

***THEORY AND PRACTICE  
IN EIGHTEENTH-CENTURY  
BRITISH MEDICINE:  
“REGIMENTAL PRACTICE”  
BY JOHN BUCHANAN, M.D.***

Introduced and annotated by

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## ***PREFACE***

In 1746, Dr. John Buchanan, recently retired as a medical officer in the British Army, produced a manuscript entitled, "Regimental Practice. or A Short History of Diseases common to His Majesties own Royal Regiment of Horse Guards when abroad (Commonly called the Blews)." Revised in several stages almost until the time of Buchanan's death in 1767, this work was for the most part based on the author's observations while surgeon to a cavalry regiment serving in Flanders 1742-45, during the War of the Austrian Succession. When first he wrote it and perhaps for some years afterward, Buchanan may well have planned to publish his manuscript, but in the end he did not. Nevertheless, he left behind him a work of great value. Eventually, this work would come into possession of the Royal Army Medical Corps. It is now included in the holdings of the Wellcome Library for the History and Understanding of Medicine, as RAMC 1037.

"Regimental Practice" is highly unusual in that it is focused on a single regiment and reflects the perspective of a regimental surgeon. The only other medical work published in the century that is comparable in this respect is *A View of the Diseases of the Army in Great Britain*, by Thomas Dickson Reide, which reviews the history of the 29th and the 60th (3rd battalion) Foot, two units that Reide served successively, mostly in Canada but later in the West Indies, during the years 1777-91. Reide's volume, which was published in 1793, is also of value to the historian. Obviously, however, its focus is a different war, and a different hemisphere. But perhaps the greatest difference is that Reide's work is deeply colored by his tendency to plead for a particular therapeutic method that set him rather far from the mainstream in the treatment of many diseases. Buchanan, on the other hand, embodied the mainstream. Reading his manuscript, one sees not only how he treated more than three dozen diseases, as well as various wounds and injuries, but how these conditions were often treated in his timeframe.

Buchanan's annotated manuscript will comprise the core of this volume. "Regimental Practice" will be preceded by an introductory chapter that is divided into three sections. The first focuses on Buchanan's life and career in medicine. The second deals with his medical education, both before and during his years in service, and how personal observation colored his understanding of the cause and cure of disease. Finally, the third section will provide analysis of his practice insofar as it is reflected in the manuscript. This last section is intended to initiate a process that will occupy the balance of the book, that of examining Buchanan's method in terms of the conceptual framework that guided it and of the milieu that fed both theory and practice. The process will be continued in the annotations to "Regimental Practice," for in these, and in appendices that I will reference in the notes, I will analyze Buchanan's therapy and choice of drugs, attempting to provide a representative sampling of practice by other eighteenth-century practitioners, particularly those who might be regarded as authorities, and, secondly, a sense of whether Buchanan's drug therapy was standard or exceptional for the time.

Although Buchanan was almost certainly, as he claimed to be, the recipient of an M.D., and although it is possible that he took some medical courses, whether at university or in one of the lecture programs then available in various major cities, he does not appear to have received much formal education beyond his apprenticeship. Nor is it likely that he was imbued with contemporary medical literature, though he read moderately. In these respects, he was much like many physicians of his time, and like a majority, probably a considerable majority, of surgeons and apothecaries.

Across the decades of the eighteenth century, there were discoveries and fashions that impacted both the theory and the practice of medicine. In the final analysis, however, what is remarkable in the practice of the period is its stability. Various writers of that age, as well as a number of historians since, have conveyed the sense that practice was chaotic. A review of the literature suggests that, on the contrary, the methods used to treat many diseases were fairly standard.

It is fair to say that reliance on Peruvian bark to treat ague (intermittent fever, malaria) represented "normative" practice in Buchanan's time, and indeed for the balance of the century and beyond. Mercury for syphilis was also normative, although the amount to be used, the duration of treatment, and the need to promote salivation became subjects of controversy. Diseases that were deemed to be inflammatory were routinely treated with large bleedings, while "low" diseases, those whose symptoms suggested a depressed system, were combated by various stimulants and venesection was employed little or not at all.

When symptoms were poorly defined or appeared to be contradictory, when diagnosis was uncertain, and when initial treatments failed, practitioners often resorted to extemporaneous measures. Treatments for chronic ailments were typically less standardized than they were for acute diseases. And the identity of drugs employed in treating given problems varied, not only across the century but within generational cohorts. Nevertheless, the broad rules for treating disease, and even the precise steps for combating certain diseases, were established to the point where the historian may in some cases fairly regard certain tactics as standard and others as eccentric. This is not to argue that the eccentric methods were necessarily unwise, though they often were, or that orthodox therapy was superior, but only that during the century there were methods of treating given diseases that were approved by the consensus and were widely applied. Those who ventured far from them opened themselves to condemnation, especially if their methods failed.

Even within normative practice, however, there was significant leeway. A given disease might typically be treated in part by bloodletting, but how much blood was to be taken, at which stages, and how often could vary significantly in accordance with the predilections and experience of the practitioner. It is also fair to speak in terms of trends and fashions within British practice. There was a significant tendency toward more moderate therapy after 1750, and this became increasingly dramatic during the last third of the century. For example, a number of writers began

to argue that it was not necessary to promote salivation to cure syphilis, and for this reason they came to advocate smaller doses of mercury and a shorter mercurial course than was customary. Nevertheless, the broad message inherent in their therapy -- that mercury cured syphilis -- was quite standard.

In suggesting that there were norms to practice, I would offer several qualifiers. First, this generalization applies only to those who would have been accepted as "regular" practitioners in the eighteenth century. Quacks did not count among them, even though many had a large and elite clientele. Neither did the various classes of personnel on the medical fringes -- purveyors of folk remedies and charms, bonesetters, midwives (aside from the physicians and surgeons who practiced midwifery), and the like -- even though this "fringe" comprised the largest group that offered medical or surgical services and often represented the only recourse to the poor. One might also fairly exclude those that medical professionals dismissed as "country apothecaries." They were seen as ignorant empirics, but what served to disqualify them, like the quacks, was that they were not perceived as entering into, or partaking of, the professional discourse on how disease should be understood and treated. Involvement in such discourse was among the distinctive characteristics of the professional practitioner.

A second qualifier is that while the broad strategies for treating disease remained stable, the drugs used in treatment did not. Indeed, drug usage was transformed, to the point where the medicinals that Sydenham relied on were -- with some exceptions, notably bark and opium -- little used by the late eighteenth century. If one looks for a date to mark the transformation, the strongest case could be made for 1746, when in a new edition of the London pharmacopoeia many traditional simple drugs were unceremoniously cast out, and a host of compound remedies were likewise eliminated or were retained only with radically revised recipes. But throughout the century, change was taking place and was being incorporated into professional practice.

History is context. The account of an individual life, the narrative of a battle, the text of a manuscript -- none conveys a sense of historical meaning or consequence until it is examined in the circumstance of time and place. The value of Buchanan's manuscript does not lie in the originality of his theory or practice, but in how well they reflect the norm. Eighteenth-century medical practice was marked by both stability and change, and Buchanan fitted well into this framework.

*A note on the two versions of this work:*

My book is being published in two versions, one in print form and a second that will be made available only electronically. To reduce confusion, the versions have different titles. The print edition (also available as an e-book), published by Ashgate, is entitled, "*Regimental Practice*" by *John Buchanan, M.D.: An Eighteenth-Century Medical Diary and Manual*, while the online version, which may be accessed through ScholarsArchive@OSU, has as its title *Theory and Practice in Eighteenth-Century British Medicine: "Regimental Practice," by John Buchanan, M.D.* Readers who have questions stemming from either version, or who wish to suggest enhancements of any sort, are encouraged to contact Dr. Kopperman, at [pkopperman@oregonstate.edu](mailto:pkopperman@oregonstate.edu).

Both versions of this book include the same preface and introduction, and provide the full text of Buchanan's journal. Nevertheless, there are significant differences. *Theory and Practice* is more than twice the length of the printed volume. Most of the disparity is accounted for by the fact that the annotations of Buchanan's journal are more numerous and are in many cases quite full; and that *Theory and Practice* includes appendices -- particularly two rather lengthy ones, the first on eighteenth-century therapy and the second on the drugs referred to in "Regimental Practice" -- that have been omitted from the Ashgate version. Although the additional or extended annotations and the appendices serve various functions, their primary aims are three: to provide as thorough an analysis as possible of Buchanan's practice and the reasoning behind it; to place his practice in context, by comparing it to that of various contemporaries; and to examine trends in therapy across the eighteenth century.

The printed version of this work is by far an easier read than is its more extended counterpart. Some readers, however, may choose to consult the fuller version, and fortunately they will have that alternative. In the past, historians were all too often forced to leave much of their best research on the cutting-room floor as they edited their works for publication. Sometimes the paring came at the behest of a publisher. Often, however, it reflected the author's own sense of what might interest the greatest part of his potential audience. The new technology allows for greater leeway, especially in permitting publishers whose desire to produce highly scholarly works is tempered by financial considerations that encourage them to provide for a general as well as a specialized audience. It may well be that heavily annotated primary sources, such as *Theory and Practice*, will within ten years be published only on disks or electronically. This will be hard on those of us who value the tactile relationship to a book in hand, but it should represent an extraordinary boon for researchers and scholars, allowing as it will for the publication of scholarly resources that, owing to cost, can now be published only in condensed form, if at all.

*Acknowledgments:*

It is with pleasure, as well as with gratitude, that I acknowledge those who have helped to bring this project to fruition. Sadly, two of those to whom I owe particular thanks are not alive to receive it.

The first is Charles Gordon, whom I met in 1986. Charles, a retired businessman, had a profound interest in the medical history of the eighteenth-century British Army, and on learning that I was working in that subject area, he initiated contact. Among the many junctures in our respective research programs was a mutual acquaintance with the Buchanan manuscript, a document that I had first consulted in 1981. Charles had in fact fully transcribed "Regimental Practice," and when we began to correspond he expressed a desire to annotate and publish it, an inclination that I strongly encouraged. By 1989, however, he had abandoned this project in order to focus on producing a doctoral dissertation on Sir John Pringle. It is unfortunate, not only for Charles and his family but for scholars who share an interest in medical history, that he passed away in 1991, before completing



his study of Pringle or his still more ambitious work, a history of British Army medical services, 1740-1763. During our all-too-brief acquaintance, Charles and I exchanged much material that we had encountered in our research, and among other pieces that he provided to me was a copy of his transcription of Buchanan's manuscript. Although my own transcription would differ significantly from his -- we took different paths on the issue of whether Buchanan's spelling and punctuation should be modernized -- I found his work to be of great use as a point of reference, and it provided me with good leads on primary sources, as well as a head start in translating many of the Latin passages in "Regimental Practice."

A second scholar whom I wish to particularly acknowledge is David L. Cowen. Professor Cowen's writings on the history of pharmacy are well known to scholars in that field, and he had a particular interest in British pharmacy. We met at a conference in 1994, and on learning of my interests he kindly provided me with microfilm of more than two dozen books of medicinal recipes from the period 1650-1750, manuscripts that he had examined at the Wellcome some three decades before. This material fits only peripherally into the printed version of the Buchanan journal, but its influence on *Theory and Practice* is significant, since that work includes substantial information on the drugs that Buchanan mentions in "Regimental Practice." Like Charles Gordon, Professor Cowen, who passed away in February 2009, impressed me by his generosity. The eagerness of these two men to enhance my project by sharing the fruits of their research marks the essence of professionalism.

Generosity of a different sort also helped me greatly as I worked to complete this project. In 1998 I was fortunate enough to receive a Burroughs-Wellcome Fellowship, which enabled me to carry out relevant research at the Wellcome Institute. Oregon State University has provided me with two awards through its Research Council, in order to provide stipends for students who undertook tasks related to this enterprise; the OSU Library has granted me several awards to cover the expense of travel in association with research; and the OSU College of Liberal Arts has twice enabled me to purchase release time so that I might pursue my project.

I wish also to acknowledge Patrick Williams, who provided me with extensive notes on the Cowen manuscripts; Dr. Christopher Hilton, who has assisted me in tracking down citations for several manuscripts at the Wellcome Library; and -- among the many colleagues of mine who have in some way nudged my project along -- two successive chairs of the OSU Department of History, Professors Paul Farber and Jon Katz, who assisted me in obtaining financial support and provided constant encouragement.

Other individuals to whom I owe thanks will be mentioned in my footnotes. To those that I have named or will name, as well as to everyone else who assisted me in my work, Thank you.

## *LIST OF ABBREVIATIONS*

<i>AL</i>	<i>Army List</i>
<i>BHM</i>	<i>Bulletin of the History of Medicine</i>
Dns.	dragoons regiment
<i>DNB</i>	<i>Dictionary of National Biography</i>
F.	foot regiment
<i>JHM</i>	<i>Journal of the History of Medicine (and Allied Sciences)</i>
Lewis/Rotheram	William Lewis, <i>The Edinburgh New Dispensatory</i> , ed. John Rotheram
<i>Pharm. Edin.</i>	<i>Pharmacopoeia collegii regii medicorum Edinburgensis</i>
<i>Pharm. Lond.</i>	<i>Pharmacopoeia Londinensis</i>
Quincy/Hooper	John Quincy, <i>Quincy's Lexicon-Medicum</i> , ed. Robert Hooper
RCPL	Royal College of Physicians of London
<i>RP</i>	"Regimental Practice. or A Short History of Diseases common to His Majesties own Royal Regiment of Horse Guards when abroad (Commonly called the Blews)," by John Buchanan [note: this refers to Buchanan's manuscript (RAMC 1037), and will be used to specify page references or footnotes in that work]
<i>T&amp;P</i>	<i>Theory and Practice in Eighteenth-Century British Medicine: "Regimental Practice," by John Buchanan, M.D.</i> [i.e. the electronic version of this work, aside from pages in Buchanan's manuscript, which as noted above will be abbreviate "RP"]

## INTRODUCTION

### I. JOHN BUCHANAN AND HIS MANUSCRIPT

#### *Sketch of a Life*

John Buchanan was born in Drimkill, Kilmarnock, in the Scottish county of Ayr, in February 1710, and was christened there 22 February. He was the second child and first son of Archibald and Jean Buchanan and was eventually to have six siblings who lived long enough to be christened.<sup>1</sup> In all likelihood, he was the "John Buchannan," son of Archibald, who on 11 January 1729 was apprenticed for five years to an Edinburgh surgeon, William Mcfarland.<sup>2</sup> It may be significant that Buchanan was almost nineteen when he was apprenticed, since it was then more common for boys who were destined for careers as surgeons or apothecaries to enter into apprenticeship between the ages of fourteen and sixteen.<sup>3</sup> Quite possibly medical practice was not the first career option

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<sup>1</sup> The Church of Jesus Christ of Latter-day Saints, International Genealogical Index, Hawaiian Temple Records, batch C11497-2, series# 00299-3, pp. 20-22.

<sup>2</sup> P. J. and R. V. Wallis, comps., *Eighteenth Century Medics (subscriptions, licences, apprenticeships)*, 2nd ed. enl. (Newcastle upon Tyne: Project for Historical Biobibliography, 1988), p. 383.

<sup>3</sup> Respecting apothecaries, note Juanita G. L. Burnby, *A Study of the English Apothecary from 1660 to 1760* [*Medical History*, supp. no. 3.] (London: Wellcome Institute for the History of Medicine, 1983), p. 79. My data base of 828 men who served in North America or the West Indies as medical officers in the British Army during the period of 1755-1783 (to be appended to my next book, entitled, *Lancet and Lance: Medicine, Heath, and Sickness in the Eighteenth-Century British Army, with Particular Reference to Army Service in North America and the West Indies, 1755-1783*) yields 16 individuals whose dates of birth or baptism and of apprenticeship can be fixed; for them, the average age at apprenticeship is 15.2 years. In 24 other cases, the birth year, but not the month or date, can be ascertained; if that date is taken to be 30 June, the average for the combined sample (N=40) is 14.9. One boy in the sample was apprenticed at 19, 1 at 18, 2 at 17, 7 at 16, 13 at 15, 11 at 14, 4 at 13, and 1 at 10. One of them was apprenticed to a physician, 29 to surgeons (including 1 barber-surgeon), 2 to surgeon-apothecaries, and 8 to apothecaries.

explored by the Buchanans. Financial considerations may also have delayed the move.

On 28 January 1734, a full five years after he was apprenticed, Buchanan was commissioned surgeon to the King's Own (later, "Royal") Horse Guards, commonly known as "the Blues."<sup>4</sup> That Buchanan gained the surgeoncy of one of the most prestigious regiments in the British Army when not yet twenty-four should not be taken to indicate that he was seen as exceptionally capable. Rather, the appointment came in association with some housecleaning by the new colonel of the regiment, John Campbell, the second duke of Argyll. Argyll had also been colonel 1715-17 and during that time he had brought in John Browne as surgeon.<sup>5</sup> When Lord Bolton had become colonel in 1717, he encouraged the surgeon -- who, he claimed, was superannuated -- to sell out. In established regiments, surgeoncies were normally bought and sold, and within the year Alexander Small, who had served as a army medical officer since 1695, purchased the commission. In a memorial that he later prepared for George II, Small claimed that the transaction price had been "upwards of" £700. He further reported that Argyll, on resuming the colonelcy, had made derogatory comments about him to the king, leading to the loss of his commission "without allowing ... any Consideration for

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<sup>4</sup> William Johnston, comp, *Roll of Commissioned Officers in the Medical Services of the British Army who Served on Full Pay within the Period between the Accession of George II and the Formation of the Royal Army Medical Corps, 20 June 1727 to 23 June 1898, With an Introduction Showing the Historical Evolution of the Corps*, ed. Harry A. L. Howell, repr. in A. Peterkin, William Johnston, and Robert Drew, *Commissioned Officers in the Medical Services of the British Army 1660-1960 [Publications of the Wellcome Historical Medical Library, Historical Monograph Series, no. 14, 1968 (1917)]*, I, 8 (#148). Johnston refers to him as "Bohannan," the name generally given in the Army Lists.

<sup>5</sup> On Campbell, see the *Dictionary of National Biography*; his stints as colonel are discussed in (Sir) George Arthur, *The Story of the Household Cavalry* (London: Archibald Constable and Co. Ltd., 1909), I, 354-56. There is an entry for Browne in Alfred Peterkin, comp., *A List of Commissioned Medical Officers of the Army: Charles II. to Accession of George II. 1660 to 1727*; repr. in Peterkin, Johnston, and Drew, *Commissioned Officers*, I, 9 (#167), though it does not appear that Peterkin was aware of the break in Browne's service.

his great Loss."<sup>6</sup> Buchanan now succeeded him. Argyll was probably Buchanan's patron, though the nature and duration of their relationship is undocumented.

In the spring of 1740, Argyll relinquished the colonelcy, and Small put forward the memorial with the stated intention of regaining his commission. Small did not explain in the document why he waited seven years to proceed, but in all probability he held back because he believed that he had no chance for success so long as Argyll was colonel. In a memorial of his own, Bolton corroborated Small's account and supported the petition.<sup>7</sup> Nevertheless, Buchanan retained his place. Small did not obtain another surgeoncy by way of compensation, though it is possible that he received a monetary settlement. Some restitution in terms of cash may in fact have been his aim in petitioning. He was nearly seventy and may have been past it. In any case, he was far beyond the age when most regimental surgeons retired. If he had regained the surgeoncy, he would probably have sold out immediately.

During the first eight years that Buchanan served as regimental surgeon, the Blues remained in England, but in the summer of 1742 the situation changed markedly, as he shipped off with his regiment to Flanders. Since early that spring, British forces had been arriving there. The conflict in which they would participate, the War of the Austrian Succession, had originated in October 1740, on the death of Charles VI, emperor of Austria and of the Holy Roman Empire. Charles had designated his daughter, Maria Theresa, as his heir, but her accession to the Austrian throne was challenged by the king of Bavaria, Charles Albert. Taking advantage of the turmoil, Frederick II of Prussia invaded Silesia. Soon, various nations were seeking to exploit the weakened position of

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<sup>6</sup> On Small, note Peterkin, *List*, in Peterkin, Johnston, and Drew, *Commissioned Officers*, I, 13 (#251). His memorial is in SP 41 (State Papers, Military, 1640-1786), vol. 12.

<sup>7</sup> Small's memorial is undated, but an approximate date can be inferred from the Bolton document (SP 41/12), which is dated 13 June 1740.

Austria by appropriating its territories abroad. Of greatest concern in western Europe was the threat by France to seize Flanders. To prevent this, Britain and Hanover, along with the Netherlands and several German states, allied themselves with Austria. The enemy coalition, which included Prussia, Bavaria, Saxony, Sweden, and Savoy, as well as France, appeared to be stronger, but the aims of the partners differed and as a result the coalition failed to pursue a coherent strategy.

During more than three years on the Continent, the Blues participated in a war that even by eighteenth-century standards was slow moving and desultory. The British Army was engaged in only two major battles. On 16/27 June 1743, it defeated the French at Dettingen, in Bavaria, this victory owing much to enemy blunders. More decisive was the action that took place on 30 April/11 May 1745, near Fontenoy, in the south of Flanders. A French army under the command of the French field marshal, Maurice de Saxe, defeated a British and allied force commanded by the duke of Cumberland. De Saxe followed up his advantage by taking several Flemish cities. He also encouraged a Scottish rising on behalf of the aging son of James II. The spread of this rebellion -- the "Forty-Five," as it came to be known -- occasioned the recall of almost the entire British force in Flanders. This was largely completed in September and October, and although much of the army returned to the Continent for the final two campaigns of the war, 1747-48, its role was less significant to the allied cause than it had been in the earlier phase. By then the war was winding down in stalemate, and in October 1748 it was concluded by the Treaty of Aix-la-Chapelle.<sup>8</sup>

The Blues were not involved in the campaigns against the Scottish Jacobites nor in the second phase of the War of the Austrian Succession. Although present at Dettingen, the regiment appears to have seen only limited action. At Fontenoy, however, it was heavily engaged and took

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<sup>8</sup> A good survey of the war is provided by J. W. Fortescue, *A History of the British Army* (London: Macmillan and Co., Ltd., 1910), II, book vii, chs. 4-5, 7.

significant casualties.<sup>9</sup> Perhaps because it was not slated for duty in Scotland, it remained in Flanders for several months after most of the British Army had left, not embarking until 22 February 1746.

Buchanan appears to have been with the regiment throughout its tour abroad and he was present at both of the major battles. In the fall of 1745, however, he made arrangements to leave the service. The commission of his successor, Thomas Cooke, dates from 16 November, but in all probability he did not take up his duties at that time, for it appears that Buchanan remained with the Blues at least until the regiment arrived at Gravesend in March 1746 [*RP*, p. 347].<sup>10</sup> Cooke may well have purchased the commission from him. Especially if Buchanan had in the end compensated Small, to whatever extent, it is probable that Cooke reimbursed him, if not more.

After leaving the army Buchanan entered into private practice in Stafford. When the Staffordshire General Infirmary was opened by public subscription in 1765, Buchanan, who had himself donated two guineas, became its first physician.<sup>11</sup> Like physicians at many other hospitals,

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<sup>9</sup> John Buchanan, "Regimental Practice. or A Short History of Diseases common to His Majesties own Royal Regiment of Horse Guards when abroad (Commonly called the Blews)" (hereafter denominated *RP*, with page numbers as in the Buchanan text), the Wellcome Institute for the History of Medicine, RAMC 1037, esp. pp. 155-57, 267-73. On the degree of the Blues' involvement at Dettingen, note *ibid.*, n. 635. During the balance of this introduction, references to *RP* will appear in the text.

<sup>10</sup> On Cooke, see Johnston's *Roll*, I, 17 (#312).

<sup>11</sup> The appointment was confirmed by the general board 26 June 1766: Staffs RO, D685/1/1 ("Records of Stafford General Infirmary -- Minute Book of Quarterly General Board, 1765-1820"). Notes of his donation are in D 685/12/1 ("A Report of the State of the Stafford General Infirmary, in the Year 1766") and D 685/23 ("Alphabetical List of Subscribers, 1766-1774, 1824-1825").



he received no salary.<sup>12</sup> But the appointment may have benefited his practice and it certainly brought him some kind words, as it did on 15 October 1766, when the general board of the infirmary thanked him and the two surgeons "for their great care and attendance on this Charity."<sup>13</sup> At that point, Buchanan was undoubtedly the most prominent medical man in practice in Stafford and its vicinity.

Buchanan last attended a meeting of the hospital board on 14 January 1767.<sup>14</sup> In early or mid-February he left on a trip, apparently headed for Glasgow. The purpose of his journey is unknown, but in any case he did not reach his intended destination. Instead, he died at Carlisle, on or about 23 February.<sup>15</sup> His death was apparently sudden and unexpected. Buchanan's body was returned to Stafford and was buried there, at St. Mary's Church, on 5 March.<sup>16</sup>

Not quite ten years earlier, on 30 August 1757, he had wed Mary Green at the same church. In the register he is described as a "bachelor" and she as a "spinster," indicating that this was the first marriage for both.<sup>17</sup> If they had children, it is improbable that any survived him. When his widow petitioned the Diocesan Court of Lichfield for letters of administration, she made no mention of children, but she presumably would have had there been any, for such petitions represented an

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<sup>12</sup> Neither did the surgeons: Cyril Williams, *The Staffordshire General Infirmary: A History of the Hospital from 1765* ([Stafford:] Mid-Staffordshire General Hospital, 1992), p. 10.

<sup>13</sup> Staffs RO, D685/1/1.

<sup>14</sup> Staffs RO, D685/2/1 ("Minute Book of Weekly Board Meetings, 1766-1769"), #42.

<sup>15</sup> The brief obituary in *Scots Magazine*, 1767, p. 110, reports the death on 23 February, "At Carlisle, on his way to Glasgow, Dr John Buchanan, brother to the late James Buchanan of Drummikill, Esq; many years a physician at Stafford." *Gentleman's Magazine* reports (p. 144) that death took place on 28 Feb., but in fact the hospital board was informed of Buchanan's death on 27 Feb.: Staffs RO, D685/2/1, #44.

<sup>16</sup> Staffs RO, parish register for St Mary's, births and burials 1760-1801.

<sup>17</sup> Staffs RO, parish register for St Mary's, marriages 1754-1787, p. 19.

occasion to cite need or distress. The value of Buchanan's estate at the time of his death is difficult to estimate. In submitting her petition, Mary Buchanan, supported by two associates, agreed to put up a £1000 bond to submit a full account of his estate to the court within a year.<sup>18</sup> If the account was submitted, however, it does not appear to be extant. Buchanan himself died intestate, perhaps suggesting that he was in good health as he left for Glasgow in February 1767 and felt that he could afford to postpone the task of preparing a will. The will of Mary Buchanan provides little information on her property or wealth, and it was in any case drawn too late to accurately reflect the estate of her husband at his death.<sup>19</sup>

### *The Preparation of Buchanan's Manuscript*

In all probability, it was shortly after he left the army that Buchanan began work on a manuscript that he entitled, "Regimental Practice. or A Short History of Diseases common to His Majesties own Royal Regiment of Horse Guards when abroad (Commonly called the Blews)." The date that he provides on the title page is 1746, and it is likely that he completed the initial draft that year or soon afterwards.<sup>20</sup> "Regimental Practice" appears to have been based on notes that he had

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<sup>18</sup> Her co-executors were Jane Robins of Stafford, who had also been a witness at the wedding; and Joseph Dickenson, the rector of St. Mary's. The grant of administration took place 30 June 1767: Lichfield Record Office, B/C/11. I wish to thank Martin Sanders, area archivist, Lichfield Record Office, for providing me with this citation.

<sup>19</sup> The will of Mary Buchanan, of Johnson Hall, Stafford (PRO, PROB 11/1188/64), was prepared 5 Aug 1789 and proved the following 27 Feb., by Sir William Winuit, master keeper or commissary of the Prerogative Court of Canterbury. Wills probated at Canterbury often dealt with substantial estates. However, the document provides no insight, specifying only that the entire estate was to be administered and inherited by Mary Buchanan's niece, Mary Meeke, the wife of Rev. Francis Meeke of Johnson Hall.

<sup>20</sup> On p. 201, Buchanan refers to "The Scorbutick Whey of Lond: Dispensary 1747." His reference appears to have been either to the *Pharmacopoeia Londinensis* or to *The Dispensatory of the Royal College of Physicians, London*, by Henry Pemberton, both of which were actually published in 1746. The reference is a later insertion, rather than an item

taken while in the service. As he states, "it has been my constant custom to keep an exact journal of Regimental Practice" [p. 61]. The manuscript was revised and amended on a number of occasions after 1746, and as late as 1766 Buchanan augmented "Authors on Military Diseases & Gunshot Wounds," a list that he had appended to his journal.<sup>21</sup>

There is a strong possibility that when first Buchanan engaged the manuscript, he was intent on publication. This is indicated by the care he took in revising the original text, correcting misspellings or careening in words to modify statements. It is perhaps noteworthy as well that he was sensitive to the issue of confidentiality. In his manuscript, he conceals the identity of a "Lunatick friend" and refers to soldiers with gonorrhoea only by case number [pp. 150, 171].<sup>22</sup> He appears, however, to have abandoned plans to publish. Such is apparent in the notations on the rectos (right side, even-numbered) of the manuscript, pages that he left blank as he prepared his initial draft. While in the text written in 1746 he usually includes fairly full and accurate citations for quoted matter, both Classical and contemporary, he often provides just the author's name, and sometimes no provenance whatever, for quotations written on the facing page. It is possible, of course, that he intended to incorporate this new material into a final, polished draft. More likely, however, he at some point decided to forgo publication and rather to continue inserting suitable quotations, sources, and medical observations as they came to his attention. By 1760, if not before, the War of the Austrian Succession was old news, having been replaced by the Seven Years' War, a conflict of wider scope, more decisive, and far more glorious from a British perspective. Even before this,

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included in the original draft. Given that both works were widely circulated, Buchanan probably used his source in 1747 or 1748, suggesting that the original draft was already completed by then.

<sup>21</sup> The latest work listed is Francis Geach, *Medical and Chirurgical Observations on Inflammations of the Eyes. On the Venereal Disease. On Ulcers, and Gunshot Wounds* (Plymouth: B. Law and R. Heydon, 1766).

<sup>22</sup> He is inconsistent, however; in most cases, he does in fact name his patients.

several publications had dealt extensively with the medical aspect of the Austrian Succession. In 1751, George Cleghorn's highly acclaimed *Observations on the Epidemical Diseases in Minorca* had appeared, and the following year Sir John Pringle, physician to the British hospital in Flanders during the war, had published his landmark study, *Observations on the Diseases of the Army*. Francis Home's *Medical Facts and Experiments*, which appeared in 1759, also dealt in part with medicine during the Austrian Succession.<sup>23</sup> Buchanan may have felt that the medical aspect of the war had been well covered by peers and that his contribution was unnecessary. Furthermore, he practiced in a small city, and unlike physicians in London he had no need to publish in order to enhance his clientele.

## II. THE LEARNING PROCESS

### *Continuing Education*

In his memorial of 1740, Small referred to the person who had been given his place as "an Apothecary's Boy from Argyleshire [*sic*] of no education nor competent knowledge." While the characterization was intended to disparage, Small may not have been inaccurate in portraying Buchanan as one whose medical preparation was rather limited. Possibly, Buchanan's education to this point was restricted to what he had learned during his apprenticeship. Nevertheless, his background was no weaker than was that of many men who were newly joined as regimental surgeons, and being twenty-four he was at the average age for men who were commissioned

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<sup>23</sup> A fourth book also dealt with the medical history of the war, this being James Grainger, *Historia febris anomalae Batavae, annorum 1746, 1747, 1748* (Edinburgh: Hamilton, Balfour & Neill, 1753). Perhaps because it was written in Latin, this work does not appear to have been widely read and it was seldom cited in contemporary literature.

surgeons without having first served as mates.<sup>24</sup>

During the eighteenth century, young men who were just entering into practice were not expected to know much -- at least, such was the estimate of veteran practitioners. This tolerance extended especially to individuals whose entire training had consisted of an apprenticeship, but also covered those who had in addition attended a lecture course or two. Expectations for young physicians who had completed a university program and received an M.D. were perhaps higher, but not markedly so. At most, men who were early in their practice were expected to be able to correctly diagnose diseases that were quite common and were clearly delineated by symptoms, and to prescribe according to common usage. Confusing or contradictory symptoms might be expected to lead them to diagnose and to treat the disease incorrectly, or to be so uncertain in their diagnosis that they prescribed timidly. Beyond their formal education, medical men were encouraged to improve themselves throughout their careers. During the seventeenth century, Thomas Fuller had observed, "physicians, like beer, are best when they are old."<sup>25</sup> Owing to the consensus that men newly embarked in practice needed extra guidance, a considerable body of medical works was generated

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<sup>24</sup> Paul E. Kopperman, "The British Army in North America and the West Indies, 1755-1783: A Medical Perspective," *War, Medicine and Britain, 1600-1800*, ed. Geoffrey Hudson (Amsterdam: Rodopi Press [Clio Medica/Wellcome Historical Institute Series in the History of Medicine], 2007), p. 54. Home's career reflects a common pattern for the period. At first trained by apprenticeship, Home studied medicine at Leiden during lulls in the war. He received his M.D. at Edinburgh in 1750: Edgar Erskine Hume, "Francis Home, M.D. (1719-1813). The Scottish Military Surgeon Who First Described Diphtheria as a Clinical Entity," *BHM*, 11 (1942), pp. 49, 51.

<sup>25</sup> (Sir)Humphry Rolleston, "Medical Aphorisms, Chiefly in English," *BHM*, 10 (1941), p. 545. On the stereotype of young practitioners as being easily baffled by complex cases or contradictory symptoms, see John Moore, *Medical Sketches: In Two Parts*, 1st American ed. (Providence, R.I., Carter & Wilkinson, 1794), pp. 138-39; and Charles Dunne, *The Chirurgical Candidate; or, Reflections on Education: Indispensable to Complete Naval, Military, and Other Surgeons* (London: Samuel Highley, 1808), p. 126.

to assist "young and unexperienced practitioners."<sup>26</sup>

The military was looked on as a place where young practitioners could hone their skills and acquire knowledge through observation and study. That such service provided good training in surgery was a belief of long standing, as reflected in the Hippocratic aphorism, "If you wish to be a surgeon, follow the army."<sup>27</sup> But if army service proved useful to the surgeon, it was of even greater value to the individual who hoped to practice medicine on returning to the civilian world. Within a few years of service, he would likely treat a considerable range of diseases and injuries. Many experienced medical men also saw advantage in army service, as they enjoyed an opportunity to observe the manifestations of disease and the success of treatments on a large scale, and thereby to test theories that they had learned or developed. While serving in Flanders, Pringle wrote to his friend Andrew Mitchell, "the <love of the> Study of my Art encreases daily. I have double pleasure now in reading Medical books, because I can turn theory into practice, confirm from experience my former Speculations or at least be sure they have not been just."<sup>28</sup>

As a physician, Pringle had impeccable credentials, having pursued medicine at Edinburgh, then moved on to Leiden, where he studied under Herman Boerhaave -- "the teacher of all Europe," as Albrecht von Haller called him. After receiving his M.D. at Leiden in 1730 he returned to Edinburgh, where he was soon appointed a professor of metaphysics. By the outbreak of the war,

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<sup>26</sup> The quotation is from John Ball, *The Modern Practice of Physic: or a Method of judiciously Treating the Several Disorders incident to the Human Body* (London, 1760), I, ii.

<sup>27</sup> This advice is derived from an observation by Hippocrates in "Physician" (*du médecin*), c. 14.

<sup>28</sup> Ghent, 31 Feb. 1743, BL, Add. 6861, f. 188.

he already had a significant reputation in the medical profession.<sup>29</sup> Few of the men who served as medical officers in the British Army during the War of the Austrian Succession had received an education comparable to his, but many of them may have undertaken medical studies beyond what an apprenticeship would have afforded. And a significant number studied medicine in a formal program while they were in the service.

During his time in Flanders, or more likely after he left the army, Buchanan wrote a response to an assertion by the German physician, Johann Degner, that regimental surgeons were ignorant, illiterate, and generally no better than quacks:

Our Regimental Surgeons from the beginning are generally well educated; wheither they are to profess Physick or Surgery have the same education, first serving an apprenticeship are instructed in all the particular branches of medecine & Surgery by proper Professors, attending the Lectures two or three years; & for further improvement travele to forreing [*sic*] universities & attend hospitals, of wch Paris & Leyden have been the most remarkable; some go to Montpellier making the tour of Italy, afterwards many take to the army in order to pass some years, & there officiate as Physician, Surgeon & Apothecary; tho young Practitioners are sure of practice & may improve by experience; supposing equal capacities the advantage most [*sic*] be very considerable.[Degner fragment<sup>30</sup>]

Possibly in this statement Buchanan in part describes himself. Perhaps he had enrolled in a few medical courses at Edinburgh while still serving out his apprenticeship to Mcfarland. It is also

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<sup>29</sup> The *DNB* provides a brief sketch of Pringle's career. A fuller review of his early career, through the peace of 1748, is included in Dorothea Waley Singer, "Sir John Pringle and His Circle," *Annals of Science*, 6 (1949), pp. 128-33.

<sup>30</sup> The "Degner fragment" appears at the close of *RP*.

possible that he attended medical lectures in London during the years 1734-42, when his regiment remained in England, or that he did so in Brussels or elsewhere after it moved to Flanders. If attendance at lectures required that he be absent from duty, he probably reserved this study for the four to six months each year when the Blues were in winter quarters, for the workload would have been light and other surgeons could have handled it.

With greater certainty, it can be said that Buchanan learned from other medical officers and shared information and ideas with them. It appears that Home, who was then a regimental surgeon, accepted Buchanan's account of an autopsy [n. 138]. By the same token, Buchanan accepted the observations and conclusions of Adam Austine, another regimental surgeon, in the wake of an autopsy that he performed [p. 64]. And Buchanan and these contacts were further associated in a network whose cohesiveness and value may well have been unexcelled in the contemporary civilian world.

I'm intimately acquainted with the greatest part of the Regimental Surgeons of our Army.... We have a weekly Club w<h>ere all are welcome to come, the chief Subject of conversation relates to our own business; it being a standing rule with us, that if any thing remarkable happen'd during the last weeks practice, it's to be made publick for the good of the Society; by this means we know the practice of the whole army during the Campn, & in winter quarters that of the Garrison, where we have an opportunity of attending the hospital. All talk freely, nor can I perceive any reservedness or fondness for Secret medecines, or a private method of practice; some are regular bred Physicians. [Degner fragment]

Not only were regimental medical officers in regular contact with their peers, but they also interacted with senior personnel that in general far outdistanced them in terms of education and experience. This contact was not always welcome. During Buchanan's time in Flanders, and indeed



throughout the Austrian Succession and the Forty-Five, the medical services were dominated by Pringle. Imperious and often impatient, Pringle freely imposed his authority on regimental medical officers, and a series of commanders-in-chief enforced his directives. In the wake of Culloden, the battle that broke the back of the Forty-Five, Cumberland ordered: "Dr Pringle recommends to the Regal Surgeons timely bleeding in the feverish & Pleuritic disorders, if for the future such patients are sent to the Hospitals without bleeding complaint will be made of the Surgeons."<sup>31</sup> But while Pringle was often headstrong in promoting ideas that he regarded as being established truths, he believed passionately in sharing information and analysis with peers in his profession. In February 1743 he wrote to Mitchell of the progress that he was making in his study of "Garrison Diseases," the project that would grow into his greatest work. He reported,

By the advice of Genl. Ligonier I am to write to the Director of the French Hospitals for an account of their diseases, & at the same time promising them toutes nos Lumières & he does not doubt of their Correspondence. I mentioned the thing to Ld. S[tair]. who was of the same opinion. I propose by the same advice & authority to demand of the proto Medicus at Vienna a History of the Austrian Garrison & Camp diseases, which will not only satisfy my curiosity in this way but be of service to ourselves when exposed to the same hardships.<sup>32</sup>

It was not just the elite of the profession that Pringle sought to engage. Over the years, he would build a trans-European network of correspondents, one of the largest circles that centered on any British physician. It included major figures like von Haller, but a number of medical men who were

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<sup>31</sup> National Army Museum, acc. #6807-228-2 (Cumberland's orderly book, 7 Dec. 1745-26 June 1747), order issued at Inverness, 22 April 1746.

<sup>32</sup> Aix-la-Chapelle, 2 Feb. 1743 n.s., BL, Add. 6861, f. 190. In France there was, by royal authority, a program of medical correspondence among the military hospitals, and the practical observations that were collected were supposed to be made public. *Medical Commentaries*, 2 (1774), p. 152.

distinguished only by the fact that, for some reason, they had gained his respect. Buchanan himself was included in the circle, at least early in the Austrian Succession. According to him, when in 1743 an epidemic of pleurisy struck "all over Europe ... Dr. Pringle [who] was then at Aix la Chapelle with Lord Stair, wrote a short account of it in that place, begging the same from me" [pp. 113, 115].

Medical service in the military provided a foothold for the practitioner who returned to the civilian world. For young men trained as surgeons or apothecaries, the army experience represented an opportunity to study medicine. Despite his title, the regimental surgeon's practice was generally more medical in nature than surgical.<sup>33</sup> Furthermore, in both medicine and surgery medical officers who were early on in practice gained insight through hands-on application -- much more, indeed, than they would have had in the teaching hospitals. Medical service in the military was accepted by government as a significant credential, for men who had practiced surgery in the army and navy were permitted to practice as surgeons or apothecaries without obtaining the license of the Company of Surgeons. This privilege was first given governmental sanction during the Cromwellian period, but more important was a statute enacted in 1749. The company made several attempts to enforce its monopoly over practice, but failed. An act in 1815, which imposed penalties on unlicensed

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<sup>33</sup> Reide reported, "Surgery forms a very small part of a regimental surgeon's duty, except in an active war": *A View of the Diseases of the Army in Great Britain, America, the West Indies, and on Board of King's Ships and Transports, from the Beginning of the Late War to the Present Time. Together with Monthly and Annual Returns of the Sick, and Some Account of the Method in Which They were Treated in the Twenty-Ninth Regiment, and the Third Battalion of the Sixtieth Regiment* (London: J. Johnson, 1793), p. 284. Richard Brocklesby noted the statement of a former regimental surgeon who had served in several hard campaigns: "in full seven years, he had never met with near 100 properly chirurgical cases in the whole regiment; though in that course of time, near 2000 men had gone through the regimental books": *Oeconomical and Medical Observations, In Two Parts, From the Year 1758 to the Year 1763, inclusive. Tending to The Improvement of Military Hospitals, and to The Cure of Camp Diseases incident to Soldiers. To which is subjoined, An Appendix, containing A curious Account of the Climate and Diseases in Africa, upon the Great River Senegal, and farther up that the Island of Senegal. In a Letter from Mr. Boone, Practitioner in Physic to that Garrison for three Years, to Dr. Brocklesby* (London: T. Becket and P. A. De Hondt, 1764), p. 48.

practitioners, was largely undone by a second act, which, in 1825, permitted former military surgeons to practice as apothecaries without obtaining license. Only in 1858 was the exemption removed.<sup>34</sup>

On the title page of "Regimental Practice," the author styles himself "John Buchanan M.D." The question remains, however: When and where had he received his degree? In all probability, it was at a university that did not require attendance. The most likely candidates would have been Aberdeen and St. Andrews. Neither had a medical program during the eighteenth century, yet both granted M.D.'s to many individuals, including a significant number of active or former army medical officers. Aberdeen may have been slightly the more probable of the two, in that it bestowed more degrees and the chancellor of Marischal was Archibald Campbell, who on the death of Buchanan's mentor in 1743 succeeded him as the third duke of Argyle.<sup>35</sup> The published records of Aberdeen and of St. Andrews do not list Buchanan as a recipient of an M.D.<sup>36</sup> Nevertheless, it is likely that he received the degree from one of these universities, probably in 1746, just after he left the Blues, and that the relevant record is either not extant or has not been located. It is, on the other hand, highly

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<sup>34</sup> Lloyd G. Stevenson, "A Note on the Relation of Military Service to Licensing in the History of British Surgery," *BHM*, 27 (1953), pp. 420-27, passim.

<sup>35</sup> *DNB*.

<sup>36</sup> I have consulted i.a. the following works, none of which contains a reference to the granting of a diploma to an individual who may have been Buchanan: *List of the Graduates in Medicine in the University of Edinburgh from MDCCV to MDCCCLXVI* (Edinburgh: Neill, 1867); W. Innes Addison, comp., *A Roll of the Graduates of the University of Glasgow: From 31st Dec, 1727 To 31st Dec 1897* (Glasgow: MacLehose, 1898); Peter John Anderson, comp., *Fasti Academiae Mariscallanae Aberdonensis: Selections from the Records of the Marischal College and University MDXCIII-MDCCCLX* (Aberdeen: New Spalding Club, 1898.); R. W. Innes Smith, *English-Speaking Students of Medicine at the University of Leyden* (Edinburgh: Oliver and Boyd, 1932). I wish to thank Paul Farber for having reviewed Innes Smith's extensive manuscript list of medical degrees granted in the 18th century by various European Universities. Also, my thanks go to Michelle Gait, for her report on the relevant records at King's College, University of Aberdeen.

improbable that he merely styled himself an M.D. without obtaining the degree. In eighteenth-century Britain it was not unusual to address a regular medical practitioner as "doctor," regardless of his credentials.<sup>37</sup> Even quacks appropriated the title. But for a practitioner to set out as a physician and claim that he had an M.D. when such was not the case was a very different matter. If the imposture were discovered, his practice would be ruined. The community of physicians in Britain was small and elite, and in consequence the likelihood of exposure was high. Furthermore, it was fairly simple and inexpensive for an experienced practitioner to acquire the degree. In September 1746 John Hawkins, who like Buchanan had served the British Army in Flanders, noted in his journal:

at the Marshall College in Aberdeen I had a Diploma for Doctor of Physick granted me, I having first had Certifycates of my being Qualifyed of Dr. Char: Alston Professor of Botany at Edinburgh, and of Dr. Pringle our Physitian to the Army, as also from Dr. James Gordon Principal of the Colledge at Aberdeen who also gave me his fees which was 5 pounds for our being intimately acquainted while I lived at Aberdeen, the remaining fee was ten pounds, which I paid to an Agent at Edinburgh upon receipt the Diploma, which was sent after me ther.<sup>38</sup>

Someone with Buchanan's record could easily have taken the same route to a diploma, and this

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<sup>37</sup> With some exaggeration, William Stevenson wrote that "all practitioners from farriers to physicians" were called doctors: *Considerations on the Dangerous Effects of Promiscuous Blood-letting* (Newark, 1783), p. 40. Thomas Champney suggested that physicians, surgeons, and man-midwives alike might be styled "Doctors of Health": *Medical and Chirurgical Reform Proposed, from a Review of the Healing Art, throughout Europe, particularly Great Britain* (London: J. Johnson [etc.], 1797), p. 84. It might be noted that Champney was himself a surgeon and midwife and as such may have coveted an elevated title.

<sup>38</sup> Wellcome Library for the History of Medicine, WMS 2788 (journal of John Hawkins), f. 23r.

makes it all the more improbable that he laid claim to a credential that was not his. Buchanan himself recognized and accepted the significance of credentials in the medical hierarchy. In his original draft of "Regimental Practice," he refers to a regimental surgeon, Adam Austine, as "Mr." At some later point, Buchanan changed the title to "Dr." Very likely this came after Austine received an M.D., in 1749 [p. 64, n. 134].

Certainly Buchanan's contemporaries and peers accepted him as John Buchanan M.D., and his career as a civilian practitioner was in part dependent on this. By the mid-eighteenth century, a physician -- though not an apothecary or surgeon-apothecary, who might also practice medicine -- was expected to have the credential. That for two decades Buchanan practiced as a physician in Stafford and was appointed to serve as physician in the Staffordshire General Infirmary are tacit evidence that his community regarded him as having an M.D. Almost certainly, such was the case.

It appears that Buchanan was disdainful of ignorant practitioners. As has been noted, he challenged Degner's condemnation of regimental surgeons, but only in that he applied it with a broad brush, implicitly taking in the British. He did not disagree when Degner's characterization was directed elsewhere:

he is very severe on all Quacks, to them he joins Camp-Surgeons, saying their Education is at first in the barbar's Shop, then learning to bleed & dress slight wounds, & from being attendants at chirurgical operations, become profess'd Surgeons & are appointed as such to some troop or Company, where they practice at ... random & learn a particular method. afterwards assume the name of Doctors[.] this may probably be true in his Country, & is customary in Germany & the Low Countries, all Barbars practising Surgery, commonly illiterate, tho some are smatterers in Latin, entirely ignorant of Anatomy, few or none having ever seen a Desection, nor is the profession much esteem'd. they have hardly a book, nor do

they knowe any. [Degner fragment]

Buchanan likewise condemned the bonesetters of his own country. Especially galling to him was that they, like other fringe practitioners, enjoyed a fair degree of credibility: "Im perswaded many Sprains pass for Dislocations amongst the English Bonesetters, & that they put in my [*sic*] bones which were never out. apply their infallible Searchcloth, & obtaine great reputation by the person walking abroad in a few days" [p. 215].

When Buchanan entered the army, he may not have been much more than the "apothecary's boy" dismissed by Small. By the time he left in 1746, however, he was probably far better schooled in practical medicine than were most practitioners of his age. His involvement with the army network played a significant part in this development. He probably benefited as well from the medical literature that he read during his time in service. Here, however, the evidence is less consistent.

### *Sources*

One can only guess which books, or how many, Buchanan had available to him during his service on the Continent. His personal collection was probably small, perhaps being limited to what he could take with him on the march. Years later, Robert Hamilton complained, "It is unfortunate for the soldiery, that the regimental surgeons must apply in general so little to books."<sup>39</sup> Buchanan may well have shared books with colleagues, especially when the army was in winter quarters. As

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<sup>39</sup> Robert Hamilton, *The Duties of a Regimental Surgeon Considered: With Observations on His General Qualifications; And Hints relative to a More Respectable Practice, and Better Regulation of that Department. Wherein are interspersed many Medical Anecdotes, and Subjects discussed, equally interesting to every Practitioner* (London, J. Johnson [etc.], 1787), I, 340.

has been noted, his manuscript was written in 1746, after he had returned to civilian life and presumably had more books at his disposal.

The manuscript as first composed is heavily geared to Classical sources, the number of references suggesting that Buchanan already had a good grounding in this literature. Hippocrates is, by far, the medical source that he refers to most often in "Regimental Practice," as he quotes him no fewer than 77 times (and cites him once), drawing on thirteen works.<sup>40</sup> Moreover, 53 of the references come in the 1746 draft, the remainder being later interpolations. Although possible, it is improbable that he first examined the Hippocratic corpus in 1746, even as he was preparing his manuscript. The remaining Classical authorities on medicine and science pale by comparison. Celsus he quotes only four times, on each occasion briefly, and none in the 1746 version. The remaining sources in this category are all noted in the original draft, but are of little consequence in Buchanan's manuscript. Pliny is quoted twice -- the same passage -- and Dioscorides is cited once. Perhaps most significant, Galen is mentioned only once, and even this is a secondary reference [p. 99]. Possibly Buchanan knew of Galen only from references that he had read or heard. His lack of first-hand knowledge and, apparently, of interest reflect the low estate of Galenic influence in eighteenth-century British medicine.

Buchanan's use of Hippocrates far transcends what convention would have called for. It was common for medical writers to quote ancient authorities in the course of their works, whether these references were meaningful in context or were merely inserted to display erudition. Generally, however, the quotations were brief, aphoristic, and few in number. Buchanan, on the other hand, quotes frequently and often at length. His tendency is so exceptional that there are few if any parallels in eighteenth-century British publications that are focused on contemporary medicine.

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<sup>40</sup> The data on Hippocrates, and on all sources, is tabularized in app. A, q.v.

In his 1746 draft, Buchanan also makes extensive use of non-medical Classics. Easily his main sources are Ovid (65 references) and Horace (64). In all, he utilizes works in this category 180 times, 121 in the 1746 draft, and only once in the form of a citation, rather than a quotation.<sup>41</sup> Quotations from the Classics serve as the primary medium for him to display emotion. His own diction suggests detachment and dispassion, while Classical passages convey humor, irony, excitement, and pathos.

Buchanan appears to have enjoyed a genuine facility in Latin. Several of the books of Hippocrates were available in English translation, yet when he quotes from them he does so in Latin, almost certainly from some edition of the popular translation of the complete works that the French physician, Anuce Foës, had first published in 1595. Buchanan could likewise have made use of English translations of a number of Roman literary figures, Ovid and Horace among them, yet he chose to quote in Latin. Among modern European languages, he may have known French, but perhaps not fluently. It is noteworthy that as regards most French works that had been translated -- Charles Rollin's *Roman History*, Montesquieu's *Reflections on the Roman Empire*, Montaigne's *Essays*, Samuel Tissot's *Essay on Bilious Fevers* -- he cites or quotes only the English version. He does cite the French titles of *L'eloge l'yvresse* and of Bernardini Ramazzini's *L'art de conserver la santé des princes* (ironically, a translation from Latin), but he quotes neither.

Buchanan's evident fluency in Latin and knowledge of Roman literature raises significant questions regarding his education, but unfortunately it does not answer them. He probably had not enjoyed a Classical education in the exalted sense that the term carried in the eighteenth century, but somewhere along the way he had received a good grounding in Latin and an introduction to at least the most prominent Roman writers. By contrast to the more than 200 references to Classical authors

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<sup>41</sup> The cited source is Xenophon (*RP*, p. 334), coincidentally the only Greek in this category (though Buchanan presumably knew his work in translation).



in “Regimental Practice,” more recent literary figures are mentioned seldom. George Buchanan is cited twice -- for that matter, works in Latin -- and John Buchanan quotes Charles Aleyn and James Thomson once apiece. He cites or quotes from another fifteen sources on non-medical subjects, but just two (*L'eloge de l'yvrse* and Rollin) are referred to in the 1746 draft. Only three of the remaining thirteen, however, were published before 1746.<sup>42</sup> And the total number of references to works in this category is only about half that given to either Horace or Ovid alone. Still, it does appear that after he left the service Buchanan began to expand his acquaintance with modern literature, as well as with the Classics.

Despite Buchanan's reverence for Hippocrates, his manuscript not surprisingly reveals some knowledge of post-Classical literature on medicine. He does not cite any medieval or Arab works in his text, nor does he mention any Renaissance authority. Among post-1550 writers, Friedrich Hoffmann receives the most citations -- fifteen -- but he is never quoted. Notable by his absence is Boerhaave.<sup>43</sup> In the 1746 draft, Buchanan cites or quotes only four modern writers: Ramazzini, Ysbrand van Diemerbroeck, David Abercromby, and Nicolaas Tulp. Five additional references to Ramazzini were inserted later, suggesting that Buchanan continued to consult his work. Although an edition of Hoffmann's complete medical works was available as early as 1740, Buchanan cites it only in interpolations made after 1746. Of sixteen sources added after Buchanan completed his original manuscript, seven were published before 1746, but these may not have come to his attention

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<sup>42</sup> These three are Verulam (Bacon) -- in an apparent misascription -- Pereira, and Montaigne. *Journal of the Campaign on the Coast of France, 1758* and *Biographia Britannica* were both published after 1746, as were the works by the following: Carte, Cooper, West, Smollett, Leland, Salmon, and Secondat (Montesquieu). Parker was published in 1746.

<sup>43</sup> Buchanan does note that the recipe for a preservative medicine against gout "is said to be originally from Dr. Boerhaave" (*RP*, p. 159), but he does not cite or quote any work by him.

until afterwards.<sup>44</sup>

Buchanan refers to only one modern work on surgery, that being John Ranby's influential *Treatise on Gunshot Wounds*. He quotes Hippocrates at length on surgical matters, notably dislocations and fractures, and he cites Lorenz Heister's *Medical, Chirurgical, and Anatomical Cases and Observations*, but only in a medical context. The list of Buchanan's references does, however, suggest that he was keeping up with advances in medicine. Most of the modern works listed are post-1700, and eight were published after 1750.

The significance of which works that Buchanan refers to in the draft as completed in 1746, rather than in later interpolations, is considerable. For the most part, "Regimental Practice" is about the methods that Buchanan used to treat diseases and injuries encountered in the Blues 1742-45. Sources that he quotes or cites in the original draft may conceivably have helped to shape his method. But it is not safe to assume that the works that he refers to represented the full range of his relevant book learning at the time. Undoubtedly, they did not, nor it is necessarily the case that he considered these to be his most important references. They might simply have been the ones closest to hand or, if he sought a quotation, the most quotable. Nor is it certain that Buchanan himself read every work that he cites, or even that he quotes. It is quite possible, for example, that at least two of the three quotations that he provides from Giorgio Baglivi's *De praxi medica* were drawn from an English treatise (not published until 1758) in which they are likewise quoted [nn. 150, 716]. Despite these qualifications, it is worth bearing in mind which of the sources that Buchanan refers to appear to have been known to him during his service in Flanders.

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<sup>44</sup> These include the works by Hoffmann, Baglivi, Castro, Piso, Degner, Weber, and Turner. Sources published after 1746 include Tissot, Whytt, Young, Russell, Degner, Johnstone, Heister (the work that Buchanan cites), and Huxham (vol. I of *Observationes*). Although the ed. of *Pharmacopoeia Londinensis* that Buchanan cites was published in 1746, he puts the date at 1747, and he probably did not in fact encounter it prior to that year.

As has been noted, Buchanan concludes his manuscript with a list of books on military medicine and surgery. In this timeframe, appended lists of authorities were not unusual. Jean Astruc, for example, provided such lists in his treatises on the diseases of women and on venereal disease (in this case, not merely a list, but analysis of sources). Buchanan's list is not generally of references that he himself used. Only one work, Ranby's treatise on gunshot wounds, is referred to in the text of "Regimental Practice."<sup>45</sup> Buchanan was probably familiar with some items on the list, like Pringle's *Observations on the Diseases of the Army*. But in all probability, he consulted only a few, and most items on the list were just titles to him. Many of them were quite obscure, including dissertations written more than a century before. Moreover, several were in languages that Buchanan apparently did not know, as evidenced by his notations (*Germaniae; Belgiae*). Probably the most surprising omission from the list is Ambroise Paré, arguably the best known and most influential of all military surgeons. Ironically, several of Paré's contemporaries are listed. Buchanan probably copied his list from one or more that he found in print. Unlike the rest of his journal, which clearly was revised and amended a number of times over the course of perhaps two decades, this list may have been prepared all at once, since the hand is rather regular and only one work, Donald Monro's study of diseases treated in army hospitals 1761-63, appears to have been squeezed in. Buchanan left room for additions, however, and it is noteworthy that all works on the list that were published after 1746 appear at or near the end of their alphabetical grouping. It is probable, though not certain, that Buchanan prepared the list not long after he completed the first draft of his text, then embellished it as additional works came to his attention or were published. The list is in essence a coda, neither feeding into nor drawing from Buchanan's text. Still, the fact that he went to the trouble of preparing it suggests, as does other evidence, that as of 1746 and probably for several years beyond he had it in mind to publish "Regimental Practice."

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<sup>45</sup> Buchanan lists a treatise by Hoffman; however, he does not refer to this piece itself in the text.

Buchanan undoubtedly picked up insights in his readings that helped to shape his therapy. Medical literature likewise suggested strategy and models. But his manuscript suggests that he did not pattern his practice on any particular authority. He cites Hippocrates extensively and he accepted some broad precepts that were common to both Hippocratic and eighteenth-century medicine. Nevertheless, the methods that he used to treat specific diseases were often quite different from those advocated by the master. For example, Hippocrates recommended treating gout with external applications, while for his part Buchanan apparently advocated dietary means to moderate the disease and also used bloodletting and purgation [p. 165 and app. B-1, entry on gout]. Buchanan also questions the value of “critical days” – the belief that fevers reached their crises according to a set pattern – although it was one of the hallmarks of Hippocratic medicine [p. 99]. Indeed, while he may have quoted Hippocrates more than did contemporaries, he followed him less than did many. Hippocrates appears to have been merely a point of reference to him. The same can be said of his other sources. They encouraged speculation on his part, and they may have influenced the way in which he treated diseases with which he was not familiar. But there was no authority that he followed slavishly.

### *Learning through observation*

Significantly more important than books in Buchanan's learning process was observation. Buchanan readily applied in his practice insights that he had drawn from his own observations or from those of colleagues. Likewise, he was quick to challenge conjecture that went against the evidence. This evidence he searched for in several ways.

One was through autopsies. The post mortem of a dropsy victim, apparently not performed by him, caused him to note, "no water in the thorax, contrary to expectation, for some imagined he had been suffocated by water in the breast" [p. 155]. The ready availability of cadavers for

dissection represented one of the greatest advantages that medical officers in the military held over civilian practitioners. In a letter that he wrote to his mother in May 1809 William Dent, who was tending soldiers at Colchester, commented, "I am very glad that I came here for besides attending the sick and wounded we have the privilege of dissecting those who die and in London we could not get a dead body under three Guineas."<sup>46</sup> Buchanan discusses fourteen postmortems in "Regimental Practice," additionally noting that a number of victims of dysentery were dissected during an epidemic in 1745 [pp. 64, 65, 67, 69, 71, 129, 131, 139, 141, 142, 153, 155, 293, 331]. Since he generally discusses the operations in the passive voice, the agent is often unclear. However, Buchanan's use of the first person establishes that at least two of the postmortems were conducted by him and that he observed another, while several were clearly conducted by others, the results simply being reported to him. Clearly, postmortems were common if not routine, and they provided Buchanan – and, in all probability, many of his colleagues -- with a significant learning tool.

Buchanan also observed surgical techniques, and he appears to have been quite willing to adjust his ideas on therapy in accordance with what seemed to be working. In assessing the use of setons to treat consumptive patients in the hospital, he noted, "I suspected these Seatons would produce carious ribs, which never happened, for they always worked outwards towards the skine." Better yet, "these Seatons discharge largely & I have seen some recover to admiration, were formerly walking Skeletons now fat & plump & free from Cough" [p. 167]. In another instance he observed, "I have imagined Buboës might be opened by Caustic befor they were quite ripe, & that the discharge after the Eschar cast off would be sufficient, & by this method shorten the cure, not waiting for Suppuration; but then the Gland remains undestroyed, having never suppured; is hard, proves

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<sup>46</sup> Leonard Woodford, "A Medical Student's Career in the Early Nineteenth Century," *Medical History*, 14 (1970), p. 92. Hamilton complained that while autopsies were an excellent learning tool for young regimental surgeons, they seldom performed them. He noted that the disposal of bodies was under the control of the officer commanding the regiment, but that he was usually quite willing to permit dissection: *Duties of a Regimental Surgeon Considered*, I, 213-14.

tedious work to the Surgn & great pain to the patient" [p. 183].

When he attempted to divine the origins and potential treatments for diseases, Buchanan, like many of his contemporaries, compared groups that were confronted by the same disease but contracted it in sharply different proportions. Frequently the groups were distinguished by status. Troopers were somewhat better clothed and accoutered than were foot-soldiers, and this Buchanan saw as having an impact on health. As regarded ague, he wrote, "the foot more subject to it than the horse, being more exposed to the injuries of the weather in doing Duty, having no watch-cloaks. our Troopers have a good warm cloake & strong boots, & less duty" [p. 33].

Buchanan regularly observed differences in the prevalence of epidemic diseases between officers on the one hand and their men on the other. In "Regimental Practice," he notes the disparities, but does not always seek to explain them. So, for example, he reports that in the Blues only men, and not officers or their servants, contracted the disease that he calls "yellow fever" in 1742, but he does not speculate on the significance of this [p. 61]. Like virtually all contemporaries, he recognized gout to be primarily a disease of the elite or, in the context of the army, the officers [p. 161]. More often, however, he observed that diseases afflicted the troops more than the officers. Of the itch, which raged among the rank and file during the crossing to France in 1742, he noted, "None of the Officers had it, and only two of their servants, as they dayly attended their Masters, were obliged to keep themselves clean, the Disease might be prevented" [p. 15]. Observing that officers and their servants were likewise free of the flux and griping that struck many men in the Blues during the spring of 1743, he cited a number of distinctions that made them less liable: "being less exposed to the injuries of the weather, have good dyet good wine. wine and water for their common drink, good lodgings, good fire, [and] are warmer cloathed than the men" [p. 25].<sup>47</sup>

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<sup>47</sup> Ibid., p. 25. Buchanan also reported [p. 24] that spring recruits did not contract the disease, for they joined the Blues when the weather was warm and dry.

The pattern in which a disease struck might cause Buchanan to explain its cause a certain way while rejecting alternative possibilities. During an outbreak of ague in 1742, he observed, "None of the Officers have been ill of this disease, nor any of their Servants; a plain proof that the air of this Country is not the only cause of the distemper, but that it rather proceeds from the Soldiers manner of life. few of the inhabitants were ill of this" [pp. 35, 37].

Buchanan was willing to allow contrary evidence to overthrow his theories. When pleuretic fevers struck in 1743, he and Pringle exchanged notes on the disease and framed their respective theories to account for it. Pringle, who was in Aix-la-Chapelle,

had himself for a Patient & blamed at first the sunk Situation & Sulphurous air. I imagined it was greatly promoted amongst our men from their being quartered in publick houses, the Beer much better than at Ghent, cheap & good measure, & they indulg'd pretty freely, sitting much by the Stoves, we had pleasent Sunshine weather, yet the air was cold, mornings frosty & winds N:E: the Officers dress more & change cloaths oftner than in last quarters & therefor more subject to catch cold, the ramparts are very pleasant & evening walks were frequent.

But having noted some problems with each attempt to link the disease to particular circumstances, Buchanan recognized the ultimate difficulty: "had it not appeared Epidemical & universal, both Dr Pringle & I would have remained satisfied with our own private theory" [pp. 115, 117].

The way Buchanan weighed evidence to determine the cause of disease is well illustrated by his comments on a dysentery outbreak that afflicted the army in 1742.

Some say it proceeds from eating fruite; & others from catching cold on Duty. the Distemper

decreased as the fruit went out of Season, though the drinking of beer continued. The latter end of September & beginning of October were remarkably wet and cold, which no doubt promoted the distemper & I believe was the chief cause, especially as we came from a better quarters to a worse, and doing night Duty to which we were strangers at home. The Streets here [Bruges] are very flat, & when the rain falls it lyes long, which makes the Streets wet. tho not dirty the feet are always wet and damp: nor are the Flemish Shoes so good as the English.... None of the Officers were ill of this distemper and only three of their Servants, being less exposed to the injuries of the weather, have good dyet good wine. wine and water for their common drink, good lodgings, good fire ... are warmer cloathed than the men; plenty of ripe fruits of which they eat freely, nor do they seem to be unwholesome. [pp. 23, 25]

In this passage and elsewhere, Buchanan dismisses the traditional belief that dysentery was caused by eating fruit [cf. pp. 287, 288, 291, 309]. Here, and indeed in most controversies on the cause of disease, Buchanan stands with the consensus of contemporary British authorities, rather than the older view.

In "Regimental Practice," Buchanan often cites popular belief regarding cause or cure of a particular illness, then judges it by his own observations. In some cases, he seems to credit legend: "Some are frighted at the sight of a person lately recovered, & imagine themselves to be infected; go home with this notion, are uneasie & sicken, having complaints the same as preceeding the eruption, & should be treated in the same manner as if the pocks were at hand. & tho they do not appear at this time, & the person recover, I have seen them come soon thereafter" [p. 57]. Generally, however, his impression of the evidence led Buchanan to doubt tradition. On the basis of his observations, he discounts what he claims to be a common belief: that apoplectics are carried off by the third attack [p. 328]. Elsewhere, he writes, "It is a common notion that a sudden fright will cure



the ague. January 14th 1743 Ashberry of Major Jenkinson's troop was almost recovered of an Ague & that day sent a foraging, fell into the *Scheld* unexpectedly, was heartily ducked and frightened; yet the Ague returned at its usuale time more violent than formerly, & was afterwards cured by the Bark. the same happened to our Sutlers Servant, but instead of curing the Ague, occasioned a violent inflammatory fever" [pp. 27, 29].

In a number of instances, his own observations caused him to question popular ideas on causation: "others imagine [smallpox] may be caught from change of air. viz: going from one place to another, yet I never observed any thing remarkable of this" [p. 57]. He challenged the contemporary tendency to explain the prevalence of particular diseases in terms of a national constitution, observing that "Scorbuticke complaints are not so frequent as one would expect, as they are said to be predominant in every English constitution" [p. 197]. Nevertheless, he did not dismiss the general belief that each nation was characterized by different physical attributes: "it's commonly said that a wound on an Englishman's leg is not easely cured, but I don't think them as bad as reported, tho many are Subject to swelled legs being full of humours" [p. 207] Sometimes he discounted interpretations that he had heard or read, and substituted his own, as he did when he noted, "Swelled testicles are frequent, & said to be occasioned from astringent medecines & the Surgeon always blamed; but are rather from catching cold, riding, intemperate drinking & private debauches, & are very obstinate in old venereal constitutions" [p. 177].

Buchanan's nosology was not very rigorous. When a "camp fever" struck in 1743, he rejected assertions that the disease was new, supporting his argument only by quoting a report that Sir John Spelman's death in 1644 was caused by "the camp-disease" [p. 298]. The tendency to identify different diseases with each other, and then to interpret their nature and determine treatment on this basis, was characteristic of the period. It helped to bridge the gap between empirical and rational medicine.

### III: BUCHANAN'S PRACTICE

#### *The Military Circumstance*

While there was a broad coherence to medical practice in eighteenth-century Britain, there was also variation that in part accorded with the practitioner's circumstances. A physician who practiced in London and enjoyed a wealthy clientele would have dealt with his patients differently and prescribed differently than would have a small-town apothecary whose clients were poor or lower middle class. Buchanan's circumstance during the years 1742-45 was the army. The scope of his practice, the health problems that he dealt with, and his relationship with his patients were greatly influenced by this.

In passing, "Regimental Practice" reveals many aspects of army life, including the rigors of the march, the violence of battle, and the tedium of winter quarters. Readers even learn that Buchanan for a time kept a young fox as a pet and that many troopers became fond of it. Nevertheless, the journal is not a desultory discourse on life in the Blues. References to the march, battle, and camp mainly provide background to explain disease or injury. The fox is introduced so that Buchanan can make a point about the impact of diet on behavior [p. 94].<sup>48</sup>

Buchanan occasionally places himself in the military context. Of the days before Dettingen he recalls, "we talked so much of decamping every day, that for Six nights I did not put off my cloaths, nor boots, lay on the ground & happy if I could get a little straw in a Soldiers tent" [p. 263].

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<sup>48</sup> Buchanan also notes (*ibid.*, p. 221) the case of a puppy that lived at his lodgings. Again, however, the reference is in a medical context i.e. that when the puppy's thigh bone was broken it healed without bandaging or being immobilized.

But recollections of his own experiences are few. Even when Buchanan recounts his bout of ague in 1743, he presents it as a case history [pp. 39, 41]. He often writes in the first person, but usually just to give his opinion or recount his practice regarding some medical matter. "Regimental Practice" is emphatically not about Buchanan. Nevertheless, much about him can be inferred, especially as regards his relationship with the men and officers of the Blues.

Characteristically, in his manuscript Buchanan never indicates a motive for having entered the military. He appears, however, to have been attracted to the army life and mission. The term of his service was exceptionally long for a regimental surgeon, and he chose to accompany the Blues on foreign service, rather than sell his surgeoncy before the men embarked, as did so many colleagues when they were confronted by service abroad. Given the number of his quotations from martial literature and the focus of his literary and historical sources, ancient and modern, it appears that Buchanan had an interest in Roman military history and more generally in the romance of warfare. His coverage of action that he himself had seen is, however, very slight. He recalls Dettingen with some appreciation of the carnage it brought: "its impossible to describe the variety of wounds from Cannon Shot, small arms, swords & Bayonets" [p. 267]. However much felt, however, such observations are so few and brief as to appear perfunctory. Rather than communicate in his own words, Buchanan strings quotations to evoke the horror of warfare, while focusing his commentary on such matters as how the wounds of battle were treated.

Unlike Pringle, whose position and authority were largely dependent on the whim of the high command, Buchanan does not appear to have been much caught up in army politics. He seems to have admired Lord Stair, Pringle's primary patron, and he lavishes praise on his performance and leadership at Dettingen [pp. 265, 267, 268]. But he does not even mention the officer who succeeded Stair as commander-in-chief, Field Marshal George Wade, and he makes note of Cumberland, Wade's successor, only in reference to a wound that the duke received at Fontenoy [pp. 269, 322].

As a regimental surgeon, Buchanan's primary responsibility would have been to the 250-300 men and officers of the Blues. He would also have been expected to tend their wives and children, as well as farriers and laborers who served the regiment. The level of difficulty faced by army medical officers varied markedly according to the situation. When the army was in winter quarters, their duties were generally light, but they might be inundated in the circumstance of battle or epidemic. Buchanan himself could be overwhelmed by the flow of patients. Of a flux-like illness that struck the Blues in 1743, he wrote, "by the middle of August it was so common that I could not keep a list of the mens names or cases" [p. 281]. In some respects, however, Buchanan's responsibilities were heavier than was usual in the army. Occasionally, perhaps regularly, the Blues appear to have suffered from a shortage of nurses. This shortage may well have forced Buchanan to assume a heavier burden and probably had a negative impact on the quality of care, as he himself noted in regard to patients suffering from inflammatory fever: "Many complain of not being well nursed; when they have an appetite, & victuals not ready at that time, the appetite is lost again; as we have no regular nurses the sick are nursed by their Comrades, & it cannot be expected that they are so careful in giving their medicines, as they ought to be" [p. 97]. Men who had their wives with them were better nursed. Buchanan notes that the troopers' wives "often apply a warm ... Dishcloth to the Throat, & sometimes a hot loafe" in the event of their husbands' suffering an attack of quinsy [pp. 123, 125]. However, either because they were unmarried or because their wives chose not to or could not accompany the regiment to Flanders, only a small minority of men enjoyed this advantage in nursing. Furthermore, as in other horse regiments, Buchanan had no mate, which presented difficulty in times of crisis. He recalls that in the wake of Dettingen, "having no assistant [I] avoided amputations as much as possible" [p. 267].

In an epidemic, the workload of medical officers increased not only because of a spike in the number of patients, but also because of a reduction in the number of nurses that they could call on. During an epidemic of flux and fever in 1743, reported Buchanan, "the Nurses dyed so fast that

private Soldiers were obliged to nurse their Comrades” [p. 283]. Like many medical officers, Buchanan valued nurses who were capable and conscientious. Of an epidemic of bloody flux in 1744, he observed, “We had many private receipts as infallible, but I would rather trust good nursing than family medecines” [p. 289]<sup>49</sup>

To reduce his workload, Buchanan could have utilized the general hospital extensively. The hospital was intended to handle chronic cases or diseases that were regarded as dangerous and likely to be protracted. It typically provided separate wards or facilities for patients who were suffering from contagious diseases. Major surgery was typically performed by hospital, rather than by regimental, personnel, though in emergencies, as were common in the wake of battle, regimental surgeons handled many amputations. Buchanan himself appears to have sent out the more serious surgical cases. He may have been reluctant to perform lithotomies [p. 142].<sup>50</sup> He reports in his manuscript that while in the Blues simple fractures were treated in barracks, "Compound fractures being more difficult of cure & requiring much time are sent to the Hospital" [p. 223]. On the whole, however, he appears to have been reluctant to send men to the hospital, for he perceived a number of dangers.

Surgeons should not send trifling cases to an hospital: those who go for slight Surgery cases are in great danger of catching some distemper of the house viz. fever, small pox &c. Harris of Cpt. Shipman's having dislocated his collar bone attended with great contusion was sent to Tournay hospital; got a slowe fever with great variety of complaints, took a dislike to the house from seeing so many disagreeable objects, continued in a lingering way some months, was at last brought to his Barracks at Brussels, tho we had a good Hospital there, would not

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<sup>49</sup> Regarding army nursing, note *RP*, n. 207.

<sup>50</sup> This case occurred when he was in civilian practice.

be persuaded to go to it, but chose to die in his qtrs always thinking of what he had seen in the hospital. Some are naturally lazy & indolent & are much more so after being some time in the hospital. [p. 196]

As is reflected in this quotation, Buchanan, like many contemporaries, was concerned that the military hospitals bred epidemics. He complained that the wards were too large and so encouraged contagion [p. 321]. A hospital base being quickly set up in the face of crisis was likely to be especially unhealthful. Buchanan writes of one facility that was established soon after the engagement at Dettingen.

Here our hospital was in great disorder as their baggage was not yet arrived from Flanders, the Sick lyeing on straw only in Barns, Stables, outhouses, &c: there was commonly a Dunghill befor the Door where all their Pots, Bedpans, &c: were emptied, & stinke abominably in warm weather, & great swarms of vermine are dayly produced; those Dunghills are lower situated than the Street, & when raine falls the common Channel empties ... itself into the Dunghills, carrying much filth along with it, & after raine the stench was almost insufferable. [pp. 281, 283]

Buchanan's anecdote regarding "Harris of Cpt. Shipmans'" also speaks to the concern that men who were confined long in hospital facilities often fell victim to depression [cf. p. 295]. When the Blues were due to depart for England, troopers who remained in hospital became profoundly depressed at the prospect of being left behind. According to Buchanan, "When the mind is so greatly concerned, the body is soon affected, grows restless & unease, tossing & tumbling in bed, nor have medecines the same effect ... whether given internally or applyed externally, nor do wounds suppurate so kindly in this condition.... three dyed last night unexpectedly, all being greatly concerned at the thoughts of being left behind, & telling their Comrades they should certainly dye. all earnestly wished to

return home, yet many dyed” [pp. 339. 341; cf. p. 343].

Yet another concern expressed by Buchanan and others was that transportation to hospital caused great physical and mental stress. Not only were hospital facilities sometimes far off, but during the winter some facilities closed, and hospitalized patients were routinely transported many miles to bases near headquarters. In late 1743, noted Buchanan, “the Sick were brought down the Rhine in Barges; suffered much from cold & wet & bad provisions, were Sick, faint & weake, pains in all their bones, Limbs numb & threatning a mortification” [p. 258]<sup>51</sup>

In the wake of Dettingen, Buchanan observed the hospitals of the French, the Hanoverians, and the Dutch, and compared their practice in treating wounds. He had little to say about the Dutch, other than that they followed a rather rigid, though simple, method of dressing wounds and that their preference when in garrison was to place their men in civilian hospitals. He was, however, quite critical of French practice: “French ... Surgeons went round the hospital carrying a tub of Brandy & Syringes, with which they washed the wounds, dressing with dry lint dipt in brandy, & covering with digestive. Such of their wounded as could be transported & require time to recover, were sent to the nearest French towns. the wounded lay on Strawe or hay in houses, churches, Barns &c: our men say the French bleed often & cut much.” Of the three hospitals that he observed he was most impressed by that of George II’s duchy.

The Hanoverians had their hospital baggage in the field; their hospital was soon put in good order; their men in good houses, lye on palliases stuffed with Straw, have good coverings; their dressings are very neat of drawn lint, wounds cleaned with fine Sponge, soaked in warm water & brandy, use the caustic on the first appearance of proud flesh....hospital medecines are carried on a large waggon, divided into many different partitions, & opening at many

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<sup>51</sup> See *RP*, n. 561, for Pringle’s comment on this episode.

places; any particular medicine may be easely got at, the whole easely packed & unpacked...  
use many chemical preparations. [p. 284]

Buchanan's endorsement of the policy and practice of the Hanoverian ally, and his deprecation of those of the French enemy, may have reflected bias, but a number of eighteenth-century British sources -- objectively or not -- echoed the observation of his informants that "the French bleed often & cut much."<sup>52</sup>

Buchanan accepted that some hospital facilities were of high quality -- as was noted above, he did write of "a good Hospital" at Brussels -- but for many reasons he preferred the infirmary even to the best of them. He favored a facility that was small, uncrowded, and well-aired. In his manuscript he notes that during a smallpox epidemic in 1743, "two Troopers were seized with this distemper in Camp, & removed to the neighbouring village, were distinct & favorable, lay in an open barn & had a slight flux during the whole course of the Desease" [p. 51]. On this count, too, he would have rejected the hospital when possible, preferring instead that the men be treated in the infirmary, the type of facility where he practiced.

### *Buchanan's Relationship with His Patients*

Like a number of other writers on military medicine, Buchanan stresses the importance of treating acute diseases quickly. Of pleurisy, he writes, "one day's delay may cost the patient's life" [p. 109; cf. p. 103]. However, soldiers were notoriously reluctant to visit the infirmary. Even less willing were they to be confined in a hospital facility. According to Buchanan, one victim of a camp

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<sup>52</sup> Paul E. Kopperman, "The Drive toward More Moderate Therapies in British Medicine, 1750-1800." *Proceedings of the 37<sup>th</sup> International Congress on the History of Medicine* (2002), pp. 267, 270n3.



fever that struck in 1743 “would neither eat nor drink, nor taste medecines, saying he was certaine he must dye, & did dye in his tent. our men had taken a dislike to the hospital, would rather suffer the injuries of the weather in the field, or think themselves happy if they got into a Boners out-house & lye on straw” [p. 295].

The first inclination of sick or injured soldiers was to treat themselves, as did the men who attempted to cure itch (scabies) with burnt gin [p. 19]. Buchanan reports that when soldiers, on leaving their ships, scraped their shins on the ropes, they rubbed brandy on the wounds [p. 7]. While not in this case commenting on the wisdom of their practice, elsewhere in his manuscript Buchanan does express concern over the tendency of the men to doctor themselves. As regards chilblains, for example, he observes, "the men rub with ol: tereb: as soon as they perceive them. tho looked upon as trifles yet are frequently of dangerous consequence & ought not to be neglected" [pp. 225, 227]. Similarly, Buchanan notes that soldiers from Essex used groundsell to control ague fits, and that he tried it, but did not find it to be effective [p. 37]. He also reports that men and officers treated themselves for scurvy [pp. 199, 201]. And line officers on occasion took it upon themselves to treat their men, sometimes unwisely. Buchanan records the case of a lieutenant in the Blues who misinterpreted the stitch of one of his troopers as a sprain and applied a cerecloth, nearly bringing about the death of the patient [p. 213].

Often medical officers were hampered by a code of masculinity that encouraged soldiers to play down their problems. Even in the face of serious diseases or conditions, the men often responded with bravado: "Peerage, of Col. Beakes's had it [phimosis] to a great degree & would not suffer anything to be done, being a Farrier only rubbed with Ungt. Dealth. & continued so two years, laughing that he now got a natural scabbard, & swearing he would never draw his sword. was lately discharged" [p. 175].

Buchanan depicts the trooper as a difficult patient. He was, first of all, partial to rigorous treatments: "Troopers love to be worked heartely, & so much the better if it operates upwards & downwards, & seldom blame a strong vomite but will always find fault with a weake one" [p. 77; cf. p. 173]. Buchanan's patients were often demanding and self centered. He writes, "Soldiers often grumble at seeing nought but dry Lint & old rags applyed to a wound ... & think themselves neglected if they are not dressed once in 24 hours whether necessary or not" [p. 268]. Troopers were prone to be contemptuous of treatments and medicines that struck them as being too simple or commonplace. When Buchanan advised fever patients that they could relieve headache by bathing their feet at night, they at first ridiculed the practice as "a childish thing," only to adopt it when they observed it working [p. 89]. For coughs, Buchanan recommended licorice, but noted that it had a fault: "that of being too common, & therefor by some despised" [p. 107; cf. p. 127]. He reported a similar problem in the case of jalap, which he regarded as an excellent vomit, yet disparaged by the vulgar "from being cheap & so much in practice" [p. 173]. Buchanan used mercurial pills of his own design to treat venereal eruptions and found them to be effective, but "our men only found fault with them as being so small and having no violent operation, imagining medecines can have no good effect unless they be rough in their operation" [p. 187]. And while Buchanan criticized his patients for disdainning remedies that were too gentle, his manuscript suggests a broader problem: that they were often reluctant to take the drugs that he prescribed. For example, according to him, the men had a "foolish aversion" to theriac, an opiate, as a remedy for tenesmus [p. 282].

In other respects, too, the men were prone to be uncooperative. Buchanan complains, "its a difficult task to cure the private man of claps: when the painfull Symptoms abate, they neglect taking medecines, let the running continue till it turns to a Gleet, then say they were not well cured. Officers are more easely cured & that with the very same medecines, being more carefull of health & keeping a proper Regimen" [p. 171]. He later adds, "Venereal emptions on the Skin are common amongst us, & I have been often afraid to attempt a cure without Salivating from the difficulty

represented by Practical authors, but our men have neither time nor Patience for this method" [p. 185]. In a number of instances, Buchanan points up the unwillingness of soldiers to cooperate in prolonged treatment. Buchanan reports the case of a trooper who fractured his ischium, then insisted on getting out of bed and walking before it healed. He was therefore left lame, with one leg shorter than the other, and was in consequence recommended to Chelsea [p. 219].

If men were reluctant to seek medical treatment, there was perhaps still greater cause for them to reject surgery. Various factors, however, allowed many to endure it. Shock, pain, or apprehension might cause patients to faint on the operating table [p. 279]. And just as men who were drunk were prone to injury, so might their drunkenness reduce the pain of corrective surgery [p. 219]. Even patients with no palliative, however, might endure surgery with fortitude. According to Buchanan,

Majr. Jonston of the horse Guards received a Cannon shot on the left ankle, the bones smashed to pieces & the foot hanging by the great tendon, the large arterie bleeding at ... full stream. I stiched the artery, cut off the ankle, dressing dry with proper bandage &c: leaving the amputation of the leg to a more convenient opportunity. it's surprising how some people bear pain better than others, this Gentleman never changed his voice or altered his Countenance; when I told him You must loose your leg, he answered cooly, that shall be the work of another day. [pp. 267, 269]

But not all patients were stoical in the face of pain. They often resisted treatments that might prove painful. After Buchanan observed that an accidental evacuation of blood cured chordee, he speculated that the condition might be relieved by venesection, but no one would allow him to apply a leech to the affected region [p.175]. The men also had their vanity. According to Buchanan, when their parotids swelled during colds, they feared that if they suppurated it would leave scars [p. 124].

Buchanan reports in his manuscript that some men with buboes "complaine of so much pain as not suffer You to touch it. are even afraid if You look at it" [p. 181]. Symptoms that medical men knew not to be worrisome might nevertheless terrify their patients. So, for example, the troops who were suffering from dysentery might be alarmed by the loss of even a little blood [p. 289]. Buchanan appears to have accepted his patients' fears and, to the extent possible, taken them into account in defining regimen. A common device of his was deception. In the course of his discussion of inflammatory fever, he observes, "Some people have a certain prejudice against vomites.... I then order them to drink two or three quarts warm water in order to wash the Stomach, & ... often provides a good emetick: let the patient be never so sick, he is easely perswaded to drink warm water when frightened at the name of a vomite" [pp. 73, 75]. Of another condition he notes, "A Blister applied to the part often removes the Stich; & when applyed without forewarning the patient there are no great complaints; but if You mention a blister, he will plead an excuse, saying he is yet not so bad & beg to put it off till to morrow. if You tell him of a plaister to the part he is well pleased & applies it with pleasure, nor are his complaints troublesome" [pp. 107, 109].<sup>53</sup> Buchanan also withheld information when he thought that this benefited the patient. On one occasion, a cornet broke his collar bone. Buchanan set and bandaged it, without telling his patient of the break, and the bone quickly healed. "Had he been informed of this fracture," he observed, "he would surely be blooded, gone to bed ... & kept his Chamber some days" [pp. 221, 223].

Buchanan complains that soldiers tended to blame doctors for not curing them, even when they were responsible, as by not continuing their therapy as they improved: "I would rather

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<sup>53</sup> Hamilton reported, "I have on many occasions seen an apparently strong and robust man tremble at the sight of a lancet, and faint away in the course of the operation, who, I dare say, would have undoubtedly charged the enemy with fixed bayonet, or mounted a breach without fear. There is something abhorrent in our nature at the deliberately wounding our flesh." *Duties of a Regimental Surgeon Considered*, I, 255.

undertake the cure of Bubo than that of a Clap. so long as they require dressing the men attend dayly for fear of being poxed, & never pretend to cure themselves; but their private receipts for claps are infinite. when the cure is compleated they don't mind physick or any regimen, but return to the old way, & if poxed thereafter blame their Surgeon" [p. 183]. If venereal patients were a problem, so were those with ulcers on the leg: "tho they appear to the eye a meer triefle yet they are always tedious & sometimes never cured. a Surgeon gets no credite by them; the men will not keep a proper Regimen; You can hardly perswade them to take a Dose or two physick, the good effect of which is soon overballanced by the nixt debauch.... The men ride or walk dayly ... despising such small sores, & find fault with their Surgn for not curing them" [pp. 201, 203, 205].

Despite Buchanan's reservations about his patients, when sick troopers came to see him, he tended to trust their judgment. He regularly asked them what they believed had made them ill and sometimes drew plans for treatment from their interpretation of cause. Many of them, he once noted, were suffering gripes after bouts of flux: "Upon asking what occasioned this Distemper, I was told by some, they believed it proceeded from drinking white Beer, I advised them to abstain from Beer & drink small milk punch" [p. 21]. On another occasion he interviewed patients suffering from rheumatic fever and learned that "all blamed cold as the first cause" [p. 121]. Sometimes the men could not give a plausible explanation, leaving Buchanan to speculate, as in the case when "three men were ill [of jaundice] in one roome, for which they could not give any particular reason, having messed with their comrades. probably from too gross feeding & little exercise; the men are apt to indulge too much on coming into garrison" [p. 133].<sup>54</sup> He also questioned patients about the progress of their treatment, as in the case of fever sufferers that he treated for nausea: "The morning after the vomite they often find themselves much better, being more *lightsome* as they express it. I then enquire into the state of their body, whether they go to stool or if their belly feel full, which if it does, purging is necessary" [p. 79].

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<sup>54</sup> More on importance of exercising, p. 135.

Buchanan had a keen interest in folk remedies that the troops employed, and he reports on many of these in "Regimental Practice." He notes, for example, that there were different remedies for ague tried by Irish recruits and by troopers from Essex [p. 37] and observes, "there are many private receipts for the cure of an Ague, and every body has his own favorite, & I have been complimented with many, & it would be endless to mention them.... upon recovery some of the men eat a Lemon with its skin on such days as they expect the fit" [pp. 29, 31]. In most cases, Buchanan does not evaluate these remedies. In some, he approves. In the course of discussing sudorifics for fever patients, he notes, "The men deal much in hot pots for this purpose; or treacle posset, boyled beer or buttered ale; & no <bad> medecines if they are not made too strong" [p. 85]. Nevertheless, he does criticize some of the remedies that the men applied to themselves. In respect to the itch, he comments, "some men cure themselves with Mercuriale water, Viz: boyling two pennyworth Corrosive mercury in a quart spring water into a pint, and washing the parts affected. This is too corrosive and often excoriates the parts, & sometimes raises blisters, striking the itch suddenly inwards, whence proceed violent coughs and diseases of the breast" [p. 17].

Buchanan appears to have been willing to tailor treatment to the comforts of his patients. Of smallpox sufferers, he writes, "Acid Sharp drinks are longed for <about> the latter end of the Disease & may drink freely of small Sherbet, adding a little wine so to be a pleasant cordiale" [p. 47]. To some extent, the issue at hand was in fact the comfort of the sick. "Drought is a constant attendant of fevers & very troublesom to the Patient.... Acid sharp drinks are often wished for, & I know none so pleasant as the common sherbet made rich with fruite, of this the sick seldome tyres, tho he soon dislikes all other drinks" [p. 81]. But of course food and drink played an important part in therapy, as well, and often illness affected appetite. In the case of fever patients, Buchanan reports, "I often consult the appetite & seldom forbid what the Patient wishes for, unless it be something very much out of the way" [p. 91].

The preferences of Buchanan's patients influenced the therapy that he provided. On at least one occasion, Buchanan bled at the request of a patient [p. 295]. The attitude of his patients in any case encouraged bloodletting: "on every slight fall or bruise the trooper thinks himself neglected if he is not bled" [p. 209]. And it was not only patients who pressured him in respect to therapy. Officers sometimes complained that he was not treating their men properly. A captain in the Blues wondered why he was unable to cure a man's cold [p. 127]. Several officers were angry when they learned that men in their units had not been bled, although they were suffering from fever, this being a form of fever that did not, in Buchanan's opinion, respond well to venesection [p. 295].<sup>55</sup>

Buchanan tried to protect patients from being ordered to duty by their superiors or pressured into it by other soldiers: "their Comrades think nothing of a broken shin, saying they have had as much at foot ball & cured it with a leafe of tobacco; grudge doing duty for their lame Comrade & often oblige him to do his Duty befor he is well. but in order to save him <I give> a certificate *unfit for Duty a horse back* directed to his Officer [p. 207].

While Buchanan may on occasion have come into conflict with officers over how best to treat his patients, he shared their concern that many men simply feigned illness in order to avoid duty. He claimed that some venereal patients magnified complaints of nocturnal pains, only to be exposed as frauds [p. 191]. Buchanan was willing to see deception used to expose malingering:

Some pretend to be sick or Lame & uncapable of Duty but can do some work in the hospital when employed as servants, & have good wages. these are not easely detected, tho

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<sup>55</sup> In the same regard, Hamilton complained of "the murmurs of officers, if men are not so soon cured of their complaints as their anxiety would have them": *Duties of a Regimental Surgeon Considered*, I, 58.

sometimes discovered by making them drunk, & carefully observing their motions. a Stiff Knee is a common complaint, but upon being fuddled, can dance, jump, & cut capars.... Some suffer the part to be blistered, Seatons cut &c: but have recovered upon hearing the Surgeons whisper that a red hot iron must be applied for nine mornings in order to remove that humor from the bone. [p. 196]

Buchanan took a hard line again malingerers, but he accepted that some soldiers genuinely believed that they were ill, even when in fact they were not. He appears generally to have sympathized with these men, and he again approved of deceiving them, in this case to provide them with peace of mind: "We have many imaginary Venereals, & when one of a Troop is fluxed for venereale complaints, if any of his old Companions have the least aching pain in their bones from catching cold or scabs on their skin from itch or scurvy, presently reflecting on their past life, conclude themselves poxed & are not satisfied without fluxing" [p. 193; cf. p. 195].

Like many writers on military medicine, Buchanan saw depression to be a major problem in his regiment, and he expressed sympathy with the sufferers. "Soldiers sometimes take a melancholy turn, become low spirited, senseless & childish, avoid company, cry or mutter to themselves, love to be solitary. upon asking their case, they tell long stories about their past & present condition, are in great fear of being some way or other lost" [pp. 327, 329]. Even soldiers who were recuperating from a slow fever in 1743 remained "greatly low-Spirited, & despairing of doing well, & fearing being left behind. which is always the case with Soldiers & greatly prevents recovery, their Mind being never easie" [p. 295]. Buchanan observed that soldiers – by inference, heavy drinkers – who suddenly swore off strong liquor were especially prone to melancholy, while a "heartie bottle" offered at least short-term relief to the problem [p. 329].

### *Accounting for Disease*



In his journal, Buchanan often notes the opinions of officers and men regarding how they contracted their diseases. It appears that in most cases he credited this conjecture. In no instance does he reject it. He reports that a man who contracted yellow fever "thought his illness was occasioned by the fatigue of marching" [p. 62]. Two officers who died of a slow fever in 1743 had, he notes, regularly slept on the ground, on straw alone, and both had complained of catching cold at the outset of the disease [p. 297].

Buchanan generally accepted contemporary wisdom regarding etiology. He saw obstructed perspiration as a frequent cause of disease. It might be the cause in itself or the trigger to a chain reaction: "the [yellow fever] patients commonly complained of catching cold on Duty, perspiration seemed to be obstructed and to have fallen on the bowels" [p. 63]. He also held to the common belief that ague was caused by wet ground or unclean air and conversely that dry weather or a cleansing of the air, as by snow, would reduce the danger [p. 43].

The nature of contagion interested him, as it did many of his contemporaries. The itch was one of the diseases that he recognized as contagious. "This disease is never to be rooted out, one man affects a whole barrack in winter Garrison and his tent Mates in the summer. Some are cured sooner than others, and he who is last acuring gives it fresh to his Comrades" [pp. 15, 17]. But he also recognized the principle of natural immunity: "I blooded many Itchy Troopers, yet never caught the distemper. & I know a *Scotch*: Gentlemen who was never affected with it, though he has had many an itchy bedfellow" [p. 19]. In a similar vein, he wrote, "Some constitutions not easely affected with the small pocks" [p. 55; cf. p. 56]. Of acquired immunity, however, he was less certain, for the evidence seemed inconsistent: "it's no extraordinary thing to have [smallpox] twice or thrice, & I have been assured of the same from their Physicians. Mr. Stevenson, Surgeon to Durure's Regimt assured me he attended on of his Soldiers twice for this distemper since he came to Ghent" [p. 45].

The bond between disease and heredity likewise appears to have interested Buchanan, for he refers to a possible linkage in several instances in "Regimental Practice."<sup>56</sup> Of the plethora that occasionally afflicted a major in the Blues he comments, "this is a family distemper" [p. 100]. But he also looked for alternative explanations for diseases that appeared to run in families. He notes the case of a father and his son (a trooper in the Blues) who were prone to colic, but observes that both drank large quantities of milk, meaning that diet, rather than heredity, might be responsible for their problem [p. 237].

Nevertheless, to Buchanan's mind, the main cause of disease was the weather. Like many eighteenth-century medical men, he studied the weather in association with patterns of health and disease. In 1744, he wrote, "During this Campn I keep't an exact journal of the weather from a small Thermometer, as to heat or cold, wet or dry; and accordingly observed my return of Sick & Lame, rise & fall like a weather Glas" [p. 313].

Overwhelmingly, Buchanan cites as causes factors that were associated with exposure and were as such intrinsic to the life of a soldier, particularly a soldier on the march. Mentioned most often are cold and chill; rain or dampness; stoppage of perspiration; and fatigue. Singly or in combination, Buchanan specifies these as causes in no fewer than 57 instances. A sense of the linkage that he detected is provided in his report of an epidemic of bloody flux that beset the army in the wake of Fontenoy: "it was not universal, being confined to such troops only, as had most fatigue. alarms were so frequent amongst our out parties, that there was scarce time to pitch tents, or untye cloaks, all lay on the cold ground exposed to the open air, & tho the days were warm the

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<sup>56</sup> Heredity was often used to account for disease during the 18th century, but even those who did so conceded that it often failed to predict who would contract a disease that they regarded as hereditary. Note John C. Waller, "'The Illusion of an Explanation': The Concept of Hereditary Disease, 1770-1870," *JHM*, 57 (2002), pp. 413-21.

nights were cold” [p. 291]. In accounting for disease, Buchanan often paired overheating with a subsequent stoppage of perspiration – often the result of an overheated man becoming chilled.

### *Avoiding Disease*

In some cases, Buchanan resisted explanations that blamed the soldiers for their diseases. Of an outbreak of blood flux in May 1745, he noted that the troops’ consumption of fruit could not be used as an explanation, since fruit was not yet in season, “yet irregularity must be charged to the poor Soldier & gin is blamed; yet I have always observed the drunken Soldier the most healthie, but when seized with Sickness, often attended with greatest danger” [p. 291]. Nevertheless, he believed that the army leadership, and even the soldiers themselves, could do much to maintain health.

That officers and men faced particular danger when their units engaged is obvious, and in “Regimental Practice” Buchanan discusses the wounds and injuries that resulted from combat. The fact that the Blues were involved in only two battles, however, and were deeply committed in only one, during their three-plus years on the Continent suggests that the hazards of battle did not generally affect the health of the regiment. Nevertheless, even when there was no combat, military life was often fatiguing and stressful. The British did not see significant action in 1744, yet the proximity of the French caused hardship.

About the latter end of Augst. our Duty began to be very hard and fatiguing from out parties, forraging, &c: the covering party for forraging turning out at break of day, & the forragers an hour or two thereafter. worke hard all day in cutting corn, mowing Grass, making trusses &c: and don't return till evening; the old Grand Guard is often employed on this duty, are thirty or forty hours a horsebacke, & often without forrage. we sometimes went fifteen miles in search of forrage, (which at home would be reckoned a long march) & return with heavie

trusses, the men mounted. Some parties were ordered out over night, in order to cover the forragers nixt day, were obliged to lye on their arms in the open field, stand to their arms all nixt day, & return to Camp at night & often wet to the skine, & some accidents of Gunshot wounds from skirmishing with the Enemies out parties. [pp. 309, 311]

Nor was the impact of battle on the health of the army to be measured only in terms of wounds and injuries. Troops suffered greatly from overheating and fatigue, and Buchanan blamed these for an epidemic of fever that struck after Fontenoy [p. 322].

Buchanan often laid the health problems of soldiers to the military circumstance. Costiveness, he observed, was often the result of poor diet [p. 3]. Walking and riding in boots caused legs to swell [p. 249]. And as was noted earlier, the group of causes that he cited easily the most often were particularly associated with the exposure to the elements that was inevitable when the army marched.

The troops certainly suffered from exposure when marching, but their living conditions in camp and garrison were likewise inimical to health. Even while in winter quarters, they often lived in damp quarters [p. 13]. Tents became worn out during the campaign, so that by fall they were insufficient to guard the men from cold and damp [p. 305]. And in summer heat, they presented another danger, according to Buchanan: "one can scarcely believe how desagreably hot a <Soldiers> tent is on a warm day. I have much adoe to bear it whilst I ask a sicke man how he does, being almost ready to faint. they are changeable from heat to cold to a surprizing degree, the perspiration sometimes greatly promoted and then suddenly checked" [p. 257].

While much of the sickness and injury suffered by the troops was intrinsic to the army life -- the fatigue and exposure associated with marching, the occasional battle -- the men also harmed

themselves by engaging in certain behavior freely. The vigorous lifestyle that characterized the army sometimes led to injury. Buchanan reported that the men often suffered head bruises when they fell while learning to iceskate [p. 211]. A cornet in the Blues dislocated a finger as he attempted to catch a cricket ball [p. 217]. The military ethos as it related to costume could also impact on health. According to Buchanan, the faces of officers became sunburnt as the Blues rode through Germany in 1743, but they would not shield themselves by uncocking their hats, for this they considered “unmilitary” [p. 251].

Buchanan’s formula for maintaining health was quite standard: “Spare dyet with good exercise & light wines seems to be the best preservative from Distempers” [p. 311]. He stressed the importance of regularity and advocated a diet that included toast soaked in oil and oily broths, along with exercise, for individuals who were sometimes costive or who followed a studious or sedentary life [p. 143].

The circumstances in which the soldier functioned might promote health as well as illness. Even when men were on the march, moderate, dry weather served to maintain them. Comparing the health of the troops in spring 1744 to that which had prevailed at the same time a year before, Buchanan observed, “When the weather become dry & warm, the ground dry, Complaints were much the same as last Season, but having little or no fatigue, the weather was not so excessive hot, they were neither so frequent nor violent.” The fact that in general the troops were inured to the march also promoted health: “The men were accustomed to a Campn life.” Significantly too, they “were always supplied with plenty of good provision.” Still another factor that promoted health was habitation. According to Buchanan, during the march the men had “abundance of Straw, lived well & made huts to shed themselves from the Sun, which we never did in Germany on account of frequent marching, nor did the Country afford such plenty of wood, nor durst we make free with it as in Flanders.” [p. 307] The huts allowed for free circulation of air – a marked contrast to the

sweltering tents that Buchanan condemned.

Anticipating the advice that Brocklesby would put forward in 1764, in his influential *Oeconomical and Medical Observations*, Buchanan suggested a few rules for maintaining health when the army was encamped. It was important to choose a healthful campsite, to keep it clean, and occasionally to shift ground:

If we continue ... long in one Camp our <men> grow lousy & itchy.... their straw should be often changed; the old always burnt & not thrown as litter to the horses.... if we remaine a long time in the same Camp, there's an ugly smell, from the horse Dung, & large swarms of flies become troublesome, especially in hot weather. if the ground be wettish, with many ditches of stagnating water, fish ponds, &c: the water stinks in hot weather & is useless, being full of frogs Spawn &c: [pp. 323, 325]

Like most of his contemporaries, Buchanan looked to the non-naturals both to preserve health and to restore it. The Flemish were typically healthier than were the English, he noted, and he related this in part to sufficient rest and good air: "Playes & other entertainments are never so late as in London. the Gentlemen keep themselves warmer than at home. some from prudence in preserving health, others from the custome of the Country.... here is no coale smoake" [pp. 241, 243]. He reported also that he had observed patients recovering from ague "without Bark or any other febrifuge medecine, which was entirely owing to a warmer & dryer air" [p. 35].

One of the factors that Buchanan frequently noted as he compared the health of different groups was diet. He reported, for example, that jaundice was "hardly known amongst the towns people.... they eat very little meat, living much on vegetables" [p. 135]. He favored simple diets that were vegetable oriented. In Flanders, he wrote, "Consumptive people are more healthie.... live much

on vegetables, all garden herbs being in great abundance & good of their kind" [p. 165]. At another point he observed, "Our Officers were more healthie abroad than at home.... this proceeds from a lighter dyet; in England solid meats are most common[;] here a light soup is always the first dish.... nor are dressed Suppers much in fashion" [p. 241].

Buchanan also considered the issue of drink -- specifically, what alcoholic beverages the men drank, how much, and how regularly -- in relation to disease. Indeed, alcohol consumption figured frequently in his observations, suggesting that he was interested in the possibility of linkage. He reported that the only man who died in an outbreak of pleuretic fever was an "old Drammer" [p. 109]. A soldier who died costive, Buchanan observed, "was remarkably Sprightly, but from bad example has learned to drink Drams. was often Drunk & it was thought his inside was burnt up." [p. 145] He found alcohol abuse to be an occasional cause of various diseases, including dropsy [p. 150] and colic [p. 235]. And in his estimation, inflammatory fever was dangerous only to heavy drinkers [p. 102].

Nevertheless, on the subject of drink, Buchanan provides a mixed message. Wine he considered to be salubrious. Malt liquor he generally approved of, even when it was drunk in excess. He made note of the dissection of a drunkard; the liver was not burnt or dry, and he ascribed this to the fact that the dead man generally drank malt liquor [p. 331]. He believed that the overall health of the Flemish had much to do with their choice of liquor and their overall sobriety. They were not, he reported, guilty of "any excess of drinking at taverns, it being customary to retire to each others private Lodgings & pass the evening in a Sober manner; here are no country rambles.... light french wines are drunk dayly instead of Strong Port.... here is no ... strong malt liquor" [pp. 241, 243]. Indeed, for the most part he found no link between drunkenness and disease. "None of our drunke fellows catched <it>," he wrote of the yellow fever epidemic of 1743 [p. 63]. In relation to ague, he wrote, "Drinking Gin & Spirituous Liquors are said to occasion this distemper; our foot Guards are

remarkable for this taste, yet not much Subject to the disease, and all our drunken fellows have escaped the distemper.... it was almost universal with the garrison at Bruges, especially where their barracks were moist & cold" [pp. 33]. He even discounted the common -- and, as it turned out, correct -- opinion that indulgence in strong, sweet wines encouraged gout: "Gouty Officers avoid drinking French wines, for fear of giving them the Gout. but in Flanders its the only wine they drink, particularly Burgundy, Hermitage and & acknowledge they never were so healthy. & in our Dutch cantonment French claret was drunk dayly & that freely, yet I don't remember many Gouty complaints" [p. 163]. Toward the close of the Blues' service on the Continent, Buchanan observed, "The Drunken fellows have been remarkably healthie since we came abroad" [p. 329]. He added, however, "when taken ill, their distempers are more violent, & some dye suddenly" [p. 331].

At least in "Regimental Practice," Buchanan does not moralize in discussing venereal disease. He views the disease itself as discouraging promiscuity, noting, "When the men have been often in for it, they are more cautious in their intrigues" [p. 197].

Buchanan was more consistent in his attitude toward exercise. He observed that sedentary soldiers were most prone to illness while the army was in winter quarters; and he did not believe that garrison duty provided meaningful exercise [p. 333]. Officers, he noted, were prone to indulgence when in winter quarters [p. 335]. Buchanan notes the negative impact on health of a sedentary life. He warmly advocated horseback riding as exercise, sometimes pointing up negative health consequences for those who neglected it [pp. 149, 169, 241, 335]. In general, he endorsed exercise as an antidote to overindulgence [pp. 133, 135]. Reflective of his overall tendency toward moderate therapies is his advocacy of lifestyle in treating consumption, while many contemporaries, like Richard Mead, were much more reliant on drugs [p. 167].<sup>57</sup>

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<sup>57</sup> On Mead's therapy, and other models, note app. B-1.



## *Treating Disease*

Beyond questioning the patients regarding their symptoms, Buchanan diagnosed diseases and traced their progress through checking signs and symptoms that were readily observable. He was, however, selective in what he looked for: "I seldom examine the Troopers urine, they having no proper conveniency to keep it, and think I can form a better judgement from their voice, looks & breathing, than from their pulse or Urine" [p. 99].

Eighteenth-century British therapeutics grew from the firm foundation of Thomas Sydenham. He, far more than any other individual, shaped the methods by which disease was understood and treated. In the corpus of his published writings -- small by comparison to those of a number of far less important figures -- there were many diseases that he did not discuss, but even in these cases the broad rules that he laid down often had influence. It is unclear whether Buchanan read any of his works. In "Regimental Practice" he does mention that he treats smallpox "after Sydenham's manner" [p. 45], and he endorses Sydenham's recommendation of horseback riding as therapy for consumption [p. 167]. But the views expressed by Sydenham were in both cases so well known that Buchanan could have picked them up by word of mouth.

For some illnesses, Buchanan recognized no treatment as effective, noting failure of even common therapies. Of the common cold, he wrote, "This is one of the most common Deseases & most difficult to cure in many cases. & people are surprized we cannot cure a cold for which every body has his own favorite medecine, but dissection often Shows them to be incurable" [p. 127]. And while some contemporaries were sanguine about curing dropsy, he reported, "the common method of cure attempted, but never succeeded, & I never saw a real Dropsy cured tho it may be palliated by medecines, tapping &c." [p. 149]. In the main, however, Buchanan was an optimist, confident that most diseases could be cured and that he could play a major role in this.

In some cases, Buchanan attempted to cure disease by removing the cause. This strategy is illustrated in a case that occurred after he left the army. When a friend of his contracted dropsy, Buchanan ascribed the condition to his heavy drinking and recommended that he be removed from the town where he lived and be boarded with an abstemious farmer. The patient was to be allowed no spirits, but only ale. On this regimen, he recovered. Generally, however, what he perceived to be the cause of the disease was not a major determinant of his therapy.

Buchanan favored drugs that were moderate in action. He dismissed an ointment that was intended to replace, within twenty-four hours, hair worn from horses' hucklebones, complaining, "it seems to be rather commanding than assisting Nature" [p. 315].<sup>58</sup> When a rapid purge was not essential, he preferred diet to drugs as a laxative. In treating smallpox patients, he wrote, "I endeavour to procure a stool every other day, by dyet or Clister, & by so doing many bad Symptoms are prevented, but would rather have it by Dyet so as to empty the whole tube of the Guts, & for this purpose I advise roasted apples, stewed pears, currant or Plumb: Gruelle, now & then a draught of whey, &c:" [pp. 45, 47].

In the course of "Regimental Practice," Buchanan cites 111 drugs or unnamed medicinal preparations that he definitely or probably used – in a number of cases, he notes that others used them, as well – plus 66 that were used by others, but not by him, at least not in the instances that he mentions. In addition to particular remedies, he occasionally refers to drugs only by category: "digestives," "mercurials," "saponaceous medicines," and the like. The number of remedies that he made use of is surprisingly large. In his period, practitioners, often after an initial phase of trial and error, tended to focus on a short list of drugs that they applied rather broadly.<sup>59</sup> Even though, as of

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<sup>58</sup> He also observed that he had never seen it have a "good effect."

<sup>59</sup> For example, while as a naval surgeon Thomas Robertson had more than 60 drugs in his medical chest, he apparently made use of only a few, employing these repeatedly: William

the start of his chronicle in September 1742, Buchanan had already been a regimental surgeon for more than eight years, he was clearly experimenting and was furthermore adjusting his choices in accordance with a set of variables, such as the nature and intensity of symptoms and the condition, perhaps also the preferences, of the patient.

Most of the remedies that Buchanan specifies shared the names of official drugs. This may not mean, however, that they were always prepared according to the recipe of London or Edinburgh. The army had its own formulas. There were, first of all, the drugs that Buchanan refers to as “nostrums.” He mentions using fourteen of these. While not always stating an opinion regarding their effectiveness, he writes favorably of those that he does assess. The army’s mercurial pill he characterizes as “the best I know,” and he states that the liniment for venereal ulcers was capable of “dissolving them insensibly without pain & [I] have been often surprized at its good success” [pp. 177, 185].

Beyond the remedies that Buchanan mentions, there were many others that were prepared in accordance with a standard army formula. A manuscript “Dispensatory for the Army Hospitals,” which was fixed as standard by Cumberland’s order, provides recipes for 45 drugs, most of them directed by their names to the treatment of particular diseases and symptoms – *Enema Dysentericum* and *Infusum Pectorale*, for example.<sup>60</sup> It appears to have been prepared in March 1746, although it

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N. Boog Watson, "Thomas Robertson, Naval Surgeon, 1793-1828." *BHM*, 46 (1972), p. 136.

<sup>60</sup> Royal Archives, Windsor Castle, Cumberland Papers, Box 2.26, pp. 4-10. This document also includes lists of drugs specified for use in the British Army; these lists are among the sources review in App. C-1. Apparently on Cumberland’s authority, in 1747 John Theobald published the recipes in translation and discussed their uses: *Medulla Medicinae Universae: or, A New Compendious Dispensatory. Compiled at the Command of His Royal Highness the Duke, For the Use of the Military Hospital Abroad, during the late War. By the King's Physicians and Surgeons, the Surgeon-General, and Apothecary-General, to the Army.*

is possible that this did not take place until the following winter.<sup>61</sup>

The dispensatory suggests that the drugs were prepared according to the recipes of either London or the army, but not Edinburgh. It includes no references to Edinburgh, but a number to London. It is also noteworthy that George Garnier, the apothecary-general and one of the co-signers of a statement approving the formulas in the dispensatory, was a member of the Society of Apothecaries of London.<sup>62</sup> He was responsible for providing regimental surgeons with their medical chests and for preparing the compound drugs that were included. It is probable that drugs that had the same names as those that were included in the pharmacopoeias of London or Edinburgh were routinely prepared from London recipes. Hospital apothecaries prepared compound drugs on the request of the regimental surgeons, and in this case the surgeons appear to have had some leeway in ordering. Buchanan appears to have had a preference for the Edinburgh recipe for *decoctum nitrosum*, for he specifies this version in two prescriptions noted in "Regimental Practice" [pp. 62, 83].

The core coverage of Buchanan's manuscript, 1742-45, just misses the landmark fifth edition of the London pharmacopoeia in 1746. It must therefore be assumed that, except in the cases noted above, the compound drugs referred to by Buchanan were prepared in accordance with the recipes set out in the most recent edition of the pharmacopoeia, which had been published in 1721.

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<sup>61</sup> The manuscript is in fact dated "9 March 1745," but the reference is probably to 1745/46.

<sup>62</sup> George Garnier (1703-63) gained the freedom of the society on 7 July 1735, after completing an apprenticeship to his father, Isaac: Guildhall Library, London, Manuscript Section, Records of the Society of Apothecaries, Freedom Books, #8206/2, p. 33. On Isaac Garnier's death, he succeeded him as apothecary-general, gaining his commission 7 March 1736: Johnston's *Roll*, I, 1 (#8), 9 (#161). Note also Arthur E. Garnier, *The Chronicles of the Garniers of Hampshire during Four Centuries, 1530-1900* (London: Jarrold, 1900), pp. 14, 21.

Although there had been some paring in this edition, the intensity of revision did not even approach that of 1746, when hundreds of recipes were virtually rewritten and many compound drugs were unceremoniously deleted.

Nevertheless, the evidence suggests that Buchanan's practice was oriented toward newer drugs. He makes rather little use of drugs, simple or compound, that appear to have been declining in popularity. He does use theriac, one of the last galenicals, which was already under attack and would be eliminated from the London pharmacopoeia in 1788. However, he seems to have employed it as a mild opiate and sudorific, rather than because he was impressed by the traditional claim that it was effective against pestilence [pp. 21, 85, 113].<sup>63</sup> He appears to have been an enthusiastic supporter of the army's experiment with cerated glass of antimony, a drug that was hailed by some as a specific for dysentery<sup>64</sup>, for as he notes with apparent satisfaction, "our Allies knew nothing of this medecine, so treated it with small Doses Ipecacaon: & Rhabarb. & some of our Surgeons do the same, never making tryale of Vitr. Cerat: Antimon: & probably the good success from it may be in a great measure owing to my persisting in its use" [p. 282]. In assessing the worth of drugs that were new or at least new to him, Buchanan took note of experiments by other medical officers. These, like his own observations, might well challenge the value of traditional remedies. He reported that another regimental surgeon had given his men walnut pith to cure their dysentery. The pith had long been considered a specific for the disease, but the surgeon did not find it to have a positive effect [p. 291].

Like Sydenham, whose advocacy of opiates was so warm that he was known as *Opiophilus*, Buchanan strongly endorsed opium. He nevertheless recognized that there was significant

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<sup>63</sup> Note also entry for *theriac Andromachi*, under "opiates," app. C-1; on Buchanan's usage of the drug, see app. C-2.

<sup>64</sup> See entry for *Vitrum ceratum antimonii*, under "antimonials," in app. C-1.

controversy over when to use it, even going so far as to write, "in England there's a universal prejudice against Opiates, in camp practice I have used them more freely than any other medicine" [p. 59].<sup>65</sup> Recalling how he had treated the mild fevers that had struck many soldiers in the spring of 1743, Buchanan reported, "a day's rest was the best medecine, & the opiate the best cordiale, procuring a good nights rest, enabled them for the nixt day's fatigue. I used Opium freely & from seeing it's good effects, became a favorite medecine" [p. 60]. Similarly, of the effects of pure opium in the treatment of rheumatism, Buchanan wrote, "Opiates were of the greatest service, especially when given in large Doses ... a good night's rest was always procured & sweats promoted, & seldom or never observed any bad effects from this free use of Opium, but am convinced it's the most universal medecine for soldiers. it became a universal practice, & the pure Opium is equal to any of it's preparations" [p. 301].

No less than the opiates, Buchanan exalted bark. In the case of ague, he wrote, "it's needless to enquire for a more certaine remedy than the Simple Barke, if the disease once form into a regular Ague, I am certaine it will cure and never saw it faile" [p. 29]. He defended bark against the criticism that it caused jaundice. [pp. 135, 137].<sup>66</sup> By the 1740's however, the value of bark in medicine was well established, while opium remained somewhat controversial.

Buchanan recognized that drugs were often falsely credited with cures that were merely coincidental to their use. He wrote, "if worms are voided during the course of any medecine, it's always looked upon as a good Vermefuge" [p. 233]. The marketing of a nostrum could bring a practitioner significant income and notoriety, though sometimes at the cost of envy and vituperation from his peers. Like many medical men, Buchanan hit on formulas that appeared to be effective, but

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<sup>65</sup> It is possible that Buchanan is not expressing himself clearly in this case; note *RP*, n. 35.

<sup>66</sup> On the other hand, he does report the case of a woman who developed jaundice after treating herself with bark [p. 75].

he chose not to conceal them. He reported that he had successfully treated inflamed eyes with a solution of milk, water, and brandy and added, “had I concealed it as a nostrum, it might have passed for a famous Eye water” [p. 248].

"Regimental Practice" deals with horses as well as their riders. As surgeon to a cavalry regiment, Buchanan was expected to assist the farriers in treating sick and injured horses. It was not until the 1790's that veterinarians were added to the establishment of horse regiments. In any case, veterinary medicine received little attention in eighteenth-century Britain, though a number of works were written on farrying.<sup>67</sup>

Just as Buchanan was quick to discount legends regarding human health issues when his observations did not accord with them, so was he prone to challenging acquired wisdom about horses. In Flanders he observed, “I have heared some Gentlemen curious in horses say that a necessary house near the Stable was dangerous for horses, that the smell of it would breake their wind. but here it's customary to have them in the corner of the Stable, & it's rare to see a broken winded horse” [p. 245].

It appears that Buchanan was often called up to advise farriers who were attached to the Blues. As he saw it, they were not always able to handle problems that were not familiar from the civilian world: "our Farriers were strangers to Gunshot wounds & I treated some wounded horses

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<sup>67</sup> Although as elector George III encouraged the founding of a veterinary college in Hanover, he did not do so in Britain. Nevertheless, there were some significant developments in veterinary medicine during the latter half of the century, culminating in the founding of the London Veterinary College in 1791. As Louise Hill Curth has noted, horses had traditionally received special treatment, and members of the Company of Farriers were the elite among animals doctors, followed by others who treated horses: “The Care of the Brute Beast: Animals and the Seventeenth-century Medical Market-place,” *Social History of Medicine*, 15 (2002), pp. 375, 382-86; note also Ernest A. Gray, "John Hunter and Veterinary Medicine," *Medical History*, 1 (1957), pp. 38-39.

much in the same manner as I did the men" [p. 277]]. That Buchanan treated the wounds of horses as he would have those of their riders reflected his general perspective. With the exception of "crib-biting," he saw equine diseases to have their human equivalents [p. 316], and this suggested analogous therapy. But just as his therapeutics in the treatment of human diseases was characteristically moderate, the same could be said of the methods that he typically used in treating horses, and in this respect he appears to have been far from most of the farriers, for they used old remedies that were often harsh.<sup>68</sup> Buchanan reports, "Cracked heels are dressed by the Farriers with an Oynt of Verdigrease, & appear to be too sharp, rather fretting than healing. I use Basilicon with a small portion of Ungt. Aegyptiac., & is then digestive, cleaning & healing" [p.253]. Similarly, while noting that it had become a common practice to purge horses that were exhausted from campaigning, he observes, "My horses had no medecines nor were they blooded, stood in a cool Stable, had dayly exercise & recovered well" [p. 253].

Buchanan had evident sympathy for the horses of the army. In the wake of Fontenoy, he notes, "The wounded horses would not foresake their Regmts though they had lost their Riders, & followed so long as they could walk, & some had only three legs to stand on" [p. 277]. He appears to have viewed the fashion of docking as not only unnecessary but injurious.

English horses for want of their tails are greatly tormented with flies during the warm weather; fatigue themselves with kicking & stamping, wear out their Shoes, breake & Spoyle the ground; tossing their heads backwards to beat off the flies, lose their forrage. the fatigue is so much that it makes them sweat as they stand at the picket, & fall off their flesh. None of our Allies docke their horses & are allowed a smaller ratiate than ours, by two or three pounds of hay, yet are fatter & look better than ours by the latter end of the Campn. [p. 317]

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<sup>68</sup> The farriers' influence in medical matters was not limited to the horses. According to Buchanan, they sold eyewaters to the troops; *RP*, p. 247.



His sensitivity regarding the horses reflects a common theme implicit in “Regimental Practice”: Buchanan appears to have been a compassionate individual, and this drove the method that he used to treat disease. The therapy that he used to tackle disease was characteristically moderate, standing in sharp contrast to more aggressive, heroic methods.<sup>69</sup>

### *Theory in Practice*

As has been noted, Buchanan regularly tested theories and discounted many on the basis of his observations. But these theories were small scale, usually relating to the cause, nature, or cure of a particular disease: whether fresh fruit caused dysentery, whether ague could be cured by terror, and the like. They played out within a broad conceptual framework that informed both his understanding of disease and his method of treating it.

In a period when “empiric” was always used pejoratively among regular medical men – for it described a quack or fringe practitioner, who proceeded without method – “empirical” was often allowed a positive connotation. Medical professionals were supposed to challenge traditional beliefs, particularly on the basis of observation and experiment. On the other hand, if they challenged a paradigm that spoke to the nature, causes, and treatment of disease, they could expect criticism, and if they tore down a popular system without offering an alternative, vituperation was certain. Like many of his contemporaries, Buchanan was to a degree oriented toward empiricism, but he was by no means an empiric.

Insofar as it related to the broad strategy of treating disease, Buchanan’s medical theory can be explained in terms of two complementary paradigms, both of which dated back to the Greeks and were commonplace, though not standard, in eighteenth-century British medicine. One was that

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<sup>69</sup> For context, see Kopperman, “The Drive toward More Moderate Therapies,” pp. 266-69.

nature controlled the entire process of sickness and health, and that when confronted with a disease condition it was the duty of the physician to interpret and support the tendencies of nature as it attempted to provide a cure. The second was that there were essentially two types of disease, which for simplicity we may denominate “high” and “low,” and that the therapy that was called for in the treatment of a disease in the former category differed markedly, even diametrically, from what was appropriate to the latter. Symptoms that characterized high diseases included a strong, rapid pulse, fever, and inflammation. Low diseases were marked by weak pulse and prostration. In general, the high diseases were seen to be the product of an overcharged, overstimulated system, while low diseases were accounted to debility and insufficient stimulation. Although the boundaries might seem to be clear, many diseases, such as smallpox, passed through a series of stages and appeared at times high, at times low, which meant that the treatment that was commonly thought wise in one stage might be considered dangerous in another.

Like so many contemporaries, when treating a patient Buchanan attempted to detect and respond to the signs of nature. In tending to men who were suffering from pleuretic fevers in 1743, Buchanan noted that “Some naturally inclined to sweat which was promoted” [p. 113]. But unless the signs were clear, the practitioner was to proceed with caution: “Fevers often attempt to throw themselves off thro the Pores of the skin, breaking out in sweats, & if naturale, are of great service & often compleat the cure. when I perceive a naturale inclination to sweat I encourage it by drinking freely of the above drinks, encreasing the quantity of wine & covering warm, which ought to be done with prudence for fear of encreasing the fever” [p. 83]. By the same token, he noted, nature was not to be coerced: “One should be cautious of forcing sweats at this time” [p. 85]. Supporting the system was all important, for as he noted, “in all Sicknesses it should be the principale care of a physician to preserve the Stomach in good order. for when that failes, adieu to all remedies, & it is often spoiled by drugs rather than the distemper” [p. 105]

Another insight into Buchanan's thought process lies in the queries that he puts forward in two instances. When a fever victim was autopsied, his lungs were found to be filled with blood and marked by black spots. Buchanan observed, "N:B: this patient had always a tickling dry cough, & pectoral medecines never had any good effect. did it proceed from the largenes of the heart interrupting the motion of the Lungs? as all men have different complexions, features, make &c: nature seems to have observed the same rule with regard to the inside, for we observe great variety as to it's size form &c: hence probably different tempers, passions, &c." [p. 69]. Later, when a trooper who was in hospital being treated for a fever appeared to be recovering, he experienced sudden and violent pain in his left leg and he died in agony the following morning. The leg then swelled and turned livid, and in dissection was found to contain gelatinous material. Buchanan wondered, "Quaer: 1mo. was this an attempt of nature to form a criticale absess here. 2do. would scarifications with warm digestives been of any use." [p. 331]. Clearly, Buchanan was seeking to interpret the signs of nature and to treat disease accordingly.

It was widely assumed that if patients craved a particular food or beverage, nature was speaking through them. Buchanan took this into consideration in determining diet. In the case of fever prisoners, he noted, "Negus is a favourite drink with our men of which they drink freely ... having a pleasant smell, it's extreamely agreable to the Sick; holding tamarinds in the mouth or sucking oranges greatly quenches thirst; the mouth should be often washed with common drink in order to relax the Glands; all drinks to be drunk moderately warm & freely. nature demands it" [p. 83].

In formulating therapy, Buchanan displayed a respect for nature. He likewise observed the boundary between high and low diseases. His practice on bloodletting illustrates this well. The use of bloodletting in therapy and the quantity of blood taken appears to have been on the rise during the first half of the eighteenth century. Although venesection had been incorporated into European

medicine for centuries, many major authorities had allowed for it only in a limited range of circumstances, and even then in small quantities. Sydenham had, however, boosted bloodletting, allowing it a key place in the treatment of many diseases and prescribing it as the central therapy for some. In Buchanan's time, several of the most influential physicians, Pringle and John Huxham among them, went still further, advocating bleeding, often in large quantities, even in circumstances where it had traditionally not been used.<sup>70</sup>

Buchanan held with contemporary practice when he asserted that it was necessary to bleed victims of rheumatism, because their pulse was "quick & full" [p. 299]. Particular diseases prompted him to bleed his patients aggressively. If he suspected quinsy, "on the first complaint I bleed largely, even though the pulse be not feverish" [p. 121]. Furthermore, in at least one instance, he bled in a situation that did not, in the opinion of some contemporaries, call for it: "I have blooded many Troopers in the first access [of ague], & don't think it retarded the cure" [p. 41].

Generally, however, Buchanan was cautious in letting blood. When fatigued men wished to be bled, he advised against it [p. 327]. During an outbreak of slow fever in 1743 he found "pulse so low that bleeding did not seem proper" [p. 293]. By holding back in this instance, he followed common practice. Perhaps more than many contemporaries, he was sensitive to the danger of excessive bleeding: "When the pulse sinks from bleeding too freely its not easely raised by medicines." [p. 119].

Certainly, Buchanan did not let blood as a matter of course. Venesection had to have a

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<sup>70</sup> John Ball wrote, "Though most authors, as well ancient as modern, generally agree, that Malignant Fevers by no means admit of bleeding, yet the ingenious and successful practitioners, Sydenham and Astruc, indiscriminately order it in all cases; and Huxham and Pringle allow it may be performed, with advantage, under certain circumstances, especially in the beginning" : *The Modern Practice of Physic*, I, 120. The use of bloodletting for a number of diseases referred to in *RP* is discussed in App. B.

purpose. When the men suffered from gripes and purging in 1742, Buchanan observed, “seldom attended with fever, of course no occasion for bleedings” [p. 19]. He appears to have been reluctant to bleed in treating diseases that contemporaries would have considered “malignant” or “putrid,” such as remittent or continued fevers such as typhus. On occasion, his practice was probably influenced by common opinion among medical officers. In the treatment of yellow fever, he reported, “bleeding was thought hurtfull” [p. 63]. But apparently he bled less than did many of his colleagues. He reported an outbreak of “fever with eruptions” in early 1743: “with some Physicians bleeding was much in vogue, in a few days the Patient lost 60, 70, 80, 90, Ounces, which was attended with bad success for few recovered. I seldom blooded unless difficult breathing or Stich &c: forced me, & all my men did well” [pp. 117, 119].

While Buchanan bled cautiously, he routinely used expellant drugs. More often than not, he initiated treatment with an emetic. Vomiting was also a standard in prophylactic medicine. Practitioners who believed that they were falling ill routinely attempted to forestall the disease by taking a vomit [e.g., p. 293]. Buchanan did not prescribe emetics as a matter of course. He mentions, for example, that when treating gripes he did not administer them unless the patient was squeamish [p. 21]. Nevertheless, he saw them as useful in cases where not all contemporaries did. While observing that “Some object” to the use of expellant drugs on fever patients who had not eaten for several days and whose vomit and stool were clear, he defended his practice: “we see dayly good effects from a vomite, tho the water come up as clear as when drunk; great advantages may be obtained from purgative medicines tho the Stools are not excrementitious, there being a large discharge from the Glands of the Gutts. so in a cold the head is greatly relieved by a large discharge of clear thin water thro the nostrills, though no snot passes.” [pp. 79, 81].

The practice portrayed in Buchanan’s manuscript possesses a coherence that had grown from his earlier education, his readings, and eight prior years of service as a regimental surgeon. It is not,

however, dogmatic, nor is it stagnant. Buchanan experimented with new techniques and new remedies for treating the diseases that he encountered while serving the Blues in Flanders. He was interested in the potential for new inventions to improve medicine. Enjoying a vision of better things, he observed in one instance that the collar bone was "easily broke & as easily reduced, yet there's no credite got by it, for its not easily kept in its place & the Surgn is blamed for not setting it well, the bandage seldom presses on the part, but too much under the Armpits & becomes uneasy to the patient. I wish a proper Screw could be contrived for this purpose" [p. 223]. And it appears that his interest in medical discoveries continued after he returned to civilian practice. In 1766, the board of the Staffordshire General Infirmary noted that staff had requested the purchase of electrical equipment, and it approved the order.<sup>71</sup> Very likely it was Buchanan who, as the chief medical officer of the infirmary, put forward this request. The type of equipment ordered was just coming into fashion, being used to treat palsy and other problems that were thought to respond well to stimulation. By advocating for it, Buchanan was keeping his practice up to date.

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<sup>71</sup> Staffs RO, D685/2/1, #36.

## *NOTES ON TRANSCRIPTION*

Superscript to mark elisions, as in "Sept<sup>r</sup>," will generally be brought down to the line; when Buchanan abbreviates books sizes with superscript, as in "8<sup>o</sup>," I will as well, to avoid confusion.

Angle brackets (<>) are used to indicate that a word or phrase is inserted interlinearly in the manuscript; if the author marks the place of insertion, this will be indicated with a caret (^).

Buchanan does not always mark off ellipses in quotations, and when he does so he usually uses a double line (=); in either case, I will indicate breaks in quoted material with ellipses (... or ....).

I will embolden and italicize Latin quotations and for the most part set them off from the text. The formulas that Buchanan provides, as well as some short quoted phrases, will be embedded in the text, as Buchanan has them. Buchanan generally incorporates prose quotations into his text and does not set them off except (occasionally) by quotation marks or (more often) by a diagonal or vertical stroke. Poetry he often sets off, but generally if he quotes a single line he does so within the text.

The letter thorn (þ; in 18th-century hand, often indistinguishable from a y) is transcribed as "th." The diphthongs -æ- and -œ-, which are numerous in Buchanan's quotations from Latin, are transcribed -ae- and -oe-.

Following convention, Buchanan routinely concludes each verso page with the first word of the next verso, setting it off in the lower right-hand corner; I omit this.

In the footnotes and throughout the earlier chapters, it is my practice to date the year from 1 January (that is 15 March 1743, rather than 1742-43).

Buchanan sometimes uses dashes to close paragraphs, or to extend a line of text to the margin. I omit these when they are superfluous and otherwise replace them with periods.

In Latin, Buchanan usually ellides "-que" (e.g., "quosq"); in the transcription, such words are written out.

Entries on the verso page usually appear opposite the points they are cited or that they qualify; in the transcription, bracketed notations will indicate their place on the page, unless Buchanan makes this clear by a note letter in superscript.



*Regimental Practice.*

or

*A Short History of Diseases common to  
His Majesties own Royale Regiment of Horse Guards when abroad  
(Commonly called the Blews)*

by

*John Buchanan M:D: Surgeon to the Regiment.*

1746.

*nullum esse librum tam malum, ut non aliqua ex parte prodesset.*

Plin. Epist:1. lib:3<sup>1</sup>

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<sup>1</sup> "[There is] no book so bad but some profit be gleaned from it"; Pliny Letters 3.5; Pliny, *Letters*, trans. William Melmoth, The Loeb Classical Library, rev. ed. (London: William Heinemann; New York, Macmillan Co., 1915), p. 201.

1:

A Short History of Diseases common to His Majesties own Royale Regiment of Horse Guards, commonly called the Blews, when Abroad.

[margin: Embark at Gravesend] Par: 1st. The Regiment embarked at Gravesend Septr 1st 1742. O:S: in good health, without any remarkable accident to man or horse; had a good passage to Ostend, being only three days at sea with fair weather:

[margin: Officers & men are seasick] the most part of Officers and men were sea:sick, purging and vomiting freely.<sup>2</sup> The soldiers were allowed by the publick, one pound bread, half a pound salt butter, and one quarter pound cheese for dayly dyet, with two quarts small beer, or half a pint brandy, for drink;<sup>3</sup> which was not a sufficient quantity, the weather being extreamely

2: [facing p. 1; blank]

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<sup>2</sup> By and large, seasickness was seen as beneficial; note below, pp. 39, 345.

<sup>3</sup> Buchanan apparently refers only to provisions for the crossing, rather than to the ration provided during the campaign. Perhaps this ration was designed to be light, since the men were generally inactive during a crossing. Rations were set by commanding officers, their decisions being influenced by cost and by which provisions were available. Nevertheless, there was some regularity. The formula laid out by Lord Loudoun to Colonel Henry Bouquet in March 1757 approximated the norm: bread or flour, 7 lbs. per week per man; beef, 7 lbs. (fresh preferred over salt) or pork, 9 lbs. (rations usually allowed more beef than pork); peas, 3 pints; butter, 6 oz.; rice, ½ lb.: *The Papers of Henry Bouquet*, ed. S. K. Stevens, Donald H. Kent, and Autumn L. Leonard (Harrisburg: The Pennsylvania Historical and Museum Commission, 1972), I, 65; cf. Edward E. Curtis, *The Organization of the British Army in the American Revolution* (New Haven and London: Yale Univ. Press, 1926), pp. 88-91. Rations often allowed for beer also, and for spirits. The liquor ration appears to have become more standard after mid-century, at least in America: Paul E. Kopperman, "'The Cheapest Pay': Alcohol Abuse in the Eighteenth-Century British Army," *Journal of Military History*, 60 (July 1996), pp. 446-47.

3: [continuing from p. 1]

hot we found it necessary to give three quarts <beer> for which extraordinary quart the commanding Officer gave his receipt to the Master of the Ship.<sup>4</sup> Officers servants had the same allowance: Officers laid in their own fresh provisions and had as much ship beer as they pleased. The ship air was very warm and suffocating from heat of the weather and breath of the horses, and drought was a general complaint. such as were not sea-sick were costive from their dyet & air.

[margin: Horses not affected by the motion of the ship.] Our horses were not in the least affected from the motion of the ship: fed as usual, but were not more greedy of water; and such as were broken winded were much worse when some time aboard:

[margin: Method of keeping at sea] we opened the ship-ports to cool and air them.<sup>5</sup>

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<sup>4</sup> The officer referred to by Buchanan was probably Lieut.-Col. Gregory Beake (cf. below, n. 29). Lieut.-Gen. Algernon, Earl Hartford, was colonel to the regiment, but did not accompany it to the Continent. Although in this case the expense was apparently borne by the regiment, it was not unusual for officers to provide their troops with extra liquor or wine, for presumed advantages to health: Kopperman, "The Cheapest Pay," p. 466.

<sup>5</sup> A major advance in ship ventilation was the development, by Stephen Hales, of a mechanism based on large bellows. Although the invention was first revealed by Hales in a talk to the Royal Society on 9 June 1741 and his lecture, supplemented by diagrams, was published in 1743 (citation, n. 6), the ventilators appear not to have been used on transports prior to the Seven Years' War. On 7 Oct. 1758 Lord Barrington, apparently acting on Pringle's advice, wrote John Cleveland, clerk of the Admiralty, "I would Submit to their Lordships whether small Ventilators as recommended by Doctor Hales in his Books might not be made and put on All future Occasions on Board all transports without taking up much room or Occasioning much inconvenience if their Lordships should give such directions I will take care that the Troops on Board shall Constantly work them"; on 17 Oct. he informed Major-Gen. Peregrine Thomas Hopson, "On my application, the Lords Commissioners of the Admiralty have order'd Ventilators for the Transports carrying the Troops under your Command: As nothing can more tend to the preservation of health. I am perswaded you will give strict charge that they shall be constantly work'd by the Soldiers": WO 4/56/330, 373. On the issue of ventilation, note also Christopher Lloyd and Jack L. S. Coulter, *Medicine and the Navy 1200-1900* (Edinburgh and London: E. & S. Livingstone Ltd., 1961), III, 72-74. Monro also recommended Hales's ventilator for use in army hospitals: *Observations on the Means of Preserving the Health of Soldiers*, I, 101.

we wet our hay and corn well,

4: [facing p. 3; top of page; in heavier ink than text on p. 3]

see Military orders & instructions for preserving the health of soldiers when on board Transports contained in a Pamphlet entitled, a Journal of the Campaign on the coast of France. 1758. p.13. &c.<sup>6</sup>

5: [continuing from p. 3]

which <was> refreshing and cooling to the horses; watered and fed three times a day, viz:

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<sup>6</sup> *Journal of the Campaign on the Coast of France, 1758* (London: J. Townsend, 1758), pp. 13-15: "As the preservation of men's health's depends chiefly upon cleanliness, keeping as much as possible upon deck, and supplying the place which the soldiers occupy with fresh air; the men, as usual, are to change their linen twice a-week; to comb their hair every day; to swab between decks; and carefully to sweep out their berths in the morning: To do which effectively, their bedding, knapsacks and habersacks, and all their necessaries, are to be brought upon deck.... And if the ship have no ventilator, an air-fail must be used immediately after the berths are cleaned, and to be continued during the day, if possible, supplying fresh air"; sergeants were made answerable for the observance of these orders, and a subaltern was directed to inspect between decks twice per day; vinegar was to be sprinkled between decks and to be consumed by the troops, officers compensating for any shortages out of their own pockets if need be, "as nothing tends more to the preservation of men's healths" (cf. n. 4), "and pitch barrels likewise to be burnt between decks twice a-week." These orders, dated 24 May 1758, appear to have come from Lord George Sackville. Fumigation with pitch or sulfur was a common method of combating contagion; sulfur was widely preferred because its fumes were acidic, while contagion was thought to be highly alkaline. For the same reason, vinegar was often sprinkled between decks, and rags soaked in vinegar were hung in close quarters to freshen the air. It was common for medical writers to stress cleanliness as a means to preserve health of troops on transports. Stephen Hales, *A Description of Ventilators: Whereby Great Quantities of Fresh Air May with Ease be conveyed into Mines, Goals [sic], Hospitals, Work-Houses and Ships, In Exchange for their Noxious Air* (London: W. Innys, R. Manby, and T. Woodward, 1743), p. 52; James Lind, *An Essay on Diseases Incidental to Europeans, in Hot Climates, with the Method of Preventing their Fatal Consequences*, 1st American ed., from the 6th London ed. (Philadelphia: William Duane, 1811 [1768]), p. 173; William Rowley, *Medical Advice, for the use of the Army and Navy, in the Present American Expedition: Intended for the Perusal of Private Gentlemen as well as Medical Practitioners* (London: F. Newbery, 1776), p. 24.

at six, at Noon, and at night; which was three quarters a day; as the Government's allowance is a peck, we saved the other quarter for the use of our troops when a share.

[*margin*: method of treating sick horses.] When a horse sickens by heat, a little water cools and relieves him;

[*margin*: Bleeding of great use.] if unease at the head, tossing it backwards and forwards, biting and catching at the Manger or collar reins, then it's absolutely necessary to bleed him immediately, or the consequence will be very bad; and some horses were lost for want of this help; if he cannot be conveniently blooded at the neck, let him be blooded in the mouth, when he has lost a sufficient quantity, rub the part with flower in order to stop it.<sup>7</sup> – horse's ears

6: [facing p. 5; blank]

7: [continuing from p. 5]

to be often pulled, and heads rubed, which refreshes them greatly and takes off their shyness. a quart blood should be taken away the first halting day<sup>8</sup> after the landing. as they stood some

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<sup>7</sup> These observations recall an order given in Aug. (before 21 Aug., n.s.) 1742 at Gravesend to the farriers and men of the 3rd and 4th troops of the Horse Guards and 2nd troop of the Horse Grenadier Guards. The order dealt with the treatment of horses during the crossing and specified, "if a Horse is Uneasy in the head ... bleed him Immediately, if you Cannot bleed him in the Neck, let him blood in The Mouth, when he has bleed Enough, put Flower in his Mouth to stop the Bleeding": BL, Add. 41,151, ff. 3-4. Gibson recommended bleeding for most disorders of the head, but cautioned that before letting blood the farrier was to consider the age and strength of the horse. He argued against routine bleeding of horses for prophylactic reasons. William Gibson, *The Farrier's New Guide: Containing, First, The Anatomy of a Horse ... Secondly, An Account of all the Diseases incident to Horses, with Their Signs, Causes, and Methods of Cure*, 7th ed. (London: J. Osborn & T. Longman, 1731), pp. 11-12, 18-19.

<sup>8</sup> A day on which the army remained in camp and did not march; cf. below, p. 253. The practice helped to combat fatigue; note Kopperman, "The British Army in North America and the West Indies, 1755-1783," p. [?].

dayes on their own Dung and Stale. their hoofs were softer & moister, and easly lost their shoes.

[*margin*: Disembark at Ostend.] Par: 2d. Disembark at Ostend, Sepr 4th, free of accidents.

[*margin*: slight complaints at Disembarking] some troopers not being used to walk across the ship ropes broke their shins, which they <cured> by washing with brandy;<sup>9</sup> only <two> were so bad as to be under my care; was obliged to poultice, digest, incarn<sup>10</sup> &c: such

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<sup>9</sup> Brandy was often used to prevent or reduce swelling from bruises. Hartman considered a brandy-honey mix almost infallible in this regard. Of brandy, rum, "and other wholesome Spirits," Brookes wrote, "Outwardly they are employed to open the Pores, because they dissolve and rarify whatever obstructs the Passages; hence they are proper in cold, oedematous Tumours, Bruises, and other Disorders where Resolvents are necessary, and when the Oscilations of the Fibres are to be restored." Note also app. C-1, under "wines and spirits." Richard Brookes, *The General Dispensatory: Containing a Translation of the Royal College of Physicians of London and Edinburgh, together with that of the Royal Hospital at Edinburgh &c.* (London: J. Newbery, 1765 [1753]), pp. 130-31; George Hartman, *The True Preserver of Health: Being a Choice Collection of Select and Experienced Remedies for all Distempers incident to Men, Women and Children. Selected from, and Experienced by the most Famous Physicians and Chyrurgians of Europe. Together with Excellent Directions for Cookery*, 2nd ed., enl. (London: T. B., 1684), pp. 219-20.

<sup>10</sup> Incarnatives, or sarcotics, were intended "to dry, and change the blood that comes to any part of the flesh" (Culpeper). Of the incarnatives noted by Culpeper, few are mentioned by Buchanan, and never in this connection. Poultices were often applied as digestives (substances that promoted suppuration when applied to an ulcer or wound); some types were also intended to serve as detergents, i.e. medicines that cleansed and healed ulcers and filled them in with good flesh. Nicholas Culpeper, *Pharmacopoeia Londinensis: or, the London Dispensatory. Further Adorned by the Studies and Collections of the Fellows, now living at the said Colledg. Being that Book by which all Apothecaries are bound to make up all the Medicines in their Shops* (London: Peter Cole, 1666), pp. 174-75; John Quincy, *Lexicon Physico-Medicum. A New Medical Dictionary; Containing an Explanation of the Terms in Anatomy, Physiology, Practice of Physic, Materia Medica, Chymistry, Pharmacy, Surgery, Midwifery, and the Various Branches of Natural Philosophy connected with Medicine. Selected, Arranged, and Compiled, from the Best Authors* (London, 1719), under "detergent"; John Quincy, *Quincy's Lexicon Physico-Medicum*, ed. Robert Hooper (Philadelphia: E. & R. Parker, M. Carey & Son, and Benjamin Warner, 1817), pp. 259, 268; William Buchan, *Domestic Medicine; or the Family Physician: Being an Attempt to render the Medical Art more generally useful, by shewing people what is in their own power both with respect to the*

as had been sick at sea were now faint and weake; others overheated themselves in disembarking the horses; all were obliged to lye on straw in an open warehouse, by their

8 [facing p. 7; blank]

9 [continuing from p. 7]:

horses, having only ship allowance (Par: 1st.) for provision, were obliged to eat such things as were easily got, viz: [*crossed*: such as fruits] Pears, Plumbs, Grapes &c: of which they were very fond, and eat heartely.

*jejunus stomachus raro vulgaria temnit.*

Hor: Sat:2. lb 2. v.37.<sup>11</sup>

and proved the beginning of many complaints,

....: *quoniam vacuis committere venis*

*nil nisi lene decet.*

Hor: Sat:6. lib:2 v.25.<sup>12</sup> –

[margin: March to Bruges] Par: 3. Many complained next morning of catching cold, were griped; for which they drank a pennyworth of Gin or Brandywyne, and marched to Bruges that day being cold & wet;

[margin: great difference twixt the English & Flemish quarters.] were billited in

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*Prevention and Cure of Diseases. Chiefly calculated to recommend a proper attention to Regimen and Simple Medicines*, 2nd American ed. (Philadelphia: Joseph Crukshank, 1774), pp. 377-78.

<sup>11</sup> "Only a stomach that seldom feels hunger scorns things common"; Hor. Sat. 2.2.38 [not 37], *Horace: Satires, Epistles and Ars Poetica*, trans. H. Rushton Fairclough, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1955 [first printed 1926; revised, 1929]), p. 139. The Loeb text has "*raro stomachus*" (p. 138).

<sup>12</sup> "For when the veins are empty one should admit nothing to them that is not mild"; Hor. Sat. 2.4[not 6].25-26, *Horace* (trans. Fairclough), p. 189.

publick <& private> houses, neither dyet nor fire provided as in England, nor forage for their horses, which they were obliged to bring on their backs from the Bylanders in the wet; were at great loss for want of the language, & obliged

10 [facing p. 9; blank]

11 [continuing from p. 9]:

to eat as (Par:2). now began to drink punch to keep themselves warm --

*neque enim repente morbi hominibus contingunt, sed paulatim collecti acervatim se produnt.* Hip: de vict: rat: lb: 1. Sect: 6.<sup>13</sup>

[margin: March to Ghent.] Par: 4. Next day had a long march to Ghent;

[margin: the legs swell on long marching] many of the men had swelled legs from being so long on horseback, especially such as were fat & corpulent, which obliged them to stay in their barracks some dayes, & soon complain'd of grieps & looseness: as this increased their legs decreased; nor did I endeavour to stop it until they became faint an [*sic*] weake, and

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<sup>13</sup> "Diseases do not suddenly seize men, but gather gradually before bursting forth"; Hip., Vict., 1.2.62-64 [note: titles in all footnote references to the works of Hippocrates are abbreviated on the model of Henry George Liddell and Robert Scott, as listed in Gilles Maloney and Winnie Frohn Villeneuve, "Présentation d'une concordance du corpus d'Hippocrate," *Hippocratica: Actes du Colloque hippocratique de Paris*, ed. M. D. Grmek (Paris: Éditions du Centre National de la Recherche Scientifique, 1980), pp. 365-66]; cf. Hippocrates, *Hippocrates*, trans. W. H. S. Jones, The Loeb Classical Library (London: William Heinemann, Ltd; New York: G. P. Putnam's Sons, 1931), IV, 231. In Foës, the opening words in the quotation read, "*neque enim morbi de repente*": *Magni Hippocratis Medicorum omnium facile principis, opera omnia quae extant*, trans. Anutio Foesio (Francofurti: Danielis ac Davidis Aubriorum, 1621), p. 341.



Pulv: Rhabarb: scr. ii.<sup>14</sup> with Pil: Math: h: s:<sup>15</sup> repeated twice or thrice with Decoct: alb: cum Gum: Arabic:<sup>16</sup> completed the cure, and living on mutton broth thickened with Rye<sup>a</sup> [*superscript in heavier ink*]. Such as had hurt their shins as in Par: 2. were now worse than at first from the

12

[*the following in heavier ink; diagonally stroked*]

<sup>a</sup>*in alvi perturbationibus et vomitionibus quae sponte eveniunt, si qualia oportet, purgentur, conducit, et facile tolerant, sin minus, contra evenit. itidem et vasorum evacuatio, si qualis debet, fiat, conducit et facile tolerant, sin minus, contra sit. adhibenda consideratio igitur, et loci et tempestatis anni, et aetatis, et morborum in quibus haec fieri debent, necne.* Hip: Aphorism: No. 2. lib: ii. s:ii.<sup>17</sup>

13 [continuing from p. 11]:

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<sup>14</sup> On rhubarb, see app. C-1, under *rhababarum*. Buchanan's hesitancy to use it (or other remedies) before the patients became weak may have reflected a concern, common at the time, that if rhubarb were given to a patient whose system was overheated by disease it would exacerbate the problem.

<sup>15</sup> *Pilulae Matthaei* (see app. C-1) was a mild opiate. See app. C-1. Buchanan probably prescribed it in order to calm the bowel, this being one of the most common applications of opiates.

<sup>16</sup> See app. C-1 for *decoctum album* ("the white drink"), *cornu cervi* (hartshorn; its principal ingredient), and gum Arabic. Decoctum album was regarded as absorbent, so useful in stopping diarrhea, and it was probably for this purpose that Buchanan prescribed it.

<sup>17</sup> "In disorders of the bowels, and in vomits that are spontaneous, if what is purged is of such a sort as should be purged, one profits and endures easily. But if not, the contrary comes to pass. Likewise with artificial evacuations, if what takes place ought to take place, he may profit and easily bear it. If not, the contrary. Therefore, consider location, season, age and disease, to see if this treatment ought to be used or not"; Hip. Aph. 1.2 [not 2.2]; cf. *Hippocrates* (trans. Jones), IV, 99. In the Foës text (*Magni Hippocratis Medicorum*, p. 1242), "*adhibenda consideratio igitur*" is "*adhibenda igitur consideratio*."

pressure of the boot, & long march; were easily cured by poultices of white bread and milk or turnep<sup>18</sup> &c.<sup>b</sup> [*superscript in heavier ink*]

[*margin: In Barracks at Ghent*] Par: 5. All are now in Barracks, ordered to Boyle their kettle and mess regularly<sup>19</sup>; all provisions being as good and as cheap as at home, they may live well; their only complaint is want of fire, having no more allowed by the town<sup>20</sup> than what is necessary to boyle the kettle<sup>a</sup>; and that is not near sufficient to air the barracks, which have been empty houses sometime, of consequence are damp, especially such as are near the canals; all have been lately white washed & are scarcely dry.<sup>21</sup> two men lye in one bed on Matrasses of coarse flax, are well enough covered, but have no curtains.

[*margin: Diseases in Garrison(:) The Itch*] Par: 6. The first distemper that was remarkable amongst the men was the Itch, to which we were strangers when at home, (the

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<sup>18</sup> Probably the most common poultice was of bread and milk. On the medical applications of the turnip, see app. C-1.

<sup>19</sup> Rules on messing were not regularly enforced, and troops occasionally sold their provisions or traded them for liquor. Among those who criticized the laxity of messing practices were Pringle and Hamilton. Note Kopperman, "The Cheapest Pay," p. 451, 451n20.

<sup>20</sup> Buchanan also complains (*RP*, p. 9) that no firewood was provided by Bruges. It was common for towns and other administrative units to help pay the upkeep of a friendly army. Often, however, their assistance was minimal and the relationship was strained.

<sup>21</sup> Buchan warned strongly against occupying damp houses or sleeping in damp beds, for dampness blocked perspiration and invited disease; he recommended that fires be used to dry damp houses, and that new houses be built in dry locations: *Domestic Medicine*, pp. 95-96. Cf. George Cheyne, *An Essay of Health and Long Life* (London: George Strahan; Bath: J. Leake; 1724), pp. 11-13. A number of authorities on military medicine pointed up the danger of permitting the troops to be exposed to dampness in camp, billet, or barracks, e.g.: Pringle, *Observations on the Diseases of the Army*, pp. 81-82, 97-99; Brocklesby, *Oeconomical and Medical Observations*, pp. 23-24; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 5, 18, 44-47; John Rollo, *Observations on the Diseases which Appeared in the Army on St. Lucia, in December, 1778; January, February, March, April, and May, 1779. To Which are Prefixed, Remarks Calculated to Assist in Ascertaining the Causes, and in Explaining the Treatment, of Those Diseases. With an Appendix, Containing a Short Address to Military Gentlemen, on the Means of Preserving Health in the West-Indies*, 2nd ed., rev. (Barbadoes and London: Charles Dilly, 1781), pp. 146-49.

dirty fellows exempted) but was now

14: [facing line that concludes "turnep &c." but lacking "b" marker]

vid. Fred: Hoffmanni Op: Med: Tom: 3. p.363. de praestantia Remediorum Domesticorum.<sup>22</sup>

[in heavier ink, as is the "a" designator on p. 13]

<sup>a</sup>*non lignorum patiantur (milites) inopiam, aut minor illis vestium suppetat copia; nec sanitati enim nec expeditioni idoneus miles est, qui algere compellitur.* Vegetius de re militari lb.3 c.2.<sup>23</sup>

15: [continuing from p. 13]

common.

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<sup>22</sup> Friedrich Hoffmann [Friderici Hoffmanni], *Opera omnia physico-medica denuò revisa, correctata & aucta, in sex tomos distributa* (Geneva: fratres de Tournes, 1740), V [not III; this ed. 6 vols. in 3], pt. iii, cap. 16, pp. 363-72. The chapter is actually entitled, "*De praestantia remediorum domesticorum*" ("of the superiority of remedies of the household"). Hoffmann writes that ancient physicians, through Hippocrates, used very few medicines, but that Galen's sect and the Arabs greatly increased the range and use of drugs, and the introduction of chemical remedies brought an overabundance. The proliferation of drugs is made worse by the fact that patients are given jumbled prescriptions (cf. n. 52). It is best to take a few simple remedies. As many authorities (i.a., Hippocrates, David [in psalms], and Boerhaave) have observed, homely items like water, bread, grains, and wine are effective in maintaining health. Ptisans (cf. n. 301) are very useful in treating fever and pectoral diseases. Decoctions of oats and lentils are likewise valuable. Hoffmann notes approvingly simple preparations of a number of other plant products (e.g., turnips, chicory, horseradish, aniseed). He provides many examples of vegetables and herbs that are healthful and useful medically. He devotes particular attention to the uses of wormwood, crocus, ginger, pepper, and the rose.

<sup>23</sup> "Let [soldiers] not suffer a lack of wood and may the supply of clothing not be insufficient for them; a soldier who is suffering from the cold is neither fit in health nor suitable for a campaign"; Vegetius 3.2; Flavius Vegetius Renatus, *Epitoma Rei Militaris*, trans. Leo F. Stelton, American University Studies, series XVII (New York, Bern, Frankfurt am Main, Paris: Peter Lang, 1990), p. 127. Pringle also quoted this passage: *Observations on the Diseases*, p. 97n; he did so in the course of advising (ibid., pp. 95-97) that providing adequate clothing, bedding, and fuel would help to prevent diseases caused by cold or fluctuations between heat and cold.

[margin: Diseases in Garrison(:) Causes.] The men being hurried in embarking their horses and taking care of them when aboard, seasick &c: neglected to shift and keep themselves clean; our transports had carried over the foot & Dragoons might be affected, & Dyet in (Par: 1.) might produce this distemper,<sup>24</sup> in curing of which the Mercuriale Ointment<sup>25</sup> was the chief application, rubbing twixt the fingers, wrists & Hams; such as were obstinate were blooded & purged, taking as much Flowers of Brimstone as would lie on a Skelline,<sup>26</sup> in warm milk or common treacle every morning. it declined daily, having brought

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<sup>24</sup> Pringle was one of many writers who associated the itch with dirtiness. Hamilton, a strong critic of billeting, in part blamed itch on landlords who seldom changed the bedclothes in rooms where troops were lodged; he also blamed the diet provided men in billets: "When a soldier's food is of a thin, coarse, watery kind ... or if the food be of too dry, or of an alkaliescent nature ... dry cheese, and coarse bread, with little or no vegetable food, is it to be expected that his juices are pure?" Increasingly, however, authorities were claiming that not just dirtiness, but tiny insects caused the itch -- true enough, since the disease was usually scabies -- and by 1780 Monro was proclaiming this view to be standard. Similarly, Wallis wrote, "The CAUSE is universally believed to be, animalculae in the skin." Pringle, citing the authority of Leeuwenhoek and Bonomo, ascribed the itch to insects (specifically discounting diet as a cause), though he linked their presence to "the contact of a foul person." Not everyone agreed that animalculae caused the itch. Wilson wrote, "The childish idea, I must call it ... of the itch being owing to animalculae, and of sulphur's being their specific poison [cf. n. 26], has proved the death of multitudes." Buchan, *Domestic Medicine*, pp. 73, 305, 307n; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 66; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 264; Pringle, *Observations on the Diseases*, pp. 93, 301-02; George Wallis, *The Art of Preventing Diseases, and Restoring Health, Founded on Rational Principles, and Adapted to Persons of Every Capacity* (New York: Samuel Campbell, 1794), p. 489; Andrew Wilson, *Rational Advice to the Military, When Exposed to the Inclemency of Hot Climates and Seasons* (London, 1780), p. 29n.

<sup>25</sup> On *unguentum mercuriale*, see app. C-1, under "mercurials."

<sup>26</sup> In the treatment of itch, Pringle wrote, "Sulphur is the specific, being both more safe and more efficacious than mercury." He cautioned, however, that sulfur not be applied too quickly if the itch succeeded a fever. Generally, treatments of the itch were external. Buchanan was here dealing with cases that in his opinion had reached the bloodstream. This explains not only the bleeding, but also the ingestion of sulfur, which was widely thought to enter the blood. On flowers of brimstone, see app. C-1, under "sulfur." In the case at hand, Buchanan is using a rough measure, apparently believing that a more precise one is unnecessary. Although flowers of sulfur was often applied to combat itch and other

it with us, few or none breeding it here.

[*margin*: None of the Officers have it, & only two of their servants.] None of the Officers had it, and only two of their servants, as they dayly attended their Masters, were obliged to keep themselves clean, the Disease might be prevented.

[*margin*: not easily cured.] This disease is never to be rooted out, one man affects a whole barrack in winter Garrison and his tent Mates in the summer. Some are

16 [*facing p. 15; blank*]

17 [*continuing from p. 15*]:

cured sooner than others, and he who is last acuring gives it fresh to his Comrades.

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cutaneous problems, it was also esteemed as a laxative, and Buchanan may have had this function in mind, as well. Tissot advised that the patient be purged, that he abstain from salty or spicy food, and that he be treated with an ointment consisting of flowers of sulfur and sal ammoniac mixed into lard. A number of 18<sup>th</sup>-century writers expressed confidence that the itch could be easily prevented or be cured when it struck. Buchan wrote, "The itch is is now by cleanliness banished from every genteel family in Britain.... Several country clergymen have told me, that by getting such as were infected cured, and strongly recommending an attention to cleanliness, they have banished the itch entirely out of their parishes." Buchan, *Domestic Medicine*, p. 307n; Robert James, *A Medicinal Dictionary; Including Physic, Surgery, Anatomy, Chymistry, and Botany. In all their Branches relative to Medicine. Together with a History of Drugs; An Account of their Various Preparations, Combinations, and Uses; And An Introductory Preface, tracing the Progress of Physic, and explaining the Theories which have principally prevail'd in all Ages of the World* (London: T. Osborne, 1743-45), "sulphur"; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 269; Pringle, *Observations on the Diseases*, p. 303; John Theobald, *Every Man His Own Physician. Being a complete Collection of Efficacious and Approved Remedies for every Disease incident to the Human Body. With Plain Instructions for their common Use*, 10th ed. (London: W. Griffin; repr. Boston: Cox and Berry, 1767), p. 22; Samuel Tissot, *Advice to the People in General, with Regard to their Health: But particularly calculated for those, who are the most unlikely to be provided in Time with the best Assistance, in acute Diseases, or upon any sudden inward or outward Accident. With A Table of the most cheap, yet effectual Remedies, and the plainest Directions for preparing them readily*, trans. J. Kirkpatrick, 4th ed. rev. (Philadelphia: John Sparhawk, 1771), pp. 176-78, 303.

[*margin*: Diseases in Garrison.] some are obstinate, requiring small Doses calomel, and afterwards purging it off.<sup>27</sup> the Recruits often bring it with them, or breed it soon after coming.

[*margin*: the men use their own mercurial washes, which are dangerous.] some men cure themselves with Mercuriale water, Viz: boyling two pennyworth Corrosive mercury in a quart spring water into a pint,<sup>28</sup> and washing the parts affected. This is too corrosive and often excoriates the parts, & sometimes raises blisters, striking the itch suddenly inwards, whence proceed violent coughs and diseases of the breast. Brampton of Collonel Beake's Troop<sup>29</sup> dyed consumptive from this method, as the inside of his thighs were much affected by this distemper; so the scrotum & testicles were violently swelled from this application & blistered. Unguentum nostrum ad scabiem is not so dabbing as the Mercurial Oyntment of the

18 [*facing p. 17; blank*]

19 [*continuing from p. 17*]:

shops, and is thus made, **Rx Argent: viv: oz. i. exting. cum Aq: Fort: drops 50: cui addas**

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<sup>27</sup> Calomel (app. C-1) was often used as a purgative, an anthelmintic, and a sialogogue, though it was frequently followed with a purging draft (as Buchanan does), to prevent salivation. Buchanan used it in this case to introduce mercury into the patient.

<sup>28</sup> On corrosive mercury, see app. C-1, under “mercurials.”

<sup>29</sup> As is usually the case, only the officer commanding the unit can be identified. Lieut.-Col. Gregory Beake was commissioned a cornet in the Blues 24 Nov. 1702. He became a major (third in command) 29 Jan. 1734 and lieut.-col. Dec. 1739. Wounded at Fontenoy, he sold his commission June 1745. He subsequently served as lieutenant-governor of Jersey and died while in this office, 19 June 1749. In his death notice in *Gentleman's Magazine*, he is described as “a brave old officer.” RADCP, Box 3/47; *The Army List of 1740* (Sheffield: Sir W. C. Ling & Co., Ltd. [for the Society for Army Historical Research], 1931), p. 6; *City and Court Register 1746*, p. 133; *GM*, XIX (1749), p. 284.

*Axung: Porcin: lb: i & Cera alb oz. ii* [interlinear insertion in heavier ink] > *M:S:A*:<sup>30</sup> this was used freely the men walking abroad dayly, keeping no regular Regimen, yet never had a bad accident, or salivation. this is more proper for the field, as not melting so soon from the heat of the weather.

[margin: some constitutions not easely affected by the Itch] I blooded many Itchy Troopers, yet never caught the distemper. & I know a Scotch: Gentlemen who was never affected with it, though he has had many an itchy bedfellow. <vid. Hoffmanni Op: Med: Tom.2. p.426. de pustulosis et pruriginosis varii generis affectibus Cutis.[insertion in heavier ink]><sup>31</sup>

[margin: Grieps and Purging.] Par: 7. The complaints from Grieps & purging were very common soon after we came into Garrison, tho frequent not dangerous, were some days ill before they applied to me, treating themselves with burnt Gin.<sup>32</sup>

[margin: Method of cure] the method in Par: 4 always succeeded; there was never any blood, the stools whitish, slimie, & frothy, seldom attended with fever, of course no

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<sup>30</sup> "Extinguish 1 oz. quicksilver with 50 drops of aqua fortis [nitric acid]; add 1 lb. lard <and 2 oz. white beeswax>; mix according to art." Buchanan's preference for "our itch ointment" over mercurial ointment (app. C-1) stems from his belief that it was less likely to run. This quality may have been owing to the the inclusion of beeswax in the army recipe. Ointments based on lard alone sometimes melted in warm weather. On lard (*auxungia porcina*) and beeswax (*cera alba*), see app. C-1.

<sup>31</sup> In his treatise, "Of pustulous and pruriginous affections of the skin, of various kinds," Hoffmann does not deal broadly with the causes of itch, or argue that some constitutional types are immune, but he does assert that children and adolescents who are of a spongy habit and a sanguine-phlegmatic habit are most prone to the "moist" itch, while it is thin or elderly people, especially those who are disposed to be melancholic, who are liable to contract the "dry" type. *Opera omnia physico-medica*, III, 426; cf. Friedrich Hoffman, *A System of the Practice of Medicine: From the Latin of Dr. Hoffman*, trans. William Lewis, rev. Andrew Duncan (London: J. Murray, 1783), II, 460. Troops suffering from the itch were sometimes segregated from other soldiers; note Charles Herbert, "Coxheath Camp, 1778-1779," *Journal of the Society for Army Historical Research*, 45 (1967), pp. 143-44.

<sup>32</sup> This use of gin may have drawn on the belief that spirits were stomachic; app. C-1, "wines and spirits."

occasion for bleedings[;] the stomach was

20 [facing p. 19; blank]

21 [continuing from p. 19]:

seldom disordered therefor seldom used vomits, but if any squeameshnes the Ipecacoan<sup>33</sup> was ordered.

[margin: Grieps often continue after the flux] Grieps often remained after the flux, a Dose Ther: Andromach h:s:<sup>34</sup> drinking something warm was the best medecine, or Opiates in large doses<sup>x</sup> [superscript in heavier ink]. in England there's a universal prejudice against Opiates, in camp practice I have used them more freely than any other medicine, & never observed any bad consequence attending them<sup>a</sup>.<sup>35</sup> Nixt spring complaints of this nature were

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<sup>33</sup> On ipecacuanha, see app. C-1.

<sup>34</sup> *Theriac Andromachi* is discussed in app. C-1; "h:s:" (*hora somni*) means "at bedtime."

<sup>35</sup> Although opiates had earlier had their critics, they were coming into more widespread use in both military and civilian practice. Note app. C-1. Buchanan may have meant only that there was a "universal prejudice" against using opiates to treat dysentery; cf. Young's reservations, n. 39. Sydenham, however, had used laudanum (app. C-1, "opiates") extensively in his therapy, while Pringle recommended *pil. Mathiae* (app. C-1, "opiates") and other opiates in treating both dysentery and diarrhea, though he cautioned that it be administered only after the patient had been purged and that its use be discontinued if it appeared that nature was attempting to evacuate "corrupted humours." Rollo, noting the astringent qualities of opium, recommended it, adding, "Until I was obliged to acknowledge the good effects of opium from experience, I had my doubts about its utility." Leigh strongly endorsed prescribing opium in the treatment of dysentery and diarrhea, and claimed that the use of it was becoming widespread. Dysentery was widely seen as a disease of debility, and opium was thought by Leigh and others to be a stimulant. John Leigh, *An Experimental Inquiry into The Properties of Opium, and its Effects on Living Subjects; With Observations on its History, Preparations and Uses. Being the Disputation which gained the Harveian Prize for the Year 1785* (Edinburgh: Charles Elliot; London: G.G.J. and J. Robinson, 1786), pp. 137-38; John Moore, *Medical Sketches: In Two Parts*, 1st American ed. (Providence, R.I.: Carter & Wilkinson, 1794), p. 267; Pringle, *Observations on the Diseases*, pp. 236-37, 276-77; Rollo, *Observations on St. Lucia*, p. 92.



frequent & treated in the same manner with the same success.

[margin: Causes. from drinking white Beer] Upon asking what occasioned this Distemper I was told by some, they believed it proceeded from drinking White Beer, I advised them to abstain from Beer & drink small milk punch.

----. *nam vina nihil moror illius orae.*

Hor: Ep. 15. lb. i. v:16.<sup>36</sup>

upon tryale all agreed it was a wholesome liquor. white Beer might promote the Desease by not being

22:

<sup>a</sup>vid: Huxham de Aere et morbis Epidemius. Lond. Vol.1. 1752. Prolegom: p.24. *interponi vero, si quid ego judico, debent Eccoprotica quaedam subinde, ad biliosam colluviem evacuandam; hoc saepe alma molitur natura, ea nempe gravata, Diarhoea, Cholera seu Dysenteria excitatis: quibus autem tempestiva Rhei barbari doses, repetita prudenter, occurrerit omnino, naturamque levaverit aequae.*<sup>37</sup>

<sup>a</sup>Young on Opium. Lond. 1753. oct. sect: 4. of the Effects of opium in a Diarhaea &

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<sup>36</sup> "For that region's wines I put out of court"; Hor. Ep. 1.15.16, *Horace* (trans. Fairclough), p. 344.

<sup>37</sup> "In my Opinion, there should be now and then also interposed some gentle Laxative to carry off the bilious Corruption: This indeed provident Nature often effects by a Diarrhoea, Cholera, or Dysentery, which a seasonable Dose of Rhubarb, now and then administered, might have altogether prevented, and yet relieved Nature as well": John Huxham, *Observations on the Air and Epidemic Diseases from the Year MDCCXXVIII to MDCCXXXVII inclusive: Made by Dr. Huxham, at Plymouth: Together with a Short Dissertation on the Devonshire Colic*, trans. John Corham Huxham (London: J. Hinton and Henry Whitfield, 1759-67), I, xxxi. This is the translation of Huxham's *Observationes de aere et morbis epidemicis, ab anno MDCCXXVIII ad finem anni MDCCXXXVII* (London: Joannes Hinton [etc.], 1752 [vol. I first published in 1739]), I, xxiv.

vomiting.<sup>38</sup> sect: 7. in the Dysentery.<sup>39</sup> Heisters. Med: Chirurg: & Anatomical Obs. V.1. No.84 of the Bloody flux & Diarhaea.<sup>40</sup>

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<sup>38</sup> Young reports that when he suffered from diarrhea, opium cured it quickly and he speculates that it calmed "the present *stimulus* till the acrimony was corrected." He also notes, however, that when he had attempted to correct a sudden attack of *cholera morbus* nausea by taking laudanum, he had become so ill that he felt compelled to take a series of vomits: "I could easily see the truth of that maxim, *viz.* That the acrimony in the *primae viae* may be such in quantity or quality, as must be expelled, and cannot be corrected." Sufficient laudanum to have ended evacuation, he speculates, might have destroyed sensation and brought on apoplexy. George Young, *A Treatise on Opium, Founded upon Practical Observations*. (London: A. Millar, 1753), sect. 4 (pp. 33-39).

<sup>39</sup> According to Young, "Opium is often very beneficial in the dysentery, but much oftener hurtful.... The *stimulus* is abated for a time by opium; but soon returns with more violence, as long as the acrimony continues." He asserts that mild dysentery, where acrimony is slight, may be "cured" by opium, but not more serious cases, for opium retains "the putrid *faeces*." He reports that opium was widely and indiscriminately used for dysentery, often with fatal effects: "I know, that when the pain is very urgent, both the patient and physician are apt to fly to opium for present relief; but while they abate the present sensation of pain, they are increasing the *stimulus* by detaining and accumulating the putrefied contents of the bowels: and indeed I have held it as a rule, that opium is then most improper when the patient calls for it with the greatest importunity." In his estimation, patients made stool less often when using purgatives and were more often relieved by these stools. Asserting that 90% of all cases of dysentery can be relieved by laxatives, enemas, and chicken broth, he adds, "I use opium only when the disease is mild, or after its violence is abated by evacuants and emollients." He also reports that in the last stages of fatal dysentery, purging ceases, "morbific matter" is reabsorbed, and opium is of no service. He concludes, "putrid and inflammatory fevers are made much worse by opium, unless where the crisis is an external suppuration, such as the small-pox.", *ibid.*, sect. 7 (pp. 47-52).

<sup>40</sup> Heister's method of treating bloody flux was, first, to administer ½ dr. ipecacuanha with a gallon of bread-water, to a patient who complained of nausea or pain; this he followed up with 1 dr. rhubarb, morning and night, intending to purge, strengthen the bowels, diminish the flux, and (because rhubarb was anodyne) assuage pain. The common drink of his patients was bread- or barley-water, to which he added gum arabic and (when patients would allow it) milk; this was intended to correct the sharpness of the humors, to relieve heat, and to heal the intestines. After eight days, Heister administered 1-2 dr. (depending on constitution) diascordium, which he reported usually cured patients if they took pains to avoid catching cold, as by wearing their stockings and avoiding cold drinks. Patients who were hot or plethoric were bled at the outset, which relieved them and made the treatment more successful. When they were nearly cured, Heister advised them to take three times each day a tincture composed of equal amounts essence of wormwood, orange peel, and

23: [continuing from p. 21]

accustomed to it; but sometime thereafter it became a universal draught at meals, and almost as much esteemed as the small English table beer, especially when drunk with a crust toasted bread and scraped Nutmeg.

[margin: from eating fruit, or catching cold on Duty] Some say it proceeds from eating fruite; & others from catching cold on Duty. the Distemper decreased as the fruite went out <of> Season, though the drinking of beer continued. The latter end of September & beginning of October were remarkably wet and cold, which no doubt promoted the distemper & I believe was the chief cause, especially as we came from a better quarters to a worse, and doing night Duty to which we were strangers at home<sup>a</sup> [*superscript in heavier ink*]. The Streets here are very flat, & when the raine falls it lyes long, which makes the Streets wet. tho not dirty the feet are always wet and damp: nor are the Flemish Shoes so good as the English.

[margin: None of the Officers Ill of it, & only three Servants.] None of the Officers were ill of this distemper and only three of their Servants,

24: <sup>a</sup>none of our Spring Recruits were troubled with Grieps or purging, nor had they the Ague. they joined us when the weather was dry & warm.

25: [continuing from p. 23]

being less exposed to the injuries of the weather, have good dyet<sup>x</sup> good wine. wine and

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cascarilla. *Medical, Chirurgical, and Anatomical Observations*, trans. George Wirgman (London: J. Reeves [etc.], 1755), I, obs. 84 (pp. 108-09).

water for their common drink,<sup>41</sup> good lodgings, good fire, (Par: 5t) are warmer clothed than the men; plenty of ripe fruits of which they eat freely, nor do they seem to be unwholesome

-----: *ille salubris*

*aestates peraget, qui nigris prandia moris*

*finiet, ante gravem quae legerit arbore solem.*

Hor: Sat:6. lb:3. v.21.<sup>42</sup>

[margin: Ague.] Par: 8. Agues were contemporary with the above disease, & regular Quotidians.

[margin: Method of cure.] on the first complaint I order a Vomit about an hour before the fit, by which it's often rendered shorter; none withstood an ounce of the Bark given in Brandy or Gin, taking a dram every two or three hours.<sup>43</sup> I give the Bark to the Trooper & he puts it into his Dram bottle, without any formal preparation, taking it on Duty\*.<sup>44</sup> and it's a just observation of Abercromby de variatone

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<sup>41</sup> While officers and common soldiers alike drank spirits, the former were much more likely to also drink wine on a regular basis: Kopperman, "The Cheapest Pay," p. 465.

<sup>42</sup> "A man will pass his summers in health, who will finish his luncheon with black mulberries which he has picked from the tree before the sun is trying"; Hor. Sat. 2.4 [not 6].21-23, *Horace* (trans. Fairclough), p. 189.

<sup>43</sup> On Peruvian bark, see app. C-1, *cortex Peruvianus*. Therapies for ague are discussed in app. B-1..

<sup>44</sup> The practice of allowing a patient to dose himself was common in the military and was made unavoidable by the necessity of having the troops do duty, even when ill. It was, however, risky. Rollo notes the case of one soldier who, while ill with fever, "accidentally took a dose of his medicine," causing diaphoresis. He also reports, "To prevent relapses, and even the formation of diseases; emetics, Glaubers salt, and bark, were left at the different out-posts, and directions lodged for the exhibition of these medicines with the Officer who commanded. But ... the men having an aversion to the hospital, it afforded them a pretence for staying at their out-posts, until their diseases were so far advanced, that they became exceedingly dangerous." *Observations on St. Lucia*, pp. 126, 133-34.

26: [the following insertion and its "x" designator are in heavier ink]

<sup>x</sup>Salmon in his *Universal Traveller* V.i p.170. fol \_\_ observes, that those that live well, & can afford good kitchene physic in unhealthfull Countries, come off better than; the common Soldiers and poor people. it is very certain, says he, where good wine or punch, & good food are taken moderately, they contribute to preserve our healths in unwholesome Countries[;] he treats of the Diseases in India where the English escape some diseases which are common among the Natives; which some impute to providence, but he to their manner of living.<sup>45</sup>

[the following citation and its asterisk designator are in heavier ink]

\*Fred. Hoffman *Op.Med.Tom 3 de recto cortuis china usu in febribus intermittibus.*<sup>46</sup>

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<sup>45</sup> Thomas Salmon, *The Universal Traveller; or, A complete description of the several nations of the World* (London: R. Baldwin, 1752), I, 170. This entire passage refers particularly to India. "Those that live ... unwholesome" is quoted; the remainder, paraphrased.

<sup>46</sup> "Of the correct use of cinchona bark in intermittent fevers," Hoffmann asserts that while all believe that certain drugs are always effective in treating given diseases, in fact differences that exist between patients cause the same drugs to act differently. Therefore, as Hippocrates noted, it is essential for the practitioner to consider the patient's constitution and the cause of the disease before he prescribes. According to Hoffman, indiscriminate usage of bark has caused some to question its value (though not in England, where its popularity, earlier fostered by Sydenham, remains high). Critics (e.g. Baglivi) regarded it as uncertain and dangerous, and claimed that it caused dropsy, slow and hectic fevers, and other diseases. They believed that fevers represented nature's attempt to expel morbid matter, and that bark, being an astringent, hampered this process. However, argues Hoffmann, their supposition that intermittent fever was the result of plethora was incorrect; rather, it resulted from a stoppage of perspiration occasioned by exposure to changeable weather and was bilious, suggesting the need for evacuations. Hoffman asserts that bark is useful because it tones the solids, promotes circulation, and prompts evacuations, especially insensible perspiration (chalybeates, he notes, provide the same advantages). While Hoffmann concedes that dangerous diseases like hektics may proceed from intermittents, he doubts bark is the cause (as some have claimed), assuming that it is properly administered. He advises that it not be given before the patient's system is cleared, by emetics and often by laxatives, and not be administered if the patient is suffering from plethora, hypochondria, or cachexy. Hoffmann cautions that inexperienced practitioners should refrain from using bark or other heroic medicines. Hoffmann, *Opera omnia physico-medica*, VI, cap. 5, pp. 32-41; James provides

27 [continuing from p. 25]:

pulsus Sect. 3. *eum enim sanioris iudicii homines Medicum praestantiolem reputabunt, non qui magno remediorum apparatu sed qui paucissimis, iisque tantum necessariis morbum proflicarit.*<sup>47</sup> only two were obstinate and were brought from England; in which case, if the Bark failed, it was the Hospital practice to give a half a Drame crude Sal Ammoniac,<sup>48</sup> every third hour, with some bitters, such as Decoct: Febris: amar. Fuller:<sup>49</sup> & I have often seen it succeed.

[margin: Agues not cured by sudden frights.] It is a common notion that a sudden

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a translation in *Medical Dictionary*, under "quinquina."

<sup>47</sup> "Prudent men considered him a preeminent doctor. He did not administer a great quantity of remedies, but only the very least that was necessary to conquer disease"; David Abercromby, *De variatone, ac varietate pulsus observationes* (London: Samuelis Smith, 1685), p. 46. The last word in the quotation reads "*profligarit*" in Abercromby.

<sup>48</sup> Note entry for sal ammoniac in app. C-1.

<sup>49</sup> "Fuller's bitter fever decoction" was named after Thomas Fuller (1654-1734), who developed it. It was prepared by boiling together chamomile flowers (cf. app. C-1) and cochineal (app. C-1, under "nitre"), then straining and adding salt of wormwood.(app. C-1) Fuller claimed that this medicine was "esteemed a Specific in Intermitting Fevers, and a Remedy inferior to none, but the *Peruvian Bark*; nay sometimes it hath succeeded when that hath fail'd." Even apart from bark, the use of bitters in treating agues was commonplace. According to Buchan, "All bitters seem to be antidotes to agues, especially those that are warm and astringent." The use of bitters as febrifuges extended back to Galen. Buchan, *Domestic Medicine*, pp. 115, 137, 280, 317; William Cullen, *A Treatise of the Materia Medica* (Philadelphia: J. Cruikshank and R. Campbell; New York: R. Hodge, S. Campbell, and T. Allen, 1789), II, 39-46; Fuller, *Pharmacopoeia Extemporanea; or, A Body of Prescripts: In Which, Forms of Select Remedies, accommodated to most Intentions of Cure usually occurring in Practice ... are Propos'd for the Assistance of Young Physicians*, ed. with "large Additions and Emendations" (London: Benj. Walford, 1710), pp. 61-62 [cf. Fuller, *Pharmacopoeia Domestica: or, the Family Dispensatory. With Remarks on the Compositions, and An Explanation of their Virtues. Designed for the Use of Physicians in the Country* (London: W. Innys & R. Manby, 1739), pp. 28-29]; George Pearson, *Outlines of Lectures on the Practice of Physic* (London, 1789), I, 22.

fright will cure the ague.<sup>50</sup> January 14th 1743 Ashberry of Major Jenkinson's troop<sup>51</sup> was almost recovered of an Ague & that day sent a foraging, fell into the Scheld unexpectedly, was heartily ducked and frightened; yet the Ague returned at its usuale time more violent than formerly, & was afterwards cured by the Bark. the same happened to our Sutlers Servant,

28: [top of page; both quotations are in heavier ink than text]

*varietas remediorum ignorantiae, filia est.* Verulam<sup>52</sup>

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<sup>50</sup> Mason reported, and Monro credited, the account of a boy who was cured of ague by the shock of falling into a river. Many Continental writers made similar observations; Gaub and Stahl were among the authorities who reported cases of ague victims being cured by terror. Terror was likewise thought to cure other physical problems, e.g. hiccup. James, *Medicinal Dictionary*, under "terror"; Mason, *The Nature of an Intermitting Fever and Ague Consider'd: m Wherein is Explain'd, the Cause of Each Succeeding Symptom, and Their Periodical Returns: With the Best and Most Rational Method of Cure* (London: J. Hedges, 1745), p. 222; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 100n; L. J. Rather, *Mind and Body in Eighteenth Century Medicine: A Study Based on Jerome Gaub's De regimentis* (Berkeley and Los Angeles: Univ. of California Press, 1965), pp. 189-94.

<sup>51</sup> Charles Jenkinson entered the Blues as a cornet, 8 Nov. 1712; capt., 5 Feb. 1723; major, 10 Dec. 1739; lieut.-col., June 1745, and until his death, 21 June 1750. His son and namesake had a distinguished career as an m.p. and a major figure in several cabinets, including a tenure as secretary at War (1778-82). WO 27/1, return for Blues dated June 1750; RADCP, Box 3/47; *Army List for 1740*, p. 6.

<sup>52</sup> "[Trying] a variety of remedies is the daughter of ignorance." Despite Buchanan's ascription, this quotation does not appear to come from Verulam (Sir Francis Bacon). It is, however, reminiscent of a comment by Hoffmann, in his chapter, "De praestantia remediorum domesticorum" (cf. n. 22): "tanta medicamentorum farrago merae ignorantiae filia est" ("a farrago of remedies is merely the daughter of ignorance"). The sentiment was in any case commonplace, and it appears in many works, e.g., Bartholomew Parr, *The London Medical Dictionary; Including, under Distinct Heads, Every Branch of Medicine, viz. Anatomy, Physiology, and Pathology, the Practice of Physic and Surgery, Therapeutics, and Materia Medica; with Whatever Relates to Medicine in Natural Philosophy, Chemistry, and Natural History* (Philadelphia: Mitchell, Ames, and White, 1819), I, xii; Young, *Treatise on Opium*, p. 10.

*Nil aequae Sanitatem aegrotantium impedit, quam remediorum crebra mutatio.*

Sen. Epist. 2.<sup>53</sup>

29: [continuing from p. 27]

but instead of curing the Ague, occasioned a violent inflammatory fever. vid: Hor: Sat: III. lib:ii. V.293.<sup>54</sup> there are many private receipts for the cure of an Ague, and every body has his own favorite & I have been complimented with many, & it would be endless to mention them.<sup>55</sup>

[margin: Bark the most certain remedy.] it's needless to enquire for a more certain remedy than the Simple Barke, if the disease once form into a regular Ague, I am certain it will cure and never saw it faile. I think it best in Substance and whatever is added only increases its bulk but not its virtue; unless it be to a very weake Stomach in order to make it sit easie.<sup>56</sup> in very obstinate cases I order thus. **Rx cort: peruvian: optime pulverisat. oz.**

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<sup>53</sup> "Nothing hinders a cure so much as frequent change of medicine"; Sen. Ep.2.3; Seneca, *Ad Lucilium Epistolae Morales*, trans. Richard M. Gummere, The Loeb Classical Library (London: William Heinemann Ltd.; Cambridge, Mass.: Harvard Univ. Press, 1934 [1917]), I, 7.

<sup>54</sup> "Should chance or the doctor raise the sick lad up from his peril, his crazy mother will kill him by planting him on the cold bank and bringing back his fever. What is the malady that has stricken her mind? Fear of the gods"; Hor. Sat. 2.3.293-95, *Horace* (trans. Fairclough), p. 177.

<sup>55</sup> A sense of the more common "vulgar" remedies is provided by Lind: *Essay on Diseases*, pp. 231-32. Buchan wrote, "Though nothing is more rational than the method of treating intermitting fevers, yet, by some strange infatuation, more charms and whimsical remedies are daily used for removing this than any other disease": *Domestic Medicine*, p. 113.

<sup>56</sup> Bark was often prescribed to tone weak stomachs and was widely used as a stomachic bitter, but many patients, including most children, had difficulty holding it down. One reason why many writers advocated evacuating patients before administering bark (cf. app. C-1) was to reduce the likelihood that they would vomit it up. If the patient could not hold down bark, it was sometimes given by enema. The army dispensatory of 1746 included a decoction of bark and nitre in spring water that, according to Theobald, was "contrived for Those, whose Stomach, perhaps, would be apt to recoil [on] swallowing [bark] in Substance." Theobald,



*fs. flor: Sal: Amm. gr. vi. Camphir: gr. iii. cons: absinth: q. S: ut f. bol: quarto quaque hord sumendus et Superbibendo oz. iv. Decoct: amar: Fuller: supra diit.*<sup>57</sup> upon recovery some of the

30: [facing p. 29; blank]

31: [continuing from p. 29]

men eat a Lemon with its skin, on such days as they expect the fit.

[margin: A Woman takes one ounce of Bark at a Dose.] A woman of the Regimt took an Ounce of the Bark in warm water overnight instead of a vomite, complaining of weight at Stomach next morning, & finding out the mistake, took her vomit, & brought it up. had the appearance of a slight jaundice, but soon went off, & the Ague afterwards cured by the Bark.

[margin: Agues local or partial.] Agues are sometimes partial or locale, seizing some particular part of the body, viz: the face or head, at a certain hour, & exactly resembling an Ague, & cured by taking the Bark, & some apply plaisters of the Bark to the part, & that with success.

[margin: a horse has an aguish disorder, & cured by the Bark.] I remember to have

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*Every Man His Own Physician*, p. 2; Theobald, *Medulla Medicinae Universae: or, A New Compendious Dispensatory. Compiled at the Command of His Royal Highness the Duke, For the Use of the Military Hospital Abroad, during the late War. By the King's Physicians and Surgeons, the Surgeon-General, and Apothecary-General, to the Army.* 6th ed. (Dublin: Alexander Ewing, 1765), pp. 19-20.

<sup>57</sup> "Take ½ oz. of the finest Peruvian bark, powdered, 6 gr. flowers of sal ammoniac, 3 gr. camphor and enough conserve of wormwood to make a bolus; one quarter to be taken every hour, washed down with Fuller's bitter decoction, already noted." Regarding *flores salis ammoniaci* (under entry for sal ammoniac), *absinthum* (wormwood) and camphor, see app. C-1.

seen a horse of Captain Ramsdens<sup>58</sup> have an aguish disorder, & cured by the Bark, & drinking the chalybeate water of Sunninghill Well on Windsor forest.<sup>59</sup>

[*margin, top of p. 33:* Agues more frequent in the lower part of Ghent than in the upper.] it has been observed that part of the Garrison quartered

32: [*facing p. 31; blank*]

33: [*continuing from p. 31*]

on the high ground of St. Peter's hill in Ghent, has been less subject to this disease, than these who are in the lower part of the town & near the canals:

[*margin:* more common amongst the foot than horse.] the foot more subject to it than the horse, being more exposed to the injuries of the weather in doing Duty, having no watch-cloaks. our Troopers have a good warm cloake & strong boots, & less duty.<sup>60</sup>

[*margin:* Agues not occasioned by Spirituous liquors.] Drinking Gin & Spirituous Liquors are said to occasion this distemper; our foot Guards are remarkable for this taste, yet not much Subject to the disease, and all our drunken fellows have escaped the distemper.

[*margin:* more frequent at Bruges than at Ghent.] it was almost universal with the

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<sup>58</sup> Frecheville Ramsden (b. c.1717) was commissioned a cornet in the Blues on 17 Feb. 1742; lieut., 24 July 1745; capt., 26 Feb. 1755; lieut. and lieut.-col., 1/Horse Grenadier Guards, 8 Feb. 1762; sold his commission and retired, 8 June 1768. RADCP, Box 3/47; WO 27/4, return for Blues; *AL 1756*, p. 14; *AL 1767*, p. 19; *AL 1768*, p. 19.

<sup>59</sup> Equine ague is described in E. R., *The Experienc'd Farrier: Or, a Compleat Treatise of Horsemanship. In Two Books; Physical and Chyrurgical*. 2nd ed., enl. (London: W. Whitwood and A. Feltham, 1691), pp. 128-29. On Sunninghill Well, see P. H. Ditchfield and William Page, eds., *The Victoria History of Berkshire* (London: St. Catherine Press, 1923), III, 134. Its water was probably intended to serve as a tonic for the horses. On the uses of chalybeates, note the entry under *chalybis* in app. C-1.

<sup>60</sup> Pringle likewise reported that because troopers had cloaks (which also served as blankets) to keep them warm and dry, they were not as subject to epidemic diseases as were foot soldiers. *Observations on the Diseases*, pp. 19, 24.

garrison at Bruges, especially where their barracks were moist & cold, there their arms soon rusted, belts moulded & contracted; that town is not so well inhabited as Ghent. the neighbourhood more watery, the air more damp, for want

34: [facing p. 33; blank]

35: [continuing from p. 33]

of fire. vid: Hipp: de aere, locis et aq.<sup>61</sup>

[margin: agues cured by change of air only.] As part of Bruges garrison marched thro Ghent to Germany, some soldiers had been ill of agues upwards of twenty weeks, were sent to the Hospital, where some recovered without Bark or any other febrifuge medecine, which was entirely owing to a warmer & dryer air. I have observed the same in England when our Regimt. marched into Kent or Essex to escort his Majesty, the further we marched towards the marshy grounds & the longer we stayed, Agues were the more frequent, & as we returned into Hertfordshire, some cured of themselves, especially if the weather was favorable. the same is observed by those who travel into the fens of Lincolnshire.

[margin: No Officer or Servant ill of the Ague.] None of the Officers have been ill of this disease, nor any of their Servants; a plain proof that the air of this Country is not the only cause of

36: [facing p. 35; blank]

37: [continuing from p. 35]

the distemper, but that it rather proceeds from the Soldiers manner of life. few of the

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<sup>61</sup> Hippocrates did not deal with dampness per se in "Airs, Waters, Places," but did claim (*Hippocrates* [trans. Jones], I, 85) that inhabitants of marshy areas were especially prone to summer quartans. cf. below, n.590.

inhabitants were ill of this or Par:7. this desease may proceed from the same causes as Par.7. for both decreased about the same time. viz: by the latter end of November, & by this time our men were more healthie; being now more habituated to the climate, have put up Grates and keep good coale fires. Agues were common next Spring, chiefly quotidian, and cured as above.

[*margin: an Irish cure for an ague.*] Our Irish additional attempted to cure themselves, by grating a twopenny Nutmeg,<sup>62</sup> adding an equale quantity of common alum<sup>63</sup> & Sugar<sup>64</sup>, divided into three equal parts, taking one in a Glass Vinegar just befor the fit,<sup>65</sup> but were often obliged to have to recourse to the Bark.

[*margin: an English cure*] Some of our Troopers from Essex affirm that two Drams Groundsell Seed<sup>66</sup> taken in warm water or Beer an hour before the Aguesh fit begins, proves a certain cure, drinking something warm & continuing in bed to procure sweat. this I tryed, but never

38: [*facing p. 37; blank*]

39: [*continuing from p. 37*]

with Success. it always occasioned weight & Sickness at Stomach, with inclination to vomite, & never had any Sudorifick quality more than what could be occasioned from the

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<sup>62</sup> On nutmeg, see app. C-1.

<sup>63</sup> On alum, see app. C-1.

<sup>64</sup> Sugar was probably included in the mix for taste, but it was thought by some authorities, Pringle among them, to have active medicinal properties; note entry in app. C-1.

<sup>65</sup> On vinegar, see app. C-1.

<sup>66</sup> Groundsell appears to have been little used in professional medicine by this time; note app. C-1.

method of keeping warm<sup>x</sup>.

[*margin*: an Ague cured by Seasickness.] I knew an obstinate Ague cured by severe Seasickness in going from England to Holland, was four days at sea in a violent storm, vomited violently; had taken large quantities of the Bark without Success, but never had the least aguish disposition after landing.

[*margin*: my own Case.] I caught this distemper June 17th. by lying under my Markie only, having neither tent nor curtains, the weather very wet & stormy, my bedding damp, & sometimes wet; was seized every other day, the fever violent five or Six hours, with severe Shiverings, breaking out into violent sweats.

[*the following quotation is diagonally stroked*]

*occupat obsessos sudor missi frigidus artus,  
unilaeque cadunt toto de corpore guttae  
quaque pedem mori, manat laves, eque capillis  
vos cadit; et citius, quam nunc tibi facta enamo,  
in latices mutor.*

Ov: met: lib: 6. V.632.<sup>67</sup>

as soon as the

- 40: [no "x" designator, though presumably keyed to the one on p. 39, which like it is in a heavier hand] B. having an obstinate Ague was advised to drink a bottle of Brandy as an infallible remedy; this plasing [*sic*] his Taste, sent immediately for a Bottle, but by mistake a Quart of

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<sup>67</sup> "Cold sweat poured down my beleagured limbs and the dark drops rained down from my whole body. Wherever I put my foot a pool trickled out, and from my hair fell the drops; and sooner than I can now tell the tale I [i.e. Arethusa] was changed to a stream of water"; Ovid Met. 5 [not 6].632-36; Ovid, *Metamorphoses*, trans. Frank J. Miller, The Loeb Classical Library (London: William Heinemann Ltd.; Cambridge, Mass.: Harvard Univ. Pr., 1960 [1916]), I, 281, 283.

Aniseed water<sup>68</sup> was brought, which he finished in a few hours, got excessively drunk, had a violent fever for some days. The Ague continued & was at last cured by the Bark.

41: [continuing from p. 39]

Sweating appeared was instantly relieved; the first access of the fever was so violent that I was blooded^ <^I have blooded many Troopers in the first access, & don't think it retarded the cure.>,<sup>69</sup> vomited next morning,

[margin: takes an ounce Bark dayly] took the Bark ad oz. i pr. diem in Strong Mountain white wine,<sup>70</sup> dr. ii pro dose, without any visible operation; the first ounce entirely prevented the return of the fit, & the Second completed the cure: many scabs broke out about the mouth & lips, which was common with others & certain forerunner of recovery.<sup>71</sup> Next morning after taking an ounce of the Bark I perceived the real taste of it in my mouth, having entered the blood & tintured the Saliva.

[margin: Relapse.] I relapsed July 20th tho not so violent & imagined it proceeded

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<sup>68</sup> Brandy was probably recommended because like other spirits it was valued as a sudorific. On aniseed, see app. C-1.

<sup>69</sup> Similarly, Cleghorn routinely bled early in the disease unless there was a strong contrary indicator (symptoms, climate, season): *Observations on the Epidemical Diseases in Minorca. From the Year 1744 to 1749. To Which is Prefixed A short Account of the Climate, Productions, Inhabitants, and Endemial Distempers of Minorca*, annot. Benjamin Rush (Philadelphia: F. Nichols, 1809 [1751]), p. 114.

<sup>70</sup> On mountain, note the entry in app. C-1 for “wines and spirits.”

<sup>71</sup> Cleghorn reported the same; however, Rush claimed that while pustules or scabs coming late in the course of disease were favorable, being a sign of coction, if they were present early they signaled danger or a lengthy illness. Rollo wrote that in both the remittent and intermittent, “An eruption about the mouth and ears, with a swelling of the upper lip ... happening when the fever was going off, was a certain sign of recovery; but if it appeared when dangerous symptoms were present, it greatly assisted in the unfavourable prognostic.” Cleghorn, *Observations on the Epidemical Diseases in Minorca* (1809 ed.), p. 98, 98n; Rollo, *Observations on the Diseases on St. Lucia*, p. 60.

from catching cold on the 17th Inst. having worked hard after pitching my tent, dressing the ground, &c. sweated much. afterwards, lying upon my bed in my westcoat only, falling asleep, the walls of the tent being tucked up & a strong draught of air; took the Bark with the same success as befor, eating the slice of a Lemon in order

42: [facing p. 41; blank]

43: [continuing from p. 41]

to take off the taste.

[margin: The Barke is sometimes purgative.] I have heard of the purgative quality of the Barke, but never saw it prove so excepting in one case, where it purged so violently that the Gentlemen [sic] was obliged to give over its use; if at any time he found himself costive a small <dose [insertion in heavier ink]> proved a gentle laxative:

[margin: Opiates are then to be given with it.] in this case Opiates are to be mixed with it.<sup>72</sup> [margin: Agues frequent when encamped in wet low ground.] During the month of August 1745 we were encamped in low<sup>x</sup> wet grounds on the Side of Brussels Canal, the Ditches & Pools of water full of green flax which gave a disagreeable smell, especially towards evening or after raine; the <water> could not be drunk by man or horse;<sup>73</sup>

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<sup>72</sup> In this case, opium was administered to counteract the laxative effect. However, it was often given in intermittents, usually after the initial fit, for the principal purpose of making later fits more productive of sweat. Sydenham was among the first to recommend opium in intermittents, and Lind and Leigh among others strongly endorsed the practice. Cheyne considered opium to be unparalleled as a diaphoretic. Cheyne, *An Essay of Health*, p. 215; Thomas Dancer, *A Brief History of the Recent Expedition against Fort San Juan, So far as it Relates to the Diseases of the Troops; together with Some Observations on Climate, Infection and Contagion; and Several of the Endemial Complaints of the West-Indies* (Kingston: D. Douglas & W. Aikman, 1781), pp. 48-49; Leigh, *An Experimental Inquiry into The Properties of Opium*, pp. 132-33; Lind, *Essay on Diseases*, pp. 234-38.

<sup>73</sup> Spirits, notably brandy and rum, were widely used in the army to purify (or replace) bad water. Vinegar and alum were also common purifiers. Blane recommended quicklime.

had large dews & thick fogs every night; & here agues were frequent.

[margin: Agues not so frequent in Garrison at Antwerp as we expected.] The latter end of this Season we were in garrison at Antwerp; Agues were not so frequent as we expected from the report of the Inhabitants, probably were prevented from the dry frosty air, which continued during our short stay in garrison. [following reference in heavier ink] <vid.> Heister's Medical, Chirurgical & anatomical obs. v.i. No. 82 of the method of curing the Ague among the Soldiers.<sup>74</sup>

44:

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Water might be purified by boiling. Alum was used to clarify muddy water. While surgeon to Cope's (7<sup>th</sup>) Dns., Home drafted regimental orders intended to prevent fever. Among them was, "the dragoons shall drink no water without it be boiled first." Disease was often blamed on bad water, but Lind argued that if the connection held true, in hot climates illness would be equally prevalent throughout the year, whereas in fact it was clustered. Pringle noted that disease had been linked to bad water as early as Hippocrates, and while not challenging the "justness of such notions," he reported that the water that the British troops had consumed in the Low Countries was generally good, except in Zealand, and therefore was not to blame for disease. (Sir) Gilbert Blane, *Observations on the Diseases of Seamen*, 2nd ed., corr. (London: Joseph Cooper, 1789), p. 329; Hume, "Francis Home, M.D.," p. 51; Robert Jackson, *A Systematic View of the Formation, Discipline, and Economy of Armies* (London: for the author, 1804), p. 237; Kopperman, "The Cheapest Pay," p. 462; Lind, *Essay on Diseases*, pp. 5, 82; Pringle, *Observations on the Diseases*, p. 91; Gerard van Swieten, *Diseases incident to Armies: With the Method of Cure* (Philadelphia: R. Bell, 1776), pp. 8, 91.

<sup>74</sup> Heister had attended Dutch troops in 1708-09, and the treatment for ague that he delineates in *Medical, Chirurgical, and Anatomical Observations* (I, obs. 82 [pp. 107-08]) was associated with this time. He initiated treatment by administering, three times daily, an emetic extract of wormwood to the patients; if a pectoral complaint discouraged this, they were given a purgative like Glauber's Salt; either treatment was intended to remove the viscidities that Heister believed to cause the disease, as well to strengthen the stomach. To the same ends, and also three times daily, Heister administered a febrifuge powder composed of salt of wormwood (or thistle water) and vitriolated tartar; this powder, he reported, cured most spring and summer agues, and some fall ones, and even if ague returned in the fall bark could now be used, because the viscidities were reduced or eliminated. Heister added that he had never seen the bark do harm.



[the following insertion and its "x" designator are in heavier ink]

<sup>x</sup>Sanctorius accounts for the bad effects of a moist Atmosphere. S.ii. Aph:viii. *in Caenoso (aere) prohibetur perspiratio, meatus implentur, sed non densantur, fibrae laxantur, non roborantur, et pondus perspirabilis retenti laedit, <et> non sentitur.<sup>75</sup>*

45: [continuing from p. 43]

[margin: The Small pocks.] Par: 9. The small pocks were Epidemick at Ghent about the time we marched into Garrison; many of the inhabitants were seen in the Streets with very fresh marks, & some with perfect Pustules;

[margin: The Flemish use the cool method.] were mostly children; are treated in the cool method; the children often running about the house & seldom confined to bed; are

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<sup>75</sup> "In a foggy Air Perspiration is lessened; the Pores are obstructed, and the Fibres weakened and not rendered more firm, and the Weight of the retained Matter is both perceivable and injurious": *Medicina Statica: Being the Aphorisms of Sanctorius, Translated into English with large Explanations. Wherein is given A Mechanical Account of the Animal Oeconomy, and of the Efficacy of the Non-Naturals, either in bringing about or removing its Disorders: Also with an Introduction concerning Mechanical Knowledge, and the Grounds of Certainty in Physick.* trans. and ed. John Quincy (London: William Newton, 1712), p. 136. While in Buchanan the passage concludes "*non sentitur*," Sanctorius omitted the "*non*": Santorio Santorio [Sanctorius Sanctorius], *Aphorismi de medicina statica* (Leipzig: Joann. Michael. Ludov. Teubner, 1762), p. 46. The last clause as it is in Buchanan would therefore be translated, "the weight of the retained matter is injurious, but is not perceivable." Commenting on this aphorism, Quincy (pp. 136-37) asked why, if both cold damp air and cold dry air inhibited perspiration, the former weakened the body while the latter strengthened it; to account for the discrepancy, he theorized that there was a "distracted fiber" in the body, which responded differently to wet and dry. Pearson later accounted Santorio responsible for the idea that fever was caused by a deficiency in perspiration, condemned the theory as fallacious, and claimed that Santorio had based it on his "inaccurate" experiments. The belief that an impeded perspiration was responsible for fever remained popular and was espoused by Pringle and many others writers on army medicine: [Alexander Bruce,] *An Inquiry Concerning the Cause of the Pestilence, and the Diseases in Fleets and Armies. In Three Parts. With an Appendix containing Some Facts taken from History, the Works of Physicians, &c. relating to the Subject.* Edinburgh: S. Bladon, 1759), p. 111; Pearson, *Outlines of Lectures*, I, 35; Pringle, *Observations on the Diseases*, pp. 20, 79-81; Tissot, *Advice to the People*, pp. 16-17, 68.

seldom mortal, nor are they near so apprehensive of catching them as the English are.

[*margin:* & affirm they have them two or three times] and affirm that it's no extraordinary thing to have them twice or thrice, & I have been assured of the same from their Physicians. Mr. Stevenson, Surgeon to Durure's Regimt<sup>76</sup> assured me he attended on of his Soldiers twice for this distemper since he came to Ghent.

[*margin:* begin with us in December] Some of our troopers were seized with them in the month of December 1742 <& one officer January 26th 1743>. were of the distinct kind.

[*margin:* Method of cure.] I treat them after Sydenham's manner, only I endeavour to procure a stool every Othr [*written in heavily, to obscure "third" beneath*] day, by dyet or Clister, & by so doing many bad Symptoms are prevented,<sup>77</sup> but would rather have it by Dyet so as to empty the

46: [*facing p. 45; blank*]

47: [*continuing from p. 45*]

whole tube of the Guts, & for this purpose I advise roasted apples, stewed pears, currant or Plumb: Gruelle, now & then a draught of whey, &c: it's well known how foetid Stools are after the body has been bound during the course of the Desease, which is often the case from

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<sup>76</sup> James Stevens [*sic*] served as surgeon to the 12th Foot (Whetham's, later Duroure's) 20 April 1732-c. 22 Nov. 1744. He then settled in Pewsey, Wilts., where he appears to have practiced until at least 1798, in his later years working in association with his son and namesake. He may well have been the James Stephens who was buried in Pewsey 12 March 1799 (private communication from Steve Hobbs, archivist, Wiltshire and Swindon Record Office). Johnston's *Roll*, p. 8 (#135); *The Medical Register For the Year 1783* (London: Joseph Johnson [1783]), p. 117; Wallis and Wallis, *Medics*, p. 569.

<sup>77</sup> Sydenham popularized the "cool" treatment of smallpox (on the hot treatment, see n. 84). Whenever possible, patients were to be exposed to cool, fresh air. Their diet was to be cooling, laxative, and diuretic. For further details, note entry on smallpox in app. B-1.

the feeding on milk pottage, the favorite dyet of Nurses; & the Patient is greatly relieved if at any time he has a naturale Stool. & I even venture to give a few Drams Manna<sup>78</sup> on purpose to open the body, especially if there be an oppression at breast, which is the effects of a load of excrements rather than the Disease.<sup>79</sup>

[*margin:* Acid Sharp drinks agreeable to the Patient & may be indulged.] Acid Sharp drinks are longed for <about> the latter end of the Disease & may drink freely of small Sherbet, adding a little wine so to be a pleasant cordiale.<sup>80</sup> a Glass small beer with a toast is extremely grateful & refreshing; a Physician can scarcely prescribe a draught more agreeable to his Patient. is gently laxative & promoting to Stool. Sucking China Oranges keep the mouth and throat clean, quench thirst, & keep

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<sup>78</sup> Manna was a rather mild laxative, and the "few Drams" prescribed by Buchanan appears to have been quite a small dose. On manna, see app. C-1.

<sup>79</sup> Buchanan's regimen, as described here, was a mild one. It is noteworthy that he does not mention bleeding, and in this regard one might contrast him to Huxham and others. On treatments of smallpox, see app. B-1.

<sup>80</sup> In the words of Quincy, "Whatsoever raises the Spirits, and gives sudden Strength and Cheerfulness, is termed Cordial, or comforting the Heart." As he noted, pleasant aromas (of flowers, spices, etc.) could be regarded as cordial, but usually the term was applied to liquids that raised the patient's spirits or vigor, with wine or wine-based medicines being easily the most important category. Wine itself was generally regarded as the finest cordial; as Buchan wrote, "Good wine possesses all the virtues of the cordial medicines, while it is free from many of their bad qualities." Fothergill, however, cautioned that wine did not serve as a cordial to patients who were habituated to it. Buchan warned against giving cordials to smallpox victims in the early stage of the disease (Buchanan is approving their use during the decline), fearing that they might cause premature and excessive eruptions and a tendency toward confluence, with pustules then collapsing before they matured. De Haen criticized Pringle and Huxham for giving cordial wines in cases of low fever, but Monro defended their practice, claiming that he often saw it help patients, and that even when he gave bark, as De Haen recommended, he often had to join it to free use of wine and cordials. Buchan, *Domestic Medicine*, p. 142; Anthony Fothergill, *A New Inquiry into the Suspension of Vital Action, in Cases of Drowning and Suffocation* (Bath: S. Hazard, 1795), p. 149; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 244-45; Quincy, *Lexicon Physico-Medicum* (1719), pp. 87-88.

48: [facing p. 47; blank]

49: [continuing from p. 47]

the Stomach in good order. some Patients eat Six or eight a day.<sup>81</sup>

[margin: our men take no great pains to prevent pitting yet escape as well as their Neighbours.] Some people are at great pains to use Oyntments, washes, &c: to prevent pitting;<sup>82</sup> this is not much minded with our Troopers, yet escape as well as their neighbours; I advise them not to pick the Scabs off, but give them time to dry & fall off; sometimes wash with warm milk, <Buttermilk> or boil elder flowers in milk; their nurses often use Goose Grease.<sup>83</sup> The only extraordinary covering which a Trooper has is his cloake for the first

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<sup>81</sup> See app. C-1 entry under “orange.”

<sup>82</sup> To prevent pitting, Smith suggested a cream prepared by mixing chopped rue into boiling lard, then straining. Home noted that the Dutch routinely opened pustules on the face, to prevent pitting, and wondered whether the English might not adopt the practice, over the entire body, to avoid secondary fever. Buchan recommended opening pustules if secondary fever appeared, explaining that this would reduce pitting, which was caused by the reabsorption of acrid matter. Extensive pitting was commonly associated with confluent pox. Buchan, *Domestic Medicine*, pp. 169-70; Home, *Medical Facts and Experiments*, p. 95; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 842; E. Smith, *The Compleat Housewife: Or, Accomplish'd Gentlewoman's Companion: Being a Collection of Six Hundred of the most approved Receipts* (London: R. Ware et al., 1750), p. 285.

<sup>83</sup> The remedy noted by Buchanan recalls an official ointment, *unguentum sambucinum* ("Ointment of Elder Flowers") which according to the recipe in the *Pharm. Lond.* of 1721 was prepared by boiling elder leaves (gathered in May), shoots, and inner bark in a base of butter; the recipe was radically changed in 1746, as the new edition prescribed boiling elder flowers in mutton suet and olive oil. The ointment was included in the 1788 edition of *Pharm. Lond.*; it was, however, dropped from the *Pharm. Edin.* in the 1792 ed., the reason being, according to Rotheram, that the CPE felt that it was not more useful than other ointments and drew no advantage from elder flowers. Note also entry on elder, app. C-1. Goose grease, a staple in popular medicine, was regarded as penetrating and was used in many topical applications, such as to cure baldness and heal chapped lips. Although official as late as 1721, it was dropped from the materia medica in the 1746 ed. of *Pharm. Lond.* Buttermilk per se was not official during the 18th century, but milk was (note app. C-1). Buchan recommended buttermilk as an antiscorbutic. Buchan, *Domestic Medicine*, p. 301.

three or four days;

[*margin*: too much covering or hot rooms are dangerous.] but Gentlemen are too apt to keep themselves too warm for fear of the Disease striking inwards. & often attended with dangerous consequence; & the bad effects of too much heat is very evident upon some of their acquaintances coming to see them. it's then common for the servant to help & stir up the fire, probably an extraordinarie candle or two brought into the roome, &c: I have <observed> the Patient change suddenly from being quiet & easie, become tossing & tumbling, sighing and

50: [*facing p. 49; blank*]

51: [*continuing from p. 49*]

sobbing & gasping for breath, but soon recover upon the Company going away, the room cooling, opening the curtains & moving the bed clothes;<sup>84</sup> in the Hospital there was a roome

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<sup>84</sup> The hot treatment was intended to drive the disease outward. Traditionally, medical authorities had frowned on cooling, fearing that it would retard eruptions, hence, the cleansing of the system. Pearson, a strong critic of the hot treatment, believed that it arose only during the 16th century, when sweating was widely used to treat English Sweating Sickness. He further blamed the influence of Sylvius, who had tied fever to coagulated blood and had favored a hot treatment to boost circulation. Most 18th-century authorities condemned the practice, while on the other hand they saw it necessary to make the fever patient sweat. Huxham was ambivalent, criticizing the hot treatment as a general practice but asserting that heating and blistering were necessary when the pustules were suppressed. Increasingly after 1750, authorities associated the hot treatment with poverty and ignorance. Buchan condemned the "vulgar prejudice" toward keeping smallpox patients warm. Heysham complained that during an epidemic in 1781, one child "appears to have fallen a victim to the over great tenderness, or rather obstinacy of the mother who could not be prevailed upon, on any account to pursue the cold regimen, but either kept him constantly in a warm bed, or exposed him to a large fire." According to Tissot, country folk believed that "all Distempers are cured by Sweat," although the practice of sweating patients was especially unwise in the case of acute diseases, for in these cases, he believed, the blood was already too thick. He warned of the dangers of hot chambers (closed windows, heavy coverings) and of hot drinks and heating medicines (e.g. treacle, wine, saffron). In America, Cadwallader Colden helped to popularize the cooling method in treating fevers. Brocklesby,

appointed for the small pocks,<sup>85</sup> it was small & narrow, too much crowded with beds, & an Iron Stove in the middle with Seacoale; these Stoves are soon overheated, & make a suffocating air, & I am certain one of Coll: Beake's men was actually suffocated there<sup>a</sup>. this distemper disappeared nixt Spring.

[margin: two men lye in an open Barn & do well.] Nixt July two Troopers were seized with this distemper in Camp, & removed to the neighbouring village, were distinct & favorable, lay in an open barn & had a slight flux during the whole course of the Desease; milk & water boyled with crust of bread was their common drink, adding a small quantity of brandy and a lump Sugar.<sup>86</sup> Decoct: Diascord: thus prepared was their common medecine:

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*Oeconomical and Medical Observations*, pp. 226-28; Buchan, *Domestic Medicine*, pp. 163-64; John Heysham, *Observations On the Bills of Mortality, In Carlisle, for 1781* (Carlisle, 1782), p. 4; John Huxham, "An Essay on the Small-pox," *An Essay on Fevers*, introd. Saul Jarcho (Canton, Mass.: Science History Publications [Eatson Publishing Intl.], 1988; repr. of 3rd [1757] ed.), p. 74; Saul Jarcho, "The Correspondence of Cadwallader Colden and Hugh Graham on Infectious Fevers (1716-1719)" *BHM*, 30 (1956), pp. 197, 205, 212n12; Moore, *Medical Sketches*, pp. 180-82; Pearson, *Outlines of Lectures*, I, 29, 38; Tissot, *Advice to the People*, pp. 23-25, 108-10.

<sup>85</sup> The army commonly had separate wards, and sometimes separate hospital facilities, for smallpox and dysentery patients. Brocklesby noted with approval the practice of isolating these patients in tents, asserting that this arrangement also had the virtue of providing the men with fresh air, which aided their recovery. Brocklesby, *Oeconomic and Medical Observations*, pp. 248-49; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 98, 159.

<sup>86</sup> The brandy and sugar may have been intended as a cordial; cf. below, p. 292. That the smallpox patients did well in the open barns was in keeping with the observations of Brocklesby, who in 1758 accommodated roughly 120 sick soldiers in a newly constructed hut on the Isle of Man; although the troops suffered from cold and moisture, they recovered better than did patients "in any of the warmer and closer huts and barns hired round Newport." This case, he believed, demonstrated that a structure that had not been used as a hospital facility before was safer than one that had, for the latter, however much the walls might be scraped, held "the seeds of infection in certain diseases." Brocklesby also preferred as hospitals airy structures with high roofs, as did Jackson and other writers. Pringle wrote that during the summer months the airiest facilities, "barns, stables, granaries and other out-houses, but, above all, churches make the best hospitals." He recommended the use of ventilators and air purifiers in facilities that were not well aired. Many authors on military

*Rx Diascord: oz. i coqr. cum s:q: Aq: ad lib: ii cui turbide addas Spt: Vin: Gallic: deflagrat. oz. iiii: Sach: alb: q:s:*

52:

[*In heavier ink than text*]

<sup>a</sup>Huxham observes that the small pox in Plymouth 1740. 1741. 1745. among the Sailors, Soldiers & Prisoners had commonly the most evident Symptoms of the malignant fever with the small pox, which therefor proved exceeding fatal among them; whereas many person in the neighbourhood, that had no communication with the hospitals, & were otherwise tolerably healthy, had a very favorable kind. it's certainly of the highest ill consequence to confine such putrid air, & the sick in it. the absurd method of making a kind of hospital chamber in a house, & crowding up two, three, or more sick in it, is a most dangerous practice, and I have known it manifestly fatal. the Stench, the groans, the cries of one disturb & offend the others: its rare they sleep all together, but they are too often kept waking so; it's bad living by such Neighbours. &c: vid: *Essay on the Small Pox.*<sup>87</sup>

53: [*continuing from p. 51*]

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medicine complained that crowded conditions characteristic of general hospital facilities promoted epidemics, though Brocklesby noted that regimental infirmaries were often overcrowded, as well. William Blair, *The Soldier's Friend: or, The Means of Preserving the Health of Military Men* (London: Murray, 1798), pp. 121-24; Brocklesby, *Oeconomical and Medical Observations*, pp. 54-55, 57, 65-68; William S. Curran, "Dr. Brocklesby of London (1722-1797): An 18th-Century Physician and Reformer," *JHM*, 17 (1962), pp. 513-14; Paul E. Kopperman, "Medical Services in the British Army, 1742-1783," *JHMAS*, 34 (1979), p. 454; Pringle, *Observations on the Diseases*, pp. 105, 110-12.

<sup>87</sup> Huxham, *Essay on Fevers* (Jarcho ed.), p. 70. "Among the Sailors ... favorable kind" is a quotation. Huxham asserted that "this malignant Fever" had arisen mainly because of the "scorbutic ill habit of Body, Manner of Life, Confinement, &c. to which the above Set of People were subject."

*ad gratiam. cap: coch: iii. 3tia quaque hora, et pil: opiat: omni noctu h:s:*<sup>88</sup> both did well, living on Ryce Gruell & thin Broths.

[*margin:* The Hospital practice.] water gruell acidulated with vinegar is their common drink in the Hospital,<sup>89</sup> stools promoted by Dyet or Clyster, Opiat pil at bedtime if restless: are purged as soon as they turn & blooded if the Second fever appear.<sup>90</sup> we had only the above two this Campaign.

[*margin:* Women & children have them in the open field & do well.] Some of our Women & Children had them in Campaign 1745. one walking abroad dayly & doing her common business of washing, &c: till the eight [*sic*] day, not knowing what ailed her, the pustules very large & flat. lying in a cold tent on wet ground, was purged with Senna & Prunes, & kepted a whey Dyet some time.<sup>91</sup> This year they were frequent in the Hospital of the confluent kind, very mortal, few recovering: many of our children had them in the open Field and did well; a whey dyet was their only physick. they were common amongst the country people in our Dutch Cantonment, the cool Regimen always used, nor are they afraid of infection; all our men

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<sup>88</sup> "Concoct 1 oz. diascordium with a sufficient quantity of boiling water to makes 2 lbs.; stirring, add 4 oz. deflagrated spirits of French wine [i.e. brandy] and sweeten to taste with white sugar; 3 spoonfuls to be taken every third hour and an opium pill every night at bedtime." The prescription mentioned by Buchanan was probably intended primarily as a sedative and soporific -- the opium pill at bedtime definitely served this purpose -- but it may also have been prescribed to relieve the patients' flux. On scordium and diascordium, see entry under the latter in app. C-1.

<sup>89</sup> The use of vinegar in the treatment of smallpox reflects the more general practice of prescribing acids to combat putrid fevers: Tissot, *Advice to the People*, p. 127.

<sup>90</sup> Secondary fever was widely regarded as the most dangerous complication of smallpox. It was thought to reflect inflammation, which prompted bleeding. Note Buchan, *Domestic Medicine*, p. 169.

<sup>91</sup> Whey was among the traditional laxatives, having been recommended as such by Hippocrates. Pearson, *Outlines of Lectures*, I, 8. Note also the entry for milk, app. C-1.



54: [top of page]

Heisters Medical, Chirurgical & Anatomical obs. V.i. No.45. of the method of treating the Soldiers having the smallpox, ardent fevers, bloody flux, & Agues, in the hospital of the Army.<sup>92</sup>

[opposite ms. line "the confluent kind ... many of our"; the following in heavier ink than text]

***Plebeior magis liberavi a peste, quam divites, qui multis medicamentis utuntur.***<sup>93</sup>

Sanctorius – S.i.a.139.<sup>94</sup>

55: [continuing from p. 53]

escaped; some children had them & did well.

[margin: Some constitutions not easely affected with the small pocks.] Mrs Royston<sup>95</sup> had them at Antwerp & tho' ill, came by water on board our Bagage Bylanders to

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<sup>92</sup> Heister reported the observations of a British Army hospital surgeon, Thomas Wilson, who had been confronted by several epidemics in 1707. For smallpox patients who were feverish or plethoric, Wilson ordered plentiful bleeding; if they had stomach complaints or nausea, they were given ipecacuanha and, after the stomach was cleared, drafts of barley-water, acidulated with dulcified spirit of salt and sweetened with syrup of poppies or of violets; this served as the common drink of patients with inflammatory disorders and was very popular with them, although soldiers who disliked it were allowed an alternative, based on the white drink (app. C-1, under *cornu cervi*). Smallpox patients lay two per bed and doors were opened during the heat of day, though windows were kept shut, to avoid a draft. Diet was panada. Most patients recovered. *Medical, Chirurgical, and Anatomical Observations*, I, obs. 45 (pp. 50-51).

<sup>93</sup> "I have freed the common people from the plague more than the rich, who use many medicines." Provenance unknown.

<sup>94</sup> Aph. 139, sect. I (p. 34 of *Aphorismi*) reads, "*Hinc nobilium sere nemo cum remediis, plebeii vero sive iis plures sanantur*" -- "Very few of the wealthier People are cured [of the Plague] by Medicines, but a great many of the poorer Sort recover without them": *Medica statica*, p. 121.

<sup>95</sup> Possibly a matron, nurse, or cook, although she does not appear on any list of hospital staff and servants; she may have been tied to the Horse Guards and nursed in the regimental infirmary.

Williamstadt, & did well; Several Troopers were on board who never had the distemper, nor did they catch it. My Landlady at Brussels never had the small pocks. she has ten children & all have been ill of this distemper except the Youngest. She nursed all her children & lay with them during their illness, yet never had the distemper. the Youngest is about three years of age, lay in the same cradle & bed with its Brothers & Sisters, yet never had the least sickness. I know many instances of this kind, some Physicians & apothecaries attend them daily, & I am told never had them<sup>a</sup> [*superscript in heavier ink*].

[*margin*: Method used to prevent infection] In England this distemper is thought very infectious,<sup>96</sup> & many people avoid coming to market for fear of catching it; the common custome is to carry a Nosegay of Green Rue<sup>97</sup> at which they often smell, or stuff some into the

56: <sup>a</sup>[*crossed*: Some Constitutions are proof against infection -- Sanctorius<sup>98</sup>]

At my Lodgings in Nottingham, a Young Lady had the distinct small pox, & tho five people were in the same house, who never had them, none were seized with the distemper at that time.

I have often Lodged where the family never had the small pocks, & tho I attended this disease dayly it never appeared in the family.

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<sup>96</sup> Some writers would have preferred "contagious" in this context. "Infectious" was often used to explain contracting a disease by contact with a sick person or with something that he had touched, like his clothing, while "contagious" referred to communication through a morbid element in the air, e.g. miasma. The words were often used interchangeably, however. Parr, *London Medical Dictionary*, I, 482-84, under "contagio."

<sup>97</sup> On rue, see app. C-1.

<sup>98</sup> Buchanan's crossed observation recurs on *ms. p. 286*. In Quincy's translation, aph. 135, sect. I, reads, "They are soonest infected [with Plague] who have weak Lungs; they who have sound ones the contrary": *Medica statica*, p. 120 (cf. *Aphorismi*, p. 33). This is the closest that Sanctorius came to linking infection to constitutions, and it may have been too specific a case to satisfy Buchanan.

Jany. 1750. they were Epidemick at Stafford near two Years & it was remarkable that the Apothecaries family were amongst the last who had them.

They are said to be most infectious upon change of air. 1750. a troop of Sr. John Mordaunts Dragoons<sup>99</sup> came to Stafford Nov. when the Desease was common, many of the men never had them, nor were any of them taken ill; & nixt April the Regmt. was reviewed there & continued twelve days in town, yet none seized with the distemper.

Lord Aston<sup>100</sup> 1751. often visited at Stafford whilst the small pox was Epidemick in town & Country, but did not catch the Distemper. but was seized with <it> Augst. 1751. when it was neither in town nor Country & dyed of the Confluent sort after the turn; of an inflammation of the Lungs, to which his Lordship was naturally subject. his Brother lived to the same Age Viz. 28. & dyed of the same distemper. which has been always fatal to the family, none ever recovering [*crossed*: this distemper].

1754. we had no small pox at Stafford but they were common at Newport & some neighbouring villages, with which we corresponded dayly. in 1755 we had them at Stafford & not in the neighbouring villages.

I knew two Mothers, nurse, & lye with their Children when ill of the small pox & neither of them caught the distemper, tho then Epidemick, but some years thereafter were taken ill of this desease & dyed.

Mrs. Clarke's Son had only one small pock on his back, large as a small boyle, & turned on the eight day; yet at first he was very sick, & it was thought he would have many. she knew the like Instance on a Girl.

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<sup>99</sup> 10th Hussars.

<sup>100</sup> James, 5th Lord Aston of Forfar, died at Tixall, a family seat, 24 August 1751 and, as Buchanan would be, he was buried at St. Margaret's, Stafford. *LM*, XX (1751), 428; *GM*, XXI (1751), 381.

57 [continuing from p. 55]

nostrills; many go to London where the distemper always reins. to prevent the infection of the Country, & other come from town into the country.

[margin: Some imagine they are caught from change of air.] others imagine they may be caught from change of air. viz: going from one place to another, yet I never observed any thing remarkable of this, unless the disease prevailed in the town as at Worcester 1737. where it greatly raged in town & Country, being chiefly confluent, was very mortal, the Summer hot & dry.

[margin: Some imagine themselves infected from seeing an infected person.] Some are frightened at the sight of a person lately recovered<sup>x</sup>, & imagine themselves to be infected; go home with this notion, are unease & sicken, having complaints the same as preceeding the eruption, & should be treated in the same manner as if the pocks were at hand. & tho they do not appear at this time, & the person recover, I have seen them come soon thereafter.<sup>101</sup>

[margin: Method used by the Nurses in England.] Common Nurses are fond of the hot method, keeping the Sick always in bed with much covering, the roome close shut up & good fire, greatly

58: [top of page]

a Mother caught the distemper from her child which she suckelled, when the child recovered

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<sup>101</sup> It was widely believed that fever could be caused (or cured; cf. n. 50) by fear. Lind wrote, "Fear is a cause of itself sufficient to produce, in certain dispositions, a bad or malignant fever." Van Swieten reported the case of a woman who caught quartan because of a fright, then relapsed after another one. Caleb Dickinson, *An Inquiry into the Nature and Causes of Fever; with a Review of the Several Opinions concerning the Proximate Cause, as Advanced by Different Authors; and Particularly as Delivered from the Practical Chair in the University of Edinburgh. Including Some Observations on the Existence of Putrefaction in the Living Body, and the Proper Method of Cure to be Pursued in Fever* (Edinburgh: C. Elliot; London: C. Robinson, 1785), pp. 29, 46n.

the Mother was taken ill, & being but slightly indisposed, suckeld the Child, on its body were several large boyles resembling small pox ripened &c. 1760. the small pox in the neighbouring villages some months; & appeared at Stafford June. were Epidemick at Burton upon Trent, a Young man coming here to visite his friends broke out, & they began to spread.

<sup>x</sup>this I knew happen to a Butcher's Boy, who seeing a person in market with fresh marks, was suddenly surprized, went home, sickened, & broke out in a few days. a Girl seeing a woman begging in the Streets, & a child in her arms with fresh marks of the smallpox, was freightned, run home, telling her Mamma she had caught the desease from a poor woman, & begged to give her a penny, which she did, & broke out the 3d. day.

a Servant Maid seeing another in market just recovered with fresh marks; was suddenly surprized, freighted, went home & sickened, imagined she should have them, had a violent fever & dyed the 3d. day without any eruption. N.B: she was plethorick & had an aversion to bleeding &c: many livid Spots appeared on her body after death; when first seized had the fluxus Mensis very large.<sup>102</sup>

59: [continues from p. 57]

use the Safron bag, viz: Safron tyed in a rag, soaked in Sack, & squeezed into their common drink mixing ale with their small beer, giving a Glas Sack in order to bring them out;<sup>103</sup> feeding & filling with milk pottage; apply a rasher of Salt Bacon round their throats, commonly put a red hot pocker into their beer to prevent a sore throat, endeavour to keep the body bound & costive; treacle water their favorite cordiale about the turn, & rub the face with

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<sup>102</sup> It was expected that the menstrual flow would be greater in a woman who contracted smallpox, especially if she were plethoric, since fever would increase the impetus of flow; note John Burton, *An Essay Towards a Complete New System of Midwifery, Theoretical and Practical, Together with the Descriptions, Causes, and Methods of Removing, or Relieving the Disorders Peculiar to Pregnant and Lying-in Women, and New-born Infants* (London: James Hodges, 1751), pp. 28-29 (#12).

<sup>103</sup> On saffron, note app. C-1.

Goosegrease.<sup>104</sup> it's no rare thing to see full grown people & aged ill of this distemper.

[*margin:* in Scotland.] in Scotland the nurses use the cool Regimen, always bleed on the first complaint seldom confining to bed except the three or four first days, drinking green tea or fig tea, water gruell with currants, clystering with milk & Sugar in which a small quantity of the bark is boyled. hands & feet dayly bathed in warm milk & water, wrapping them in warm flannel; washing the mouth often with Honey of Roses, jelly of Currants & Green tea;<sup>105</sup> a small list of

60: [*facing p. 59; blank*]

61: [*continuing from p. 59*]

flannel round the neck; Syr: Diacod:<sup>106</sup> much used when the complaints begin. Sack whey or small Cinnamon water the chief cordiale. Manna the common purge or Syr: Rosar: cum Senna.<sup>107</sup> the face nibed with Creame. it's rare to see full grown people ill of them, being almost confined to children & not near so mortal as in England.

[*margin:* few dye of the distinct sort and few recover of the confluent sort.] as it has

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<sup>104</sup> The goosegrease was probably to prevent pitting; cf. above, p. 49.

<sup>105</sup> The three items were probably intended to serve a medicinal purpose, and were not simply offered as mouthwash or gargle. Currants (app. C-1) were thought effective against sore throat, while honey of roses (app. C-1, under "roses") was prescribed to heal sores in the mouth and throat. The green tea (app. C-1, under "tea") may have been thought to serve as an astringent, this being one of its perceived virtues, but the reliance on tea in popular medicine was so extensive that it is difficult to pinpoint a rationale. The other usage noted by Buchanan may have been linked to another quality, as a diaphoretic; other remedies noted by him (washing hands and feet in warm water, wrapping them in flannel) were likewise geared to promoting light perspiration or transpiration.

<sup>106</sup> On diacodion, see app. C-1.

<sup>107</sup> On manna, see app. C-1. For *Syrupus rosaceus solutivus cum sena*, see app. C-1, entry for roses.

been my constant custom to keep an exact journal of Regimental Practice, I find eighteen cases of the distinct small pocks of or belonging to the Blews, and all recovered, one was from inoculation.<sup>108</sup> of the confluent sort there are Eleven cases and eight of them dye.

[margin: Lingring fever.] Par: 10. About the beginning of Octr. 1742. a small lingring fever appeared<sup>109</sup> which engaged the attention of Physicians and Surgeons<sup>110</sup> more

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<sup>108</sup> During the latter half of the century, it became common practice in the British Army to inoculate soldiers who had not yet had smallpox. It does not appear, however, that there were concerted efforts this early, and the case noted by Buchanan may be an isolated example. While some medical men remained critical of inoculation, Monro believed that if properly handled the risk was slight. He noted as a model David Middleton, the king's sergeant-surgeon and surgeon-general of the army, who reportedly had inoculated hundreds of patients without losing any. La Condamine credited the report that in Nov. 1747, John Ranby, as sergeant-surgeon, inoculated 827, "all fortunate." Ranby, like Middleton, was familiar to writers on military medicine, and his example may have boosted their confidence in inoculation. Cleghorn also endorsed inoculation early on. Though not a strong advocate of inoculation, Monro advised that if the troops were to be inoculated, it was best to do it when they were in winter quarters. The candidates for inoculation were to be kept cool, and on mild vegetable diets, for four or five days prior to the treatment, and should take a mild laxative, to cleanse them, shortly before being inoculated. When the patient was satisfactorily prepared, the medical officer was to dip his lancet into a "ripe pustule," then insert it between the cuticle and the skin of both arms. To facilitate regular inspection, no bandage was to be applied. If healing came without an eruption, the process was to be repeated. The typical case after inoculation included a slight fever, for which Monro advised subacid liquor and a laxative. He also recommended exposing feverish patients to cool air, but criticized contemporaries who advocated sending them outside in even the coldest weather. Cleghorn, *Observations on the Epidemical Diseases in Minorca* (1751 ed.), pp. 287-88; Charles La Condamine, *The History of Inoculation* (New Haven: T. & S. Green, 1773), p. 9; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 172-76.

<sup>109</sup> Home provided a fuller account of this epidemic. According to him, this "slow fever" appeared first in Bruges, in July 1742, reached Ghent at the end of September, and finally faded out the following January. An early "diagnostic symptom" was the victim's loss of "quickness of mind." For the most part, the symptoms as he reported them jibe with Buchanan's -- tongue parched, eyes staring and dull, pain below the stomach, with purging, voice weak -- but he claimed that the pulse was only slightly quicker and weaker than normal, though the patients' respiration was often rapid. He also noted that there was often stoppage of urine or hot urine. Hiccup and *subsultus tendimun* were signs of impending death. If the patient was to recover, the first positive sign was a moistening of the tongue, and nature threw off the disease by fever and sweat. Like Buchanan, however, Home saw

from it's being <more> mortal than frequent. it always began with grieps & purging, pain at Stomach & bowells, tongue dry & parched, voice weak & broke, a deafnes, the eyes staring, mouth always open, looks unnatural & stupid, skin dry & burning, pulse low & frequent, a universal stupor & weakness.<sup>111</sup>

*talis iste meus Stupor, nil vidit, nil audit*

*ipse quis sit, utrum sit, an non sit, id quoque nescit.*

Catull: ad Colon.<sup>112</sup>

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the disease as "not very general, yet ... very mortal." Pringle wrote that of the various diseases that afflicted the army during the winter of 1742-43, "the most alarming was a fever of a malignant nature, very slow, and attended with a sunk pulse and a constant *stupor*; yet it was more the newness and danger, than the number seized, that made it considerable." According to him, it was confined to one hospital, and Pringle blamed the outbreak on the foul air in a room where a patient had lain with a mortified limb exposed. Identifying this "hospital fever" with the illness sometimes called "jail fever," Pringle produced the amalgam, "jail or hospital fever." He first identified the two illnesses as the same in an open letter to Mead, which was published in *Gentleman's Magazine* in 1750. In the 1st ed. of *Diseases of the British Army*, he referred to the illness as the "*malignant or hospital-fever*." Home, *Medical Facts and Experiments*, pp. 1-16; Pringle, *Diseases of the British Army*, pp. 15-16.

<sup>110</sup> This is the only case in which Buchanan notes a disease that befell the army without providing insight into how he or others treated it. Note app. B-1, under "malignant" fever.

<sup>111</sup> The list of symptoms accords with those provided by many other writers on the disease. Buchan wrote, "Putrid fevers may be distinguished from the inflammatory, by the smalness of the pulse, the great dejection of mind, the dissolved state of the blood, the petechiae, or purple spots, and the putrid smell of the excrements. They may likewise be distinguished from the low or nervous fever by the heat and thirst being greater, the urine of a higher colour, and all the other symptoms more violent." He added, however, that the symptoms of different fevers could blend, making it difficult to distinguish among them. Pringle warned that in its early stages this disease was easy to confuse with a common fever and practitioners were therefore prone to bleed, attempting to counter inflammation -- an operation that was likely to cause the pulse to fall, perhaps irrevocably. Buchan, *Domestic Medicine*, pp. 147-48; Pringle, *Observations on the Diseases*, pp. 247, 265.

<sup>112</sup> "Like this, my booby sees nothing, hears nothing; what he himself is, whether he is or is not, he does not know as much as this"; Catullus, Car. 17.21-22; *Catullus, Tibullus and Pervigilium Veneris*, trans. F. W. Cornish et al., The Loeb Classical Library (London:



[interleaf, pp. 61-62] Small pock Cases Sept. 29th. 1756.

Distinct No. 107. all recovered except one & that a sucking Child, teething, attended with looseness, Convulsions &c: I was called the day before she dyed, the pock was favorable & came to maturity 8th. day.

Confluent No. 31 -- 22 dye, -- N:B: are mostly Adults.

Inoculation. No. 27 --all distinct & do well, not one in danger.<sup>113</sup>

[back of sheet]            Distinct, No. 1.1.1.1. Inoculation No. 1.1.1.1.1.1. Confluent No. 1.1.1.1.1.1.

62:

[top of page] Sheeps dung infused in black cherry water, is a favorite with the Nurses, in order to bring them out.<sup>114</sup>

[margin: Yellow fever.] in Decr. 1743. we had the yellow fever, so called from the yellow colour of the Skin, & was more dangerous than frequent. the first complaints were sickness and weight at Stomach, with frequent retchings to vomite; bleeding<sup>115</sup> & Emeticks<sup>116</sup>

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William Heinemann; New York: The Macmillan Co., 1912), p. 25.

<sup>113</sup> Samuel Sharp vehemently denied that patients who contracted smallpox through inoculation might still be subject to catching it the natural way: *A Treatise on the Operations of Surgery, With a Description and Representation of the Instruments Used in Performing them: To which is Prefix'd an Introduction. On the Nature and Treatment of Wounds, Abscesses and Ulcers*, 5th ed. (London: J. and R. Tonson and S. Draper, 1747), p. 228.

<sup>114</sup> On the cherry and on dung, see app. C-1.

<sup>115</sup> According to Home, a crisis was often achieved by bleeding at the nose, and he reported that these patients did not relapse. As to quantity, he observed, "They often bleed a great deal, which affrights the patient much, especially as I would never stop it at their earnest request. I never found any disadvantage from allowing it to bleed till it stopt naturally." Bleeding was characteristic of the treatment of ague. Bleeding, plus the use of sudorifics to augment the body's tendency to sweat, were the two remedies that he found most useful in combating the disease. Dancer also advocated bleeding for remittent, noting that its symptoms were similar to those for intermittent and that the cure must therefore be so, as well. He thought that bleeding was desirable, especially in the early stages, for it might reduce the progress to putrefaction, and also the ardency of the fever. Following on the standard therapy for

were usfull; the yellow coloured appeared the 4th or 5th day.<sup>117</sup>

[*margin*: Method of cure.] I then ordered Saline Saponaceous medecines with the *Decoct: Nitros: P:E: & Mann: oz. i.*<sup>118</sup> as the body was commonly bound. this proved sufficiently opening; there was a constant pain about the *Regio Hepatica* when pressed, & always eased by fomenting; towards the latter end of the distemper frequent vomitings were troublesome, but in some measure prevented by mixt: antemeti: nostr.<sup>119</sup> these were

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intermittent, Dancer recommended bark in heavy doses, but he approved of the suggestion of William Hillary (d. 1763), that snakeroot was a satisfactory alternative for patients who could not hold down bark. He also advocated the use of laxatives, recommending particularly a mix of calomel and opium, and asserted that chamomile flowers and opiates might help patients who had difficulty holding down laxatives. Buchan advised that venesection be confined to inflammatory cases. Buchan, *Domestic Medicine*, p. 160; Dancer, *A Brief History of the Recent Expedition*, pp. 53-55; Home, *Medical Facts and Experiments*, pp. 19, 21.

<sup>116</sup> Home recommended administering a vomit, and in many cases repeating it, early in the disease. Moore advised that nauseated patients should not initially be given purgatives -- for these would be thrown up -- but enemas. While noting that some writers condemned vomits in these cases, Moore thought them useful, and advised that if the patient was inclined to vomit naturally, the act should be encouraged with warm water. He cautioned that bark should not be administered when there were signs of inflammation, but recommended James's Powder (app. C-1, under "antimonials"), at the point of effervescence. Townsend, in reference to typhus (another putrid disease), argued that strong emetics might weaken a patient whose system was already reduced, but that since it was necessary to clear the alimentary canal, mild purgatives and were valuable. Home, *Medical Facts and Experiments*, p. 21; Moore, *Medical Sketches*, pp. 198-200, 205-06; Joseph Townsend, *Elements of Therapeutics; or a Guide to Health; being Cautions and Directions in the Treatment of Diseases. Designed Chiefly for the Use of Students*, 1st American ed. (Boston: David Carlisle, 1802), pp. 53-54.

<sup>117</sup> In discussing this disease, which he called "epidemic remitting fever," Hume, like Buchanan, noted jaundice as a symptom, but found that what most sharply distinguished it from diseases that had struck the army earlier were its remissions (which Buchanan does not mention). Home considered the symptoms to be ague-like. *Medical Facts and Experiments*, pp. 17-26.

<sup>118</sup> "Decoction of nitre (Edinburgh recipe) and 1 oz. manna." Manna is discussed in app. C-1. On *decoctum nitrosum*, see the app. C-1 entry under "nitre."

<sup>119</sup> *Mixtura antemetica nostra* was probably similar if not identical to the *mistura anti-emetica et febrifuga* ("mixture against vomiting and fevers") listed in the "Dispensary." This drug was

followed with laborious breathings & other deadly Symptoms viz. hiccups<sup>120</sup>, starting of the tendons, wyld looks, playing with the bed cloaths. & generally ended in death.<sup>121</sup> Haven of

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still used in army hospitals during the 1770's, being then called "a saline mixture." It consisted of salt of wormwood, lemon juice, spring water, spirituous cinnamon water, and syrup of orange peels; Theobald ascribed this composition to Riverius. It was intended as a stomachic, and Theobald also regarded it as useful in treating intermittents. To counter both vomiting and putridity it was thought desirable to acidulate the patient's system, and the mixture was designed to do that. Antiemetics were often administered before doses of bark or other drugs that the patients were likely to reject. Wormwood was among the most popular antiemetics, though it was also used in emetic compounds (cf. n. 74). "A decoction against vomiting and fevers" was also listed in the "Dispensary" and was prepared by boiling salt of wormwood in water, then skimming and adding the remainder to spirit of vitriol, finally adding sugar and alexiterial water. *The Practice of the British and French Hospitals: Viz. The Edinburgh, Military, and Naval Hospital, /L'Hotel Dieu, La Charite, and Les Invalides. Containing A select Body of useful and elegant Medicines For the several Disorders incident to the Human Body; with Practical Remarks on each Prescription*, 2nd ed. (London: R. Baldwin, 1775), pp. 44, 64. On the general problem of vomiting in remittents, see app. B-1.

<sup>120</sup> For hiccup, musk was a common remedy, but Rollo reported that he had administered it in large doses, both alone and mixed with camphor, and that it had failed to provide relief. Instead, he suggested that hiccup could be relieved by a gentle emetic during the early stages, but that when it was combined with other danger signs, "the bark was the only medicine from which any good effect was derived." For a "comatose disposition," Rollo asserted that a large blister, immediately applied to the patient's scalp usually proved to be not only a corrective, but helped to give the associated disease a favorable direction. If the danger was great, another blister might be applied to back, or one to each ankle, while the patient was given a bolus of camphor (5-8 grains) in a strong infusion of snakeroot, or else a thick solution of bark, every two or three hours. This last remedy was usually given in the final stages, when hiccup, delirium, and subsultus tendinum were present, "and, though seldom, yet we could trace some advantage." Buchan, *Domestic Medicine*, p. 332; Rollo, *Observations on the Diseases on St. Lucia*, pp. 85-87.

<sup>121</sup> Monro likewise reported that "fatal presages" in remittent cases included persistent twitching of tendons and hiccup, as well as parched tongue, delirium, and violent diarrhea or dysentery. According to Rollo, during the last stages of a case that was to prove mortal, the pulse became erratic. A general moderation of symptoms presaged remission, while cold skin, coma, cold sweats, loss of speech, and involuntary stools were danger signs. Rollo asserted, "An eruption about the mouth and ears, with a swelling of the upper lip, either in this or the intermittent, happening when the fever was going off, was a certain sign of recovery; but if it appeared when dangerous symptoms were present, it greatly assisted in the unfavourable prognostic." Flies swarming around a sickbed was also a bad sign, especially if the patient was insensible to them. Monro, *Observations on the Means of Preserving the Health of*

Capt. Shipman's<sup>122</sup> died the tenth day:thought his illness was occasioned by the fatigue of marching

63: [continues from p. 61]

[margin: Causes.] the patients commonly complained of catching cold on Duty, perspiration seemed to be obstructed and to have fallen on the bowels. None of our drunke fellows catched <it>.<sup>123</sup>

[margin: Method of cure] The method of cure was with Diaphoreticks, Cordials, Blisters,<sup>124</sup> &c: they were seldom attended with any visible operation or good success;

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*Soldiers*, II, 83; Rollo, *Observations on the Diseases on St. Lucia*, pp. 59-61.

<sup>122</sup> Charles Shipman (b. c.1700) entered the Blues as a cornet 6 May 1719; capt.-lieut., 18 July 1737; capt., 25 April 1741; major, 17 Dec.1754. He retired 17 Dec. 1756 and died 15 Nov. 1767. WO 27/4, return for Blues; WO 64/11, p. 10; RADCP 3/47; *Army List for 1756*, p. 14; *GM* 563.

<sup>123</sup> Regarding the epidemic that Buchanan refers to, Home notes, "Drinking was at first blamed as the cause of it, but the greatest drinkers of spirits were not observed to be the most subject to it." Home also discounted diet, claiming that the soldiers' ration of boiled meat and root was actually more healthful than it had been in England, where they had eaten much roast beef. He instead blamed the dampness of the barracks -- which relaxed the fibers and hampered perspiration -- and the fact that the men lacked adequate firewood and blankets to keep warm. Home, *Medical Facts and Experiments*, pp. 13-16.

<sup>124</sup> This course of treatment was designed to do two things: promote excretion, specifically through perspiration (which Buchanan perceived as being obstructed); and stimulate the patients, whose physical signs, and often mental state, were depressed. Diaphoretics ideally stimulated both perceptible and imperceptible perspiration, though milder ones were thought to primarily encourage the latter. Blisters were thought to evacuate serous humors, while purulent matter was drained by issues and sextons. Whytt reported also that in some cases blisters lowered the pulse rate. On the whole, however, they were valued for stimulating the system. Quincy asserted that blistering did not work by evacuation -- the amount vented being too small to have an effect -- but added, "It is a principle sufficiently established with regard to the living system, that where a morbid action exists, it may often be removed by inducing an action of a different kind in the same or neighbouring part." Blisters were raised by applying a distillate of cantharides (app. C-1), a practice that may have dated back to Archigenes. Cordials were used to stimulate physically, but also to raise the patients' spirits

blisters never altering the pulse; refrigerating medicines<sup>125</sup> were tried to as little purpose; warm fomentations<sup>126</sup> were at least used & seemingly with good success. pains in the bowells were eased, the tongue moistned, the skin cooled & softned; some sweated, which was promoted with Sperm: Cet<sup>127</sup> & Sal: V:C.C.<sup>128</sup> the stupor abated, & all things promised a cure but few recovered. few died under twenty days & many lived beyond thirty, never had

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(cf. n. 80). An imaginative interpretation of how blisters worked is provided by Townsend. The treatment described by Buchanan here is similar to the one used by Lind on an ague patient who became delirious and then comatose: Roger K. French, *Robert Whytt, The Soul, and Medicine* (London: Wellcome Institute, 1969), p. 48; John Hill, *A History of the Materia Medica: Containing Descriptions of all the Substances used in Medicine; their Origin, their Characters when in Perfection, the Signs of their Decay, their Chymical Analysis, and an Account of their Virtues, and of the several Preparations from them now used in the Shops* (London: T. Longman [etc.], 1751), pp. 822-23; James Johnstone, *An historical dissertation concerning the malignant epidemical fever of 1756* (London: W. Johnston, 1758), p. 3; Lind, *Essay on Diseases*, p. 223; Pearson, *Outlines of Lectures*, I, 11; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 298, under "epispastics"; Townsend, *Elements of Therapeutics*, p. 75.

<sup>125</sup> Refrigerating medicines were supposed to lower the body temperature without producing chills or shivering. Nitre was perhaps the most widely used refrigerant, but many drugs, including bitters, vinegar, and antimonials like James's Powder, were valued as coolants. James, *Medicinal Dictionary*, under "catapsyxis."

<sup>126</sup> Fomentations were primarily intended to promote sweating, and ever since the time of Celsus a common strategy in treating fever was to make the patient sweat. In this case, Buchanan may also have been using the fomentations to counter delirium or coma. Pearson, *Outlines of Lectures*, I, 15; Theobald, *Every Man His Own Physician*, p. 53; Townsend, *Elements of Therapeutics*, pp. 55-56.

<sup>127</sup> On spermaceti, see app. C-1.

<sup>128</sup> On *Sal cornu cervi volatile*, see app. C-1 entry for "cornu cervi." Many writers, among them Lewis, esteemed the volatile salt as a sudorific, and that may account for its use here. In prescribing this medicine, and in his other treatments noted here, Buchanan is trying to get the patients to sweat. Home noted this as the usual course to relieve them. More generally, however, volatile salt of hartshorn was regarded as a powerful stimulant, and Buchanan may in addition (or instead) have been using it, as it often was used, to relieve the lethargy of the patients and keep them from sinking. Perhaps he wished to associate this drug with "the stupor abated."

a visible crisis;

[*margin:* none of our men recover.] none of our Men recovered;

[*margin:* no Officer or Servant ill of this fever.] none of the Officers or their Servants were ill of it. it decreased about the end of Janry 1743. It appeared at Bruges by the end of July. Decoct: Serpent:<sup>129</sup> was their chief medecine & bleeding was thought hurtfull.<sup>130</sup>

Corporal Goodyear of Sr James Chamberlaynes<sup>131</sup> troop was taken ill Octr 26. & sent to the Hospital

64: [*continues from p. 62*]

a foot from Germany, overheating himself & catching cold. his urine was always high coloured, having nothing like that of a jaundice, and his Stools of a naturale colour. never

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<sup>129</sup> Note entry for serpentaria in app. C-1. At the time Buchanan was writing neither London nor Edinburgh listed a drug named *decoctio serpentariae* in its pharmacopoeia, though Edinburgh did include *Decoc. serp. compositum* (compound decoction of snakeroot), which was composed of snakeroot, Edinburgh Treacle, cochineal, syrup of meconium, and spring water. The "decoction of snakeroot" listed in *Practice* was prepared by boiling snakeroot in water, straining, then adding liquid laudanum (app. C-1), syrup of orange peel (for flavor), and *sal volatile oleosum* (volatile salt of [wood]soot, prepared in a similar way to volatile salt of hartshorn [app. C-1] and thought to serve similar purposes). This was regarded as a powerful alexipharmic. Compounds of snakeroot (C-1, under "serpentaria") were valued as tonics and diaphoretics -- by this time, they were seldom prescribed for snakebite -- and in consequence were often used against malignant fever. Home regarded *decoc. serp.* (Edinburgh recipe) as the most efficacious medicine for treating the disease, for while it encouraged sweat it reduced looseness, thereby allowing "nature strength to throw off the disease." Brookes, *General Dispensatory*, p. 201; Home, *Medical Facts and Experiments*, p. 21

<sup>130</sup> Quite possibly the medical officers rejected venesection because the disease was seen as malignant, rather than inflammatory or plethoric. Nevertheless, bleeding was often used in treating this type of disease. Note app. B-1.

<sup>131</sup> Sir James Chamberlayne, bart., entered the Blues as a cornet 2 May 1718; capt., 20 Jan. 1732; major, June 1745; lieut.-col., Nov. 1750; sold out, 17 Dec. 1754. He died in Oxfordshire 23 Dec. 1767. RADCP Box 3/47; WO 27/1, 2, 3; WO 64/11, p. 10; *Army List 1740*, p. 6; *GM*, XXXVII (1767), 611.

tasted any thing but medecines & always laye on his back. Aldridge of Cpt. Wenman's<sup>132</sup> of a corpulent habit of body & old Drammer, lived to the 20th day. was to all appearance in a fair way of recovery, but relapsed suddenly & dyed suddenly. Goodine of the Major's<sup>133</sup> was treated as the above two & recovered, tho often in great danger, & lingered for a long while & took Decoct. Serpent. many died at Ghent. Dr. [*written heavily, to obscure "Mr."*] Austine of Genl. Haley's Regmt.<sup>134</sup> opened one of their men & found the membrana adiposa full of yellow thin liquer in the abdomen, at least a quart of the same liquor within the Peritoneum; all the viscera of the same colour. the liver in its natural state. no Stone or concretions in the Gall bladder or Ducts. the Gall bladder containing a black inspissated glutinous liquor, rather thicker than gelly. a large quantity of yellow liquor was contained in the Thorax. the liver weighed nine pounds. None of our Officers were ill of it, & it disappeared with the month of Janry.

65: [*continues from p. 63*]

Decr. 17th, was treated as above & died 27th. he had a constant hiccup which never yielded to medicine.

[*margin: Dissection No. 1.*] I opened his body, the Peritoneum was livid & black, quite mortified; the Omentum much wasted & mortified; all the intestines black &

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<sup>132</sup> Richard Wenman was commissioned a cornet in the Blues, 7 May 1709; lieut., 9 Sept. 1726; capt., 10 Dec. 1739. His death is noted by Buchanan below, *ms. p. 99*. WO 64/10, f. 8; *AL 1740*, p. 6

<sup>133</sup> Troop commanded by Charles Jenkinson (n. 51).

<sup>134</sup> Adam Austine (d. 1773) was surgeon to the 1st (Royal) Dns., 8 July 1742-July 1748. He received his M.D. from Glasgow in 1749 -- which likely explains the over-writing of "Mr." by "Dr." (cf. Introduction, ch. 1) -- and seems to have practiced entirely in Edinburgh, being established there at least as early as 1752. Although he did not publish, he appears to have enjoyed a good reputation, and he was successively elected a member of the Royal Company of Surgeon and a fellow of the Royal College of Surgeons (and Royal College of Physicians) of Edinburgh. Johnston, *Roll*, p. 13 (#245); Wallis and Wallis, *Medics*, p. 20.

mortified, & in some parts adhering strongly to each other; a strong putride smell; the Stomach inflamed and beginning to mortify. the Pylorus much inflamed, it's sides thicker than usuale & the passage very narrow, the Spleen of a whitish colour & appeared as if it had been macerated some time in warm water. the superior surface of the liver of it's naturale colour, but was hard to the touch; the exterior membrane of the large Lobe seperated from its substance, & adhering to the inside of the ribs; many large abcesses with good *pus*<sup>135</sup> were found here, the whole being a mass of corruption, the Gall bladder full of deep yellow bile, much yellow water in the pericardium. all other viscera sound. N.B. during his illness he

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<sup>135</sup> "Laudable pus" was taken as a sign that the body was combating disease. The characterization dates from Hippocrates. Not everyone believed in laudable pus. Theodoric of Bologna (1205-96) wrote of pus, "there is nothing more likely to impede Nature, to prolong the disease, to prevent the conglutination and consolidation of the wound, to destroy the parts and to hinder cicatrization of the wound." He advised that wounds be cleansed of foreign matter, washed with wine, and closed by bringing the edges together. During the 18<sup>th</sup> century, it was common to distinguish (as had the Greeks) among several kinds of pus. Brocklesby believed pus to represent an attempt by nature to concentrate morbid matter that would more properly have been removed through venesection. Some 18th-century authorities believed that pus was corrosive and absorbed flesh, but Hunter, relying in part on Home's experiments, argued that the notion was overbroad, although he conceded that in a diseased body pus could corrode. Hunter recognized that pus was composed of globules. The mechanism that produced pus, he wrote, was "not in the least known, nor must we wonder at this, for it is exactly the same with every other organ of secretion, about all which we are equally ignorant." He did, however, regard the production of pus as a natural aspect of healing, arguing that pus was of same nature as the part that produced it, and so in harmony with it. Pure pus he found sweet and perhaps resistant to putrefaction, though in general he found pus to have a tendency to putrefy. As to its purpose, he wrote, "The final intention of this secretion of matter is, I believe, not yet understood, although almost every one thinks himself able to assign one; and various are the uses attributed to it." Brocklesby, *Oeconomical and Medical Observations*, pp. 148-49; John Hunter, *A Treatise on the Blood, Inflammation, and Gun-Shot Wounds, by the Late John Hunter. To which is Prefixed a Short Account of the Author's Life, by his Brother-in-Law, Everard Home* (Philadelphia: Thomas Bradford, 1796), II, 137-43, 150-51, 154-58; John Hunter, *A Treatise on the Venereal Disease* (Philadelphia: Parry Hall, 1791), p. 6; James, *Medicinal Dictionary*, under "inflammatio," supperatio"; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 667-68; William A. R. Thomson, "From Antisepsis to Antibiosis," *Chemistry in the Service of Medicine*, ed. F. N. L. Poynter (London: Pitman Medical Publishing Company Ltd., 1963), p. 161.



never made any <particular> complaint about the Regio Hepatis, nor was there any Symptom of the liver being in this morbid state, nor any thing of this kind suspected by the Physicians. was a remarkable sober man.

[margin: No. 2.] Serjeant Clark of the Second Regmt of Foot Guards.

66: [top of page, in heavy ink]

vid: an historical Dissertation concerning <the> malignant Epidemical fever of 1756. with some with some account of the malignant Diseases prevailing since the year 1752. at Kidderminster. by James Johnstone M.D. 8o. Lond. 1758.<sup>136</sup>

an Essay on Bilious fevers, or the history of Bilious Epidemick fever at Lausanne in the 1755. by S: A: D: Tissot M.D: Lond: 1759. 8o.<sup>137</sup>

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<sup>136</sup> This reference to Johnstone appears to be general, rather than to a specific point. In his treatise, Johnstone first deals (pp. 2-16) with the epidemic of a "low miliary fever" that struck Kidderminster in 1752 and again in 1753. An exceptionally moist atmosphere was, in Johnstone's opinion, the cause of both outbreaks. In most cases, the fever was accompanied was accompanied by an "extraordinary and new disorder" that was attracting widespread attention in Britain and France, and which Johnstone calls "malignant sore throat." Johnstone had found astringents, diaphoretics, and blisters to be of use in combating these illnesses. Most patients at Kidderminster had been children, and the mortality rates had been low. Probably more germane to Buchanan was Johnstone's review (pp. 16-58) of the epidemic of "putrid continual" fever that swept Kidderminster in 1756. This time the fever exacted high mortality and was very contagious. Johnston describes two types that struck, one that was usually fatal and a second that was milder, but he adds (p. 26), "In every degree of this disorder, lowness, debility, restlessness, nausea, head-ach; a great propensity to a coma or delirium; the foetor, and contagious nature of the excretions, seemed to be its distinguishing and characterising symptoms." In contrast to Buchanan, Johnstone does not note that any of his patients, in either this epidemic or those of 1752-53, appeared jaundiced.

<sup>137</sup> The edition that Buchanan refers to was actually published in 1760: S. A. D. Tissot, *An Essay on Bilious Fevers; or, The History of a Bilious Epidemic Fever at Lausanne, in the Year MDCCLV* (London: D. Wilson and T. Durham). As with Johnstone, Buchanan may have been referring to Tissot's essay in general, rather than to a specific section, though he may have had in mind particularly the case histories provided by Tissot (pp. 4-18) or the post mortems he discussed (pp. 27-32). It should be noted, however, that unlike Buchanan himself, as well as several contemporary authorities, notably Hoffmann, Tissot did not

67: [continuing from p. 65]

treated in the same manner as the above. about the latter end of the distemper had a constant grinding of the teeth especially in the night time & when a sleep: two days before he dyed a constant craving for victuals[;] dyed Janry. 3rd. the body opened next day, all the intestines inflamed, especially the small ones, black & beginning to mortefie. the Stomach the same; they were slit open in quest of worms, but none found, tho strongly expected from *grinding of the teeth & craving appetite*. the liver more relaxed than usuale, the left lob covering part of the Spleen & adhering to it. the Gallbladder full of very thick & black bile; all other abdominal viscera sound; in the Thorax nothing remarkable only less water in the pericardium than I ever observed. part of the left lung adhering strongly to the Pleura, but never any complaint in that part.

[margin: No. 3.] Durham a Soldier of the same Regmt was taken ill Decr 19th & dyed Janry 22d. Stomach & intestines the same as the above; the Bile thin of a yellow brown colour. the heart very large & much Water in pericardium, a thick white membranous

68: [facing p. 67; blank]

69: [continuing from p. 67]

Substance three inches long contained in the heart, but not fixed to any part. the lungs full of blood & many black Spots on them, but no where adhering to the Pleura. N:B: this patient had always a tickling dry cough, & pectoral medecines never had any good effect. did it proceed from the largenes of the heart interrupting the motion of the Lungs? as all men have different complexions, features, make &c: nature seems to have observed the same rule with regard to the inside, for we observe great variety as to it's size form &c: hence probably

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perform nor observe autopsies on victims of the epidemic that he discussed in this work, but rather relied on the reports of colleagues and on published post mortems.

different tempers, passions, &c.

[*margin:* No. 4.] Wyld of the 4th Troop of Guards dyed of this fever Janry 22d. complaints were more moderate than the above three. upon opening the body the lungs adhered strongly to the Pleura, yet never any complaints in breathing; much fat about the heart & no water in the pericardium; Stomach & intestines sound but much distended with wind; the liver sound; the Gall thin & of a brown colour; other viscera sound & naturale, only the neck of the bladder inflamed. The braine being dissected,

70: [*facing p. 70; blank*]

71: [*continuing from p. 69*]

in the right ventricle was a large abcess, containing much thin green coloured pus, insinuating itself thro the whole substance of the right hemisphere, the same found in the left hemisphere; the veins very large & turgide, in the Cerebellum was an abcess of the same nature; & pus found as the Medulla passes through the foramen & guessed about four ounces, N:B: an abcess in this braine was never suspected & must have been some time aforming; yet this person answered all questions very distinctly, had no involuntary motions till the day befor death. viz: his face convulsed.<sup>138</sup>

[*margin:* Experiments on the Gall] The following experiments were made on his

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<sup>138</sup> An autopsy, almost certainly Wyld's, is discussed in Home, *Medical Facts and Experiments*, pp. 11-13. Home alludes to "the surgeon," in all probability Buchanan. According to Home (p. 12), Wyld's "was the first head that was opened of those who died of this slow fever, and there was no opportunity afterwards of pursuing our searches into this part further." Home believed that Wyld's head was the seat of his illness, adding (p. 13), "What shall we say of matter formed in the *cerebellum*, where the least disorder has been looked upon as mortal? It overturns the doctrine of the schools."

Gall.<sup>139</sup> Viz

Expt 1st. Some Gall was dropt into common vinegar, sunk to the bottom & coagulated, growing so tough as to be lifted up with my probe. there was no effervescence.<sup>140</sup>

Expt. 2d. when juice of Lemon was dropt on a small quantity of the Gall, it was the same as in expt 1st.<sup>141</sup>

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<sup>139</sup> These experiments appear to have been occasioned by a controversy over the nature of gall. Boerhaave had concluded that bile was a soap. In the opinion of McClurg, Boerhaave's conclusion was inspired by a consensus that bile was detergent and by the fact that it fit his theory that the substance "might serve as a medium for uniting the oily and watery liquors in the first passages." Boerhaave's characterization of bile was accepted by many authorities, including Haller and Gaub. The characterization was widely enough endorsed that Brookes, who accepted it, wrote, "some Authors call [bile] the animal Soap." In therapy, soap was sometimes used to replace bile that had been expelled. Experiments as early as Baglivi's, however, pointed to a different conclusion, and Haller's own summary of different sets revealed the confusion. In a dissertation dating from 1700, Baglivi reported 15 experiments, but of the substances that he mixed with bile only three were used by Buchanan: spir. c.c. (experiment #8), oil of vitriol (#11; he specifies spirit; probably, strong spirit; cf. app. C-1), and vinegar (#13). Buchanan was probably working from a different model or else was adding his own touches. McClurg undertook yet another series of experiments around 1770 and thereafter challenged Boerhaave's assertion. Georgii Baglivi, "De experimentis circa bilem, ejusdemque natura, usu, & morbis," *Opera omnia medico-practica, et anatomica*, 8th ed. (Leiden: Anisson & Joannis Posuel, 1714), pp. 428-41 (experiments pp. 436-39); Brookes, *General Practice of Physic; Extracted chiefly from the Writings of the Most Celebrated Physicians, and The Medical Essays, Transactions, Journals, and Literary Correspondence of the Learned Societies in Europe* (London: J. Newbury, 1758), I, 37; James McClurg, *Experiments upon the Human Bile: And Reflections on the Biliary Secretion: With an Introductory Essay* (London: T. Cadell, 1772), pp. 3-6, 10.

<sup>140</sup> McClurg reports, "I poured a little vinegar on some Bile, and I observed that this fluid was immediately coagulated, its colour changing at the same time to yellow." Contrary to the assertions of some, the yellow substance produced was not, he believed, a precipitate, but rather a coagulum: *Experiments upon Bile*, pp. 29-30.

<sup>141</sup> Of his tenth experiment, McClurg reports "Juice of lemons poured on the Bile produced exactly the same phenomena [as did the experiment with vinegar; cf. n. 140]. As these Experiments (IX. and X.) are very inconsistent with an opinion which has been adopted under the sanction of Experiment, and made the basis of some important medical theories, I took care to repeat them on the Bile of at least a dozen different persons": *ibid.*, p. 30 (versions of experiment X to p. 33).

Expt. 3d. Oyle of vitriol being dropt on the gall it coagulated presently, was harder than in 1st & 2d, white; no effervescence.<sup>142</sup>

72: [facing p. 71; blank]

73: [continuing from p. 71]

Expt 4th. Ol: Vitriol being diluted with water, & mixing some Gall, it sunk to bottom, coagulated, but not so hard as in expt. 3d. of a mixed colour of white & green resembling liquid Soape.

Expt 5th[.] Gall being mixed with Spt. C.C.<sup>143</sup> did not effervesce, nor coagulate, nor change colour.

Expt. 6th. Ol. Rosar.<sup>144</sup> diluted in water, & adding some Gall, when gently stirred with my Probe, there was a regular mixture & remained as a liquid Soape, no change of colour. vid: Pag. 62.<sup>145</sup>

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<sup>142</sup> In his first experiment, McClurg poured strong spirit of vitriol (app. C-1, under "vitriol") into bile; this "produced an instantaneous coagulation of it. The coagulum, swimming in a clear liquor, was then of a pale colour; but presently it became green, as well as the liquor about it; and on shaking the vessel the coagulum disappeared, and there formed a turbid green solution. Some water being poured on this [cf. Buchanan's fourth experiment], and the vessel left at rest, there fell to the bottom a plentiful green sediment, the liquor above remaining clear, and of a beautiful green colour." Spirit of vitriol served a number of medicinal purposes, but its application of greatest relevance to Buchanan's experiment was as an astringent. Virtually all acids used medically during the 18th century were valued as astringents, meaning that they had the power to constrict or coagulate. *Experiments upon Bile*, p. 11.

<sup>143</sup> On spirit of hartshorn, see app. C-1, under *cornu cervi*. McClurg does not report having tried this experiment.

<sup>144</sup> On *oleum rosarum*, see app. C-1, under "roses."

<sup>145</sup> Which work "Pag. 62" refers to is unclear. Drawing general conclusions from his experiments, McClurg writes, "The concentrated mineral acids, at least the vitriolic and the nitrous (Exp. I. III.), coagulated the Bile as soon as they touched it; and I have endeavoured

[*margin*: Inflammatory fevers] Par: 11th. Inflammatory fevers<sup>146</sup> were neither Frequent nor dangerous during the winter 1742.

[*margin*: Method of cure. Bleeding.] my method of treating them is bleeding largely vizt: an lb: i. if the pulse be full & strong, youthfull or sanguine constitution,<sup>147</sup> & sometimes requires to be repeated; (frequent sighings with oppression at breast, indicate bleedings, as frequent reachings indicate Vomits). If any sickness at Stomach, mouth & tongue clammy, with reachings to vomit; vomiting is absolutely necessary. I commonly use Ipecacoan:<sup>148</sup> Some people have a certain prejudice against vomites.

[*margin*: warm water a good vomite.] I then order them to drink two or three quarts warm water in order to wash the Stomach, &

74: [*facing beginning of section on inflammatory fevers*]

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to prove, that the remarkable appearances which accompanied, or followed this effect, depended on the action of these acids on the phlogiston of the Bile, in consequence of their vehement attraction to that principle. But it is known that the vegetable acids, in their common state, have comparatively very little of this attraction; and that the mineral acids lose much of its force when they are combined with a large proportion of water. We should expect, therefore, on applying the vegetable, and diluted mineral acids to the Bile, to see their coagulant effect quite pure, and unmixed with those phenomena, which marked the strong action of the concentrated acids upon the phlogiston of the Bile." McClurg, *Experiments upon Bile*, pp. 34-35. McClurg associated effervescence with the escape of phlogiston: *ibid.*, p. 23.

<sup>146</sup> Buchanan does not discuss the symptoms of inflammatory fever, except for noting how he treated particular ones. On the symptoms, note app. B-1.

<sup>147</sup> The strong pulse was seen as a sign of plethora. Youthful patients were thought to be naturally plethoric and "juicy." Venesection, as well as the other treatments described by Buchanan were entirely standard as treatments for inflammatory fever; note app. B-1.

<sup>148</sup> While bleeding was routine in the treatment of inflammatory fever, emetics were usually given only if the patient was nauseated or if bilious symptoms were present. Note *Monro, Observations on the Means of Preserving the Health of Soldiers*, II, 9; *Reide, View of the Diseases*, p. 74.

Heister's Medical, Chirurgical & Anatomical Obs. V:i. No. 81. of the cure of Inflammatory fevers among the Soldiers &c.<sup>149</sup>

*omnes acutas febres per Sanguinis missionem curare incipio.* Bagl: Prax: Med.<sup>150</sup>

75: [continuing from p. 73]

often provides a good emetick: let the patient be never so sick, he is easily perswaded to drink warm water when frightened at the name of a vomite. its operation is mild, promoting sweat & urine, especially when assisted by an opiate which is my common practice, & seldom fails of procuring a good night, & gentle sweating, especially as the humours have been well diluted by the warm water & moved by the shoake of vomiting.<sup>151</sup> I order them to

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<sup>149</sup> Writing in terms of treatments that he had administered during an epidemic in 1708-09, Heister observed that inflammatory fevers arose from an overloaded stomach or from bad food, and that patients usually complained of nausea, stomach pains, or foul taste; he therefore initiated treatment with a dose of emetic tartar or emetic wine, followed in either case by warm water. Plethoric patients were bled once, 6-10 oz. Patients were then given cooling powders and were encouraged to drink barley- or bread-water or simple water and in hot weather to mix in tincture of roses or of poppies; for delirious patients, he added camphor to the cooling powders. Heister advised his patients to eat little and to consume nothing but water-gruel, panada, or soups made from barley, plums, or cherries; meat soups he found to be especially harmful in inflammatory disorders. *Medical, Chirurgical, and Anatomical Observations*, I, obs. 81 (pp. 106-07).

<sup>150</sup> "I commence the Cure of all acute Fevers, by letting Blood": Giorgio Baglivi, *The Practice of Physick, Reduc'd to the Ancient Way of Observations. Containing a Just Parallel between The Wisdom and Experience of the Ancients, and The Hypothesis's of Modern Physicians. Intermixed With many Practical Remarks upon most Distempers* (London: Andrew Bell etc., 1704), I, cap. xiii, p. 166 [p. 120 in Baglivi, *De praxi medica ad priscam observandi rationem revocanda. Libri duo. Accedunt dissertationes novae* (Leiden: Fredericum Haringium, 1700)]. Baglivi made an almost identical statement in cap. ix (*Practice of Physick*, I, 72). Buchanan may have quoted the passage in the text from Johnstone, who likewise quoted it (*Historical Dissertation*, p. 55) without specifying chapter or page; cf. below, n. 716.

<sup>151</sup> There was a common belief that, besides clearing the stomach, vomiting cleansed the body by clearing obstructions from emunctories and boosting circulation; note Ball, *Modern Practice of Physic*, I, 11-12. In using opiates freely, Buchanan differed sharply from

bed so soon as the vomite is over, take the opiate, drinking something warm, viz: Negus or small punch, & this often surpasses expectation.

[*the following quotation is diagonally stroked*]

*harum autem febrium epota medicamenta hanc habent facultatem, ut corpus in consueta caliditate et frigiditate suo loco consistat neque praeter naturam incalescat neque refrigeretur.* Hipp. de affect.<sup>152</sup>

[*margin:* Sicknes at Stomach:] if Sicknes at Stomach yet continues & there be reason to think it is overcharged from overeating; which is often the case: it's then necessary to repeat the vomite, in order to bring up its contents<sup>a</sup>;

[*margin:* require two or three vomits] but our men don't care to have it repeated a second time tho' absolutely necessary. I then make them up in different forms, writing

76: <sup>a</sup>*Sincerum est nisi vas, quodcumque infundis accessit:*

Hor: Ep.ii. lib:1.<sup>153</sup>

77: [*continuing from p. 75*]

the Stomatick, Cordiale &c:

[*margin:* method of giving them.] advising them to drink warm water if squeamish

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Pringle's practice; note entry for inflammatory fever, app. B-1.

<sup>152</sup> "But medicines drunk for these fevers are capable of acting in such a way that the body remains in its accustomed state of heat and coolness, not abnormally heated nor abnormally chilled"; Hip., Aff., 18; cf. Hippocrates, *Hippocrates*, trans. Paul Potter, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Pr.; London: William Heinemann Ltd, 1988), V, 33.

<sup>153</sup> "Unless the vessel is clean, whatever you pour in turns sour": Hor. Ep. 1. 2. 54; *Horace* (trans. Fairclough), p. 267.



or sick, at Stomach. vid: Hor: Sat:iii. lib:ii. V.145.<sup>154</sup> Vomits are the most universal operation<sup>155</sup>, & being so much used are almost despised; one or two are thought sufficient for any disease, but are not near sufficient in gross habits & foul feeders.

*[the following quotation is diagonally stroked]*

*at quicumque alii dolores per aetatem contingunt, qui quidem ad praecordia et cor seruntur, aquam mulsam aquosam, aceti tribus affusis heminis, tepidam propinato, et ubi modico tempore eum continuerit, et igne et vestibus contactus fuerit, vomat; quod si a vomitu rursus urgeant, et strangulent, rursus vomitum cieto, aut multa calida loto alvum subducito.* Hipp: de affect:<sup>156</sup>

*[margin: Troopers love to be worked heartely.]* Troopers love to be worked heartely, & so much the better if it operates upwards & downwards, & seldom blame a strong vomite but will always find fault with a weak one. I seldom exceed dr. fs. Ipecac: or gr. vi Tartar.<sup>157</sup> advising a Glass wine after the operation.

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<sup>154</sup> Hor. Sat. 2.3.145-50 reads (*Horace* [trans. Fairclough], p. 165): "Now once [Opimius, a miser] fell into a lethargy so deep that already his heir was running in joy and triumph round about his keys and coffers. But his physician, a man of very quick wit and a loyal friend, revives him by this device. He has a table brought in and bags of coin poured out, and bids many draw near to count it."

<sup>155</sup> Buchan proposed a much milder course in the treatment of inflammatory fever. Note app. B-1.

<sup>156</sup> "But whatever other pains, because of summer heat, afflict the breast and heart, administer lukewarm water with a small amount of honey and a hemina [about 1 ½ pints] of vinegar added and, after a short time, if the illness continues, [the patient] should vomit, being kept free from heat and clothing; but, if after vomiting the pains oppress him again and suffocate him, I provoke another vomit or purge with much warm water"; Hip., Aff., c.15; cf. *Hippocrates* (trans. Potter), V, 27. The last word in Buchanan's quotation is "*subluito*" in Foës (*Magni Hippocratis Medicorum*, p. 519).

<sup>157</sup> One-half dr. ipecacuanha would have been regarded as a high, though not excessive dose, intended as a sure vomit, rather than a purge. On tartar and emetic tartar (the form that Buchanan probably used), see app. C-1 (emetic tartar under "antimonials").

*Cardiacorum morbo unicam spem in Vino certum est.* Plin: lib: xxii.<sup>158</sup>

I prefer Ipecacoan to Tartar, tho I cannot say I ever saw any bad effects from Tartar providing they drink freely, but if they

78:

[*in heavier ink*]

*°nec solum initio, sed in quolibet morbi statu eluendus est ventriculus, si urget vomendi conamen, aut ructatio biliosa, olida et ingrata valde.* Huxham. de Aere et morb: Epidemic: Lond. 1752. V.2. p.48. vid: Cels: lib:i.C.3.<sup>159</sup>

79: [*continuing from p. 77*]

do not, some remains & sticks to the coates of the Stomach & occasion violent sicknes some time thereafter, as was the case with Smith of Capt. Wenman's, was extreemely sick with violent cramps, involuntary stools, convulsive motions in the Stomach, but cured by drinking

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<sup>158</sup> "In cardiac disease the one hope of relief lies undoubtedly in wine"; Pliny, Nat. Hist. 23.25.50; Pliny, *Natural History*, trans. W. H. S. Jones, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1951), VI, 449. cf. below, n. 802.

<sup>159</sup> "Not only in the Beginning, but in any Stage of the Disease, the Stomach is to be washed out, if there is an Urging to vomit, or if there is a bilious, foetid, and very disagreeable Eructation"; Huxham, *Observations on the Air and Epidemical Diseases*, II, 69 [Latin quotation in Huxham, *Observationes de aere et morbis epidemicis*, II, 48]. Huxham himself quoted Celsus 1.3.[20]. The passage in Celsus to which Buchanan refers is probably this: "When ... there are bitter eructations, with pain and weight over the heart, recourse should at once be had to a vomit"; De Med. 1.3.20; cf. Celsus, *De Medicina*, trans. W. G. Spencer, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1960 [1935]), I, 61. This portion of Huxham's work was an extended discussion of a putrid or pestilential fever that struck Plymouth in 1740. Huxham noted nature's efforts to cure the fever, as by retching that pumped up "the bilious Colluvies (which, if it remained, would for the future feed the Disease" (*Observations*, p. 69).

freely of warm water & oyle, & then a large opiate.<sup>160</sup> it's seldom prescribed in this country. The morning after the vomite they often find themselves much better, being more *lightsome* as they express it. I then enquire into the state of their body, whether they go to stool or if their belly feel full, which if it does, purging is necessary;

[*margin*: purging medecines necessary.] pil: cocc: minr:<sup>161</sup> answer the intention, but if the case require a sudden operation, then Sal: cathartic: amar: with Manna, or Pulv: Jalap:<sup>162</sup> worked off with water gruel or warm small beer, do the business, & op: h:s:. Infusion of Senna with prunes<sup>163</sup> is a common medecine, drinking a cupfull every hour till it purges. Some object against purging medecines, saying, there is nothing in them to work upon, having eat nothing these three days. we see dayly good effects from a vomite, tho the water come up as

80: [facing p. 79; blank]

81: [continuing from p. 79]

clear as when drunk; great advantages may be obtained from purgative medicines tho the Stools are not excrementitious, there being a large discharge from the Glands of the Gutts. so in a cold the head is greatly relieved by a large discharge of clear thin water thro the

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<sup>160</sup> The warm water and oil was probably intended as a mild emetic, while the opiate served to ease the cramps and convulsions, relax the bowel, and relieve the diarrhea. One of the advantages of using ipecacuanha (cf. entry, app. C-1), in Lewis's opinion, was that all of it was readily eliminated from the body. William Lewis, *The Edinburgh New Dispensatory: ... Being an Improvement of the New Dispensatory by Dr. Lewis*, ed. John Rotheram, 3rd American ed., from the 4th Edinburgh ed. (Walpole, N.H.: D. Carlisle [etc.], 1796), p. 179.

<sup>161</sup> On *pilulae cocciae minores*, see app. C-1.

<sup>162</sup> On manna, jalap, and *sal catharticus amarum*, see app. C-1.

<sup>163</sup> See entry on prunes in app. C-1.

nostrills, though no snot passes.

[*margin:* Droughts.] Drought is a constant attendant of fevers & very troublesom to the Patient.

*Si tibi nulla sitim finiret copia Lymphae  
narrares Medicis.*

Hor: Ep.ii. lib:ii V:146.<sup>164</sup>

Our men commonly drink Sage tea from the universal custom of England,<sup>165</sup> to which I add the Squeeze of a Lemon or Ora<n>ge<sup>166</sup> [*careted "n" in "Orange" is written in heavier ink*] and Sal: Prunel:<sup>167</sup> oz. i. to each quart; is a pleasant & gently sudorifick especially if a little wine be added which is necessary as a Cordiale.

[*margin:* Acid sharp drinks often wished so may be indulged.] Acid sharp drinks are often [*crossed:* are often] wished for, & I know none so pleasant as the common sherbet made rich with fruite, of this the sick seldome tyres, tho he soon dislikes all other drinks; a little brandy or wine<sup>x</sup> may be safely added to take off the waterishnes as the men phrase it, is then a real cordiale, & good diluter.<sup>168</sup> Peppmt.

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<sup>164</sup> "If no amount of water could quench your thirst, you would tell your story to the doctor"; Hor. Ep. 2.2.146-47, *Horace* (trans. Fairclough), p. 437.

<sup>165</sup> Entry for sage, app. C-1.

<sup>166</sup> Note entry on the orange and lemon, app. C-1..

<sup>167</sup> Note entry for *sal prunellae*, app. C-1.

<sup>168</sup> Wine was the most common and esteemed cordial. Diluents, which included such thin liquids as water, whey, ptisans, and juleps, were intended to thin the blood when it was viscid. Ptisans were a staple of Hippocratic medicine. Boerhaave, who believed that inflammation was caused by stagnant, thick blood, recommended that the condition be combated by having the patient drink some thin, watery, hot liquid, in order to dilute the stagnating bodies. Rollo reported that in the practice that he had observed in the West Indies, when intermittents were in the cold stage, liquids were not provided to the patients, but that as sweating approached, "free dilution was recommended, as lemonade, toast and water, barley-water, &c." John Barker, *An Essay on the Agreement betwixt Ancient and Modern*

82:

[in darker ink]

*<sup>x</sup>quo febris magis ad Statum vergit, eo minus utendum est refrigerantibus, ne per ea Crisis impediatur.* Bagliv: Prax: Med: lib:i. C.13.<sup>169</sup>

83: [continuing from p. 81]

water is very agreeable. Decoct: Nitros: P:E:<sup>170</sup> is an excellent medecine & a neat form: if the body be costive sweaten with Manna instead of sugar.<sup>171</sup> Sal Prunel is the most universal medecine in this case, mixed in all drinks or given in powders, is one of the best febrifuges. Negus is a favourite drink with our men of which they drink freely with Spt. Nitr: Dulc: gt. xxx. in each draught[;]<sup>172</sup> having a pleasant smell, it's extremely agreeable to the Sick;

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*Physicians: Or a Comparison Between the Practice of Hippocrates, Galen, / Sydenham, and Boerhaave, in Acute Diseases. Intended to Shew, What the Practice of Physick, in such Distempers, ought to be* (London: G. Hawkins, 1747), pp. 103-05; Herman Boerhaave, *Boerhaave's Aphorisms: Concerning the Knowledge and Cure of Diseases*, 3rd ed. (London: W. Innys [etc.], 1755), pp. 98-99 (aphorisms #398-400); Dancer, *Brief History of the Recent Expedition*, p. 56; Quincy, *Lexicon Physico-Medicum* (1719), p. 115; Rollo, *Observations on the Diseases on St. Lucia*, p. 74.

<sup>169</sup> "The nearer a Fever approaches to the height, the less we insist upon refrigerating Remedies, for fear of opposing the Crisis"; Baglivi, *Practice of Physick*, I, 167; in the Latin original (*De praxi medica*, I, cap. xiii, p. 122), the opening words are "*quod febris.*" Baglivi recommended the free use of refrigerants in early stages of the disease.

<sup>170</sup> App. C-1.

<sup>171</sup> This switch was not made because sugar was considered binding, but because manna was esteemed as a cathartic (cf. n. 78). Note entries on sugar and on manna in app. C-1.

<sup>172</sup> This hot spiced wine was named after Col. Francis Negus (d. 1732). On *spiritus nitri dulcis*, see app. C-1. The 30-drop dose suggested by Buchanan was moderate; Brookes recommended that amount 3-4 times daily (*General Dispensatory*, p. 300). This drug was widely used for a number of purposes. Buchanan probably employed it as a febrifuge, though he may also have valued its diaphoretic quality.

holding tamarinds in the mouth or sucking oranges greatly quenches thirst;<sup>173</sup> the mouth should be often washed with common drink in order to relax the Glands; all drinks to be drunk moderately warm & freely. nature demands it.

[*margin:* Sweating.] Fevers often attempt to throw themselves off thro the Pores of the skin, breaking out in sweats, & if naturale, are of great service & often compleat the cure. when I perceive a naturale inclination to sweat I encourage it by drinking freely of the above drinks, encreasing the quantity of wine & covering warm, which ought to be done with prudence for fear of encreasing the fever.

[*margin:* Sudorific Medecines.] Lap: contrayerva

84: [*facing p. 83; blank*]

85: [*continuing from p. 83*] is much mixed in their drink or given in powder.<sup>174</sup> I commonly use Ther:Androm:& a few grains Camphire<sup>175x</sup> & a large draught small warm punch & generally succeeds well, & is keep't up by drinking plentifully; water gruell sharpened with vinegar is an excellent medecine at this time; if skin feel hot & burning, parched and dry, warm, bathing would be the best medecine, but we have no conveniency for it.

[*margin:* to be used with caution.] One should be cautious of forcing sweats at this time; the body should be washed with a sponge in warm water, especially under the arm pits, Groins &c: soaking the palms of the hands in warm water, as also the feet<sup>176</sup>; coming out of

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<sup>173</sup> On the tamarind, see app. C-1.

<sup>174</sup> Note the entry for contrayerva, app. C-1.

<sup>175</sup> On camphor and on theriac Andromachi, see app. C-1 (theriac under "opiates").

<sup>176</sup> For the most part, the treatments that Monro recommended were strictly medicinal, but he did credit the claim that at Cartagena, in 1742, Robert Barclay Dalrymple, physician-general on the Vernon expedition, had saved many victims of remittent by wrapping them in blankets

the sweat, care should be taken to dry the body well, have fresh linnen &c.

[*margin:* the men have their own favorite medecines.] The men deal much in hot pots for this purpose; or treacle posset, boyled beer or buttered ale; & no <bad> medecines if they are not made too strong. in slight complaints it's their common custome to drink a pint cold water, when going into bed. The Officers use Sack whey & Spt. C.C. seldom exceeding a tea Spoonfull which is too small a Dose.<sup>177</sup>

86: [*heavier ink, as is "x" designator on p. 85*] <sup>x</sup>Fred: Hoffmanni Op: Med: Tom:3. de Camphorae usu interno securissim et prestantissimo.<sup>178</sup>

87: [*continuing from p. 85*]

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soaked in warm decoctions, thereby causing a sweat that carried off the fever. *Observations on the Means of Preserving the Health of Soldiers*, II, 74n. On Dalrymple, see Johnston's *Roll*, p. 11 (#198).

<sup>177</sup> On spir. c.c., here being used as a sudorific, see entry in app. C-1; cf. n. 128.

<sup>178</sup> “On how to use camphor internally most safely and with the best results”; Hoffmann, *Opera omnia physico-medica*, VI, pt. 1, pp. 60-67;. Hoffmann begins by complaining that medical men constantly see a need to introduce new drugs, then cast them aside. After discussing the source and physical nature of camphor, he concentrates on its medical benefits (Lewis provides a summary of the remainder in *New Dispensatory*, p. 103). Hoffmann asserts that camphor penetrates the whole body, but neither raises the pulse nor causes heat. It excites stagnant humors in the extremities and encourage their evacuation. Prolonged use makes the blood more fluid, while reducing the amount of serum in the habit generally. In the case of malignant or acute fevers, or chronic ones that proceed from putrescent or acrid juices, camphor corrects acrimony and promotes expulsion through the pores, and it promotes critical evacuations. It also resists inflammation, and by strengthening the vessels it prevents the hemorrhaging that is associated with acute fevers. Hoffmann further maintains that camphor expels the venereal virus; by itself it can cure lues, and it is unmatched in treating recent gonorrhoea. In continual fevers, pleurisy, and all inflammatory conditions where there is heat, dry skin, thirst, and a tendency to mortification, even delirium, a combination of camphor and nitre serves to reduce all symptoms, while promoting calm sleep and sweat. Hoffmann asserts that the antiphlogistic quality of camphor corrects cantharides and acrid cathartics and diuretics. He warns, however, that epileptics and paralytics should be cautious in taking it.

[*margin: Headach.*] Fevers are often attended with violent headachs, the patient complaining his head is so heavie that he cannot raise it from the pillow; often giddy as a Goose, like to tumble down, & if he stoops to buckle his shoe, cannot get up again. face is flushed eyes bloodshot, eye lashes heavie, can hardly be kept open; the above method greatly contribute to remove it. but applications should be made to the part affected. the nose is commonly stuffed up & dry, with weight or pain about the eyebrows; the head is greatly relieved if you can make the Nose run.

[*margin: Method of cure.*] I order them to hold their heads above the steam of warm water or sage tea, Sucking the vapour thro the mouth & drawing thro the nostrills; there's a large discharge from the nostrills, Corners of the eyes & glands of the mouth, & often times much clotted blood from the Nose, as was the case of Cornet Ramsden's Servt., to the instant relief of the Patient; & should be repeated two or three times a day; taking care to keep warm & prevent

88: [*facing p. 87; blank*]

89: [*continuing from p. 87*]

catching cold. the men at first despised this simple method & when advised to bath their feet at bedtime in order to ease their head, used to laugh at it, as a childish thing, but seeing its good effects, became a common practice amongst them. Leeches may be applied to the temples & seldom faile of giving ease<sup>179</sup>; if the headach yet continues with inclination to

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<sup>179</sup> Leeches were often used for topical bleeding, as in this case, or to bleed children. Pearson credited Themison with being the first to treat a headache by bleeding with leeches. Wallis enumerated six types of headache, each distinguished by its causes. For the type that was inflammatory in nature, he advised bleeding and purgatives, with cupping an option. For all headache sufferers, he recommended warm clothing, avoidance of costiveness, light diet, moderate exercise, and a cheerful outlook. James recommended using small leeches, since they were less painful than the large ones, and suggested that leeches be acquired from



dose & sleep, Blisters are absolutely necessary to the nape of the neck or behind the Ears, & should be kept open till all complaints cease;<sup>180</sup> the only inconveniency of attending them is the Strangury, for which I order marshmallow tea, or dissolve Gum Arabic in their common drink.<sup>181</sup>

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streams, rather than pools, for stagnant water might cause them to be foul (though they might be cleansed by being left in a glass of clean water for several months). Applying milk or blood to the desired spot were considered ways to entice the leech to focus there. Quincy advised cutting off a portion from the rear of the leech so it would imbibe more. When a practitioner felt that leeches had taken enough blood, salt might be used to remove them. Alston warned that they could cause a hemorrhage sufficient to require cautery or stitching -- James asserted that compression or a styptic sufficed to stop continued bleeding -- and that they sometimes went to a place other than the one intended. Complaining that practitioners did not take the size or vigor of leeches into account in judging their consumption of blood, Fowler estimated that an average leech typically removed about 1 oz. Charles Alston, *Lectures on the Materia Medica: Containing The Natural History of Drugs, Their Virtues and Doses: also Directions for the Study of the Materia Medica; and An Appendix on the Method of Prescribing*, ed. John Hope (London: Edward and Charles Dilly; Edinburgh: A. Kincaid and J. Bell, 1770), II, 506-07 (under "hirudo"); Thomas Fowler, *Medical Reports of the Effects of Blood-letting, Sudorifics, and Blistering, in the Cure of the Acute and Chronic Rheumatism* (London: J. Johnson, 1795), p. 224; John C. Hartnett, "The Care and Use of Medicinal Leeches in 19th Century Pharmacy and Therapeutics," *Pharmacy in History*, 14 (1972), pp. 127-29; James, *Medicinal Dictionary*, under "hirudo"; Pearson, *Outlines of Lectures*, I, 12; Quincy/Hooper, *Quincy's Lexicon- Medicum*, pp. 432-33; Theobald, *Every Man His Own Physician*, p. 19; Wallis, *Art of Preventing Diseases*, pp. 346-48.

<sup>180</sup> The blisters were in this case being used to stimulate the patient. For delirium, Buchan recommended the use of opiates, internally and externally (like many contemporaries, he thought of opium as a stimulant). Buchan, *Domestic Medicine*, pp. 271-72.

<sup>181</sup> On gum Arabic and marshmallow, see app. C-1. It was common knowledge that blisters promoted strangury. The author of *Practice* claimed that strangury could "be quickly relieved, by drinking plentifully of barley-water, or the Arabic emulsion." Buchan also prescribed gum Arabic in emulsion. Fomentations and phlebotomy were often used to encourage urination, and if the condition was chronic or there was thought to be an obstruction, a catheter or cannula might be inserted. Fowler advised that strangury be treated with drafts of a bland diluent like linseed tea, and that if it began to occur while the blister was still in place the plaster was to be immediately removed. Like Buchanan, Turner recommended marshmallow tea in treating retention of urine. Buchan, *Domestic Medicine*, p. 124; Fowler, *Medical Reports of the Effects*, p. 245; *Practice of the British and French Hospitals*, p. 69 ("blistering plaister"); Theobald, *Every Man His Own Physician*, pp. 31-32.

*cum Capitis Dolores contigerint, in eo caput multae calidae lotione <cale>facere confert, et sternutamento excitato pituitam et mucos educere.* Hip. de affect:<sup>182</sup>

*deinde capito universo, sed per aures et nares fomentum admoveto =[...] vitare autem oportet Solem, ventos, ignem, fumum, acres odores, aliaq[ue] id genus, et quiete ac molli victus ratione uti; venter inferior ex vasorum inanitione lubricus esse debet.* de Morb: lib: iii: Hipp.<sup>183</sup>

90: [facing p. 89; blank]

91: [continuing from p. 89]

[margin: Dyet.] The Dyet can hardly be too simple. I recommend that as in the small pocks, Par: 9. I often consult the appetite & seldom forbid what the Patient wishes for, unless it be something very much out of the way<sup>c</sup> [*superscript in heavier ink*]; there's a natural aversion in all sorts of fleshes, but thin broths with toasted bread are proper, boyled turneps, &c: Sparrowgrass, &c:.. what I commonly order is the crumb of a penny loafe boyled in a quart water over a gentle fire into a pint, adding a Gill wine when near boyled; seasoning with Cinnamon, Nutmeg Cloves, sweating with Sugar; makes a good nourishment, & real cordial, easely got & easely prepared. Our men on recovering their appetite are apt to indulge too much & return to their gross way of feeding befor the Stomach be strong enough

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<sup>182</sup> "Whenever headaches occur, the head should be warmed by washing it with much hot water, and sneezing should be encouraged to carry off phlegm and mucus"; Hip., Aff., c.2; cf. *Hippocrates* (trans. Potter), V, 9.

<sup>183</sup> "Then the head in general [should be treated] but vapor-baths through the ears and nostrils.... One should avoid sun, wind, fire, smoke, and sharp-smelling substances. He should live quietly and enjoy a mild diet; his lower belly be thoroughly emptied"; Hip. Morb.III. c.2; cf. *Hippocrates* (trans. Potter), VI, 9, 11. In Foës (*Magni Hippocratis Medicorum*, p. 488), the opening words of this quotation read, "*deinde capiti praesertum universo ....*" and the last line begins, "*vasorum mani inanitione.*"

to digest it; <*non facile esuriens posita retinebere mensa.* Ov: rem: Am: V:631.<sup>184</sup>>  
become sick at Stomach & relapse. must begin again with Vomits &c.<sup>a:</sup> [*superscript in heavier ink*] Puddings they think to be light food & may eat freely, but theirs are made of flower & eggs, boyled very hard, & become a tough paste, not to be dissolved by a weak Stomach; light

92: *in quibusdam aegrotis est gratificandum, velut est, ut munde tum potus tum cibus parentur, tum etiam quaecumq[ue] videt et attingit mollia sint. in aliis quoq[ue] gratificari oportet quae non magnam noxam afferunt, aut quae facile sarciri queat, velut frigida, ubi ea opus est. in his etiam Medicum aegroto se gratum praebere convenit, qualia sunt ingressus, sermones, corporis habitus, vestitus, tonsura, ungues et odores.* Hip: de morb: vulg: lib:vi. S:vii.<sup>185</sup>

<sup>a:</sup>*cum quis cibos aut potiones plures solito sumpserit, nisi ut solet perfecerit, statim vomitione rejicere optimum est.* Hip: de affect.<sup>186</sup>

93:

bread puddings may be allowed. & small fish viz. Pearch, Gudgeons, smelts, Plaise, &c:

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<sup>184</sup> "With difficulty will you be kept, when hungry, from the appointed feast"; Ov. Rem. Am. 631; Ovid, *The Art of Love, and Other Poems*, trans. J. H. Mozley, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd., 1957 [1929]), p. 221.

<sup>185</sup> "One should humor some patients as it were, so that they have food and drink provided cleanly and whatever the patient feels or touches should be pleasant. For others they should not be exposed to great harm, or only that which can easily be remedied, such as cold while there is need. With these it is advantageous for the doctor to be agreeable to the patient, regarding what he talks about, his appearance, his clothes, his haircut, his fingernails and his smell." Hip., Epid. VI.iv.7.

<sup>186</sup> "When one consumes more foods or drinks than he is used to, or of a different kind, it is best for him to immediately vomit them up"; Hip., Aff., c.61; cf. *Hippocrates* (trans. Potter), V, 87.

with little butter & seasoned with Salt & lemon<sup>a</sup>:

[vertical stroke through all quotations from Hippocrates, but not Ovid]

*pisces cocti et assati, ipsi per se et cum ceteris cibis sumpti, leve sunt edulium[.]*

Hip: de affect.<sup>187</sup>

*Si quid dare voles virium reficiendarum gratia, alicam et ptisanam triticeam exhibeto -- [...] imbecillis post sorbitiones cibum exhibeto, et vinum generosum superbibendo dato -- [...] imbecillis cibaria et opsonia conficito et exhibeto, ex quibus neque flatus sit, neque ructus acidus neque tormina, et quae neque admodum per alvum demittantur, neque admodum exciccentur -- [...] imbecilles cibi et leves, neque ventriculum quidem neque corpus molestia afficiunt quia calefacti non intumescunt, neque implent, sed cito emolliuntur et cocti per alvum secedunt. Ib.<sup>188</sup>*

*quod si febris detinet sorbitione farinae aut millii utatur -- si vero cibi exhibeantur, pauci porrigantur, et opsonia per alvum secedentia. Hip: de intern: affect.<sup>189</sup>*  
*post haec autem in prandium cibos puros, ex opsoniis valentiora ei exhibeto, et vinum idem bibat. Ib.<sup>190</sup>*

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<sup>187</sup> "Fish, both boiled and baked, alone and together with other foods, are light food": Hip., Aff., c.52; cf. *Hippocrates* (trans. Potter), V, 81.

<sup>188</sup> "If you wish to give something restorative, to assist recovery, give spelt or a wheat ptisan.... The weak should then receive food; then give them generous wine.... Prepare and give to the weak common food and main dishes that will not cause flatulence, belching, acid, or colic, and will cause neither looseness nor constipation. The weak should receive light food that will not trouble the belly or the body by heat or bloating, or fullness, but be quickly digested and passed through the stomach"; *ibid.*, c.44, 46, 47; cf. *Hippocrates* (trans. Potter), V, 69, 71, 73.

<sup>189</sup> "If fever persists, give broth of meal or millet; if foods are given, only small amounts should be provided, together with laxative main dishes"; Hip., Int., c.1; cf. *Hippocrates* (trans. Potter), p. 75.

<sup>190</sup> "After this, however, give pure foods for lunch, meals to provide strength, and [the patient] should also drink wine"; Hip., Int., c.1; cf. *Hippocrates* (trans. Potter), VI, 75.

*Ecce cibos etiam, Medicinae fungor et omni  
munere fungor, quos fugies, quosque sequare, dabo.*

Ov: Rem:Am: v.795.<sup>191</sup>

94: <sup>a</sup>a regular dyet is the greatest consequence in Recovery, but much neglected from our unsettled way of life; & works surprizing changes both on man & beast, of which I have an extraordinary Instance; having kept a Young fox, even in the field, & feeding him daily with boyled or roasted meats, he became very tame & tractable; as he was a great favorite with all the Regimt, the <men> would sometimes treat him privately with a Young-live-Rabbite, or pigeon, or give him some warm blood; nixt day he was wild as ever, and would not suffer himself to be handled, tho at other times he might be played with as a young-puppy, & required a carefull diet some days, befor he returned to his mild & gentle temper.

*Sic ubi desuetae Silvis in carnere clausae  
mansueverae ferae, et vultus posuere minaces  
atque hominem didicere pati, si torrida parvus  
venit in ora cruor, redeunt rabiesque furorque,  
admonitaeque tument gustato Sanguine fauces,  
fervet, et a trepido vix abstinet ira Magistro.*

Lucan: lib:4.<sup>192</sup>

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<sup>191</sup> "And then there is diet too; that I may perform all a physician's part, I will tell you what to take and what to shun"; Ov. Rem. Am. v.795-96; *Art of Love, and Other Poems* (trans. Mozley), p. 233.

<sup>192</sup> "So, when wild beasts have lost the habit of the woods and grown tame in a narrow prison, they lose their grim aspect and learn to submit to man; but, if a drop of blood finds its way to their thirsty mouths, their rage and fury return, and their throats, reminded of their old life by the taste of blood, swell again; their anger boils up and scarcely spares their frightened trainer"; Lucan, 4.237-42; Lucan, *Lucan*, trans. J. D. Duff, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1957 [1928]), p. 193.

95: [continuing from p. 93]

[margin: Regimen:] The Same Regimen to be observed as in Par: 9. The patient not be always confined to bed, but suffered to sit up & let the bed cool; he had better rest himself upon the bed, than be always confined in it. nor am I too scrupulous in forbidding Company.

[margin: Recovery] in order to recover strength, a light nourishing dyet is necessary, & a Glass wine viz. a Gill pr. Day.

*'vina dulcia et austera et mellita vetera ventrem subducunt. maxime urinam movent, et nutriunt: neque flatum, neque tormina, neque plenitudinem excitant= [...]* corpus enim vino calefactum, calore eximit ea quae a cibis et potibus, ac *similibus insunt: Hipp: de affect:*<sup>193</sup>

[margin: many relapse from error in dyet:] Elixr. Vitriol, is proper to whet the appetite,<sup>194</sup> but they should be careful not to overheat, but in this they exceed dayly, Adams of Captn. Marcham's<sup>195</sup> had almost killed himself by eating too freely of a bullocks heart & afterwards drinking near a quart strong Spanish Mountaine<sup>a</sup>. [*superscript in heavier ink*].

----- *Perna magis ac magis hillis*

*flagitat in morsus refici: quin omnia malit*

*quaecumque immundis fervent allata popinis.*

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<sup>193</sup> "Wines that are sweet, dry, honeyed, and aged are the most laxative. They provoke the most urine and nourish. And they do not cause flatulence, colic or fullness.... For the body is warmed by the wine, and this heat causes the body to expel the food and drink and similar things"; Hip., Aff., c.48, 61; cf. *Hippocrates* (trans. Potter), V, 75, 89.

<sup>194</sup> Elixirs were compound tinctures (cf. n. 292). Their popularity as a class declined markedly during the 18<sup>th</sup> century. Although ingredients differed, they all were intended to serve as stomachics: strengthening the stomach -- especially one relaxed by drink -- and intestines, and stimulating appetite. Elixirs were also widely used to treat catarrhs and headaches. Some practitioners claimed they were useful for nervous problems and palsies, but Brookes (*General Dispensatory*, p. 182) saw no evidence of this. On *elixir vitrioli*, see app. C-1.

<sup>195</sup> Thomas Marcham or Markham became a cornet in the Blues 26 Feb. 1712; capt.-lieut., 7 Jan. 1733; capt., 18 July 1737, until his death, 4 Sept. 1755. RADCP, 3/47; *Army List for 1740*, p. 6; *GM*, XXV (1755), 428.

Hor. Sat:4 lib.2. V.60.<sup>196</sup>

*quidquid quaesierat, ventri donabat avaro.*

H. Ep.15: lib:1. V.32.<sup>197</sup>

I never

96: <sup>a</sup>*ubi copiosior praeter naturam cibus ingestus fuerit, id morbum creat, quod etiam curatio indicat.* Hip: Aph. No.17. S.ii.<sup>198</sup>

Fred: Hoffmanni Op: Med: Tom: 5. p.283. de Convalescentiae Statu, eiusque impedimentis et Praendiis<sup>199</sup>

97: [continuing from p. 95]

allow above a pint of wine in 24 hours. If any slight feverish chillness or shiverings remain, the Bark in Substance or in tincture & taken in wine, removes it.

[margin: Rieding (*sic*) of great service.] I order the Trooper to ride his horse so soon as his Strength permitts; it's needless to purge them afterwards with strong physick, for that keeps them long weake; but it's of service to keep the body laxative, & our Stomatick pills

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<sup>196</sup> "By ham and by sausages rather does [appetite] crave to be pricked and freshened. Nay, it would prefer any viands brought smoking hot from untidy cookshops"; Hor. Sat. 2.4.60-62; *Horace* (trans. Fairclough), p. 191.

<sup>197</sup> "Whatever he gained, he gave to his greedy maw"; Hor. Ep. 1.15.32; *Horace* (trans. Fairclough), p. 347.

<sup>198</sup> "When food is consumed in excess of what nature can stand, disease is caused, as the treatment shows"; Hip. Aph., 2.17; cf. *Hippocrates* (trans. Jones), IV, 113.

<sup>199</sup> Hoffmann, *Opera omnia physico-medica*, V, 283, does not accord with the topic that Buchanan cites. Elsewhere, however, Hoffman notes the case of a tradesman who, while recovering from an inflammatory fever, ate too freely, suffered a relapse, and died. He warns convalescents to avoid irregularities, for these may bring back the fever, and in a more dangerous form. *Opera omnia physico-medica*, II, sect. ii, ch. 1, p. 109; cf. *System of the Practice of Medicine*, I, 213.

answer this purpose, taking two or three as occasions require, using gentle exercise.

*deambulationes paucae primum faciendae, ne lassitudo invadat -- [...] primum parum laboret, deinde, paulo plus, nunquam vero multum.* Hip: de intern: affect.<sup>200</sup>

[margin: many complaints from bad Nursing.] many complain of not being well nursed; when they have an appetite, & victuals not ready at that time, the appetite is lost again; as we have no regular nurses the sick are nursed by their Comrades, & it cannot be expected that they are so carefull in giving their medecines, as they ought to be.<sup>201</sup>

*Temporibus medicin a valet, data tempore prosunt,  
et data non apto tempore vina novene.*

Ov: rem: Amo: V:131:<sup>202</sup>

98: [facing p. 97; blank]

99: [continuing from p. 97]

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<sup>200</sup> "At first, let [the patient] take only short walks, so that he is not fatigued.... [Let him] exert himself a little at first, then a little more, but never very much"; Hip. Int., c.1; cf. *Hippocrates* (trans. Potter), VI, 75, 77.

<sup>201</sup> In commenting on the nurses, Buchanan is probably referring mainly to the situation on the regimental level. Possibly, however, he is referring to an early phase of the war, before the general hospital reached the level of organization that it did after about 1743. Although women might be hired, or required, to serve as nurses in regimental infirmaries, they were often just soldiers' wives, with little experience. General hospital facilities were staffed by regular teams of nurses, under the supervision of matrons or assistant matrons. These nurses were often drawn from staffs in military or civilian hospitals in Britain, and they were required to be literate, so that they might read, understand, and follow the instructions on their "nurses' ticket," which detailed the regimen for each patient. Besides rations and lodgings, hospital nurses received the same pay as sergeants, while a matron was paid as much as a hospital mate. For a discussion of army nursing during this period, on both the regimental and hospital levels, see Kopperman, "Medical Services," pp. 436-43.

<sup>202</sup> "The art of being timely is almost a medicine: wine timely given helps, untimely, harms"; Ov. Rem. Am. v.131-32; *Art of Love, and Other Poems* (trans. Mozley), p. 187.



when the Stomach is very weake I order a large draught whey with cons: Ros:<sup>203</sup> every morning: & have seen weake people recover strength wonderfully, & ascribe their recovery to this simple remedy, more than to all the Drugs they took.

[margin: Critical days.] I have no great regard for criticale days.<sup>204</sup> by the above

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<sup>203</sup> Conserves were vegetables, fruits, or flowers beaten together with sugar to form a uniform mass. Their medical reputation declined during the 18th century. During the later years they were used less than formerly, and even then primarily (Lewis's words) "as auxiliaries to medicines of greater efficacy, or as intermedia for joining them together." On *conserva rosarum*, see app. C-1. As of the mid-18th century, it was still often prescribed to treat coughs. It was also given to invigorate weak stomachs, which probably explains Buchanan's use of it, but even by that time it was giving ways to other remedies that were considered more active in this regard. Rollo's list of remedies is of interest by way of comparison: chalybeates, mineral acids, aromatics, bitters, absorbents (he considered lime-water or a weak solution of salt of tartar best, magnesia useful as well), infusions of chamomile, or wood of simarouba; he further recommended abstaining from vegetables (probably, because they caused gas), plus taking exercise and free air, as the most certain means to reduce flatulence and restore stomach tone. Rollo, *Observations on the Diseases on St. Lucia*, p. 91.

<sup>204</sup> Hippocrates asserted that fevers tended to end on particular days (4-5-7-9-11-14-17-20), following "critical discharges" that marked the body's effort to eliminate them. By the mid-18th century, the doctrine of critical days had fallen out of favor in British medicine, although it appears to have been somewhat more popular on the Continent, where its defenders included de Haen. Pearson wrote that it was "supposed to be a mere phantasy, originating in the doctrine of Pythagoras concerning the influence of odd numbers." It retained some defenders, however. Barker wrote extensively of it, seeing it as the cornerstone of Greek medicine. He praised Boerhaave for restoring the doctrine and cited Hoffmann, Sydenham, and Mead among its modern adherents. Later, Cullen embraced the doctrine (though adding that Hippocrates may have been swayed by Pythagorean numerology), but, as Dickinson saw it, he was "almost the only modern author who appears in support." Jackson also wrote in favor of Hippocrates' observation, while McLean saw some regularity in crises, though no "invariable order." Pringle noted that neither pleurisies nor remittent fevers concluded on the critical days noted by Hippocrates, and Dickinson asserted that fevers terminated as often on non-critical as on critical days. Some writers tried to explain the disparity by claiming that because of climatic differences the critical days might be different from what they were in the Cos of Hippocrates, or that they were now less sharply drawn. Baglivi claimed that modern practitioners, by overmedicating patients, were disturbing the cycles of disease, making it appear that the doctrine of critical days was invalid. Baglivi, *The Practice of Physick*, pp. 335-44, esp. p. 338; Barker, *Essay on the Agreement*, p. 62; William Cullen, *First Lines of the Practice of Physic*, new ed. from the last British ed., corr. and enl. (Worcester, Mass.: Isaiah Thomas, 1790), I, 114-23 (cvii-

treatment this fever terminated in five or Six days, but may be continued longer by a different method; this was the most common fever during the winter & all did well, none being so bad as to require the Hospital. [margin: Urine seldom inspected. rather trusting the looks, voice, & breathing than pulse or urine.] I seldom examine the Troopers urine, they having no proper conveniency to keep it, and think I can form a better judgement from their voice, looks & breathing, than from their pulse or Urine<sup>a</sup> [superscript in heavier ink]. Capt. Gaye's<sup>205</sup> pulse intermits every third stroake even in a good state of health. Capt. Wenman<sup>206</sup> died the 16th day Pleuretick & asthmatick; his pulse<sup>207</sup> & urine<sup>208</sup> were always more

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cxxiv); Dickinson, *Inquiry into Fever*, pp. 63-64, 70-71; Robert Jackson, *An Outline of the History and Cure of Fever, Endemic and Contagious; More Expressly the Contagious Fever of Jails, Ships, and Hospitals; the Concentrated Endemic, Vulgarly the Yellow Fever of the West Indies. To Which is Added, an Explanation of the Principles of Military Discipline and Economy; With a Scheme of Medical Arrangement for Armies* (Edinburgh: Mundell & Son; London: T.N. Longman and Murray & Highley, 1798), pp. 242-44; Hector McLean, *An Enquiry into the Nature, and Causes of the Great Mortality among the Troops at St. Domingo: With Practical Remarks on the Fever of that Island; And Directions, for the Conduct of Europeans on Their First Arrival in Warm Climates* (London: T. Cadell and W. Davies, 1797), pp. 93-94; Pearson, *Outlines of Lectures*, I, 5, 83; Pringle, *Observations on the Diseases of the Army*, pp. 144, 168.

<sup>205</sup> John Gaye or Guy entered the Blues as a cornet, 9 November 1723; lieutenant, 29 Jan. 1734; captain-lieutenant, 27 May 1742. As Buchanan notes (*ms.p. 151*), he died in Dec. 1743. WO 64/10, f. 7.

<sup>206</sup> On Wenman, see n. 133.

<sup>207</sup> Home reported that wine both slowed the rate and increased the strength of the pulse in patients with low fever. He noted, "It is but lately since physicians measured the velocity of the pulse with that accuracy that they do now." Falconer attempted to make the pulse a more useful diagnostic tool. Following up on an article by Heberden ("Remarks on the Pulse," *Medical Transactions*, II), he urged that rate be the only aspect of pulse to be consulted by the practitioner. While noting that instruments to measure pulse rate had been used earlier, notably by Sir John Floyer (1649-1734), he asserted that only recently had accurate ones been developed and even though these had come to be widely used, they were often poorly used. Falconer noted that average pulse tended to vary by sex (women typically faster), temperament (faster rates among fair-complected, sanguine types), and stature, as well as by time of day and other considerations. Setting the standard pulse at 75, he asserted that 96 marked the beginning of fever stage, 108 of hectic fever, 112 of peripneumony, 120 of

favorable than his look & breathing.

*Forestus scribit, in peste Delphica [...] nonnullos probum pulsum habuisse, et tamen mortuos esse quod quoque asserit Galenus.* vid: Diemerbroeck de pest. p:21.

103. et[c]<sup>209</sup>

100:

<sup>a</sup>Majr. Jenkinson<sup>210</sup> in the white of the left eye has a bloody Specke & when it encreases in bulke & Spreads large, it's an undoubted Sign that his body is then Plethoricke, requires bleeding. otherwise he is soon purcy & choaked up at breast, is then suddenly seized with

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inflammatory fever, and 130 of putrid fever or delirium. He then calibrated scales based on average rates (measured morning and evening) from 40 to 130. W. Falconer, *Observations respecting the Pulse; Intended to Point out with Greater Certainty, the Indications which it Signifies; Especially in Feverish Complaints* (London: T. Cadell, jr., and W. Davies, 1796), pp. 1-3, 6-8, 48, 67-157 (esp. p. 102); Home, *Medical Facts and Experiments*, pp. 121-25 (quotation p. 124).

<sup>208</sup> Buchan commented, "It has long been an observation among physicians, that the appearances of the urine are very unreliable and very little to be depended on"; he noted that such factors as passions and diet might alter it; nevertheless, he reported, quacks often diagnosed and prescribed entirely on the basis of urine. Classical authority, however, tended to favor urine as a diagnostic tool. James, relying heavily on Hippocrates and Galen, asserted that urine was often useful in diagnosis and prognosis. Most 18<sup>th</sup>-century authorities considered the appearance of urine in prognosis, especially in the case of fevers. Nevertheless, heavy reliance on uroscopy became increasingly associated with quackery. Buchan, *Domestic Medicine*, p. 91n; James, *Medicinal Dictionary*, under "urina"; Roy Porter, "I Think Ye Both Quacks': The Controversy between Dr Theodor Myersbach and Dr John Coakley Lettsom," *Medical Fringe & Medical Orthodoxy 1750-1850*, ed. W. F. Bynum and Porter [The Wellcome Institute Series in the History of Medicine] (London, Sydney, Wolfboro: Croom Helm, 1987), pp. 58-61; Pringle, *Observations on the Diseases of the Army*, pp. 256, 388-89.

<sup>209</sup> "Forestus writes that in the Delphic plague ... some people had an excellent pulse and yet died; Galen also asserts this." This passage is actually a quotation, though 1.2 in Diemerbroeck reads, "*mortuos fuisse quod quoque ipsum asserit*" ("... died; [Galen] asserts the same"): Ysbrand van Diemerbroeck, *Tractatus copiosissimus de peste* (Geneva, 1721), I, cap. vii, pp. 26-27.

<sup>210</sup> cf. n. 51.

a pain in the left cheek & Gum. face swells especially from catching cold, any slight debauch. & then bleeding & purging are necessary. this is a family distemper, his Sister is often affected in the same manner, & applies a Leech to the Gum. he was formerly subject to dangerous inflammations of the Lungs, Spitting blood &c: from which he has been free Some years, & thinks it changed to that in his face. when his tent is damp & wet, he is sure to be troubled with whizzing coughs & bad breathing, but recovers in dry weather.

101: [continuing from p. 99]

et Car: Piso Obs: Med: p. 222<sup>x</sup>.<sup>211</sup> Tulpis: Obs: p. 257<sup>212</sup>

*"Gallis celerior ac liberior est arteriorum pulsus. Germanis nutans titubansque pulsus, Belgis languidior. in Anglis Scotisque praesertim plenior acutiorque.[....] caeterum quovis sub coelo aliter iis vena micat. qui montium juga, aliter iis qui aperta incolunt aequora, aut subjectas montibus vallas, aut loca etiam nemorosa.*

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<sup>211</sup> On p. 222 (sect. iii, cap. iv) of *Selectiorum observationum et consiliorum*, noviss. ed. (Leiden.: Cornelii Boutestein and Joh. Arnoldum, 1714), Charles le Pois [Carolus Piso, d. 1633] asserts that in recognizing fevers associated with asthma neither the pulse nor urine is a good indicator. Instead, he advises that diagnosis of these fevers be confirmed by the presence of heat, internal and external, and of such accidental signs as lassitude, oppression at the breast, watchfulness, and thirst.

<sup>212</sup> Nicolaas Tulp, *Observationes medicae*, 6<sup>th</sup> ed. (Leiden: Georgium Wishoff, 1739), cap. xlix, pp. 356-57. Tulp (d. 1674) reports that a consul of Amsterdam, feeling slightly ill, checked his arterial pulse and was frightened when it intermitted, not knowing that he naturally tended to intermit. The physician suspected this and recognized his ignorance, and wished to frighten him away from such ill-considered arterial examination, which did more harm than good, exciting panic or terror, which could precipitate hectic fever. He then advised the consul that, as one experienced in assessing pulses, he regarded his as being in harmony and his body sound. Often, notes Tulp, a reading of the pulse by someone who is ignorant may be mistaken and bring on imaginary illness. It is more profitable to be encouraged than prostrate. Tulp concludes by quoting Celsus (De Med., III.5.11; cf. *Celsus*, trans. Spencer, I, 251), that it is best to withhold from patients anything that is likely to exasperate them, for they should be tranquil and be troubled in body only, not in spirit.

Abercromby de variatione ac varietate Pulsus<sup>213</sup>

*quot tamen artis Apollineae Professores reperias, qui pulsum ex consuetudine cum aegros invisunt, non ex arte sed comice attrahunt.* Ib:

Lectori<sup>C</sup>.<sup>214</sup>

[margin: Causes.] The principal cause of this fever is cold; all complaining they catch cold on Duty, patrolling the Streets in the night time, putting on a damp Shirts [sic], lying in damp sheets, being wet aforaging &c: few or none acknowledging their own private debauches. & such as have been sometime in the hole<sup>215</sup> are sure of it, with aching pains in the bones & cured by plentiful sweating<sup>a</sup> [*superscript in heavier ink*].

[margin: Pleuretick fever.] Par: 12th. Pleuretick fevers did not appear till Decr 1742

102:

[diagonal stroke through quotations]

<sup>C</sup>*Sermonis quoque et Silentii habenda est ratio, et dicere oportet quae velit aeger, videndumque quibus utitur Sermonibus, sintne magni, an multi, an veri, aut ficti:* Hip:

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<sup>213</sup> "In the French, the arterial pulse is quicker and freer. In the Germans, it wavers and falters. In the Belgians, it is more sluggish. In the English and Scots, it is much fuller and stronger... Otherwise, in any place you please under the sky, the pulse of the veins quivers [as among] those who live in mountains, open plains, mountain valleys or forested places"; The opening sentence, "*Gallis ... pulsus*," appears not to be in Abercromby; in l.2 of the quotation, the Abercromby text reads, "*in Belgis*"; in l.4, "*valles*": Abercromby, *De variatone pulsus*, p. 8. Home believed that the Dutch pulse was slower than was the English: *Medical Facts and Experiments*, p. 70.

<sup>214</sup> "Nevertheless, you may discover many teachers of the art of Apollo who, when they visit the sick, handle their pulses according to their custom, not from skill but handling in a comical way"; in l.1 of the quotation, Abercromby's text reads (*De variatone pulsus*, p. 9), "*artis etiam Apollineae*."

<sup>215</sup> The hole or "black hole" was a detention facility for soldiers who had committed minor crimes or infractions; note Hamilton, *Duties of a Regimental Surgeon Considered*, I, 35n.

de morb: vulg: lib:vi. S:vii.<sup>216</sup>

*Mentis quoque intelligentia videnda est, ut perseipsa constat, citra instrumenta et res externas, an tristia, aut gaudium, an metu, aut confidentia, an spe aut animi abiectione tentetur.* Ib.<sup>217</sup>

*Corpus quoque et actio in considerationem adhibeatur, tum visio, auditio, tactio, nasus, lingua et ratiocinatio.* Ib.<sup>218</sup>

vid: Cels: lib: iii. Cap:vi (*inquit*) *venis etiam maxime credimus, falacissimae rei; quia saepe istae lentiores celereoresve sunt, et aetate et sexu, et corporum natura &c.*<sup>x</sup> <sup>219</sup>

<sup>a</sup>fevers of this sort were frequent after coming into Garrison 1743. seldom lasting above 6. or 7. days, were not dangerous excepting to hard drinkers & several dyed; they drank too freely with their old pot-companions, talking of our German expedition &c. and seldom complained till it was too late. vid: Fred: Hoffmanni Op: Med: Tom: i. p.84. Lect.1. Cap.xi. de febribus Petechialibus veris.<sup>220</sup> et Ibid. Cap.x. de febribus Epidemicis,

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<sup>216</sup> "The sick person should have times of conversation also, and of quiet, and he should say what he may wish, and his conversation should be considered, whether he is loud or says a lot and whether what he says is true or false." Hippocrates, Epid. VI, 8.7; cf. Hippocrates, *Oeuvres complètes d'Hippocrate*, trans. and ed. Emile Littré (Amsterdam: A. M. Hakkert, 1973-89 [1839-61]), V, 347.

<sup>217</sup> "Also note the state of his mind and intellect, how it is in itself, apart from any medical treatment and anything foreign, whether he tends to be sad or joyful, fearful or confident, hopeful or despairing." Epid. VI, 8.10; cf. *Oeuvres complètes d'Hippocrate* (trans. Littré), V, 349.. "Tristia" (l. 2 of quotation) is rendered "tristitia" in Foës (*Magni Hippocratis Medicorum*, p. 1200, #28).

<sup>218</sup> "The body should also be considered: sight, hearing, touch, smell, tongue, and reasoning." Epidemics VI, 8.17; cf. *Oeuvres complètes d'Hippocrate* (trans. Littré), V, 351.

<sup>219</sup> "For the pulse upon which we mostly rely is a very deceptive thing, because often it is rendered slower or faster by age and by sex and by constitution"; Celsus De Med. 3.6.5; *De Medicina*, (trans. Spencer), I, 253.

<sup>220</sup> Buchanan appears to be referring generally to Hoffmann's discourse, "Of true petechial fevers," rather than to any particular aspect or point. In the chapter, Hoffmann describes the fever as malignant and contagious, characterized by extreme lassitude and petechiae or other

103: [continuing from p. 101]

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eruptions, and usually fatal. Such fevers are, according to Hoffmann, common in the army, because soldiers are often exposed to extreme weather conditions, are commonly fatigued, drink stagnant or putrid water, and are regularly exposed to marshy air and effluvia; however, he notes, the disease often makes its appearance when the troops are in winter quarters. Prevention, which consists of fresh air, regularity in the non-naturals, and moderation in drink, is easier than curing the disease. To cure, however, Hoffmann recommends administering acids like lemon juice or vinegar in a ptisan or similar drink. Since patients who spit freely usually survive, he further advises the use of expectorants like oxymel of squills. He notes that it is common to make use of sudorifics, hot liquors, or a warm regimen, for heating the patient is debilitating and promotes putrescence. The disease declines in sweat and flux, and nature is to be assisted with mild laxatives like cream of tartar and tamarinds. It is proper to bleed plethoric or sedentary types, though otherwise there are no general rules. Contrary to folk belief, it is preferable for the stomach to contain little food, since it is weakened. Hoffmann concludes with case histories, noting that among these the patients who were not bled died. *Opera omnia physico-medica*, I, sect. i, ch. xi, pp. 84-93; cf. *System of the Practice of Medicine*, I, 167-82.

<sup>221</sup> “Of fevers [called] epidemic, exanthematous, catarrhal, or even petechial.” Again, Buchanan appears to be citing an entire chapter. Hoffmann reports that malignant catarrhal fevers appear in the form of quartan remittents. The outstanding symptom is general prostration, with costiveness, headache, quick and weak pulse, labored breathing, pale urine, and usually, after several days, an outbreak of spots. Negative indicators include the starting of tendons, convulsions, cold extremities, or profuse sweats (though a warm sweat is positive). These fevers are epidemic and are usually associated with dramatic changes in weather, so are most common in spring and autumn. Recovery depends more on the constitution of the patient than on the physician; if the fluids of the patient are highly corrupt, recovery is doubtful. In any case, however, there are four general indications: to counter putrescence (using mild acids like vinegar and lemon juice, and dulcified acid spirits, as of sea salt); diluting and obtunding acrimonious humors (barley water, ptisans, weak chicken broth); promoting excretion, both cuticular (gentle diaphoretics) and alvine (glysters, manna, cream of tartar; and maintaining or enhancing strength (wine, waters, jelly of hartshorn, or lemon or orange juice). The patient is not to be allowed to become too warm, which will exhaust him and promote the corruption of the fluids, while excessive cold will check perspiration, repel eruptions, bring on hiccups and diarrhea, and disturb critical evacuations. The physician is to keep the air pure, perspiration free, work to keep up the patients' spirits, avoid overloading the stomach, use mild medicines only. Bleeding is to be done cautiously, and vomits are to be restricted to the first stages of the disease. *Opera omnia physico-medica*, I, sect. i, ch. 10 (vol. II, pp. 75-84); cf. *System of the Practice of Medicine*, I, 154-66.

and increased towards Spring, they attack suddenly & there's no time to be lost in attempting a cure.

*'Febres hyeme exortas [...] diligenti cura observare oportet.* Hipp: de affect:<sup>222</sup>

& Horace well advises

*Si latus aut renes morbo tentantur acuto*

*quaere fugam morbi.*

Ep:vi. lib:i.<sup>223</sup>

& in Sat:vi. lib:ii. V:147.

*Medicus multum celer atque fidelis,*<sup>224</sup> is now of the greatest use, & as Ovid advises rem: Amor: V:81.

*Opprime, dum nova sunt subiti mala semina morbi.*<sup>225</sup>

[margin: Method of cure] the general method of treating the above fever will answer the intention here;

[margin: Bleeding the chief remedy] bleeding is the chief remedy, & at first I bleed the patient till he is almost ready to faint, & sometimes fill a small punch bowell as I did with Cpt. Migelt<sup>226</sup> at Nottingham during the hard frost; sometimes stopping the orifice with my

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<sup>222</sup> "When winter fevers arise [...] one must take care and be observant"; Hippocrates, Affections, c.12; cf. *Hippocrates* (trans. Potter), V, 23.

<sup>223</sup> "If your chest or reins are assailed by a sharp disease, seek a remedy for the disease"; Hor. Ep. 1.6.28-29, *Horace* (trans. Fairclough), p. 289.

<sup>224</sup> "His physician, a man of very quick wit and a loyal friend"; Hor. Sat. 2.3.147; *Horace* (trans. Fairclough), p. 165); cf. n.138.

<sup>225</sup> "Crush, while they are yet new, the baneful seeds of sudden disease"; Ovid R.A. 81; *Art of Love, and Other Poems* (trans. Mozley), p. 183.

<sup>226</sup> Henry Migelt or Miget was commissioned a cornet in the Blues 12 May 1726; lieut., 18 July 1737; capt.-lieut., 18 Feb. 1745; capt., 12 Aug. 1752, dying in this rank on or shortly before 24 April 1755. He was one of three officers in the Blues listed as wounded in returns after Fontenoy. WO 64/10, f. 8; WO 64/11, p. 10; RADCP, Box 3/47; *City and Court Register*



thumb, then letting it bleed afresh, & repeating it as the case requires.

[*margin*: fomenting the part.] fomenting the part & rubbing with Ungt. Dialth: ol: recent<sup>227</sup> &c. it's a prevailing custom with the men to apply to the part a bag of hot oats heated in

104: [*facing p. 103; blank*]

105: [*continuing from p. 103*]

the frying pan, or a bag salt, or Scalded bran;

*et qua parte dolor detinet tepefacientia adhibeto.* Hip. de affect.<sup>228</sup>

[*margin*: Saponaceous & pectoral medecines.] Saponaceous medecines are of great service, pectorals usefull, those of the shops, viz: Dect: pectoral has many ingredients in proportion to the water & when boyled is too thick, should rather be prepared by infusion, is apt to pale the Stomach;<sup>229</sup> in all Sicknesses it should be the principale care of a physician to preserve the Stomach in good order. for when that failes, adieu to all remedies, & it is often spoiled by drugs rather than the distemper. I order the men Bran-tea, viz: taking a handfull of bran on which they power a quart or two of boyling water, adding a few figs or

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1746, p. 146; *AL 1754*, p. 16. On the treatment of pleurisy, see app. B-1.

<sup>227</sup> By "*ol: recent*," Buchanan probably means fresh olive oil. On *unguentum de althaea*, see app. C-1.

<sup>228</sup> "And when pain is present, warming materials should be applied"; Hip. Aff., c.10; cf. *Hippocrates* (trans. Potter), V, 19. For "*adhibeto*," Foës has "*admoveto*" (*Magni Hippocratis Medicorum*, p. 518).

<sup>229</sup> On *decoctum pectorale*, see app. C-1. Although the Pectoral Decoction was approved by a number of authorities, it may be that others shared Buchanan's belief that the drug was too thick. The "Dispensary" of 1746 does not include a pectoral decoction, but does provide a recipe for *Infusum pectorale*: two handfulls of ground-ivy leaves and two ounces of licorice root infused in a gallon of barley water. This relatively simple drug might have answered Buchanan's concern.

raisings [*sic*] or slyced Liquorice; this makes a pleasant drink & good pectoral,<sup>230</sup> quenching thirst when sharpened with juice of Lemon or Orange. they often drink Lintseed Tea sweetened with sugar candy, as a remedy for the cough.<sup>231</sup> in the night time have a little Juic: Liquorit: in their

106: [*facing p. 105; blank*]

107: [*continuing from p. 105*]

mouth to prevent the tickling cough & keep the throat moist. this is one of the best pectorals. it's only fault is that of being too common, & therefor by some despised.-- <or Trochis: Bech: Nigr.><sup>232</sup> [*interpolation in darker ink*]

***Multa viros nescire decet; pars maxima rerum  
offendat, si non interiora tegas.***

Ov. Art: Amat. lib:iii. V:229.<sup>233</sup>

infus: hispanic: Fuller: is an excellent medecine;<sup>234</sup> all oylly & greasy medecines spoile the

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<sup>230</sup> This is in fact similar in composition to *decoctum pectorale* (n. 230), but thinner, relieving Buchanan's main concern about that medicine.

<sup>231</sup> On linseed, see app. C-1.

<sup>232</sup> Troches, which were often classed with lozenges, were intended to be held in the patient's mouth until they dissolved. On *trochisci bechici nigri*, see app. C-1.

<sup>233</sup> "There is much that it befits men not to know; most of your doings would offend, did you not hide them within"; Ovid Art. Am. 3.229-30; *Art of Love, and Other Poems* (trans. Mozley), p. 135.

<sup>234</sup> Fuller's "Spanish Infusion" consisted of salt of tartar, saffron, and juice of Spanish licorice digested in heated spring water, then covered for 24 hours and finally strained. Fuller specified its virtues: [it] "edulcorates, maturates, incides, and expectorates." For a nighttime cough, such as the sort noted by Buchanan, Fuller recommended ½ pint of infusion taken cold at bedtime, while for a pectoral cold or catarrhal fever, he advised larger quantities, taken warm. *Pharmacopoeia Extemporanea*, pp. 227-28.

Stomach, should be gently acidulated and used with prudence.<sup>235</sup> Lac. Ammon:<sup>236</sup> with Oxymel Scillitic:<sup>237</sup> of great service in promoting expectoration.

[the following quotations are all vertically stroked]

*"ut autem sputum et pus ex pulmonibus sursum educatur, exhibenda sunt in potu medicamenta quibus pulmo humectatur, et pus per superiora repurgatur:* Hip: de affect.<sup>238</sup>

*ventrem vero subducente et refrigerante clystere eluere oportet;[...]*  
*exhibendus etiam potus et sorbitio. et potiones acidiores propinandae, ut sputum de latere per superiora educatur ubi vero pus repurgari coeperit quae latus calefaciunt conferunt, et exteriore parte lateri admovenda quae maturent:* Ib:<sup>239</sup>

[margin: Blisters.] A Blister applied to the part often removes

108: [facing p. 107; blank]

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<sup>235</sup> Thick medicines could be nauseating and difficult to get into the patient's system; in consequence, they were often thinned. Nevertheless, they were relied on when it was thought necessary to have a medicine cling (e.g., gum tragacanth, as used to treat ulcers of the esophagus). James, *A Medicinal Dictionary*, under "consistia."

<sup>236</sup> On *lac ammoniacum*, see app. C-1, under entry for gum ammoniacum.

<sup>237</sup> On *oxymel scilliticum*, see entry for squill, app. C-1.

<sup>238</sup> "But in order that sputum and pus may be brought upwards from the lung, give medicinal drinks by which the lung is moistened and pus cleaned upwards"; Hip., Aff., c.9; cf. *Hippocrates* (trans. Potter), V, 17, 19.

<sup>239</sup> "Moreover, one ought to clean the cavity [i.e., gastro-intestinal tract] downwards by giving a purging and cooling enema.... Administer also drinks and broth. And acidulated drinks should be given quickly, in order that the sputum from the side will be cleaned through the upper parts. When the pus begins to be cleared, bring the material lying against the chest wall to maturity by warming the side from the outside"; Hip., Aff., c.7; cf. *Hippocrates* (trans. Potter), V, 15, 17.

109: [continuing from p. 107]

the Stich; & when applied without forewarning the patient there are no great complaints; but if You mention a blister, he will plead an excuse, saying he is yet not so bad & beg to put it off till to morrow. if You tell him of a plaister to the part he is well pleased & applies it with pleasure, nor are his complaints troublesome. I have blistered a Trooper for Sciatic complaints, has mounted Guard & discharged his Duty, without much pain; but in pleuretick cases one day's delay may cost the patient's life.

*"Opportunitates autem (ut semel dicam) multae sunt, in arte et varie, velut et morbi et affectiones, eorumque curationes. ac celerimae quidem sunt=[...] et haec quidem celeres, neque confert paulo post cum plaerique paulo postea moriantur. Hip: de morb:<sup>240</sup>*

*Principiis obsta. sero medicina paratur  
cum mala per longas convaluere inoras.  
sed propera; nec te venturas differ in horas,  
qui non est hodie, eras minus aptus, erit.*

Ov. rem: Amor: V:91.<sup>241</sup>

all the men recovered excepting one, viz: Christmas of Cpt. Wenman's, an old Drammer & gross habit of body, & dyed

110: [facing p. 109; blank]

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<sup>240</sup> "But (to make the point once and for all) opportune moments in the art [of medicine] are many and varied, just as are the diseases and conditions and their treatments.... These opportunities demand haste, and a little later does not suffice, for a little later most patients die"; Hip. Morb. I, c. 5; cf. *Hippocrates* (trans. Potter), V, 107.

<sup>241</sup> "Resist beginnings; too late is the medicine prepared, when the disease has gained strength by long delay. Ay, and make haste, nor wait on the coming hours; he who is not ready to-day will be even less so to-morrow"; Ov. Rem.Am. v.91-94; *Art of Love, and Other Poems* (trans. Mozley), p. 185.

111: [continuing from p. 109]

the ninth day. his blood extremely siezy<sup>242</sup> & green coloured.

*oritur autem hic morbus ex potu praecipue.* Hip: de affect.<sup>243</sup> --

he never could be brought to expectorate --

*"si pus ex latere repurgatum et per Sputum rejectum fuerit, sanus evadit; si vero minime expuatur [...] longius protrahitur.* Ib.<sup>244</sup>--

I'm perswaded this disease is often prevented by bleeding largely at the beginning & keeping a proper Regimen, & the complaints are so violent as to oblige the men to complain on the first attack --

[the following quotations are stroked vertically]

*'febris ardens, phrenitis, pulmonum inflammatio, angina, Uva, lateris dolor, cito ad judicationem perveniunt.* Hip: de morb.<sup>245</sup> --

*hi quidem acuti vocantur, et maximi quidem et vehementissimi hyeme oriuntur.* de affect<sup>246</sup>

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<sup>242</sup> Buchanan would probably have taken this to suggest a high degree of inflammation.

<sup>243</sup> "This disease generally arises from drinking"; Hip., Aff., c.7; cf. *Hippocrates* (trans. Potter), V, 17.

<sup>244</sup> "If within this period [i.e., 7th-14th day of illness] the pus is purged away from the side and expelled through sputum, [the patient] recovers; but if little is expectorated ... the disease drags on long"; Hip., Aff., c.7; cf. *Hippocrates* (trans. Potter), V, 17.

<sup>245</sup> "Ardent fever, inflammation of the lungs, angina, inflammation of the uvula, and pain in the side [i.e. pleurisy] reach their crises quickly"; Hip. Morb. I, c. 3; cf. *Hippocrates* (trans. Potter), V, 105. Tissot advised that patients with "ardent or burning fever" should: be bled repeatedly; be given enemas; be bathed once or more per day in warm water; and, for dilution, be given ptisans or almond milk in large quantities. Tissot, *Advice to the People*, pp. 123-25.

<sup>246</sup> "These are called 'acute', and occur most frequently and violently in winter"; Hip. Aff. 6; cf. *Hippocrates* (trans. Potter), V, 15.

*ex hoc morbo pauci evadunt.* Ib: de morbi lib:ii<sup>247</sup> –

Nixt Spring we marched to Brussels arrived there Febry 27th O:S: & quartered in Barracks rather better than at Ghent, being all inhabited houses with good fires or stoves; the men cook'd for themselves as at Ghent.<sup>248</sup> were no sooner arrived when

112: [facing p. 111; blank]

113: [continuing from p. 111]

[margin: Slight pleuretick fevers 1743.] many men, some Officers & Servants complained of colds, stiches about the breast cough, violent headach, eyes bloodshot, pulse quick; required large bleeding<sup>249</sup> & gentle purging, &c : taking pil: pectoral: nostr: cum infus: Hispanic: Fuller:<sup>250</sup> Some naturally inclined to sweat which was promoted with Ther:

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<sup>247</sup> "From this disease, few escape"; Hip. Morb. II, 46; cf. *Hippocrates* (trans. Potter), V, 267. In Foës (*Magni Hippocratis Medicorum*, p. 475), the wording is "*Ex hoc autem morbo....*"

<sup>248</sup> Each British soldier was assigned to a mess of six men. Officers and soldiers' wives typically had their messes, as well. The mess was generally responsible for distributing and preparing rations, and, in the settled situation to which Buchanan refers, it was usual to have one man cook, often in a common pot, for his mess. On the laxness of messing, see n. 19.

<sup>249</sup> On pleurisy, see app. B-1.

<sup>250</sup> "Our pectoral pill with Fuller's Spanish Infusion [cf. n. 234]." The pectoral pill mentioned by Buchanan may have been similar to a pill that, according to *Practice*, was used as a pectoral in army hospitals. It consisted of spermaceti and sugar candy, ground together, in a base of balsamic syrup. To combat the aches and pains associated with colds, Theobald recommended that the patient rub a little opodeldoch (app. C-1, under "saponaceous preparations") on the affected part 2-3 times per day and wear flannel; if that did not work, he advised taking 20 drops volatile tincture of guaiacum (app. C-1), morning and night, in spring water. In the case of violent coughs, Brocklesby recommended venesection as most necessary. Light diet and nitrous drafts, he observed, usually effected a quick cure. Brocklesby, *Oeconomical and Medical Observations*, pp. 116-17; *Practice of the British and French Hospitals*, pp. 68-69; Theobald, *Every Man His Own Physician*, p. 1.

Androm: & Sal: V:C:C.<sup>251</sup> as they recovered Scabs broke out about the mouth, lips & nose;

[*margin:* were very common tho not dangerous.] this was very common tho not dangerous, all our men recovering in five or six days.

[*margin:* four Officers taken ill in one night & two nixt morning.] four of our officers were taken ill in one night, & two nixt morning. few of our women & children escaped the distemper & all recovered. Senna tea<sup>252</sup> was their common medicine; it run over the whole garrison.

[*margin:* was common with the inhabitants.] it was common with the inhabitants, especially amongst children, generally going thro the whole family, and called la fièvre catarrhale,<sup>253</sup> bleeding & pulv: Pleuretic: of the town's dispensatory<sup>254</sup> was their universal medicine.

[*margin:* was Epidemick & universal.] was Epidemick all over Europe by accounts from News-papers. Dr. Pringle was then at Aix la Chapelle with Lord

114: [*facing p. 113; blank*]

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<sup>251</sup> On theriac Andromachi (under "opiates") and volatile salts of hartshorn ("cornu cervi"), see app. C-1.

<sup>252</sup> Senna tea was not only laxative but a coolant; note app. C-1.

<sup>253</sup> "Catarrh" was a vague term, often used adjectivally as a qualifier. Catarrhal fever or "febrile catarrh" was frequently equated with "influenza" after the latter term was introduced into English in 1733. Wallis complained that some writers called quinsy or croup "suffocating catarrh," which he considered quite different: "*that* being an inflammatory affection of the branches of the windpipe, requires bleeding, which might be highly serviceable; *this* being spasmodic, bleeding would be as injurious": *Art of Preventing Diseases*, p. 448. On treatments, see app. B-1.

<sup>254</sup> The *pulvis pleureticus* specified in *Pharmacopoea Bruxellensis*, 2nd ed. (Brussels, 1739), p. 67, was a powdered mix of tooth shavings, poppies, stag's penis, crab's eyes (the stony accretions on crayfish), burdock root, goat's blood, and saffron.

115: [continuing from p. 113]

Stair, wrote a short account of it in that place,<sup>255</sup> begging the same from me; says of the few Officers there, he had more Patients than when at Ghent with that numerous Garrison, or could have had, had he been the only Physician: calls them colds in the shape of coughs, stiches & slight inflammations, with a sort of half feverishnes. had himself for a Patient & blamed at first the sunk Situation & Sulphurous air. I imagined it was greatly promoted amongst our men from their being quartered in publick houses, the Beer much better than at Ghent, cheap & good measure, & they indulg'd pretty freely, sitting much by the Stoves, we had pleasant Sunshine weather, yet the air was cold, mornings frosty & winds N:E: the Officers dress more & change cloaths oftner than in last quarters & therefor more subject to catch cold, the ramparts are very pleasant & evening walks were frequent. had it not appeared Epidemical & universal, both

116: [facing p. 115; blank]

117: [continuing from p. 115]

Dr Pringle & I would have remained satisfied with our own private theory.

[margin: fever with Eruptions.] Par: 13th. Slight fevers with a slight rash on the Skin appeared about the beginning of Janry 1743. resembling bug-bites, continued three or four days, going off without any dangerous Symptoms. were treated in the cool Regimen & scarcely required medecines.

[margin: Method of Cure.] if the fever threatned to be too high at first it was necessary to bleed; the men continued in bed with their usuale covering only, drinking warm-

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<sup>255</sup> Pringle refers to the epidemic, which he calls "influenza," in *Observations on the Diseases*, p. 16.



<small>-punch with Lap: Contrayerv:<sup>256</sup> to promote a breathing sweat. when the Eruptions disappeared were purged with infus: Senn &c:

[*margin:* neither common nor dangerous.] this was not common, nor dangerous, all recovering.

[*margin:* more frequent in Spring 1744.] It was more common in spring of 1744. & with some Physicians bleeding was much in vogue, in a few days the Patient lost 60, 70, 80, 90, Ounces, which was attended with bad success for few recovered. I seldom blooded unless difficult

118: [*facing p. 117; blank*]

119: [*continuing from p. 117*]

breathing or Stich &c: forced me, & all my men did well; a gentle sweat was always good. the Patient often blooded at the nose a small quantity about the latter end of the Disease, the blood very thin. When the pulse sinks from bleeding too freely its not easly raised by medicines.

[*margin:* & nixt Campn] this was frequent nixt Campn & treated in the same manner & same success tho in the field, all did well excepting one woman who had it to a great degree her whole body of a deep scarlet colour, lay in a cold damp tent, being wet weather, & instead of drinking something warm, would take nothing but cold green tea. dyed the 3d day Augst. 28th.

[*margin:* & in Spring 1745.] this was common in Spring 1745 tho not dangerous & the same method succeeded.

[*margin:* Rheumatick fevers.] Par: 14th. Fevers with Rheumatick complaints were frequent but neither dangerous, nor difficult to cure. the common method of treating fevers

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<sup>256</sup> App. C-1.

in general answered

120: [facing p. 119; blank]

121: [continuing from p. 119]

the intention.

[margin: Method of Cure.] if Rheumatick complaints continued Bol: nostr: ad Rheumatis:<sup>257</sup> always removed them being repeated some nights with proper Regimen. The men use Mountaine flax seed infused in boyling water, drinking a cup or two till it purges. proves a rough purge & is often successfull.<sup>258</sup> fomenting the part & rubbing with Lint: Volatil: nostr. covering with flannel or fur of Hare or Rabbite<sup>259</sup>. a Spoonfull of Mustard seed bruised<sup>260</sup> & taken in a Spoonfull of warm water at different times, was a good medecine. all did well, none required the hospital, nor were they tedeous of cure;

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<sup>257</sup> The active ingredients in this bolus may have been the same as in the army's *electuarium rheumaticum* ("electuary in a rheumatism"), which was composed of cinnabar, gum guaiacum, and Winter's Bark, in a base of conserve of orange peel and syrup of orange peel. On these ingredients, see app. C-1 (cinnabar under "mercurials"). According to Theobald, the cinnabar and gum served as "powerful Attenuants," promoting a perspiration that would relieve rheumatism -- a disease that, in his estimation, was caused by "an Obstruction of the Pores, and the Blood, from too great a Siziness, being sluggish in its Circulation, distends the Vessels, and causes those uneasy Muscular Sensations." Theobald warned against using this electuary on patients who showed symptoms of inflammation, "as it would be adding Heat to Heat in Contradiction to the very first Elements of Physick." Even when there was no inflammation, he recommended that patients be purged and bled before the electuary was administered. Theobald, *Medulla medicinae*, pp. 32-33.

<sup>258</sup> On mountain flax, see app. C-1.

<sup>259</sup> Rheumatic diseases were considered cold, so remedies tended to be warm, in this case, liniment and warm coverings. The recipe for the *linimentum volatile* (volatile liniment) used in the army is not known, but the recipe in the *Pharm. Lond.* of 1746 was composed of oil of almonds (note App. C-1 entry for almonds) and spirit of sal ammoniac, shaken together.

<sup>260</sup> On mustard, see app. C-1.

[margin: Cause.] all blamed cold as the first cause.

[margin: Quinsies] Par: 15th. Quinsies were frequent but not dangerous, & treated as the above fevers.

[margin: Method of Cure.] on the first complaint I bleed largely, even though the pulse be not feverish. wash the mouth often with warm broth or fig tea.

*deinde ficus aqua decoquito, Rhois triti parvam portionem hoc ficuum Decocto macerato, coque si possit ad Gargarismum utatur, sin minus, os*

122: [facing p. 121; blank]

123: [continuing from p. 121]

*colluat:* Hip: de morb: lib: ii.<sup>261</sup>

I always use pulv. ad extrahend. Salivam nostr.<sup>262</sup> in order to make them slabber & it's surprizing the great quantity of Spittle discharged from the Glands of the mouth. if the Glands of the fauces appear very red & seemengly inflammed, I make small incisions with the point of my Bistouri<sup>263</sup> in order to make them bleed, to the immedeate relief of the Patient

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<sup>261</sup> "Then boil down figs in water, pour off the water, grind sumac [Hippocrates may have intended corn-poppies], and heat a little of this in the fig-juice; if [the patient] is able, he should gargle, but if not, wash his mouth"; Hip. Morb.II c.28; *Hippocrates* (trans. Potter), V, 243. For "*Gargarismum*" (1.2), Foës (*Magni Hippocratis Medicorum*, p. 470) has "*gargarisandum*."

<sup>262</sup> This "powder to draw out saliva" is not listed in the "Dispensatory" of 1746. Most of the sialogogues were mercurials, and this nostrum may well have been such. James, *A Medicinal Dictionary*, under "sialogoga."

<sup>263</sup> Bistouries were standard issue to army surgeons, and were regularly included in the medical chests that were supplied to them, as shown in the list of materials and instruments in RADCP 2.24. Bleeding was a common treatment for quinsy. Tissot recommended that sufferers be bled 4-5 times in the first few hours of treatment. Buchan allowed for bleeding in inflammatory quinsy (which he believed was in some cases caused by neglect of prophylactic venesection), but he warned strongly against it in the treatment of malignant

& prevent a suppuration, & sometimes apply Leeches externally<sup>a</sup>. observing the good effects of Blister in the pleuretick Stich, I apply one to the throat, & seldom failed of Success. if the Uvula be relaxed gargle with Brandy & Vinegar or Aq: Alum:<sup>264</sup>

*"at si fauces inflammatione tentantur, oris collutionibus utendum. si vero Gingivae aut pars quaedam sub Lingua inflammatione detineatur iis quae manducantur utendum[....] si uva suspensa fuerit et suffocationem faciat [...] confestim quidem Gargarismis apparatis.* Hip: de Affect:<sup>265</sup>

Troopers wives often apply a warm

124:

[*stroked through vertically*]

<sup>a</sup>the parotide Glands often swell from colds. I endeavour to disperse them by Ungt. Mercurial.<sup>266</sup> keeping warm with flannel, the men do not desire they should suppurate: are

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quinsy (putrid sore throat). Buchan, *Domestic Medicine*, pp. 200-01, 207; Theobald, *Every Man His Own Physician*, p. 30; Tissot, *Advice to the People*, p. 61.

<sup>264</sup> All medicinal astringents were thought to brace and tighten weakened parts of the body. Quincy divided them into two types: "such as act by the Asperity of their Particles, whereby they corrugate the Membranes, and make them draw up closer; or such as thicken the Fluids, whereby they cannot run off so fast as before"; generally, however, the term was applied to the former type. Alum (app. C-1), one of the strongest astringents, was often used to treat (Brookes's words) "Relaxations of the Uvula," while brandy and vinegar (app. C-1), although milder, served the same purpose. Vinegar was among the most common gargles. On *aqua aluminosa*, see app. C-1, entry for alum. Brookes, *General Dispensatory*, p. 7; Quincy, *Lexicon Physico-Medicum* (1719), p. 32.

<sup>265</sup> "But if the throat becomes inflamed and swollen, give gargles.... But if the gums or any of the parts beneath the tongue swell up, use medicine that can be chewed.... If the swollen uvula hangs down and causes suffocation ... at once give gargles"; Hip., *Aff.*, c.4; cf. *Hippocrates* (trans. Potter), V, 13.

<sup>266</sup> *Unguentum mercuriale* (app. C-1, under "mercurials") was often used in the treatment of cutaneous problems, as an alterant, but obviously in this case it was applied for its other main purpose, to raise a salivation. As Quincy notes, during the 18th century the ointment was "In

afraid of Scars in these parts.

125: [continuing from p. 123]

Dishcloath to the Throat, & sometimes a hot loafe.

*"exteriore autem parte collo et maxillis cataplasma ex farina calida, in vino et oleo cocta imponito, et panes calidos admoveto. Hipp: de morb: Lib: ii.<sup>267</sup>*

putting the warm Stocking round the throat at bedtime is an old Scotch cure. they were very frequent in the Spring, & treated as above. this is one of the most common Camp diseases & the following is a favourite medecine with many. **Rx Gum: Guajac: pulv: scr.ii. Rob. Sambuc: gr.S: ut s. bol: h:S: Sumend:**<sup>268</sup> some make it up with Theriac: Androm.<sup>269</sup> –

*"cucurbitulam admoveto deinde Spongiam calida maceratum cervici et maxillis apponito, aquam mulsam aquosam ad os colluendum exhibito, et ptisanæ succum*

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very general use for mercurial frictions." Although not listed in the "Dispensatory" of 1746 it is included in several later comparator lists, always in the strong variety (*ung. mercurius fortius*), which included balsam of sulfur. Brookes, *General Dispensatory*, p. 343; Lewis/Rotheram, *New Dispensatory*, pp. 570-71; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 830. To treat swelled parotids, Tissot recommended no medicine (assuming that fever was not present), but only keeping the affected region covered and maintaining a light diet. Home believed that swollen parotids in remittent cases represented the body's attempt to create a critical discharge. He recommended Aethiopic mineral (app. C-1, under "mercurials") to reduce them. Home, *Medical Facts and Experiments*, p. 142; Tissot, *Advice to the People*, p. 65.

<sup>267</sup> "But on the lower part of the neck and jaws place a cataplasm made from warm flour boiled in wine and oil, and still warm, and apply warm bread": Hip., *Morb. II*, c. 28; cf. *Hippocrates* (trans. Potter), V, 243.

<sup>268</sup> "Take 2 scr. powdered guaiacum gum and ½ gr. elderberry rob, to make a bolus taken at bedtime." On elderberries (entry for "elder") and guaiacum, see app. C-1. Elderberries and guaiacum individually were popular as cold remedies

<sup>269</sup> On theriac, cf. entry, app. C-1. In this case, it was probably used to procure sleep.

*forbere cogito[.]* Hip: de morb: lib:ii.<sup>270</sup>

[margin: Coughs.] Par: 16th. Coughs were frequent<sup>271</sup> & treated with Pectorals as in Par: 12th.

[margin: Method of Cure:] Bals: Sulphur: Anisat:<sup>272</sup> was the most universal & great favourite with the men. to which I often added a small quantity Laud: & is a good medicine in old habituale

126: [facing p. 125; blank]

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<sup>270</sup> "Put a cupping-glass on it. Soak a sponge in warm water, and apply it against the neck and jaws.... To drink give dilute melicrat, which moistens the mouth; make the patient drink barley-water"; Hip., Morb. II, c.27; cf. *Hippocrates* (trans. Potter), V, 239, 241. For "exhibito" (1.2), Foës (*Magni Hippocratis Medicorum*, p. 470) has "exhibeto."

<sup>271</sup> James Carrick Moore thought coughs to be more common in England than perhaps anywhere else: *An Essay on the Materia Medica: In Which the Theories of the Late Dr. Cullen are Considered; Together with Some Opinions of Mr. Hunter, and Other Celebrated Writers* (London: T. Cadell, 1792), p. 280.

<sup>272</sup> *Balsamum sulphurous anisatum* is discussed in app. C-1. It is not listed in the "Dispensatory" of 1746 or in any comparator list, which may suggest that the popularity mentioned by Buchanan did not last. As a class, balsams had both fervent advocates and strong detractors. Among the former was James, who wrote, "their Virtues are as great as those of any other Class of Medicines whatever, since they are suited to all Constitutions, easily incorporated with all other Remedies, and exquisitely calculated for subduing and removing almost all Diseases." Perhaps aware of the controversy, however, he added, "Physicians have not as yet sufficiently discover'd the Virtues and Efficacy of Balsamics in the Practice of Medicine; since they are far more powerful and efficacious than is commonly believed." During the course of the century, writers like Hooper came to restrict the term balsam, which had formerly been applied to "any strong-scented, natural vegetable resin of about the fluidity of treacle," to resins that contained benzoic acid, e.g. balsam of Tolu (n. 461). Other writers, however, used the term more loosely. To Turton, balsams were "those medicines by which the vital heat is increased, or restored." James, *Medicinal Dictionary*, under "balsamum"; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 95-96; William Turton, *A Medical Glossary: In which the Words in the Various Branches of Medicine are Deduced from Their Original Languages; Properly Accented, and Explained* (London: J. Johnson, 1797), p. 121, under "balsamica."

127: [continuing from p. 125]

coughs.<sup>273</sup> Ol: Lini is much esteemed by some but is often so rancid & smells so strong that few Stomachs can bear it, unless it be fresh drawn.<sup>274</sup> the best common sweat Oyle is often preferable to it. water Gruelle sweatned with honey<sup>275</sup> is the best Supper & an excellent remedy. private Receipts are common, & the following is a favorite with our Men. **Rx.**  
**Cons: rosar: rubr. pulp: papular: major. aa oz.ii Bals: Sulphur: Anisat: gtt.40. M.cap: M.N:M: h.S:**<sup>276</sup> Trochis c: Bech: nigr:<sup>277</sup> I often substitute in place of Succ: Liquirit: which is so commonly known that it scarcely passes as medecine.

[margin: one of the most common deseases & often incurable.] This is one of the most common Deseases & most difficult to cure in many cases. & people are surprized we cannot cure a cold for which every body has his own favorite medecine,<sup>278</sup> but dissection

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<sup>273</sup> On laudanum, see app. C-1.

<sup>274</sup> On linseed oil, see app. C-1.; n. 231.

<sup>275</sup> Note entry for honey, app. C-1. Honey was valued as a pectoral, among other things, and that accounts for its use in the case Buchanan refers to here. He also uses honey as a laxative; cf. below, p. 143. When given orally, honey was usually mixed in water or another liquid (as in the case noted by Buchanan).

<sup>276</sup> "Take 2 oz. each of conserve of red roses and pulp of Majorcan raisins with 40 drops of anisated balsam of sulfur. Mix capsules M.N.M. [*moles nucis moschate*; i.e. in the size of a nutmeg], to be taken at bedtime." On conserve of roses (under "roses") and raisins, see app. C-1.

<sup>277</sup> On *Trochisci bechici nigri*, see app. C-1.

<sup>278</sup> Buchan noted that in order to promote perspiration, "Many attempt to cure a cold, by getting drunk"; he cautioned against this practice, claiming that it encouraged inflammatory conditions. Most authorities recommended that cold sufferers follow a mild diet, supplemented by warm drinks. Cheyne advised that colds be treated as moderate fevers would be, with mild diaphoretics like contrayerva or Mindererus's spirit. To prevent them, he recommended both sweats and cold baths, to brace the fibers. Buchan warned that neglected colds often brought on fatal diseases, so it was important to prevent them; he added, "It is a true saying, that colds kill more than plagues." Heysham reported that many cases of consumption began with a cold, noting that this showed that colds should not be

often Shows them to be incurable. Joyener of captn Wenman's was always subject to cough & pain at breast, & his Captn. wondered I could not cure him, for he was seldom relieved

128: [facing p. 127; blank]

129: [continuing from p. 127]

by medecine. of a florid complexion, could hardly walk being presently out of wind from the least exercise, was naturally sober & greatly Hypochondriack.<sup>279</sup> was taken suddenly ill Feby 17th 1744. with laborious breathing, pulse quick, ghastly countenance; eyes fixed & senseless, knew none of his Comrades & could not speake. stools & urine involuntary. was

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trifled with. According to Tissot, colds were widely regarded as minor, even salutary, and beyond the power of medicine to cure or moderate. He recommended that colds be treated like other inflammatory diseases like quinsy: bleeding if symptoms were severe; by bathing the feet in warm water every night; by light diet (enough by itself in mild cases). advised that cold sufferers not drink hot water or spirits or take fatty remedies or aliments like spermaceti. Steams of warm water he found useful for head colds. Tissot noted the common tendency to prescribe troches and while not condemning this form of medicine he preferred simple licorice juice. Buchan, *Domestic Medicine*, pp. 93, 210-11; Cheyne, *An Essay of Health*, pp. 102-04; Heysham, *Observations On the Bills of Mortality, In Carlisle, for 1780*, p. 3; Theobald, *Every Man His Own Physician*, p. 9; Tissot, *Advice to the People*, pp. 69-74.

<sup>279</sup> There was general agreement on what physical symptoms characterized hypochondria: lethargy, lack of appetite, chronic pain in the chest and abdomen. Many writers noted that its onset followed a period of watchful waiting and that it was often attended by melancholy. Some associated with it a morbid preoccupation with illness and reported that in extreme cases, patients exhibited suicidal tendencies. Sydenham estimated that one-sixth of his patients suffered from hypochondria or hysteria -- he and his disciples saw them as the same disease, distinguished only by the sex of the patient -- and Trotter claimed to see the malady in two-thirds of his. Although there was disagreement on the cause of the disease, and treatments were often conditioned by the whim of the patient, it was common to provide some stimulant and to keep the patient under surveillance. Rollo reported, "A Careful attention to prevent the patient from being by himself, a change of situation, exercise, chalybeate preparations, and cold bathing, if no topical affection existed, were the means we found most successful." Esther Fischer-Homberger, "Hypochondriasis of the Eighteenth Century -- Neurosis of the Present Century," *BHM*, 46 (1972), p. 391; Rollo, *Observations on the Diseases on St. Lucia*, p. 89; Wallis, *Art of Preventing Diseases*, pp. 510-15.



blooded and blistered to no purpose, continued till nixt day & dyed about Noon.

[*margin: Dissection No. 1.*] I had the curiosity to open the body, the left lung was entirely useless, nothing remaining but a membranous Substance; thick & strongly adhering to the Pleura, could not be inflated. the right lung was large & in some parts adhering to the Pleura & Diaphrame, inflammed, the blood very thick & black, neither tubercles or ulcers. the heart large & much water in pericardium, very red coloured: in the right Ventricle a large Polypus, bigger than a common Walnut, when washed was white & firm, of a tough Substance

130: [*facing p. 129; blank*]

131: [*continuing from p. 129*]

resembling a common Ligament. the same Substance was found in the pulmonary Artery about eight Inches long; & in the ascending Aorta was one of the same colour & substance; many other pieces of the same substance in other blood vessells<sup>x</sup>. the Spleen large & weighing three pounds & half, & some don't weigh above four ounces.

[*margin: No.2.*] a Polypus of the same nature was found in Wells of the King's Troop.<sup>280</sup> he dyed suddenly; was always subject to a cough & seldom relieved by medecine; of a fine florid complexion & purcy on the least motion.

[*margin: No. 3.*] Aranthrow's left lung adhered strongly to the Pleura & was perfectly Schirrus, some parts gristly & could not be extended by blowing air, & adhered so strongly to the Spine that it could not be seperated without tearing the Substance. the upper part of the right lung adhered to Pleura & Spine, was become Schirrous & gristly\*. this man dyed suddenly & a Polypus suspected, but no such thing found. all the viscera sound.

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<sup>280</sup> The troop commanded by the captain-lieutenant of the Blues -- at this time, Henry Miget (n. 226) -- was known as the "King's Troop." Arthur, *Story of the Household Cavalry*, II, 418n.

132: <sup>x</sup>Vid. Pechlini obs: Med: lib:ii. No.1.<sup>281</sup> – Fred: Hoffmanni Op: Med: Tom: 3. p.277. de subita morte et morbis aliis in sana bilibus, ex vitali Sanguinis per Polypos intercepto circuitu ortis prudenter praecavendis<sup>282</sup> –Ibid: Tom: 3. de usu Anatomies in praxi Medica<sup>283</sup> – Tom:6.

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<sup>281</sup> Johann Nicolaus Pechlin, *Observationum physico-mediciarum libri tres, quibus accessit, Ephemeris vulveris thoracici & in eam commentarius* (Hamburgi: Libraria Schultziana, 1691), II, obs. i, 201-03 ("polypus cordis veris" ["genuine heart polyp"]). Pechlin notes while great authorities such as Tulp, Bartholinus, and Malpighi, have no doubt that heart polyps exist, Theodor Kerckring disagrees and has imputed error to those who thought differently, but Pechlin wishes to defend the authority of the distinguished men that Kerckring has disparaged. While he doubts that Kerckring has ever seen a true heart polyp – and for this reason has an erroneous sense of its nature – he himself has, notably in an Ethiopian woman whose case he had discussed in an earlier treatise. Pechlin then describes this type of polyp. (For the notes on this and the other chapters in Pechlin referred to by Buchanan [nn. 305, 812, 847], I wish to thank Darrel Amundsen.)

<sup>282</sup> "Of the prevention of sudden death and other incurable disorders, from an interruption of circulation or the blood by polyps." Hoffmann, *Opera omnia physico-medica*, III, cap. x, pp. 277-84; cf. *System of the Practice of Medicine*, II, 324-28. According to Hoffmann, the most common cause of sudden death, as revealed by dissection, were fibrous concretions or "polyps" that clogged blood vessels. Their presence might be diagnosed on the basis of: difficulty in breathing without apparent cause; fixed pain in the heart; frequent palpitations and anxieties from slight causes like exercise; frequent fainting; or irregular pulse. A sign of predisposition to polyps, if not their existence, was that blood drawn in venesection and injected into warm water concreted into white gelatinous filaments. Polyps could not be cured, but might be prevented or contained, through: spare diet; exercise (especially important for those obese, plethoric, or sedentary); diluting drinks; clean temperate air; avoiding extreme passions; free excretion of all kinds; taking aperient and resolvent medicines (esp. mineral waters, which worked best at dissolving fibrous particles that could cause concretions. Caroline waters might help to resolve gelatinous polyps. If a polyp had concreted, one might seek to change its place or prevent it from growing by keeping the blood fluid and not redundant. If the patient had difficulty breathing, venesection was undesirable, since it might cause an even greater accumulation. Practitioners needed to be warned against the practice of suppressing hemorrhages and fevers with astringents, for this was one of the most common causes of polyps. Hoffmann did, however, advise bleeding when palpitations were caused by plethora; note James, *A Medicinal Dictionary*, under "palpitatio."

<sup>283</sup> "Of the use of anatomy in the practice of medicine." *Opera omnia physico-medica*, VI, pt. 2, cap. 5, pp. 124-34; translated in James, *Medicinal Dictionary*, under "anatome." Hoffmann encourages a sense of anatomy that incorporates not only the identity of each part but its function and association with every other. He regards the importance of anatomy to

*\*Medendi enim ars circumscripta, interque certos limites contenta est. neque id*

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surgery to be generally accepted but criticizes the Stahlians (without naming them) for ignoring anatomy on the grounds that the body is merely a passive agent of the soul. Likewise, he criticizes the ancients, and dismisses much of their speculation, for disregarding anatomy while making the body a servant of nature. Hoffmann argues that discovery of the circulation of the blood has rendered obsolete ancient concepts of physiology. He explains death in terms of the deterioration, in old age, of the circulatory system and the ability to eliminate waste through sweat. While emphasizing the importance of fluids in maintaining health, he denies the existence of the humors as defined by the ancients, and criticizes their tendency to treat disease with powerful purgatives like colocynth and scammony. He further asserts that the large number of drugs used by them suggests a confused practice (James criticizes him for generalizing here and unfairly lumping Hippocrates in with later, more philosophical, physicians), since disease could be properly handled with a few, well-chosen medicines, and he adds that many of the most-effective drugs (e.g. mercury, antimony, volatile and neutral salts) were unknown to them). In the treatment of chronic diseases they relied on regimen and phlebotomy, and enjoyed success only because of the lucky circumstance of the temperate climate that prevails in Greece and Italy, while in the north diseases are more deeply rooted and serious. Turning to the implications of anatomy for contemporary practice, Hoffmann asserts that fevers and other diseases that require purgation should not be treated with hot medicines, intended to promote sweat, for these cause costiveness. He also warns against cold applications that may contract the skin and prevent elimination of noxious matter. A knowledge of the nature and function of the skin helps the practitioner to avoid such errors, just as a knowledge of the relative density of fat and muscle in various bodily regions help him determine where best to apply topical drugs. Regarding internal diseases, Hoffmann argues that an awareness of anatomy reveals why treating the pain associated with intermittents and smallpox with narcotics is dangerous and why venesection is essential in treating pulmonary disorders. Hoffmann emphasizes the importance of maintaining free circulation of blood and lymph and toning the solids (he advocates chalybeates and astringents). He concludes by noting the necessity for the practitioner to be aware of the anatomy of the nervous system, for this allows him to locate the source of diseases of sympathy and consent and suggests proper treatments.

<sup>284</sup> "On guarding the growth of polypus." Hoffmann does not provide a chapter or gloss with this heading, and the page reference given by Buchanan does not check out. In Hoffmann's chapter on polyps and sudden death (cf. n. 282), however, he advises that the principal strategy in preventing the growth of polyps lay in diluting or thinning thick blood and in reducing the overall plethora. He recommends a spare and moist diet, avoidance of strong passions and over-exertion, moderate venesection, and the consumption of medicines like nitre, which thin viscous fluids, as well as alkaline salts, notably those found in certain mineral waters.

*tamen vel arti vel professori objiciendum est; quoniam conservare imbecillum corpus atque adjuvare, non novum creare, Medici profitemur.* Russell de Oeconomia Naturae in morb: Acut et Chron: Glandularum. Lond:1759. p.149.<sup>285</sup>

133: [continuing from p. 131]

[margin: Jaundice.] Par: 17th. The Jaundice appeared in Decr. 1742. was neither dangerous or frequent.

[margin: Method of cure] bleeding, vomiting, purging are necessary, pil: cocc: with calomel<sup>286</sup> much in use, & pil: Stomatic: nostr. No.2. or 3.<sup>287</sup> twice a day. washed down with

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<sup>285</sup> "[The art of healing is restricted and contained within fixed limits.] And this is no ground for finding fault either with the physician or his Art; for he pretends not to create, but to aid and assist the body, labouring with infirmities"; Richard Russell, *The Oeconomy of Nature in Acute and Chronical Diseases of the Glands* (London: J. and J. Rivington, 1755), p. 150 [Buchanan's citation of the Latin original is correct: Russell, *Oeconomia naturae in morbis acutis et chronicis glandularum* (London, 1755 [not 1759]), p. 149]. Immediately preceding this quotation, Russell notes that circulation declines as people age, and this necessitates amputation, which weakens the system further.

<sup>286</sup> The combination of Pill Cocciae (app. C-1, under "colocynth") and calomel (app. C-1, "mercurials") would have been a strong cathartic. Regarding the treatment of jaundice, see app. B-1.

<sup>287</sup> The composition of these pills is unknown. No such item is not listed in the "Dispensatory" of 1746. However, the list (and *Practice*) did include "A Stomachic and Anti-Scorbutic Electuary," which was composed of conserve of orange peels, candied ginger, Winter's Bark, and rust of iron in a base of syrup of orange peel (qq.v. app. C-1 on these ingredients). Each of these ingredients was regarded as stomachic. The 17<sup>th</sup>-century editions of the *Pharm. Lond.* included pilulae stomachicae (Stomachic Pills), which were composed of aloes, mastic, and red roses in syrup of wormwood (qq.v., app. C-1), while a drug of the same name remained in *Pharm. Edin.* through the first half of the 18<sup>th</sup> and was composed of rhubarb, aloes, myrrh, vitriolated tartar, and oil of mint in a base of syrup of orange peel (qq.v. app. C-1). Although Brookes asserts that this pill strengthened the stomach and sharpened appetite, its effect was probably more laxative than the first. Brookes, *General Dispensatory*, pp. 132, 253-54; *Practice of the British and French Hospitals*, p. 52; William Salmon, *Pharmacopoeia Londinensis: Or, the New London Dispensatory. In Six Books. Translated into English for the publick Good, and fitted to the whole Art of Healing. Illustrated with The Preparations, Virtues and Uses of all Simple Medicaments; Vegitable, Animal and*

tinct: Amar:<sup>288</sup> & continued some days always succeeded. the Decoction of Artichoake leaves in common water or small beer, is by some esteemed a specific in this disorder,<sup>289</sup> but I never had occasion to use <it>. all our men did well; none of the Officers had it.

[margin: was frequent in Garrison 1744.] it was frequent in Garrison 1744. were cured with pil: Stomat: nostr. & drinking Senna tea &c: tinct. Myrrh: & aloes was a useful medicine, taking 30 or 40 drops in a Glas wine two or three times a day.<sup>290</sup> was never attended with any fever or dangerous Symptom. three men were ill in one roome, for which they could not give any particular reason, having messed with their comrades. probably from too gross feeding & little exercise; the men are apt to indulge too much on coming into garrison

134: [facing p. 133; blank]

135: [continuing from p. 133]

as it were to make up for the fatigue of the field.

[margin: seldom or never happens in the field.] this disease seldom or never happens in the field; & in Garrison I order all the jaundiced men to ride dayly, & that the

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*Mineral: Of all the Compounds, both Internal and External; And of all the Chymical Preparations now in Use* (London: Thomas Dawks, 1678), p. 688; Theobald, *Medulla medicinae*, pp. 33-34.

<sup>288</sup> The tinctures, which comprised a major medicinal class, were solutions of various substances in proof spirits of wine (note entry for wine, app. C-1). On *tinctura amara* and its ingredients, cardamom and gentian, see app. C-1.

<sup>289</sup> On the artichoke, see app. C-1.

<sup>290</sup> The aim here was to cure through purgation, since jaundice was generally thought to be caused by obstructed bile. Buchan recommended a similar remedy – rhubarb, aloes, and Castile Soap, in pill form. On *tinctura myrrhae et aloes*, see app. C-1. The dose given by Buchanan is similar to the 40 gt. twice daily advised by Brookes (*General Dispensatory*, p. 172).

most rough trotting horse.

[*margin:* nor is it frequent amongst the Flemish.] it's hardly known amongst the towns people. Dr. Van Belengen <sup>291</sup> has seen but one these four years, they eat very little meat, living much on vegetables. all our men recover'd dayly on marching. a melancholy sedentary life is natural in this distemper and of bad consequence if the Patient indulge it,<sup>292</sup> as was the case with Weaver of Captn. Wenman's, being fond of an old woman's company would not stirr abroad & use exercise, I was obliged to send him to the Hospital in order to get rid of her, & tho this be a bad place for melancholick constitutions, yet he recovered with the same medecines.

[*margin:* Bark is said to occasion the jaundice.] Some blame the Bark occasioning this Desease if long persisted in. I have had some complaints of this kind, but from my own

136: [*facing p. 135; blank*]

137: [*continuing from p. 135*]

practice never had occasion to persist so long in its use as to observe any bad consequence

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<sup>291</sup> Unidentified. Hawkins notes that while the army was in Brussels he "was acquainted here with Dr. Van Bellingen an Ingenious Physitian": "Hawkins Journal," f. 21v.

<sup>292</sup> The belief that mental problems could cause physical disease was commonplace. Buchan wrote, "The passions have great influence both in the cause and cure of diseases. How mind acts upon matter, will, in all probability, ever remain a secret. It is sufficient for us to know, that there is established a reciprocal influence betwixt the mental and corporeal parts, and that whatever disorders the one, likewise affects the other." Walker explained the influence was positing that sympathy existed between mind and body, just as it did among body parts and organs. Buchan, *Domestic Medicine*, p. 82; Sayer Walker, *A Treatise on Nervous Diseases; in Which are Introduced Some Observations on the Structure and Functions of the Nervous System; and Such an Investigation of the Symptoms and Causes of These Diseases as may Lead to a Rational and Successful Method of Cure* (London: J. Phillips [etc.], 1796), pp. 42-47, 213-14.

from it. & I knew a child take scr. fs. dayly<sup>293</sup> for three years, & never had the least appearance of a jaundice.

[*margin*: Gravelish Complaints.] Par: 18th. Gravelish complaints are common and Salts of Manna or Bol: Laxans nostr. with Marshmallow tea<sup>294</sup> is the common method. the body should always be kept open. diluting thin drinks are of great Service viz: Green tea sweatned with honey, whey, &c: Spirituous are too forcing & of bad consequence. Onions boyled & roasted are much esteemed.<sup>295</sup> the Men often use ol Tereb: in Gin,<sup>296</sup> which is too hot occasioning bloody urine.<sup>297</sup> Small Stones are often passed, after much pain & bloody urine, & that without the help of medecines. Brisby of Coll: Beake's passed fifteen on his march from England. having taken bol. lax: nostr. he passed one large as a horse bean, had great pain & bloody urine, saying the bolus did him a deal of good, searching his bladder & moving the Stone from Side to Side. a foot Soldier of Blyth's Regt. was sent from Bruges to the Hospital at Brussells to be cut for

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<sup>293</sup> One-half scruple daily would have been regarded as a small dose, except for a very young child, so Buchanan is probably impressed by the duration of use, rather than the dosage. On the claims that bark caused jaundice, see app. C-1.

<sup>294</sup> The composition of the army's "laxative bolus" can only be guessed at, but it may have been similar to the "cathartic bolus" that was used at army hospitals during this period and consisted of powdered jalap, oil of juniper (a carminative, stomachic, and diuretic), and syrup of orange peel (a bitter and stomachic); on these ingredients, see app. C-1. Many authorities, including Sydenham and Whytt, shared Buchanan's belief that it was important to keep gravel patients open. Theobald, *Every Man His Own Physician*, p. 19; Wallis, *Art of Preventing Diseases*, pp. 364-66.

<sup>295</sup> On onions, see App. C-1.

<sup>296</sup> Gin was valued as a diuretic. On *oleum terebinthinae*, see entry for turpentine, app. C-1.

<sup>297</sup> Lewis, like Buchanan, warned that turpentine might cause bloody urine. Wallis cautioned generally against using "heating or stimulating diuretics" in treating gravel, asserting that they might cause inflammation and aggravate pain. When the intention was to relieve gravel, turpentine was sometimes administered by enema. William Lewis, *The New Dispensatory: .... Intended as a Correction, and Improvement of Quincy* (London: J. Nourse), pp. 217-19; Wallis, *Art of Preventing Diseases*, pp. 365, 395.

138: [*facing p. 137; blank*]

139: [*continuing from p. 137*]

the Stone March 1744.<sup>298</sup> of a robust constitution & about thirty years of age; endeavouring to sound him could not introduce the Catheter, there being an obstruction about the neck of the bladder. by introducing a finger into the Anus perceived the bladder thicker than usual. his urine had a large purulent sediment, with many small films swimming therein, of a strong smell & always <much> difficulty in making water; dyed some days thereafter of a common fever.

[*margin: Dissection No. 1.*] On desecting the body there was a large abcess near the neck of the Bladder externally, the part hard & swelled, the bladder much thicker than usuale being almost callous, & much contracted; containing a flat Stone weighing dr.x, almost as big as half a Crown, light in proportion to its bulk, of a brownish colour, & some part covered with a Nucleus. the right kidney entirely wasted, only a thick membranous Substance remaining, containing some pus. The last rib but one of that side had been fractured. the callus very large & pointing inwards, which had probably destroyed the kidney. the left kidney was very large, being three times bigger than usual;

140: [*facing p. 139; blank*]

141: [*continuing from p. 139*]

the peritoneum adhering strongly to it & very thick; the kidney full of small abcesses, containing much purulent pus & some in the pelvis. this urether & all the blood vessels of a prodigious size, no stony concretions in kidney or Gall bladder. the carnell columnes in the heart were cartilaginous & white coloured. Saponaceous pills and lime water is a favourite

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<sup>298</sup> Lithotomy developed significantly during the 18th century. Note app. B-2



with some<sup>x</sup>: such as are subject to gravelish complaints are always worse from drinking the strong brown Faro Beer, but better from the small white beer which is soft & Diuretick.

[quotation diagonally stroked]

*"Ventrem epithymio, aut Scammoniae radice aliquantulum purgato, eadem, quae Stranguria laboranti potui exhibeto. cumque dolor detinuerit, tepefactoriis potissimum loco dolenti admotis: copiosa calida lavata, pro sorbitione farinam coctam affuso melle fumat, reliquaque victus ratione, quam maxime alvum subducere utatur, vinumque bibat album Mendaeum, melle permixtum, aut aliud album suavissimum probe dilutum. hic morbus non sere deferit. si Anni tempestas serat, serum et lac bibat. Serum quidem ad purgationem. Hipp: de affect: intern:<sup>299</sup>*

142: [top of page] Stafford 1753. a Scotch-Hollander [i.e. "Highlander"] had a confirmed Stone which was plainly discovered by sounding[.] I recommended him to the Hospital at Shrewsbury to be cut, but soon after admission he was seized with a lingering fever & dyed in a few weeks. the Surgeon performed the operation on the dead body & found the Stone so strongly adhering to the bladder that it was impossible to extract it without pulling out the Bladder. it was of a brown colour & flat; weighed one Ounce & Six Drams.

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<sup>299</sup> "Clean the belly a little with thyme or scammony root, and give the same drinks drunk by those suffering from strangury. While pain continues, warm especially the place where the pain is; wash with much warm water. For drink, provide boiled meal gruel infused with honey, and for diet otherwise, the patient should eat what purges most. He should drink white Mendaeian wine mixed with honey or another very sweet white wine. This disease seldom goes away [note: Potter translates the Greek as "This disease usually goes away," but Littré has it, *Cette maladie ne quitte guère le patient*]. When the season for it arrives, the patient should drink whey and milk. Whey certainly will purge." Hippocrates, Internal Affections, c.16; cf. *Hippocrates* (trans. Potter), VI, 125; *Oeuvres complètes d'Hippocrate* (trans. Littré), VII, 207.

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<sup>300</sup> On quicklime and the preparation of limewater, see app. C-1, entry for lime. Boerhaave argued that alkali like quicklime were harmful and encouraged the search for a substance that was not alkaline but would dissolve the stone. Despite extensive research and experiment, no such substance was discovered. In sect. x of *An Essay on the Virtues of Lime-Water in the Cure of the Stone* (Edinburgh: Hamilton, Balfour, and Neill, 1752), Robert Whytt reported on experiments in which he used lime water, mixed with soap or soap lees, to reduce the stone. In most cases, according to him, there was some reduction. However, unlike Stephen Hales, who had claimed in an earlier essay (*ibid.*, p. 81) that soap itself dissolved the stone, Whytt concluded (p. 97), "the dissolving Virtue of Soap lies chiefly, if not wholly, in the Lime that is in it." Gardiner accepted Whytt's claim that the stone was sometimes dissolved by limewater, but asserted that this was rare and depended on the composition and looseness of the stone. Healde, who on the whole endorsed the medicinal value of limewater, commented, "though it may not be lithontriptic, it moderates some calculous symptoms." Buchan followed the same line of moderate support. Bromfield was skeptical, however, and at the close of the century, Bell asserted that while earlier, many had been impressed by claim that limewater could dissolve stone and devices had invented to inject solutions into bladder, "it seems now to be universally allowed among practitioners, that no solvent, powerful enough to have any effect upon a stone can be injected into the bladder, but with the greatest hazard of injuring that organ in a very material manner." There was an official soap pill (*pil. saponaceae*), but Leigh warned that stomach acid might cause the soap to decompose, with harmful results. Medicines that contained soap and a calciferous material were common remedies for stone and gravel. One of the most popular remedies of the early and mid-18th century was Mrs. [Joanna] Stephens's Cure, which, as refined by David Hartley, included calcined eggshells and Castile soap. Although during the 17th and 18th some instruments were devised to pass through the urethra and grasp and extract or crush bladder stones, they were little used. Benjamin Bell, *A System of Surgery*, 1st American ed. (Worcester, Mass.: Isaiah Thomas, 1791), I, 321-22; William Bromfield, *Chirurgical Operations and Cases* (London: T. Cadell, 1773), II, 207-13; Buchan, *Domestic Medicine*, pp. 249-50, 262; French, Robert Whytt, *The Soul, and Medicine*, pp. 17-26; Gardiner, *An Inquiry into the Nature, Cause, and Cure of the Gout, and of Some of the Diseases with which it is Connected* (Philadelphia: William Spotswood, 1793), pp. 165-69; F. W. Gibbs, "Boerhaave and the Place of Chemistry in Medicine," *Chemistry in the Service of Medicine*, ed. F. N. L. Poynter (London: Pitman Medical Publishing Company Ltd., 1963), pp. 36-37; Thomas Healde, *The New Pharmacopoeia of the Royal College of Physicians of London. Translated into English, With Notes, Indexes of New Names, Preparations, &c. &c.*, 3rd ed., corr. (London: T. Longman, 1788), pp. 210-11; Andreas-Holger Maehle, *Drugs on Trial: Experimental Pharmacology and Therapeutic Innovation in the Eighteenth Century*, Wellcome Institute Series in the History of Medicine (Amsterdam and Atlanta: Rodopi, 1999), ch. 2 (pp. 78-86 on Whytt); Harry S. Shelley, "Intravesical Destruction of Bladder Stones," *JHM*, 19 (1964), pp. 46-49; Theobald, *Every Man His Own Physician*, p. 57.

143: [continuing from p. 141]

[margin: Costiveness.] Par: 19th. Costiveness is common amongst [crossed: amongst] us, often proceeding from a naturale dry habite of body; living much on Salt or smoked meats, drinking too freely Spirituous Liquors.

[margin: Method of Cure.] my first attempt is to make a clear passage by laxative Ptisans of Senna, Manna &c.<sup>301</sup> assisted with Clysters. viz: Enema commune nostr.<sup>302</sup> drinking water gruel sweetned with honey, Barley gruell with Currants &c.<sup>303</sup> the best preservative against a relapse is to eat a toaste soaked in oyle for supper, live on fat broths, use exercise, there being nothing worse than Study or a Sedentary life.<sup>304</sup> such as are of this

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<sup>301</sup> Ptisan was hulled barley (cf. app. C-1 entry) or, as the term was popularly used in 18<sup>th</sup>-century medicine, the drink made by boiling it. Ptisans and drinks made from other grains were a commonplace in Greek medicine. Barker, *An Essay on the Agreement betwixt Ancient and Modern Physicians*, pp. 94-96; James, *Medicinal Dictionary*, under "ptisana."

<sup>302</sup> The *enema commune nostrum* may have been similar to "The common clyster" that, according to the editor of *Practice*, was used at army hospitals of the period. This was an electuary prepared by mixing 3/4 pint water, 2 oz. lenitive electuary (note entry, app. C-1), and 3 dr. common salt. It was intended to be injected warm, whenever the bowels needed clearing. *Practice of the British and French Hospitals*, p. 57.

<sup>303</sup> On medicinal applications of the currant, see app. C-1.

<sup>304</sup> The problem of costiveness was one that 18th-century medicine regarded as solved, though physicians might differ on which remedy best balanced effectiveness with gentleness. Rollo assured his readers, "Aloetic preparations, solutions of alkaline salt, and a laxative diet, soon procured a regular state of the belly." Buchan recommended a moistening, laxative diet, including fruit and rye bread. The costive individual was to avoid excessive exercise (horseback riding, Buchan believed, might cause constipation) or becoming overheated, but moderate exercise Buchan considered beneficial, and the patient was to be cheerful. Wesley recommended a diet that was cooling as well as gently laxative. Buchan, *Domestic Medicine*, pp. 314-15; Rollo, *Observations on the Diseases*, p. 92; John Wesley, *Primitive Physic: or an Easy and Natural Method of Curing Most Diseases*, 21st ed. (Philadelphia: Prichard & Hall, 1789), p. xix.

constitution should be regular in going to stool dayly<sup>x</sup>, <<sup>x</sup>Pechlin: obs: med: lib:3. No.12.<sup>305</sup>>  
not giving the excrements time to harden, should sit over the steam of warm water & not  
press too hard for fear of procedentia Ani<sup>a</sup>.<sup>306</sup>

*"qui enim sanus, futurus est, hesternum stercus Semper quotidie per alvum  
demittit.* Hip: de morb: lib:4. vid: lib: 3.<sup>307</sup>

eating cheese too freely is an unwholesome dyet especially for children,<sup>308</sup> as was the case  
with Jack Hobson

144: [top of page] *Culus tibi purior salillo est*

*nec toto decies cacas in Anno*<sup>309</sup>

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<sup>305</sup> In *Observationum physico-medicarum*, III, cap. xii (pp. 417-20), Pechlin discusses "Phantasia in corporis excretionibus moderandis" ("The faculty of imagination in managing the excretions of the body"). Pechlin asserts that in order to maintain regularity it is desirable to attempt to make stool once or twice a day on a set schedule, regardless of whether one feels the urge. Regularity can also be encouraged by imagination (the mental devices that one uses to stimulate his system) and by suggestion..

<sup>306</sup> Prolapse of the bowel through the anus.

<sup>307</sup> "To remain healthy, one should daily excrete yesterday's feces downwards." Despite Buchanan's reference, this quotation does not appear to come from Morb. IV. In referring to bk. III, Buchanan may be general, as cleansing the body downwards is noted as a part of the regimen for several diseases. Writers on health issues in the 18th century stressed the importance of regularity; Buchan wrote, "Few things conduce more to health than keeping the belly regular. When the *faeces* lie too long in the body they vitiate the humours, and when they are too soon discharged it is not sufficiently nourished" *Domestic Medicine*, p. 90.

<sup>308</sup> Buchan warned that cheese should be eaten only as a dessert, for it caused constipation, fired the blood, and provoked thirst: "If men will live on dry bread, poor cheese, salt butter, broiled bacon, and such like parching food, they will find their way to the ale house, the bane of the lower orders, and the source of half the beggary in the nation." Buchan, *Observations concerning the Diet of the Common People: Recommending a Method of Living Less Expensive and More Conducive to Health, than the Present* (London: A. Strahan, 1797), p. 28.

<sup>309</sup> "Your anus is cleaner than a salt cellar nor do you defecate more than ten times a year." This is from Catullus. Buchanan leaves the quotation a fragment and appears to have smudged

<sup>a</sup>*Utere lactucis, et mollibus utere malvis:*

*nam faciem, durum, Phoebe, cacantis habes.*

Mart: Ep.89. lib:iii<sup>310</sup>

*Pruna peregrinae carie rugosa Senectae*

*sume: solent duri solvere ventris onus.*

Ib. Ep.29 lib:13.<sup>311</sup>

145: [continuing from p. 143]

after being costive nine days from living only on Dutch cheese, many hard black excrements were brought away resembling buttons<sup>x</sup>. by persisting in the above method naturale excrements were brought away, being often bathed in warm water. yet dyed the 12th day. was remarkably Sprightly, but from bad example has learned to drink Drams. was often Drunk & it was thought his inside was burnt up.

[margin: tobacco Clysters succeed when other means faile.] never used Quicksilver or leaden bullets, & have seen Tobacco Clysters succeed when all other means failed.<sup>312</sup> Dumbar of Col. Beake's troop had been costive some days on our march to Germany & greatly fatigued being carried on the baggage waggon, had taken medicines at mouth & Clysteres injected, but no excrements passed, had violent racking pains in bowells, but never any inclination to stool. as we passed at Aix la Chapelle were told these waters were a

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it purposely. He then gives a fuller version on p. 146 (cf. n. 313), but omits the first line.

<sup>310</sup> "Take lettuces and take aperient mallows, for you have the appearance, Phoebus, of one straining at stool"; Martial Ep. 3.89; Martial, *Epigrams*, trans. Walter C. A. Ker, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Pr.; London: William Heinemann Ltd., 1968 [1919]), I, 219.

<sup>311</sup> "Take plums wrinkled by shrivelling old age abroad: they are used to lighten the load of an obstinate stomach"; *ibid.*, 13.29; *Epigrams* (trans. Ker), II, 401.

<sup>312</sup> On tobacco, see app. C-1.

sovereign remedy in this disorder, & halting in that neighbourhood I went with him to the Bath. advising with the Physicians of that place, he was ordered a laxative Ptisane & the water to be injected as Clyster every fourth hour, to be bathed

146: *<sup>x</sup>nec toto decies cacas in Anno  
atque id durius est faba, et Lapillis:  
quod tu si manibus teras, fricesque,  
non unquam digitum inquinare posses.*

Catul. Carmin 20.<sup>313</sup>

147: [continuing from p. 145]

twice a day, drinking the water, &c: was four days in this manner & in danger of dying, but presently relieved by Clyster of Tobacco smoake.

[quotations stroked]

*"quod si clysterem recuset, fistula ad propendulum utriculi petiolum adligata, et inflata, multus flatus immittendus, intestinoque et ventre per flatum distento, detracta fistula confestim clyster injiciendus.* Hip: de affect.<sup>314</sup>

*hunc et intus et extra humectare oportet, et multa calida lavare, bibereque quae alvum moveant et urinam deducant, et per infusum subluere si admittit.*<sup>315</sup>

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<sup>313</sup> "You do not defecate more than ten times in a year and then it is harder than beans or pebbles. If you rubbed it in your hands you wouldn't even dirty your fingers"; Catullus, 23.21-23.

<sup>314</sup> "But if he cannot accept an enema, affix a tube to the mouth of a small wine skin, inflate it, and blow much air into the stomach and intestines; when they are distended, remove the tube and immediately insert an enema"; Hip., Aff., c.21; cf. *Hippocrates* (trans. Potter), V, 39.

<sup>315</sup> "From both the inside and the outside one should moisten [the patient]; wash him with much warm water and have him drink potions that will move the belly and evacuate urine, and give

[margin: Aix la chapelle Bath.] May 17th 1743, I went into this warm Bath & continued about 1/4 <hour>. I had been much fatigued by walking in boots, the day being very warm; upon bathing was greatly refreshed as from sound sleep.

*haec reparat vires fessaque membra novat.*

Ov: in Epis: Heroid: No:4. V:89.<sup>316</sup>

I inclined to sweat afterwards, but did not encourage it being obliged to march in the evening. the water was warmer than new milked milk, of a milkish colour, strong sulphureous taste & smell. some say it's warm enough to harden an egg in qtr. hour, is gently purgative, Diuretick & Diaphoretick,

148: [facing p. 147; blank]

149: [continuing from p. 147]

famous for skin diseases, aching pains, Rheumatisms & Gout &c.<sup>317</sup>

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an infusion underneath [i.e. an enema], if he will accept it"; Hip., Aff. 21; cf. *Hippocrates* (trans. Potter), V, 39. "Admittit" in Buchanan reads "admittat" in Foës (*Magni Hippocratis Medicorum*, p. 521).

<sup>316</sup> "This is what repairs the strength and renews the wearied limbs"; Ovid Her. 4.90; Ovid, *Heroides and Amores*, trans. Grant Showerman, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd., 1971 [1914]), p.51.

<sup>317</sup> In his journal Hawkins discusses the therapeutic waters at Aix-la-Chapelle, which he visited during the summer of 1747: "here are several fountains just out of Town, which boil up, and give as much Vapour as a boiling Pot.... These Waters abound very much in Sulphur to hould your head over the steam proves very offensive, by reason of its stinking sulphureous Vapour or Exhalation; which sulphur lies always a Top of the Water like the farina of flowers. & collects itself to all adjacent solid Bodys, (which gives the water bounds,) particularly the Stony Rocks which include it, & out of which it forces its Ebullitions. The Water was so hot in all these fountains, that I could not Suffer my fingers in it: There is one large Fountain in the Middle of the City of Aix, where the sick come to drink, which Fountain is supply'd by a Pump, from six in the morning till ten, by a blind man, in this Well room is the most pure sulphur found sticking to the Pipes and which Apothecarys preserve for Medicinal uses, some of which I brought home with me." "Hawkins Journal," ff. 65v-

*Dictaque cessantem nervis elidere morbum*

*Sulfura.*

Hor: Ep.15. lib:i. V.6.<sup>318</sup>

[margin: Dropsy.] Par: 20th. Dropsies were seldom known amongst us, tho there were some in the Hospital.

[margin: seldom or never cured.] the common method of cure attempted, but never succeeded, & I never saw a real Dropsy cured tho it may be palliated by medecines, tapping &c.<sup>319</sup> [penciled line in margin next to this case] Captn. Gay<sup>320</sup> was the only Dropsical constitution in the Blews, under which he had laboured some time; so soon as we returned from Germany was remarkably bad. was formerly carefull in taking dayly exercise a horseback, but since coming into Garrison at Brussels is more sedentary, only indulging in town Diversions &c: forgetting Horace's advise.

[the following quotations are vertically stroked]

*ut te ipsum serves, non expergisceris? [...]*

*si noles sanus, cures Hydropicus.*

Epist:2d. lib:i.<sup>321</sup>

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66r. During the 1770's John Williams, a British physician practicing at Aix-la-Chapelle, published two treatises on the waters; he advocated particularly their use for gout, but claimed that they were sometimes used to treat diseases for which they were ineffectual or even dangerous. Parr reported that the waters were hotter and richer in sulfur than were those of Bourbon and Bath. Parr, *London Medical Dictionary*, I, 59-62.

<sup>318</sup> Of Baiae: "its sulphur baths ... so famous for driving a lingering disorder from the sinews"; Hor. Ep. 1.15.6-7; *Horace* (trans. Fairclough), p. 345.

<sup>319</sup> Of the types and treatments of dropsy, see app. B-1.

<sup>320</sup> On Gay, see n. 206.

<sup>321</sup> "To save your own life, won't you wake up? Nay, just as, if you won't take up running in health, you'll have to do it when dropsical"; Hor. Ep. [not Od.] 1.2.33-34; *Horace* (trans. Fairclough), p. 265).



*crescit indulgens sibi dirus Hydrops  
nac sitim pellit, nisi causa morbi  
fugerit venis et aquosis albo  
corpore languor.*

Od:2 lib:2. V:13.<sup>322</sup>

being put on a proper course of medecines with horse exercise,

150: [facing beginning of Par. 20.]

[name written, then obliterated in darker ink] a Lunatick friend of mine has been ill of a deep jaundice for some time & far gone in a Dropsy, his belly legs & thighs greatly swelled, he is dayly drunk & chiefly with Gin or double distilled aniseed water. I advised his friends to remove him from town & board him with an honest farmer, forbidding all manner of Spirituos Liquors, & allowing only a certaine quantity of ale, from this method with the assistance of a few Hydragogue purges he recovered, & continues well<sup>323</sup>

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<sup>322</sup> "By indulgence the dreadful dropsy grows apace, nor can the sufferer banish thirst, unless the cause of the malady has first departed from the veins and the watery languor from the pale body"; Hor. Ode 2.2.13-16; Horace, *Horace: The Odes and Epodes*, trans. C. E. Bennett, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1968 [1914; revised, 1927]), p. 111.

<sup>323</sup> As the quotations from Horace suggest, dropsy had historically often been linked to excessive drinking, and many 18th-century writers, e.g. Wallis, made the same connection, though they noted other causes, as well. The fact that Buchanan's "lunatic friend" was drinking aniseed water (note app. C-1, "anisum") suggests that he was on a diuretic course. Wallis, *Art of Preventing Diseases*, p. 457. The association between liver malfunction and jaundice, on the one hand, habitual drunkenness, on the other, was common in Buchanan's day. The threat that alcoholic beverages posed to the liver was widely recognized; note Erasmus Darwin to the duke of Devonshire, Derby, 20 Nov. 1783, *The Letters of Erasmus Darwin*, ed. Desmond King-Hale (Cambridge: Cambridge Univ. Press, 1981), p. 130. Mead saw the consumption of spirits as contributing to jaundice, and Hoffmann, who cited many causes, found strong wine and brandy to be a common antecedent. James, *Medicinal Dictionary*, under "icterus"; Mead, *The Medical Works of Richard Mead, M.D.*, new ed. Edinburgh: Alexander Donaldson and Charles Elliot, 1775 [repr. New York: AMS Press,

151: [continuing from p. 149]

found himself less purcy, but legs swelled always towards the night, & belly increased with hardness about the Regio Hypochondriaca: mercurials & saponaceous<sup>324</sup> were tried but without success, complaints encreasing dayly, became weake & low Spirited & jaundiced-look, thighs began to swell, went for England nixt Spring, hoping a cure from his ordinary Physicians, & being some time under their care, without any relief, began to despair & be peevish in his temper.

*(fidis offendar Medicis, irascar amicis)* Hor: Ep.8. lib:i. [quotation in heavier ink]<sup>325</sup>

then put himself under Dr. Ward's<sup>326</sup> care to as little purpose. his method was daily sweating twixt warm Blankets. about the beginning of winter was obliged to be tapped; four Gallons & ½ were drawn off. he dyed Decr. from being a bulkie man was reduced to a meer skeleton.

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1978], pp. 28, 397-98.

<sup>324</sup> Saponaceous preparations might be prescribed as diuretics; note entry on them, app. C-1. Mercurials such as calomel were sometimes used as cathartics for dropsical patients, and were also thought to clear obstructions in the liver and other organs; writing more than 60 years after Buchanan, Blackall warned that they could exacerbate or even cause dropsy, especially since they were often haphazardly prescribed: John Blackall, *Observations on the Nature and Cure of Dropsies, and Particularly on the Presence of the Coagulable Part of the Blood in Dropsical Urine; To Which is added, an Appendix, Containing Several Cases of Angina Pectoris, with Dissections, &c.*, 1st American, from the 3rd London ed. (Philadelphia: James Webster, 1820), pp. 45, 221-22.

<sup>325</sup> "Quarrel with my faithful physicians, and angrily ask my friends [why they are eager to rescue me from fatal lethargy]"; Hor. Ep. 1.8.9; *Horace* (trans. Fairclough), p. 307.

<sup>326</sup> The reference is probably to Joshua Ward, the quack doctor who operated a hospital in London. Ward developed a number of successful patent medicines, the most important of them being Ward's Pill and Ward's Drop, two popular antimonials. On the preparation of Ward's medicines, see Brookes, *General Dispensatory*, pp. 367-72. Note also John Wiltshire, *Samuel Johnson in the Medical World: The Doctor and Patient* (Cambridge: Cambridge Univ. Press, 1991), pp. 93, 224. Ward's Pill and Drop declined in popularity after mid-century: Gregory, *Observations on the Duties*, p. 150.

*denique pro vivo vitiatas sanguine venas*

*lympa subit: restatque nihil quod prendere posses.*

Ov: met: lib.v V:435.<sup>327</sup>

Succ: Porr:<sup>328</sup> is greatly esteemed by the Flemish; was given to Murray of the 3: Regmt. of Guards, but had no visible operation or good effect, nor had any other medecines any good success.

152: [facing p. 151; blank]

153: [continuing from p. 151]

[margin: Dissection No.1.] upon opening the body, the viscera appeared as in other Hydropicks; the liver swelled to an immense bulk, containing much water & upwards of three pints real pus, & so large that the pus was taken out <in> a pint porringer. extending itself upwards as far as the 3d. rib, pushing the Diaphragme along with it & forcing the lung almost under the clavicle; the lung much wasted & of no use; the 5t & 6t. ribs carious. all the others were soft; the left lung naturale, but much water contained. was about 30. years of age & always sober. was ill about Six months & always in the Hospital. the following is a favourite Hydragogue with some. **Rx Tart: emetic: gr.iii. Mann: opt. oz. iii: solvetr in Aq: Com oz.x cap. oz.iii. 2da. quaque hora donec laxetur alvus.**<sup>329</sup>

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<sup>327</sup> "And finally, in place of living blood, clear water flows through her [i.e. Cyane's] weakened veins and nothing is left that you can touch"; Ovid Met. 5.436-37; *Metamorphoses* (trans. Miller), I, 269.

<sup>328</sup> On *succus porrum*, see app. C-1.

<sup>329</sup> "Take 3 gr. tartar emetic [app. C-1, under "tartar"] and 3 oz. of the best manna [app. C-1] dissolved in 10 oz. of common water. Two spoonfuls to be taken every 2 hours until the bowels move."

[margin: No.2.] One of Duruer's<sup>330</sup> was tapd & dying nixt day. the Liver was of a white colour as if pare-boiled, & so schirrus as to be almost gristly, cutting hard to the knife: the Spleen very large of a dark brown colour. & so dry as to be ready to moulder into dust, a large quantity of Water in the Abdomen. had a perpetual drought & drank much.

***Durrique Sitim sedare cupit, sitis altera crevit.***

Ov: Met: lib:iii V.415<sup>331</sup>

***nec Sitis est extineta prius, quam vita, bibido.***

Ib: lib: vii. v:566<sup>332</sup>

154: [facing p. 153; blank]

155: [continuing from p. 153]

[margin: No. 3.] a Serjeant of Cope's Dragoones<sup>333</sup> being some weeks in the Hospital for an Anasarca, & heated in the common method, ***E.G. Rx. Syr: de Rham: oz.ii tartar emetic: dr.fs. Aq. Com: oz.x. M. cap: coch: ii. 2da quaque hora ut laxetur alvus.***<sup>334</sup>

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<sup>330</sup> Buchanan may have received this information from James Stevens, surgeon to Durore's; cf. n. 76.

<sup>331</sup> "While he seeks to slake his thirst another thirst springs up"; Ovid Met. 3.415; *Metamorphoses* (trans. Miller), I, 153.

<sup>332</sup> "Nor by drinking is their thirst quenched so long as life remains"; Ovid Met. 7.569; *Metamorphoses* (trans. Miller), I, 383.

<sup>333</sup> 7th Dns. Francis Home was surgeon to the regiment 18 March 1742-Nov. 1750 and may well have been Buchanan's source on this case. Johnston's Roll, p. 13 (#235).

<sup>334</sup> "Take 2 oz. of syrup of buckthorn and ½ dr. tartar emetic and mix with 10 oz. common water; 2 spoonfuls to be taken every 2 hours until the bowels move." Note entries for syrup of buckthorn (as *syrupus de rhamno*) and emetic tartar (under "antimonials") in app. C-1; both of the active ingredients in Buchanan's formula were purgatives.

was ordered to eat Garlick, mustard Rhadishes<sup>335</sup> &c. legs were scarified & much water discharged. dyed suddenly Apoplectick. upon being blooded his blood was waterish & thin. All the Bowells were sound, no water in abdomen; the Gall bladder much distended & full of Green coloured Bile, Omentum much wasted; no water in the thorax, contrary to expectation, for some imagined he had been suffocated by water in the breast. & very little in pericardium. the lungs full of blood & no adhesion, the braine quite sound. no inflammation, & not above a Spoonfull of water in the left ventricle, yet some said his death must be from water in the braine. he was of very large size as were all the Bowels, excepting the Spleen.

*"victus ratio instituenda in cibis et potibus, laboribus et deambulationibus ex quibus gracilis et siccus reddatur, carnes vero quam validissimae= [...]"*

156 [facing p. 155; blank]

157 [following on from p. 155]

*quibus morbis siccitas consert, semel die cibum capere conducit et cibos ac potus pauciores quam replere queant insumere, cosque laboribus et de ambulationibus consicere, et quam minime dormire.* Hipp: de affect.<sup>336</sup>

[margin: Goute.] Par: 21st. The Gout is not so common in this Country as in

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<sup>335</sup> On the medicinal uses of mustard, see app. C-1. Celsus recommended both garlic and mustard as stimulants, and historically this appears to have been seen as their main medicinal virtue. On garlic, see app. C-1. The radish, medically the least used of these items, is also discussed in app. C-1.

<sup>336</sup> "A regimen of food and drink should be instituted, along with exertion and exercises that will restore a slim, dry physique, with very healthy flesh.... In diseases linked to [Potter: "alleviated by"] dryness [Littre: *il convient de dessécher*], it is best to take food only once a day, not to eat and drink to satiety, to work these off by exertion and walks, and to sleep as little as possible"; Hip., Aff., c.22, 43; cf. *Hippocrates* (trans. Potter), V, 41, 67; *Oeuvres complètes d'Hippocrate* (trans. Littre), VI, 253.

England<sup>337</sup> & our Gouty Officers are more healthy here than at home. Captain Gilbert<sup>338</sup> seldom escapes a fitt every fall of the leafe, but had not the least gouty complaint till Janry. 23rd. 1743. O:S: & was then occasioned by spraining the ankle.

[*margin*: Method of cure.] his method of cure is living Sparingly, abstaining from meats & strong Liquors:

----- *tibi ingens*

*virtus atque animus caenis responsat opimis.*

Hor: Sat 7. lib:2.<sup>339</sup>

green tea & skimmed milk his principale Dyet, condemns the vulgar practice of strong cordials<sup>a</sup>. tho when in health he eats and drinks heartely.<sup>340</sup>

(*carus eris Romae donec te deserat aetas.* Hor: Ep.)<sup>341</sup>

wrapps the part in flannel & keeps warm<sup>342</sup>, seldome goes into bed, rather sits in his great

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<sup>337</sup> Gout was exceptionally prevalent in late-18th/early-19th c. England. Gene V. Ball speculates that the high incidence probably reflected the combined result of prolonged alcohol abuse and drinking fortified wines from Portugal (especially port and canary) that were high in lead: "Two Epidemics of Gout," *BHM*, 45 (1971), pp. 402-03, 407.

<sup>338</sup> John Gilbert entered the Blues as a lieut., 17 June 1712; capt.-lieut., 20 Jan. 1731; capt., 20 April 1732. He remained with the regiment until it returned to England in 1746, but appears to have left soon thereafter. WO 64/10, f. 8; *Army List of 1740*, p. 6.

<sup>339</sup> "Does your heroic virtue and spirit defy rich suppers?"; Hor. Sat. 2.7.102-03; *Horace* (trans. Fairclough), p. 233.

<sup>340</sup> On the perceived causes and cure of gout, see app. B-1.

<sup>341</sup> "You will be loved in Rome till your youth leave you"; Hor. Ep. 1.20.10; *Horace* (trans. Fairclough), p. 389.

<sup>342</sup> This is Buchanan's only reference to one of the standard aspects of treating gout: keeping the patient warm. Suppressed perspiration was often seen as a contributing factor in gout, and this suggested the remedy of promoting sweat. Few authorities would have disagreed with Buchan's assertion that "the most safe and efficacious method of discharging the gouty matter is by perspiration." More broadly, Berdoe advised, "A fit of the gout is best relieved by an abundant evacuation, either by the intestines, or by perspiration." The practice of

chair, his legs hanging down, saying the humours then fall more easely downwards, the parts swell sooner, becoming numbed as it were, & pain ceases. when the swelling decreases

158: [facing p. 157; blank]

159: [continuing from p. 157]

he takes three purges, *unct: Sacr. & Elixr. Salut: aa: p.q.*<sup>343</sup> this fit was much shorter than used to be, but more painfull, which he always bears with great patience.

*(fortem crede bonumque.* Hor<sup>344</sup>)

he had a slight fit nixt <month of> March & only held for four days. is often Subject to bleeding piells, which were stop'ed some time, but upon breaking open he recovered. Aprl. 20th Sr James Chamberlayne had a slight gout in wrists & anckles & has been often laid up six weeks at home; here was only confined a few days & advised the following medicine by way of prevention:

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keeping gouty patients warm, particularly during fits, was standard. Warm slippers were widely recommended, and Jeans also suggested tepid baths (though not hot ones, which could enervate). In popular medicine, too, patients were encouraged to keep warm (as Gilbert is here) and to take remedies that would promote sweating. While ill with gout during the 1670's, Sir William Temple was advised to take hartshorn (as a sudorific). He also noted the remedy used by Maurice of Saxony: immersing his feet in the boiled dung of a white stallion, then, after an hour or more, retreating to a warm bed, in hopes of maintaining perspiration. Berdoe, *An Essay on the Nature and Causes of the Gout, With a Few Conjectures on the Probability of Its Cure* (Bath: S. Hazard, 1772), p. 27; Buchan, *Domestic Medicine*, p. 292; Thomas Jeans, *A Treatise on the Gout, Wherein is Delivered a New Idea of it Proximate Cause, and Consequent Means of Relief; Written with a View to Excite to Excite Further Research into the Nature, and to Lessen Patient Reserve in the Treatment of that Disease* (Southampton: T. Cadell, 1792), pp. 64-65; George Rosen, "Sir William Temple and the Therapeutic Use of Moxa for Gout in England," *BHM*, 44 (1970), pp. 38-39.

<sup>343</sup> "Equal amounts of the sacred tincture and the elixir of health, a small quantity." On *tinctura sacra* and *elixir salutis*, see app. C-1.

<sup>344</sup> "Believe him brave and good"; Hor. Ep. 1.9.13; *Horace* (trans. Fairclough), p. 311.

[margin: a preservative medicine.] *Rx. Gum: Guajac: pulverisat: oz.i. Sal: V:oleos: oz.iv. M: extrahtr tinctura, per quadriduum saepius agitando. essundatur liquor clarus et usui servetur. cap: gtt 60 bis in die. sacharo [sic] exceptas.*<sup>345</sup>

This was sometimes made in rum for the same purpose, is said to be originally from Dr. Boerhaave.<sup>346</sup> both he & Captn. Gilbert say it does them good by keeping the *body* open. the parts remained weake some time (*hoc etiam enervat debilitat que pedes*<sup>347</sup>) Some apply raw flesh to the affected part, which eases the pain, but acting as a repellent is often attended with bad consequence<sup>x</sup>.<sup>348</sup> vid: Car: Piso obs: med: pag: 398.<sup>349</sup>

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<sup>345</sup> "Take 1 oz. of powdered gum guaiacum [app. C-1] and 4 oz. of oily salt of vitriol [C-1, under "vitriol"]; mix, and extract a tincture over 4 days, shaking frequently, then let the clear liquid be poured out and kept for use, 60 drops to be taken twice a day on sugar."

<sup>346</sup> It is possible that Boerhaave did indeed provide this formula, though it does not appear in his *Aphorisms* or in his *Materia Medica; or, a Series of Prescriptions* (London: W. Innis [etc.], 1741). He saw gout as a disease of debility and advocated a regimen intended to stimulate the system (volatile alkaline salts, then purgatives quickened by mercurials). A number of writers, e.g. Robinson, warned their readers that drugs could not cure gout. Nevertheless, most allowed some use of medicines, such as mild laxatives, in their regimen. Wallis was favorably inclined to reinforcing diet with medicine, asserting that sufferers from gout should counter overindulgence in food with emetics and purgatives and should use diaphoretics to maintain perspiration. Liger strongly cautioned against opiates, but Jeans expressed concern that excessive pain might weaken a patient, and wrote that they might profitably be administered by someone who was knowledgeable. *Boerhaave's Aphorisms*, pp. 379-80 (aphorisms #1274-76); Jeans, *A Treatise on the Gout*, pp. 97-100; Charles Louis Liger, *Treatise on the Gout* (London: R. Griffiths, 1760), pp. 36-39, 247; Nicholas Robinson, *An Essay on the Gout, and all Gouty Affections Incident to affect Mankind. Comprizing The various Natures, Symptoms, and Causes, thro' every Branch and Stage of the Disease* (London: Edward Robinson [1755]), iv; Wallis, *Art of Preventing Diseases*, pp. 376-79.

<sup>347</sup> "Also weakens the feet and makes them feeble" Provenance unknown.

<sup>348</sup> Writers on gout often expressed concern over the use of repellants by patients. Although painful, gout was seen as good in the sense that it marked the efforts of the constitution to force dangerous matter to the extremities. If the constitution were weakened by old age or overindulgence, the matter might attack vital organs. So might it if it were repelled, by medicine or other means, from the extremities. Liger warned against warm poultices for this reason. Gardiner regarded use of the term "repellent" to be improper in certain cases. Cold



160:

[dark ink, as is "x" in text]

<sup>x</sup>vid: Biograph: Britannic: Art: Betterton. vol.2d. p.779.<sup>350</sup>

161: [continuing from p. 159]

Coll: Beake had it in the right foot about the heel & ankle, June 5th 1743. has had it often & violently; thinks it's occasioned from drinking the small Rhenish & Moselle wines; is subject to shaking of the hand which is worse since he came to this country. this held him only a few days & was slight; its his custom to purge with Daffies Elixr.<sup>351</sup> & takes Gum:

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water, solutions of some metallic salts, and some cooling astringents, were, he noted, often called repellants, but although they constricted vessels, they did not repel the acrid matter that caused inflammation, which was secreted by the blood, though some might be absorbed by the lymphatics ("the most powerful agents in terminating inflammations by resolution"). Gardiner therefore rejected the term, claiming that it gave a false impression of how these drugs worked. Gardiner, *Inquiry into Gout*, pp. 172, 200-02; Liger, *Treatise on the Gout*, pp. 266-68.

<sup>349</sup> Le Pois, *Selectiorum observationum*, p. 398 (sect. v, cap. i ["Of Arthritis"]): Le Pois asserts that when venesection is applied in the body part opposite the pain, it causes a revulsion, which reduces pain and increases blood flow. In Le Pois' experience, the relief of pain is most certain when the amount of blood taken is large.

<sup>350</sup> According to the author of *Biographia Britannica*, in old age Thomas Betterton, the noted actor and dramatist, suffered from gout, and in 1710, hoping to get through the season, he "was forced to allow of outward applications to reduce the swelling of his feet.... the gouty humour, repelled by fomentations, soon seized upon the noble parts"; this shift caused his death: *Biographia Britannica: or, The Lives of the Most Eminent Persons Who have Flourished in Great Britain and Ireland, from the Earliest Ages, down to the Present Times* (London: W. Innys [etc.], 1748), II, 779.

<sup>351</sup> E. Smith provided this recipe for Daffy's Elixir: elecampane roots, licorice, aniseed, coriander seeds, caraway seeds, senna, guaiacum, rhubarb, saffron, and raisins, infused into aniseed water. This she recommended for colic, gravel and kidney obstructions, dropsy, and gripes, noting, "it purgeth two or three times a day." She also gave a second, slightly different, recipe for "the true" Daffy's Elixir. Wesley (who reported the composition of various nostrums, hoping to drive down prices) and Theobald provided still other recipes. Brookes (paralleling James) regarded *elixir salutis* (app. C-1) as being similar in both nature

Guajac & Sal: V. Oleos.<sup>352</sup>

*(nos quoque senes est aequom senibus obsequi[.] Ter: heau Act:3. Scen:1. V:10.<sup>353</sup>)*

about the same time Sr James had a slight touch in the right wrist, says rubbing the part with common treacle assuages the pain but never tryed it. there's but one Soldier in the Regmt troubled with this disease, viz: Campbell of Captn. Loyd's troop, an Argyleshire man & is hereditary.

*tollere nodosam nescit medicina dolorem.*

*nec formidandis auxiliatur Aquis.*

Ov: de Ponto lib:1 V.255.<sup>354</sup>

[margin: many Gouty Officers but few soldiers] there's not a Regmt in the Service without two or three Gouty Officers but it's rare to see a gouty Soldier & they seldom or never breed it. vid: Buch: Eleg: ad Ptolemaeum Luxeum Tastaemum &c:<sup>355</sup> Sr James had it

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and purpose to Daffy's Elixir. He wrote of the latter, "if you will believe the Venders of it, [it] will cure all chronic Distempers." Radcliffe recommended it against griping caused by purgatives. Brookes, *General Dispensatory*, p. 177; James, *A Medicinal Dictionary*, under "elixir"; Smith, *The Compleat Housewife*, pp. 274-75, 350; Theobald, *Every Man His Own Physician*, pp. 19, 58; Wesley, *Primitive Physic*, p. 177.

<sup>352</sup> App. C-1.

<sup>353</sup> "So it's right we old fellows should gratify other old fellows"; Terence, *Self-tormentor* 3.419; Terence, *Terence*, trans. John Sargeant, The Loeb Classical Library (London: William Heinemann Ltd.; New York: G. P. Putnam's Sons, 1926 [1912]), p. 159.

<sup>354</sup> "Healing art knows not how to remove crippling gout, it helps not the fearful dropsy"; Ov. P. 1.3.24-25; Ovid, *Ovid, with an English Translation*, trans. Arthur L. Wheeler, The Loeb Classical Library (Cambridge, Mass., Harvard Univ. Press; London: William Heinemann Ltd, 1953 [1924]), p. 283.

<sup>355</sup> Buchanan's fourth elegy, "Ad Ptolemaeum Luxium Tastaemum, & Jacobum Tevium cum articulari morbo laboraret" ("To Ptolemaeus Luxius Tastaemus and Jacobus Tevius, while he was ill with a disease of the joints"), was written in 1544, during an extended illness that he suffered while in Paris; in it, he describes at length the symptoms of his disease, including weakness and pain. Translation and discussion in David Henry Sabrio, "George Buchanan's *Elegies* and *Silvae* Translated, with Introduction and Commentary" (unpub. Ph.D. diss.,

in his feet febrile. 1746 & held him some weeks, thought

162: [facing p. 161; blank]

163: [continuing from p. 161]

it proceeded from lying cold the night we embarked for England, his feet being wet.

[margin: the Gout not occasioned from drinking French wines.] When at home our Gouty Officers avoid drinking French wines, for fear of giving them the Gout. but in Flanders it's the only wine they drink, particularly Burgundy, Hermitage & acknowledge they never were so healthy. & in our Dutch cantonment French claret was drunk daily & that freely, yet I don't remember many Gouty complaints.

[margin: evacuations necessary in the Gout.] Gouts from a Surfeit or hard living in a Sanguine constitution require evacuations: Cpt. Loyd was laid up some days at Coventry & confined to his bed or chair, his ankles useless & wrists so weak that he could not hold a small book.<sup>356</sup> was briskly purged with Pil: coc: min. & Cal:<sup>357</sup> on the purging day he could walk with pleasure & lift a chair, but next day was weak, but recovered always with purging. & this was my constant practice with Sir John Bennet,<sup>358</sup> being of a Sanguine

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Univ. of South Carolina, 1980), pp. 66-73.

<sup>356</sup> John Loyde or Lloyd was commissioned a cornet in the Blues 3 April 1718; a lieut., 12 Dec. 1728; a capt.-lieut., 25 April 1741; and a capt., 27 May 1742. He left the regiment in late 1753. RADCP, box 3/47; WO 27/1, 2, 3, 4, returns for Blues; *AL 1740*, p. 6.

<sup>357</sup> The same combination of cathartics is noted on *ms. p. 133*. On calomel and on *pilulae cocciae minores*, see also app. C-1. Purgatives were often used to treat gout; note Berdoe's comment, n. 347. However, Robinson (n. 365) and Mead cautioned that they should not be administered until the paroxysm was over. Mead, *Medical Works*, p. 413.

<sup>358</sup> Sir John Bennett, bart., entered the Blues as a cornet, 5 Feb. 1706; lieut., 24 Nov. 1715; capt.-lieut., 20 April 1732; capt., 29 Jan. 1734. He sold his commission 27 May 1742 and died at Fife 28 April 1752. WO 64/10, f. 7; *LM*, XXI (1752), 239.

constitution & Subject to fevers. have blooded, clystered &c. & always succeeded.<sup>359</sup> A Gentleman having the Gout in his great toe, & vexed with pain, scarified it with his penknife, blooded a small quantity to his present relief.

*"qui quo magis [continues on p. 165]*

164: [facing p. 163; blank]

165: [continuing from p. 163]

[quotations stroked]

*"tenues venulas corporique plurimum necessarias, nervosque, et ossa multa accrebra subierit, eo sane tum stabilior morbus est tum aegerrime profligatur. Hip: de Affect.<sup>360</sup> in podagricis doloribus tumores nitro leviter trito aqua subacto, velut cataplasmate obducito, tribus diebus ne lavato. cum vero laveris, rursus nitro*

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<sup>359</sup> Cadogan recommended bleeding strong patients, especially since patients often drank wines and cordials to keep up their spirits, thereby raising a fever and prolonging the attack. He also advised that moderate laxatives, as well as absorbent correctors of acrimony and cataplasms applied to hurt part may help. He added, however, that treatments such as vomiting and bleeding produced only temporary benefits in gout and other chronic diseases. Gouty patients, he insisted, could be cured only if they reformed. Bleeding was also endorsed by some writers (e.g. Jeans, Liger), but only in certain circumstances and in a small amount. Sydenham, who believed gout to be reflective of debility, argued that bleeding (as well as purgatives and sudorifics) should not be used in this case, for it further weakened the patient. Robinson criticized practitioners who treated gout with bleeding, purging, and laudanum (for pain). William Cadogan, *A Dissertation on the Gout, and All Chronic Diseases, Jointly Considered: As proceeding from the same Causes; What those Causes are; and A rational and natural Method of Cure proposed. Addressed to all Invalids*, 10th ed. (London [repr. Boston: Henry Knox]: 1772), pp. 63-65; Jeans, *Treatise on the Gout*, pp. 84-85, 101-04; Liger, *Treatise on the Gout*, p. 259; Robinson, *Essay on the Gout*, p. 69.

<sup>360</sup> "Inasmuch as this [i.e. corruption of blood by bile and phlegm] takes place in vessels that are the finest and by nature most critical in the body, as well as in sinews and bones that are many and dense, the condition is most persistent and intractable"; Hip., Aff., c.31; cf. *Hippocrates* (trans. Potter), V, 55.

*crudo rubro, cum pauco melle trito, eo velut semper utendum.* Ib: de mor. mulier:  
lib:1.<sup>361</sup>

[margin: Consumptions.] Par: 22. Consumptive people are more healthie here than  
at home<sup>362</sup>; live much on vegetables, all garden herbs being in great abundance & good of  
their kind, abstaine from malt liquor: drinking wine & water.<sup>363</sup>

[margin: Method of Cure.] are treated with pectorals, warm milk & Cons: rosar:  
[quotation stroked]

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<sup>361</sup> "For goutish pain, apply to the swelling ground nitre mixed with water into a cataplasm, and do not wash it off for three days, but when you wash it, put on crude red nitre with a little honey. Use this, as it were, always"; Hip., Mul., 1.98; cf. *Oeuvres complètes d'Hippocrate* (trans. Littré), VIII, 225. In Foës, Buchanan's "*leviter*" (l. 1) is rendered "*laviter*" (*Magni Hippocratis Medicorum*, p. 635).

<sup>362</sup> Noting John Arbuthnot's observation that consumption accounted for one-tenth of deaths in London, Buchan claimed, "Consumptions prevail more in England than in any other part of the world, owing perhaps to the great use of animal food and strong liquors, the general application to sedentary employments, and the great quantity of pit-coal which is there burnt; to which we may add the perpetual changes in the atmosphere, or variableness of the weather." In England, the death rate from consumption peaked in about 1780, at 1120 per 100,000 population. Poor working and living conditions associated with the early stages of the Industrial Revolution played a part. Buchan, *Domestic Medicine*, p. 130; Esmond R. Long, "The Decline of Tuberculosis, with Special Reference to Its Generalized Form," *BHM*, 8 (1940), p. 820.

<sup>363</sup> Buchan advised that consumptions, being inflammatory, might be caused by animal foods. He advocated a light diet, featuring fresh vegetables, as a key element in treating consumption. Boerhaave advised providing sufferers from cachexy with "such Aliment as approaches nearly to the Nature of the healthful Fluids of the Body, which are easily digestible; which are in their Nature opposite to the Cause of the Disorder; and which are agreeable to the Patient." Mead recommended that consumptives avoid malt liquors. These were considered binding, and Cheyne cautioned that they might damage weak stomachs. On the other hand, Blane saw them as "extremely wholesome and antiscorbutic." Buchan asserted that drinking alcoholic beverages in excess promoted consumption by weakening digestion. Berdoe, *Essay on the Nature*, p. 56; Blane, *Observations on the Diseases of Seamen*, p. 320; Buchan, *Domestic Medicine*, p. 70, 133; Buchan, *Observations concerning the Diet*, p. 11; Cheyne, *An Essay of Health*, p. 60; James, *A Medicinal Dictionary*, under "cachexia" (cf. *Boerhaave's Aphorisms*, p. 345 [aph. #1175]); Theobald, *Every Man His Own Physician*, p. 4.

*"lac etiam bubulum crudum, aquae mulsae 3tiae admixta parte bibat, per dies 45. una etiam admixto Origano[....] est morbus gravis, evadunt pauci.* Hip: de intern: affect:<sup>364</sup>

Night sweats keep the patient very weak. The Bark the best remedy taken with a slight bitter wine.<sup>365</sup> Some men swallow two or three Young frogs or snails<sup>366</sup> on a morning without any sickness at Stomach or any other effects. Cpt. Forbes's<sup>367</sup> Servant has swallowed Dozens.

[margin: Hospital practice.] in the Hospital frequent bleedings were tried in small

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<sup>364</sup> "Let the patient also drink raw cow's milk, to which one-third part of honeyed water has been added, for 45 days, and mix marjoram with it as well.... It is a serious disease, and few escape it"; Hip., Int., c.10; cf. *Hippocrates* (trans. Potter), VI, 105, 107. Buchanan's concluding line, "*est morbus gravis, evadunt pauci*," appears to be his own rendering of Hippocrates's conclusion; in Foës (*Magni Hippocratis Medicorum*, p. 537), the sentence reads, "*Morbus aut lethalis est, at eaque pauci evadunt*." The same formula, with slight variations in wording, is applied to a number of diseases.

<sup>365</sup> Bark and wine were used for their tonic qualities. Some authors would have disagreed with this strategy. Pringle wrote that in consumptive cases he prescribed bark only for convalescents whose lungs were free of obstructions. Manning wrote that in phthisis, "all medicines possessed of heating stimulating qualities, are in general improper." Fothergill asserted that bark exacerbated hectic fever. Nevertheless, Manning felt that bark might be appropriate in some cases; "By its tonic virtues it will enable nature to conquer many difficulties." He advised against use of another stimulant, elixir of vitriol (app. C-1, under "vitriol"), in the early, inflammatory stage, because of its astringency, but he claimed that during the latter stage it would be useful in resisting putrefaction and "colliquative sweats." Van Swieten and Leigh claimed that opium was useful in treating consumption. Leigh, *Experimental Inquiry into The Properties of Opium*, pp. 136-37; Henry Manning, *Modern Improvements in the Practice of Physic* (London: G. Robinson and J. Murray, 1780), pp. 263-78; Moore, *An Essay on the Materia Medica*, p. 125; Pringle, *Observations on the Diseases*, p. 163.

<sup>366</sup> On the medicinal applications of frogs and snails, see app. C-1.

<sup>367</sup> Hugh Forbes was born c.1701 and gained a commission as cornet (at a comparatively advanced age) 18 July 1737; lieut.; 17 Feb.1741; capt., 23 July 1745; major, 17 Dec. 1756; sold his commission and retired, 29 Dec. 1758. WO 27/4, 5; WO 64/10, f. 7; AL 1758, p. 17.

166: [facing p. 165; blank]

167: [continuing from p. 165]

quantities viz: from oz. iv. to oz. vi. prescribing Saponaceous medecines in large quantities, making Seatons in each side of the breast about 2. inches below the nipple: these Seatons discharge largely & I have seen some recover to admiration, were formerly walking Skeletons now fat & plump & free from Cough.<sup>368</sup> if the cough proves at any time unease, bleeding is immediately repeated. Dr. Pringle took to this method from observing the lungs of consumptives to be wasted or useless from tubercles &c: & of consequence not sufficient to *ventilate the blood*. therefor proposed lessening, the mass at different times, that the lungs might be able to do their duty on the remaining part. Some were blooded nineteen times in Six weeks.<sup>369</sup> I suspected these Seatons would produce carious ribs, which never happened, for they always worked outwards towards the skine.

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<sup>368</sup> Setons were silken threads pulled into punctures made by needles. The intention was to keep the wound open, so as to promote discharge. The process and the intention behind it were similar to rowelling (cf. n. 558). Quincy considered setons more effective than issues. Quincy, *Lexicon Physico-Medicum*, p. 396 (under "setaceum").

<sup>369</sup> Pringle advocated a series of small bleedings, as well as the use of setons and issues, for both patients with stubborn coughs and consumptives. He did, however, add that in determining how much to bleed the strength and condition of a patient was to be considered. Mead likewise advised venesection, and not only (as practiced by some physicians) when the blood was sily, but uniformly, adding, "It will possibly be thought a rash practice to draw blood, even when the patient is much wasted in his flesh, and very weak. But it is better to try a doubtful remedy than none." Manning advised bleeding for patients who were plethoric and strong or who had sily blood, particularly those with pain in the breast, but he cautioned against bleeding patients who were delicate or were weakened by their condition. Buchan believed that venesection might relieve coughing among consumptives, but in general he believed that the keys to successful treatment of consumption were diet, exercise, and fresh air, and he commented that when these failed, "I never knew medicine succeed." Buchan, *Domestic Medicine*, pp. 132-36; Manning, *Modern Improvements in the Practice of Physic*, pp. 276-77; Mead, *Medical Works*, p. 360; Pringle, *Observations on the Diseases*, pp. 160-61.

[margin: Consumptives & phthisickey people are better in field than in Garrison.]  
Consumptive & pthisicky people are always better in field, than in Garrison, providing their  
Duty be moderate, a plain proof of the benefite of horse exercise so much recommended by  
Sydenhame. three recovered in Campn 1745 from milk dyet and pil: pectoral: nostr. with  
gentle rieding.<sup>370</sup> one was attended with Spitting of blood & recovered by frequent bleedings  
in small

168: [facing p. 167; blank]

169: [continuing from p. 167]

quantities. (vid: Cornaro de la Sante des Princes. p.96<sup>371</sup>).

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<sup>370</sup> Drinking milk was a Classical treatment for consumption. Sydenham's endorsement (coupled with that of Richard Morton) helped make the practice standard in 18<sup>th</sup>-century British medicine. He also helped to popularize horseback riding as a remedy. Buchan wrote that horseback riding was "an infallible remedy, if begun in time" and asserted that physicians too seldom advised it. Milk, he commented, was "of more value in this disease than the whole materia medica"; like Sydenham and Mead, he favored asses' milk, but advised that cows' milk, though less digestible, was a fair substitute. Manning cautioned that horseback riding could be detrimental, and advised that consumptives ride early in the day, when their symptoms were mild. Monro observed that common soldiers could not afford the costs associated with riding. Buchan, *Domestic Medicine*, pp. 132-35; Manning, *Modern Improvements in the Practice of Physic*, pp. 274-75; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 35n; Sydenham, *The Whole Works of that Excellent Practical Physician, Dr. Thomas Sydenham: Wherein not only the History and Cures of Acute Diseases are Treated of, after a New and Accurate Method; But also the Shortest and Safest Way of Curing Most Chronical Diseases*, trans. John Pechey. 6th ed., corr. (London: R. Wellington, 1715), pp. 366, 374.

<sup>371</sup> Bernardino Ramazzini, *L'art de conserver la santé des princes* (Leiden, 1724) [note: The volume that provides this translation into French of Ramazzini's *De principum valetudine tuenda* also includes *Les avantages de la vie sobre*, by Luigi Cornaro; Buchanan may have been confused about the authorship of *La santé de princes*]. On p. 96, Ramazzini reports that a patient of his had developed a fever because of his intemperance, and, fearing that he would contract dropsy, he took Ramazzini's advice to return to his earlier manner of living, including horseback riding; he then regained his health.



[quotation stroked; stroke continues through case of Wilcox, which is also marked by marginal stroke, in pencil, and penciled note, 'Riding Master,' in a hand other than Buchanan's]

*"huic veratrum et lentis Decoctum proponito, et quam plurimis cibis satiato dum ab acribus carnibus bubulis suillis et ovillis abstineat. exercitationibus paucis et deambulationibus utatur, post illas vomitiones adhibeat venere abstineat.* Hipp: de morb: lib.2.<sup>372</sup>

Qr. Mr. Wilcox<sup>373</sup> is Riding-Master to the Regmt, naturally fat & corpulent, during the winter grows fat & purcy, big bellyed, becomes indolent for want of exercise. when our recruite horses are brought over nixt Spring, he has then hard exercise in breaking Young horses and teaching Young men to ride, is dayly a horseback, soon looses his big belly, grows more active every day, & as he expresses it, is fit to jump over the moon & a Stomach to eat a piece of a dead horse. & some of our men seem to be in the last stage of this distemper & uncapable of Garrison Duty, looking more fit for an hospital than a camp, yet recover wonderfully when in the field.

[margin: Venereale Disease.] Par: 23. It is a common notion that Venereal disorders are more malignant here than at home, but I have not had sufficient observation to form any just judgement. Some Buboës from England were more virulent than one could well imagine, having been twice fluxed in the hospital, fumigated with

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<sup>372</sup> "This man should be given hellebore and a decoction of lentils and as much food as possible, but should abstain from pungent flesh, beef, pork, and mutton; he should do a few exercises and take walks, and afterwards should vomit; he should refrain from sex"; Hip., Morb. II, c.49; cf. *Hippocrates* (trans. Potter), V, 281. In the quotation, for "*proponito*" (l.1), Foës (*Magni Hippocratis Medicorum*, p. 478) has "*propinato*."

<sup>373</sup> William Wilcox was commissioned a cornet in the Blues, and a quartermaster and riding master, 25 April 1741. He remained with the regiment at least until 1755. His difficulty with ulcerated legs is noted below, *ms.p.* 203. RADCP, Box 3/47; *AL 1754*, p. 61.

170: [lower part of page, opposite discussion of venereal disease] Venereal cases were more malignant in Brussels than at Ghent, commonly appearing at first with shankers, excoriations, Buboes, parts swelled, all complaints virulent. Mercurial Vomits were used more freely, to some I have given dr.fs. & never any bad complaint.<sup>374</sup> they were more mild in Germany, being only Simple Gonorheas.

171: [continuing from p. 169]

Cinnabar<sup>375</sup> &c: yet far from being well tho Patient seems to be in a good State of health. [marginal figure, in pencil, of hand pointing, signifying "N.B."] it's a difficult task to cure the private men of claps: when the pain<full> symptoms abate, they neglect taking medicines, let the running continue till it turns to a Gleet, then say they were not well cured.

[margin: Officers more easely cured than the men.] Officers are more easely cured

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<sup>374</sup> Several official mercurials, such as emetic tartar and turbith mineral (on both, see app. C-1), were regularly used as emetics, and the army may have used its own variants in addition. In the treatment of venereal disease, mercurials were not relied upon only to produce salivation; rather, they were consistently employed. On the treatment of venereal disease, see app. B-1.

<sup>375</sup> On cinnabar, see app. C-1. Apropos of Buchanan's usage, it was often used as a fumigant, to administer mercury to venereal patients. Mercurial fumigations had earlier been relied on more and had been quite harsh (Fracastorius had recommended fumigations of styrax, antimony, and incense, as well as cinnabar). By the 18th century, however, they were conducted mainly with cinnabar, which was regarded as mild. Furthermore, they were no longer used against syphilis, but only local venereal complaints. A popular method was for cinnabar to be put on live coals, its smoke being directed by a tube to the affected part. To enhance its effect, patients often sat in confined spaces or boxes. James believed that cinnabar given internally acted too slowly, and preferred other mercurials, but its use as a fumigant was widely supported by authorities. By the close of the century, according to Healde, cinnabar was "employed chiefly in fumigations, sometimes to raise a ptyalism, but oftener for curing ulcers in those infected with the Lues Venerea." John Astruc, *A Treatise of the Venereal Disease, in Six Books; containing An Account of the Original, Propagation, and Contagion of this Distemper in General. As also of the Nature, Cause, and Cure of all Venereal Disorders in particular, whether Local or Universal*, trans. William Barrowby (London, W. Innys [etc.], 1737), II, 203-04; Healde, *New Pharmacopoeia*, pp. 34, 172-73; James, *Medicinal Dictionary*, "cinnabaris"; François Xavier Swediaur, *Practical Observations on Venereal Complaints*, 3rd ed. (New York: Samuel Campbell, 1788), p. 98

& that with the very same medecines being more carefull of health & keeping a proper Regimen.

[*margin:* Gonorhea.] The Gonorhea appears in the Space of a week after infection & may <be> caught by touching the parts only without coition as was the case of No. 3. and No. 5. says he got it going to the same necessarie house where two of his clapped Comrades frequented<sup>a</sup>.<sup>376</sup>

[*margin:* Method of Cure.] I commonly begin with calomel purges & continue till the running grow thick & white. the common purge is Jalap & Sal: Prunella & for heat of urine *Sal: Prunel & Sachar: alb: aa. p:v.*<sup>377</sup> taken frequently in a Glass warm water or whey, marsh mallow tea with Gum Arabic: Lintseed tea with Sal: Prunel: &c: I reckon the desease about half cured when the above complaints cease, & then order pil: resinos: nostr.<sup>378</sup> or an

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<sup>376</sup> Although it is possible that the men were lying, there were few inducements for them to cover up their sexual activities. Of venereal disease, Hamilton wrote, "Among soldiers it is so prevalent, that no reproach follows it, either from their comrades or from many of their officers. While this is the case, all hopes of reformation are shut out." Some regiments did, however, punish men if their condition made them unfit for duty. In civilian society, many victims of venereal disease felt ashamed. Buchan wrote, "It is peculiarly unfortunate for the unhappy persons who contract this disease, that it still lies under a sort of disgrace. This renders disguise necessary, and makes the patient either conceal his disorder altogether, or apply to those who promise a sudden and secret cure; but who in fact only remove the symptoms for a time, while they fix the disease deeper into the habit." Buchan, *Domestic Medicine*, pp. 365-66; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 71.

<sup>377</sup> "Sal prunella and white sugar, in the same quantities, as much as is required." In this case, sugar was probably being used for taste, though during the 17th century it had widely been considered anodyne. Note entries for sugar and for sal prunella, app. C-1. Salmon, *New London Dispensatory*, p. 171.

<sup>378</sup> While the recipe in this case is unknown, it is quite possible that the "resinous pills" that were used at 18th-century army hospitals in the treatment of old gleet were similar. These were prepared by mixing common resin with sugar of lead, camphor, balsam of copaiva, and turpentine, in a base of egg yolk. In this mix, the resin was probably included to give shape to the pills. Camphor served many purposes (app. C-1), but seems to have been included in the pill for its perceived anodyne and sedative qualities. Note app. C-1 entries for sugar of lead (under "lead"), balsam of copaiva, and turpentine. Various writers cautioned that balsam of copaiva not be given while gonorrhoea remained virulent (app. C-1); this may explain why

Electuary with G. Guajac: Rhab. with tereb. Venet.<sup>379</sup> &c: which operate by wine & keep the body open; towards the latter

172: <sup>a</sup>No.1. caught it tho he had a natural Phimosiſis, & the oriſice ſo very ſmall, that it was only ſufficient to paſs the urine. No.2 from the woman's handling the part only, thinks ſhe rubbed ſome matter brought from her own Body.

[the following quotations are crossed through]

-----? *quare, ne paeniteat te*

*desine matronas ſectarier unde laboris*

*plus haurire mali eſt, quam ex re decerpere fructus.*

*nec magis huic inter niveos viridisque lapillos*

*(ſit licet hoc Cerinthe tuum) tenerum eſt femur, aut crus*

*rectius atque etiam melius perſaepe togatae.*

Hor: Sat:2. lib:1. V:77.<sup>380</sup>

*Matronae praeter faciem, nil cernere poſſis*

*Cetera ni Catia eſt, demiſſa veſte tegentis.*

Ib. et vid. Ep.17. lib.1. V:55.<sup>381</sup>

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Buchanan held back until the diſeaſe was "half cured." *Practice of the British and French Hospitals*, p. 68.

<sup>379</sup> Note entries for gum guaiacum, *rhabarbarum*, and *terebintha Veneta* (under "turpentine"), app. C-1.

<sup>380</sup> "Wherefore, that you may have no reaſon to repent, ceaſe to court matrons, for thence one may derive pain and miſery, rather than reap enjoyment in the reality. Though this may not be your opinion, Cerinthus, yet not ſofter or finer are a woman's limbs amidſt ſnowy pearls and green emeralds -- nay, often the advantage is with the ſtrumpet"; Hor. Sat. 1.2.77-82; *Horace* (trans. Fairclough), p. 25.

<sup>381</sup> "In a matron one can only ſee her face, for unleſs ſhe be a Catia, her long robe conceals all elſe"; Hor. Sat., 1.2.94-95; *Horace* (trans. Fairclough), p. 27. Ep. 17.1.55 (I, 17.55-58) translates, "[a complaining travel companion] recalls the familiar tricks of a miſtreſs who oft

173: [continuing from p. 171]

end, advise the cold bath or washing with cold water.<sup>382</sup>

[margin: never use injections.] seldom or never use injections,<sup>383</sup> & never saw one

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bewails a pretty chain, oft a stolen anklet, so that by and by her real losses and griefs win no belief"; *Horace* (trans. Fairclough), p. 365.

<sup>382</sup> Hunter likewise advised cold bathing as a means to brace the habits of patients recuperating from gonorrhea or suffering from gleans. Galen had strongly endorsed cold baths as a treatment and palliative for fever, and Avicenna and Averroes had encouraged cold bathing as well. The practice was condemned by most 16th- and 17th-century writers, notably Lommius, who was especially critical of Arab writers for recommending cold water before coction. The 18th century, however, saw a renewed interest in cold baths, Hoffmann writing extensively on the subject. Quincy found cold bathing generally useful for bracing the solids and accelerating the circulation, thereby forcing the blood through blocked or constricted vessels. Hunter, *Treatise on Venereal Disease*, pp. 67-69; James, *A Medicinal Dictionary*, under "balneum"; Pearson, *Outlines of Lectures*, I, 10, 22, 26-27, 32; Quincy, *Lexicon Physico-Medicum*, pp. 38-39. Sanctorius's demonstration of invisible perspiration encouraged a rise in balneology and spas: Virginia Smith, "Physical Puritanism and Sanitary Science: Material and Immaterial Beliefs in Popular Physiology, 1650-1840," *Medical Fringe & Medical Orthodoxy 1750-1850*, ed. W. F. Bynum and Roy Porter [The Wellcome Institute Series in the History of Medicine] (London, Sydney, Wolfeboro: Croom Helm, 1987), p. 176.

<sup>383</sup> In the words of Hunter, "Fluid applications to the inside of the urethra are commonly called injections, and like the internal remedies, are without number; every practitioner thinking, or wishing to make the world think, that his own is the best." He enumerated four types of injection. Irritating injections were generally astringent; they were designed to cause greater irritation than the disease, thereby destroying it; but Hunter saw their effects as temporary, and advised against using them in the presence of inflammation or pain. Injections of the second type, sedative, were often opiates, which he esteemed the best type (since it reduced pain and helped return the system to its normal state), but not effective in all parts or constitutions; he also endorsed lead, especially a solution of sugar of lead (app. C-1, under "plumbic preparations"), which he asserted not only reduced inflammation but was also a gentle astringent. Emollient injections were more useful, in Hunter's view, when there was much irritation; they were intended to wash away irritating matter and coat the affected region; milky water, sweet oil, and solutions of gum arabic worked well in his estimation. Astringent injections, he noted, were of many kinds, including balsams, turpentine, bark, vitriols, salts of mercury, and alum; he believed that they might serve a useful purpose by causing vessels of the affected part to contract, reducing the discharge, but that none of the injections was specific to gonorrhea; he also cautioned that injections of this type were often irritating. According to Brocklesby, most army surgeons made use of injections, usually

of our men have a Caruncle.<sup>384</sup>

[*margin:* the men are irregular as to Regimen, & love to be heartely worked.] are well in Six or Seven weeks tho very irregular as to Regimen, their breakfast is water gruell, with which they work on their physick which procures a good appetite for dinner & eat freely of mess food with their Comrades & rarely abstaine from drinking. they love to be heartely worked & Jalap answers this purpose working briskly & seldom attended with grieps, there's a vulgar & unjust prejudice against it from being cheap & so much in practice. Manna & Salts is the common method with officers, giving calomel pill<sup>385</sup> overnight; repeated every other day, & with this have only made a cure in three weeks time; but the men don't think this strong enough.

[*margin:* Cordee] The Cordee is one of the most troublesome complaints,

[*margin:* method of cure.] rubbing with Ungt. merial [*sic*]<sup>386</sup> is of use, or dissolved

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including calomel or another mercurial; he favored the solution of corrosive sublimate (app. C-1, "mercurials") that had been popularized by van Swieten. Buchan wrote that in its early stages gonorrhoea might be cured by astringent injections (sugar of lead in rose water) up the urethra five or six times per day. Brocklesby, *Oeconomical and Medical Observations*, pp. 291-92; Buchan, *Domestic Medicine*, p. 368; Hunter, *Treatise on Venereal Disease*, pp. 70-75.

<sup>384</sup> Hunter doubted that it was possible to distinguish among caruncles, excrescences, or "risings" from strictures in living patients. He recommended caustics to treat caruncles that were accessible and considered the bougie generally ineffective in this situation. *Treatise on Venereal Disease*, p. 154.

<sup>385</sup> This is probably similar or identical to the army's "calomel bolus" (entry for calomel, app. C-1, "mercurials"). Although virtually all 18th-century authorities believed that mercury cured syphilis, some had a sense that it was less effective against gonorrhoea. Monro reported that some of his patients had developed the pox after he had supposedly cured them of gonorrhoea, and without apparent reinfection. Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 219-20.

<sup>386</sup> App. C-1, "mercurials."

*vitell: ovi. with Aq: hord.*<sup>387</sup> & injected. I often prescribe thus. *Rx turpeth: mineral: gr.iv. calomel Camphire: aa gr:vi. elect: Lenitiv: gr.l: ut f. bol.*<sup>388</sup> it's purgative, seldom emetick; & if often repeated makes a sore mouth. Mercuric vomits are often given for this purpose. I often use them in venerale cases & never saw anything dangerous attending them as

174: [facing p. 173; blank]

175: [continuing from p. 173]

is commonly reported. I once knew a violent Cordee relieved by accidental bleeding from the part & have always thought bleeding with a Leech would be of Service, but none incline to try.<sup>389</sup> Sometime after the running stops & the patient quite well, there remains pain & heat round the os pubis greatly alarming the patient, though never of any bad consequence & easely removed by any lenient purge.

[margin: Phimosis.] The Phimosis is often troublesome both to Patient & Surgn.

[margin: Method of Cure.] fomentations are necessary. warm milk, rubbing with ungt. mercurial or injection as above. our men often use warm small beer & butter & some

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<sup>387</sup> "In eggyolk with barley water." Eggyolk was commonly used in medicine as an intermedium to make resinous juices and balsams soluble in water. On barley, note app. C-1, under "*hordeum*."

<sup>388</sup> "Take 4 gr. turbith mineral and 6 gr. each of calomel and camphor and as much lenitive electuary as is necessary to make a bolus." Note entries for the four ingredients, app. C-1. The formula prescribed by Buchanan probably represented an attempt to introduce mercury into the patient while cleansing his system and reducing the nausea or salivation that Turbith Mineral alone might cause.

<sup>389</sup> Hunter likewise recommended using leeches to treat chordee. He also advised exposing the penis to steam and poulticing or fomenting it, using camphor as an ingredient, to relieve inflammation; opium and camphor would also serve to reduce pain. In obstinate cases, Hunter recommended mercurial ointment, cicuta (hemlock), or treatments with electricity. Mercury, he noted, was effective because it promoted absorption. *Treatise on Venereal Disease*, pp. 81-82.

fat broth, & always bread & milk poultice.<sup>390</sup> Peerage, of Col. Beakes's had it to a great degree & would not suffer anything to be done, being a Farrier only rubbed with Ungt. Death.<sup>391</sup> & continued so two years, laughing that he now got a natural scabbard, & swearing he would never draw his sword. was lately discharged. we had many in Garrison 1744 & some required the operation.

[*margin: Paraphimosis.*] Paraphimosis more dangerous than the above, sometimes threatenng a mortification, the Glans swelling to a great size, pustules rise & containe a sharp water, excoriating &c[;] the above method usefull, yet the operation cannot be avoided in some cases. or slight incisions where the stricture is strongest

176: [*facing p. 175; blank*]

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<sup>390</sup> Phimosis (a condition in which the prepuce swelled and tightened over the glans, so that it could not be exposed) and paraphimosis (where the prepuce tightened behind the glans; cf. n. 392) were treated similarly. Phimosis could be treated surgically, by slitting the prepuce or, if it was large and indurated, by circumcision (as Galen had recommended). Swediaur advised, however, "where chirurgical operations can be avoided, I think they ought," and he cautioned that a surgical incision would allow venereal poison to enter the body, threatening a proliferation of chancres and buboes. He recommended inserting a probe beneath the prepuce to search for ulcers and injecting diluted mercury in nitrous acid. A poultice of bread and water, he added, would soothe the penis and help to relax the prepuce. Hunter recommended mercurial injections between prepuce and glans, sometimes with admixtures of gum arabic (to promote adherence) or opium (to control pain); injections of corrosive sublimate, he cautioned, should be heavily diluted. He further recommended the use of linseed poultices and advised fomenting the penis by placing it in a steam of water, vinegar, and spirits of wine. Hunter found bleeding sores to be difficult to treat, because whereas normally he was inclined to combat bleeding with oil of turpentine ("the best stimulus for the contraction of vessels of all kinds"), he thought that in this case it would be ineffective, and advised instead the use of sedatives. If the phimosis was blocking urination, he advised first using a bougie, and, if this failed, surgery. Douglas J. Campbell, "The Venereal Diseases," *The History and Conquest of Common Diseases*, ed. Walter R. Bett (Norman: Univ. of Oklahoma Press, 1954), pp. 179-80; Hunter, *Treatise on Venereal Disease*, pp. 201-04, 211-16; Sharp, *Treatise on the Operations*, pp. 53-54; Swediaur, *Practical Observations*, 60-61.

<sup>391</sup> App. C-1, under "marshmallow."



177: [continuing from p. 175]

rubbing the Glans with brandy & oyle; some use cold water & vinegar.<sup>392</sup> this often happens after recovering a Phimosiſ, being fond of pulling the prepuce back before it is ſufficiently relaxed, catches the Glans ſuddenly, & ſometimes ſo tight that the urine cannot paſs.

[margin: Swelled teſticles.] Swelled teſticles are frequent, & ſaid to be occaſioned from aſtringent medecines & the Surgeon always blamed; but are rather from catching cold, riding, intemperate drinking & private debauches, & are very obſtinate in old venereal conſtitutions as was with Barbier of Sir James's, continued ſix weeks notwithſtanding a gentle *ſale*. bleeding &c. as above are neceſſary & turpeth vomits of great uſe. when the ſwelling decreases the part ſhould be keep'd warm, wearing a truss of flannel &c. otherwiſe it returns on the leaſt Cold. ſmall hard knotty lumps adhering to the teſticle remain ſome time, & the Strings are often hard & as it were twisted, but of no dangerous conſequence. warm milk & honey is a favorite fomentation with ſome, greatly aſſwages pain.<sup>393</sup>

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<sup>392</sup> The treatments noted by Buchanan fall within the framework of common practice. The regimen for paraphimosis was intended to loosen the prepuce, soothe and heal the penis, and heal any sores that were on the glans. Swediaur recommended pushing back the glans and using cold water, while, for phimosiſ as well as paraphimosis, Aſtruc advised rubbing the penis with an emollient decoction that included marſhmallow and linſeed. Bell believed that paraphimosis could uſually be cured by ſoaking the penis in a cold ſolution of ſaccharum ſaturni (one of his favorite remedies). As was the caſe with phimosiſ, ſurgical correction was endorsed only when medical treatment failed. Sharp advised that if the ſtricture threatened gangrene and crystalline tumors were forming, ſeveral inciſions ſhould be made in the ſtricture and the ſores and that this ſhould be followed up with fomentations, diſſectives, and *theriaca Londiniſis* (dropped in 1746; the final verſion, although ſimplified, included 26 ingredients) over pledgits. Hunter, who like Buchanan and like moſt medical authorities conſidered paraphimosis to be the more dangerous diſeaſe, becauſe of the threat of mortification, advised that ſurgical release of the ſtricture was often neceſſary. Aſtruc, *Treatiſe of the Venereal Diſeaſe*, II, pp. 165-66; Bell, *System of Surgery*, I, 297-98; Hunter, *Treatiſe on Venereal Diſeaſe*, pp. 201-04, 217-18; James, *A Medicinal Dictionary*, under "theriaca"; Sharp, *Treatiſe on the Operations*, pp. 54-56; Swediaur, *Practical Obſervations*, p. 62.

<sup>393</sup> Hunter believed that ſwelled teſticles was cauſed by ſympathy between them and the urethra or bladder. To treat the problem, he advised bleeding and purging, as one would an

[*margin*: Shankers.] Shankers often appear without any other Symptoms, are taken off with Scissars, cut down with Causticks,<sup>394</sup> Vitriol: Rom:<sup>395</sup> or Lint. ad ulcera venerea nostr.<sup>396</sup> dissolving them insensibly without pain & have been often surprized at its good

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inflammation. Bleeding with leeches he found to be especially effective, though he was unsure why this should be the case. He did not believe that mercurials would help -- swelled testicles was not, he believed, in itself venereal -- but thought that vomits might help, because of the sympathy between the stomach and testicles. Noting that the testicles tended to swell when running ceased, Bromfield and others had advised treating the condition by encouraging irritation with bougies or even by introducing venereal matter into the urethra, but Hunter saw no value in these procedures. Instead, he recommended resolvents (e.g. mercurial frictions with camphor), fumigations with aromatic herbs (to stimulate absorption), or applying electricity. Buchan advised venesection during the inflammatory stage; if the problem continued, he advised a treatment suggested by Fordyce (who was, in turn, inspired by Stork), that of fomenting the testicles with hemlock. Buchan, *Domestic Medicine*, pp. 376-77; Bromfield, *Chirurgical Operations and Cases*, II, 322-27; Hunter, *Treatise on Venereal Disease*, pp. 83-85.

<sup>394</sup> Caustics were intended to burn off unwanted flesh or bone, or to open abscesses. Woodall warned against excessive use of caustics and cautioned that they should not be reapplied for at least eight days, after the first scar had fallen off. Hunter cautioned that the treatment of chancres should take into account the constitution of the patient and the stage in his disease, because might both reflect infection in the system and infect it. Nevertheless, the treatment that he suggested for new chancres was similar to Buchanan's: caustic, especially lunar caustic (silver dissolved in nitric acid over heat), or, if the sore was spreading, surgical removal. Caustic was, he believed, especially preferable for chancres on the glans, since it was not very sensitive, while an incision would cause unnecessary bleeding. In cases where the practitioner had reason to believe that the chancre was spreading, he recommended dressing the sore with mercurial ointment and administering mercurial drugs to the patient. Brookes, *General Dispensatory*, p. 316; Hunter, *Treatise on Venereal Disease*, pp. 205-11; Quincy, *Lexicon Physico-Medicum* (1719), pp. 63-64; John Woodall, *The Surgeon's Mate; or Military & Domestique Surgery* (London: Rob. Young, 1639), p. 21.

<sup>395</sup> On *Vitriolum Romanum*, see app. C-1, under "vitriol."

<sup>396</sup> Although *linimentum ad ulcera venerea nostrum* cannot be identified, it may well have been similar to mercurial ointment, the army version of which was prepared simply by mixing 2 lbs. lard and 1 lb. mercury. According to the editor of *Practice*, "This is the ointment usually applied to venereal sores, and rubbed into the skin to raise a salivation; as also applied by way of friction, in which last case, half a drachm only should be rubbed in every, or every other, night, as the patient can bear it, till the mouth gets sore. During these frictions, the body ought to be kept in a laxative state, and the utmost care taken to prevent catching cold."

success.

178: [facing p. 177; blank]

179: [continuing from p. 177]

I have seen the whole Glans covered like a Cluster of Grapes & cured without pain. great care should be taken in order to keep the neighbouring parts clean for the matter breeds others or makes large excoriations.

*et neglecta solent incendia sumere vires.*

Hor: Ep.18. lib:1. V:85.<sup>397</sup>

Women often neglect them till they become filthy ulcers.

*Stultorum incurata pudor malus ulcera celat.*

Ep.16. lib.i. V:24.<sup>398</sup>

internale medecines as above are usefull, but our troopers are careless & if the ulcer be healed, they never think of taking physick, but quite otherwise with Officers. Paterson of the King's had many ulcers & was a careless dirty fellow, not keeping them clean[;] was prisoner in the hole three days & fed on bread & water only. on coming out the parts were quite clean tho never dressed.

[margin: Buboes.] Buboes often appear without any preceeding Symptom; sometimes sooner or later. our fellows are such dablers that there's nothing certain to be

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Liniments were intermediate in consistency between oils and ointments, but during the 18th century they were absorbed into the ointments. Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 446; *Practice of the British and French Hospitals*, p. 75.

<sup>397</sup> "And fires neglected are wont to gather strength"; Hor. Ep. 1.18.85; *Horace* (trans. Fairclough), p. 375.

<sup>398</sup> "Fools, through false shame, hide the unhealed sore"; *ibid.* 1.16.24; *Horace* (trans. Fairclough), p. 353.

learned from them.

[*margin: Method of Cure.*] so soon as they appear I apply Empl: Diachyl: c: Gum.<sup>399</sup>, allowing the fellow to live as usuale & take his Pot of Beer. their custom is to drink Gin but that makes them drunk & does not answer the intention. some ripen of themselves without any application. some are kindly & do well without much trouble. those of a healthy strong constitution ripen

180: [*facing p. 179; blank*]

181: [*continuing from p. 179*]

best & such as live well. Some fellows are drunkish every night & have told me it cost them a Ducate to nurse their pig & make it ready for the knife. when ripe I open with the Lancet, cutting off the edges: dress with dry Lint, covering with digestive.<sup>400</sup> if the edges grow hard and callous, rub with Ungt. mercurial; if proud flesh touch with Caustic or Vitriol: Rom: if foul at bottom, sprinkle praecipit. rubr.<sup>401</sup> or Ungt. Aegyptiac;<sup>402</sup> when opened by Caustic, the

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<sup>399</sup> Emplastra were "composed chiefly of oily and unctuous substances, united with powders into such a consistence, that the compound may remain firm in the cold without sticking to the fingers; that it may be soft and pliable in a low degree of heat, and that by the warmth of the human body it may be so tenacious as readily to adhere both to the part on which it is applied, and to the substance on which it is spread" (Lewis). They were usually made with wax, although resins were sometimes used. Plasters for the breast and stomach were supposed to be soft and those for limbs, more firm and adhesive, the inclusion of more wax and powder increasing firmness. On *Emplastrum diachylon cum gummi* see app. C-1.

<sup>400</sup> Digestives (n. 10) were often applied after caustics, to complete the process of removing unwanted flesh. Lint, wrote Hooper, was "the common dressing in all cases of wounds and ulcers, either simply or covered with different unctuous substances." Quincy/Hooper, *Quincy's Lexicon- Medicum*, p. 448.

<sup>401</sup> Regarding (*Mercurius*) *praecipitatus ruber*, see app. C-1, under "mercurials." Of the healing process, Sharp wrote, "The first Stage of Healing, or the Discharge of Matter, is by Surgeons call'd *Digestion*; the Second, or the filling-up with Flesh, *Incarnation*; and the last, or skinning-over, *Cicatrization*." He recommended that proud flesh be kept down with pressure

business is done at once, seldom proud flesh or callous edges, but the men have not the patience for Caust: some are faint & sicke as from bleeding. others never mind it, making no complaint, riding dayly, only lying by a day or two when near ripe, and some are so large that they cannot walke upright, but crawl on their hands & feet. Some complaine of so much pain as not suffer You to touch it. are even [*beginning here, and for balance of page, is a vertical penciled line in margin*] afraid if You look at it, and people of this constitution are always a long time a curing. Paterson of the King's in naturally of a sulkie temper and must have repeated orders from his Corporale before he does his duty. The constitution of his body is much the same with respect to physick requiring almost double Doses to operate, is now fluxing & has double the quantity of Mercury that others have. I seldom attempt to disperse them.

182: [*facing p. 181; blank*]

183: [*continuing from p. 181*]

[*margin: not always confined to the Groine.*] they may happen in other parts of the body as well as in the Groine & Crosfield of Coll. Beake's had one on the os pubis, Attree of Major Jenkinson's in the arm pit, & in another on the fore part of the neck.

[*margin: are easier cured than claps.*] I would rather undertake the cure of Bubo than

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or with flesh-eating medicines, so that skin could advance from the circumference to cover the wound. A mild escharotic like vitriol was sufficient, in his opinion, for it was necessary only to reduce the perimeter. He strongly endorsed the use of dry lint (cf. Buchanan's use), which absorbed blood without injury (unlike styptic) and also absorbed thin matter, being in effect a digestive. Lint, he argued, was the softest matter that could be applied between a roller and granulations during incarnation, and also served as an easy compress on sprouting fungus or proud flesh. Sharp, *Treatise on the Operations*, pp. ii-iii, v-vi.

<sup>402</sup> On *unguentum Aegyptiacum* and its main active ingredient, verdigris, see entry under the former in app. C-1.

that of a Clap. so long as they require dressing the men attend dayly for fear of being poxed, & never pretend to cure themselves; but their private receipts for claps are infinite. when the cure is compleated they don't mind physick or any regimen, but return to the old way, & if poxed thereafter blame their Surgeon. Some do not heal kindly, continue ouzing from a small orifice; & some have small sinuses of this kind, threatning to be fistulous. Should be laid open with Lancet or Caustic: applyed, if compress & bandage faile.

[*margin:* not to be opened till ripe.] I have imagined Buboës might be opened by Caustic befor they were quite ripe, & that the discharge after the Eschar cast off would be sufficient, & by this method shorten the cure, not waiting for Suppuration; but then the Gland remains undestroyed, having never suppured; is hard, proves tedeous work to the Surgn & great pain to the patient; escarotick powders must be applied, viz: <pulv.> Angelic:<sup>403</sup> round the root of the Gland, pressing the

184: [*facing p. 183; blank*]

185: [*continuing from p. 183*]

dressings tight towards the bottom, in order to root it out, & some cut it out as soon as they can get at it. others waste with Caustic, continuing a course of internal mercurials.<sup>404</sup> Rylie of the King's Troop had one on our March to Germany & promising to ripen, encreasing

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<sup>403</sup> On angelica, see entry in app. C-1.

<sup>404</sup> Hunter recommended a somewhat different courses of treatment for buboes depending on their location and whether they appeared to be venereal in origin. For venereal buboes, he advised a strongly mercurial course and claimed that it almost always resulted in resolution, rather than suppuration. Regarding buboes that did suppurate, he advised using the lancet to open small ones, and caustic for large ones, but added, "The surgeon should in some degree be guided by the patient. Some patients are afraid of caustic, others have a horror of cutting instruments." *Treatise on Venereal Disease*, pp. 247-55 (quotation p. 254).

daily; at Maestricht we received ammunition bread,<sup>405</sup> & proved purgative at first, being mixed with a large quantity of Rye; he was violently purged and the Bubo disappeared. his dyet was Spare, sweating much from the heat of weather & exercise, & never had other complaint.

[*margin: Venereal Eruptions.*] Venereal eruptions on the Skin are common amongst us, and I have often been afraid to attempt a cure without salivating from the difficulty represented by Practical Authors, but our men have neither time nor Patience for this method. & I have often thought of trying some uncommon mercurial preparation for this purpose.

[*margin: Method of Cure.*] the best I know are our pil: Mercurial: nostr. taking two morning & evening, desisting if the mouth or Gums grow sore,<sup>406</sup> & begin again when that goes off, been often surprized at their good success. two or three Dozen has done wonders & that without any visible operation; & some have taken three Dozen without the least soreness of mouth. mercurial Oynt. should be used externally with prudence. I have tried several mercurial

186: [*facing p. 185; blank*]

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<sup>405</sup> The recipe for this version of ammunition bread was probably similar if not identical to the one provided by Abraham Hume, commissary-general, in a memorandum prepared at some point during the war. Hume prescribed that 200 lbs. of rye flour, including bran, be mixed with 115 lbs. water, then baked; figuring in evaporation, this would provide 45 6-lb. loaves, each 11-12" wide and 3" thick. Hume's memorandum is in the Cumberland Papers, Box 58/263. The recipe suggests that this bread was intended to be laxative.

<sup>406</sup> These were probably the same as the *pilulae mercuriales* of the army "Dispensatory" of 1746. The pills were prepared by mixing 5 dr. mercury with 2 dr. Strasburgh turpentine, 1 ½ dr. Ruidius' extract [app. C-1], thinning with olive oil if necessary, then beating the mix into a mass, for pills. Theobald wrote, "Where-ever Mercurials are indicated, Pills from this Mass may be administred [*sic*] with great prospect of Success; being second to no Form, wherein Quicksilver is wont to be exhibited." He recommended them for "lesser" venereal symptoms, as well as in treating ulcers and scorbutic sores. *Medulla medicinae*, p. 56.

187: [continuing from p. 185]

preparations, but never found any more effectual than the above. I deflagrated Mercur: precipit: rubr. dr.ii with Brandy three times, finely prepared in a marble mortar & formed into pills ad: gr.i aut ii. are purgative, making a slight sickness at Stomach, taking one morning & evening & sometimes raise a slight spitting; one man took twenty two in ten days, without any remarkable operation; had many venereal Blotches, shankers, aching pains in the bones & did well; was surprised to see so great an alteration from so small a Pill. Fishar of Col. Beake's his skin was covered over & of long standing, dry Scales &c.

*Livor, et adverso maculae sub pectore nigrae*

*pectus adulterii labe carere negant.*

Ov. Amor: lib:ii. eleg.:c. V:43.<sup>407</sup>

& C.F.<sup>408</sup> took them in our Dutch cantonment during the hard frost, with the same good effect. Turpeth. mineral: prepared in the same manner answered the same purpose. our men only found fault with them as being so small and having no violent operation, imagining medecines can have no good effect unless they be rough in their operation. Small doses Calomel has the same effect. continued some time and raising a slight Salivation, called a walking Sale. the men walk abroad dayly taking care to keep the feet dry, wearing two

188: [facing p. 187; blank]

189: [continuing from p. 187]

shirts or flannel westcoat, their cloake &c., walking in the Sun in order to sweat, all sweat largely in the night from drinking something warm at bedtime &c. their chief dyet is water

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<sup>407</sup> Of Io: "The dark colour and the black spots on her breast in front were signs that her heart is not without stain of unfaithfulness"; Ovid Amores 3.5.43-44; *Heroides and Amores* (trans. Showerman), p. 467.

<sup>408</sup> Possibly Captain Forbes (cf. n. 367).



gruelle with bread in which they boyle Young nettle tops. Elder buds &c: making Spring pottage as in England, with which they wash the mouth frequently. Some require three or four Scruples befor the mouth grow sore, others flux sufficiently with half the quantity, & some are always purged, & all attended with the same good effect. which is to be continued till all complaints cease; the skin should be washed dayly with a Sponge & soapie water, well rub'd. warm bathing would be of great service. abstaining from Salt or fat meats. Murrel of Sr James took thirty three pills aa. gr.v: fluxed gently, his mouth never sore, and purged dayly. Harding of Captn. Gilbert's took upwards of fourty in March & Aprl. many others were treated in this manner & all succeeded. & I have observed fewer relapses after this slow method than from higher Salivations. & tho in cold rooms there has not been the least bad consequence, but irregular fellows are not to be trusted in this manner. when the head is scabbed they rub the part too freely with Ungt. Mercurial, from seeing its good affects on other parts & sometimes

190: [*facing p. 189; blank*]

191: [*continuing from p. 189*]

throw themselves into a high salivation, & befor it can be checked the hair is obliged to be taken off, to the great grief of the Trooper. I have also used mer praecipit.<sup>409</sup> pr. Se with the same success.

[*margin: Nocturnale pains.*] Nocturnal Pains are seldom alone, something Venereal appearing to the Eye; tho Some Soldiers magnify complaints of this kind even after a regular

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<sup>409</sup> Buchanan's reference is probably to red precipitate (app. C-1, "mercurials"), though green, white, and yellow precipitates of mercury were also official, the last being better known as turbith mineral (entry for *turpethum minerale*, under "mercurials," app. C-1).

Salivation in hopes of being discharged, but have been frequently detected as impostors.<sup>410</sup> are to <be> treated in the above manner, tho Salivation is their last recourse, which is always in the Hospital & chiefly by unction<sup>a</sup>.

[*margin*: Nodes & Exostoses.] Nodes & Exostoses render the Soldier unfit for Duty, cannot <bear> a boot &c: & as he is likely to be so for a long time, is more proper for the Hospital than his quarters. the common practice is to apply caustic to the part. a large Eschar is cast off, the bone rasped & chiselled in order to take off all that is affected, & unless You go to the bottom You are dayly plagued with filthy Spungie excrescences. dress with pledgits in Mastich:<sup>411</sup> &c. covering with digestives. these caustics require much time & give great pain & after all there's much work for the knife. I would therefor prefer the incision at first. Nodes & exostoses remaine after Salivation, & should be crushed in the bud.

192: <sup>a</sup>[*margin*: method of fluxing in the hospital.] the method of fluxing in our hospital is first to bleed, purge & bath. The Pa<tients> [*insertion in darker ink*] are dressed in flannel resembling the dress of a Capuchine; confined to a warm room, & always raised by unction

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<sup>410</sup> Both line officers and medical officers believed that many hospitalized soldiers were malingering. Wilson recommended that army surgeons check their patients regularly, to distinguish the truly sick from malingerers. Kopperman, "Medical Services," p. 449; Wilson, *Rational Advice to the Military*, pp. 6-7. A review of malingering, with emphasis on examples and tendencies in history, is provided by Edward L. Murphy, "Malingering," *The History and Conquest of Common Diseases*, ed. Walter R. Bett (Norman: Univ. of Oklahoma Press, 1954), pp. 286-309. As Murphy notes (p. 288), little scholarship has been devoted to this subject, and it might be added that his own piece, while interesting and more than adequate as an essay, is mainly anecdotal.

<sup>411</sup> On mastic, see app. C-1. An exostosis was "an indolent hard tumor originating from a bone" (Bell). Bell and most contemporary authorities thought it important to excise not only the tumor, but the portion of bone from which it grew. Bell reported that the bone often regenerated, and stressed that during the operation it was important to protect the good flesh around it. As noted by Buchanan, it was common to use caustic in treating ulcers associated with carious bones. Bell, *System of Surgery*, IV, 91-102; Sharp, *Treatise on the Operations*, pp. xliii-xlvi.

viz: one 3d. Argt. viv: ad Axung: Porcin:<sup>412</sup> rubbing dr.i. on legs & thighs h.S: nixt night the same quantity on the arms, then the lower extremities, & repeated every night till the Spitting begin, which is commonly after the 3d. or 4th rubbing, amounting to three pots in 24 hours. each pot containing about a pint English. Some require a turpeth vomite to raise it & is afterwards kept up by small doses Calomel, rubbing the part affected dayly with Ungt. Mercurial & continuing till the complaints are quite gone. some times it goes off by urine and Sweat, & attended by the same good effect as Spitting. if grieps or purging are troublesome Decoct. Diascord. & Op. are used, Decoct. Alb. or Gum: Arab: their ordinary drink. their chief food Ryce Gruell,<sup>413</sup> light bread pudding & their common drink barley water, water Gruell &c. when the Salivation is finished, they are put on a course of the wood Decoction,<sup>414</sup> taking Gum. Guajac. and Argt. viv: in pills, & seldom faile of a cure. Some years ago this was looked on as the utmost danger & of the greatest consequence & called the Grand Cure,<sup>415</sup> always under the care of Physicians of the greatest experience, now mostly under the Surgeones or their Mates & seldom attended with bad consequence. yet one of our

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<sup>412</sup> "One-third quicksilver mixed with 1 oz. pig lard." This was the same formula specified in the recipe for the "mercurial ointment" listed in *Practice*. According to the author, "This is the ointment usually applied to venereal sores, and rubbed into the skin to raise a salivation; as also applied by way of friction, in which last case, half a drachm only should be rubbed in every, or every other, night, as the patient can bear it, till the mouth gets sore. During these frictions, the body ought to be kept in a laxative state, and the utmost care taken to prevent catching cold." This ointment was similar to *unguentum mercuriale* (app. C-1, "mercurials") in composition and purpose. *Practice of the British and French Hospitals*, p. 75.

<sup>413</sup> On *decoctum album* (under *cornu cervi*), gum Arabic, and diascordium, note app. C-1. Rice was less used in medical diet than was barley, but it was thought to be mild and nutritious and, according to Brookes, "particularly serviceable in Dysenteries and Diarrhoeas." There was a widespread belief that rice caused costiveness, though Cullen attempted -- successfully, in Moore's opinion -- to refute it. Brookes, *General Dispensatory*, p. 84; Moore, *An Essay on the Materia Medica*, p. 100.

<sup>414</sup> On the wood decoction, see app. C-1.

<sup>415</sup> On the treatment of syphilis, see app. B-1, under "venereal disease."

men died at Brussels, being jaw-locked.<sup>416</sup>

193: [continuing from p. 191]

old Venereals & much emaciated have recovered & able to do Duty from this method being keep'd strickly to a long course of Mercurials & wood-Drinks. others are walking Skeletons for life<sup>a</sup>.

*fecit amor maciem: longaque internodia crurum;*

*longa manet cervix. caput est a corpore longe.*

Ov: met: lib:12. V:794.<sup>417</sup>

Heskin's Coll. Beake's, had a large excrescence on the upper lip which almost obstructed his nostrills, & many large dry scabs cast off. being an old Venereal I treated with mercurials in small Doses rubbing the part with this Oynt. *Rx Ungt. Mercurial. dr.ii. Sublim. Corrosiv. scr. fs.M.*<sup>418</sup> & dissolved dayly.

[margin: Imaginary Venereals.] We have many imaginary Venereals, & when one of a Troop is fluxed for venereale complaints, if any of his old Companions have the least aching pain in their bones from catching cold or scabs on their skin from itch or scurvy, presently reflecting on their past life, conclude themselves poxed & are not satisfied without fluxing. Marriote of the Major's when confined from a broken leg a lying in the ward nixt

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<sup>416</sup> It is improbable that the onset of lockjaw was directly related to the grand cure. On the other hand, lockjaw was a significant problem in the military. Note app. B-1, under "tetanus."

<sup>417</sup> Of Aesachus: "His passion made him lean: his legs between the joints are long, his long neck is still long, his head is far from his body"; Ovid Met. 11.793-94; *Metamorphoses* (trans. Miller), II, 177.

<sup>418</sup> "Take 2 dr. mercurial ointment [n. 25] and mix with ½ scr. corrosive sublimate." On the two ingredients, see app. C-1, under "mercurials." By adding mercurial ointment, Buchanan probably hoped to buffer the sublimate, which by itself would have been painful and perhaps dangerous to the patient. To treat "fleshy excrescences," Bell recommended the use of scalpel and ligature (when the neck was narrow), for escharotics usually failed. Bell, *System of Surgery*, IV, 90-91.

the Salivating, & many Venereal Patients lying in the same roome, & often relating their Cases; imagined he was poxed & could not be satisfied without a Salivation, which he had, tho there was no appearance of any Venereal taint: & some are so intent on fluxing that they are fluxed from imagination

194:

[first three quotations are stroked with dark ink]

<sup>a</sup>*Solomon ait a Mulierum consuetudine revocet adolescentes ne frustra gemere incipiunt posteaquam carnes suas consumpserivet.* Prov: C.5. V:xi.<sup>419</sup>

*intemperantia Veneris cito mulierem inveterat et vehementer deformat, ac turpat.* Perer: in Genes: C: 20, Disput. i.<sup>420</sup>

*nosse haec omnia Salus est Adolescentulis.* Ter. Eun: Act:5. S:4. V.184.<sup>421</sup>

*intemperans et libidinosa adolescentia, efflatum corpus tradidit senectuti.* Tull: de Senect.<sup>422</sup> [this last quotation is written in heavier ink and slightly larger characters; it may

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<sup>419</sup> "Solomon tells the young men to avoid consorting with strange women, 'Lest thou mourn at the last, when thy flesh and thy body are consumed': Prov. 5:11. This does not appear to have been quoted from Pereira (n. 425).

<sup>420</sup> "Excessive sex swiftly ages a woman and causes her to become greatly disfigured and ugly"; Benito Pereira [Benedictus Pererius], *Commentarium et disputationum in Genesim* (Coloniae Agrippinae, 1601), cap. xx, disp. i (t. 3 [vol. II], 891)(V, 525). In Pereira's text, the quotation begins, "*intemperantia Veneris autem cito.*" Pereira is speculating why Sarah, at the age of 90, was still beautiful; he concludes that it was not the result of a miracle, but because she was chaste.

<sup>421</sup> In Loeb text, "*nosse omnia haec salutis adolescentulis*": "To see all this is salvation to a young man"; Terence, *Eunuchus* 5.940 (trans. Sargeant, p. 333).

<sup>422</sup> Buchanan may have been quoting from memory. The quotation should read, "*libidinosa enim et intemperans adolescentia efflatum corpus tradit senectuti*" -- "for an intemperate and indulgent youth delivers to old age a body all worn out"; Cic. de Sen. 9.29; Cicero, *De Senectute, De Amicitia, De Divinatione*, trans. William A. Falconer, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1953 [1923]), pp. 38, 39. Astruc cautioned that the elderly should not engage in sex: Alain F.

*have been inserted later]*

195 [following on p. 193]

only. as was the case of a Soldier in the first Regimt of Guards Decr. 1743. imagining himself poxed & insisting on a Salivation. upon examination at the Hospital nothing appeared Venereal. Complaints were Scorbutick and Rheumatick. but he would be fluxed & in order to please him was put into the fluxing dress, viz: flannel shirt & Drawers &c. orderd. to keep very warm & taste nothing that was cold. as there was no bed for him in the Fluxing Ward, was told he was to be put under a Mercuriale Course & have a walking Sale in a proper ward with all necessary care, begging him to be very cautious as to eating & drinking &c:

[margin: Imaginary flux.] Crude antimony was given in form of an Elect: directed the mercurial Elect:<sup>423</sup> &c: which he took with great care and pleasure, expecting a fine cure; in a few days he began to spit, imagined his teeth loose & mouth sore, & fluxed a good pint a day & extreamely happy at the thoughts of doing so well. & this Salivation was lowered by degrees by lessing the Dose &c: & never was near the Salivating Ward. vid: Tulp: Ob: p. 35,93.<sup>424</sup> & Ov: rem: Amor. V.525.

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Corcos, "Jean Astruc (1684-1766) on Old Age: A Man of his Times?" *Clio Medica*, 18 (1983), p. 144.

<sup>423</sup> Neither London nor Edinburgh prescribed a "mercurial electuary"; this may have been a nostrum, or perhaps the soldier was merely told that this was the name of the electuary in order to impress him. On antimony, see app. C-1.

<sup>424</sup> Tulp, *Observationes medicae*, I, cap. xviii (pp. 35-38) is about imaginary soft bones. He reports that imagined diseases are difficult to cure, but thanks "Philodotus" for having invented a leaden cap (*plumbeo pileo*) that returned patients to sanity (cf. n. 812). As regards treating insanity, Tulp favorably cites Celsus, *De Medicina*, iii.18. On p. 93, in his chapter (pp. 91-93) on severe arterial wounds, Tulp asserts that men may falsely imagine injuries or they may feign them, but that their reaction to the pain when, without warning, they are struck on the calf will reveal any deceit.

*nam, quoniam variant animi, variabimus artes,  
mille mali Species, mille salutis erunt*<sup>a. 425</sup>

[written in small hand next to the first line of this quotation, apparently a later insert:  
Montaigne's Essays chap: XX on the force of Imagination.<sup>426</sup> Turner's Siphylis.<sup>427</sup>]

Burford of Majr: Jenkinson's taking pil: pect: nostr. for a Cough, was perswaded by  
his Comrades they were Mercurials. nixt *day* began to Spit largely, when increased to a great  
degree, guessed at two pints a day, neither

196:

[margin: triffling cases not to be sent to the hospital.] <sup>a</sup>Surgeons should not send triffling

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<sup>425</sup> "For since natures vary, I will vary my arts; the disease has a thousand forms, I have a thousand remedies"; Ov. Rem. Am., v.525-26; *Art of Love, and Other Poems* (trans. Mozley), p. 213.

<sup>426</sup> Although Buchanan refers to the essay (bk. I, ch. 20) in general, he may have had in mind comments like the following: "We sweat, we shake, we grow pale, and we blush at the motions of our imaginations; and wallowing in our beds we feel our bodies agitated and turmoiled at their apprehensions, yea in such manner, as sometimes we are ready to yeeld up the spirit." Michel de Montaigne, *The Essays of Montaigne*, trans. John Florio, introd. J. I. M. Stewart (New York: The Modern Library, n.d.), p. 64. On the authority of Fienus, James commented, "The Fancy ... by causing a Motion of the Humours and Spirits, is capable of producing almost every Disease." James, *A Medicinal Dictionary*, under "imaginatio."

<sup>427</sup> Daniel Turner, *Syphilis: A Practical Dissertation on the Venereal Disease*, 4th ed., rev. (London: J. Walthoe [etc.], 1732). On pp. 121-37, Turner discusses the case histories of four men who consulted him because they were convinced that they were suffering from venereal disease. All were respectable men, who were guilt-ridden over sexual encounters that had occurred years earlier. One patient even feared (pp. 126-27) that his nose would fall off if he did not hold it in place. Turner tried to convince all four men that they did not have the disease, and he dissuaded them from seeking treatment, though they all had been treated before, and some were afterwards, by other practitioners and quacks. Unlike the hospital staff referred to by Buchanan, Turner did not humor these patients. Brocklesby reported that he had encouraged "hypochondriacal *malingersers*" at the Pimlico hospital to leave by warning them -- honestly, he claimed -- that if they remained too long they would contract hospital fever. He had also applied weak spirits of vitriol (app. C-1, under "vitriol") to a raw region that had been blistered. *Oeconomical and Medical Observations*, pp. 89-90, 138-39.

cases to an hospital: those who go for slight Surgery cases are in great danger of catching some distemper of the house viz. fever, small pox &c. Harris of Cpt. Shipman's having dislocated his collar bone attended with great contusion was sent to Tournay hospital; got a slowe fever with great variety of complaints, took a dislike to the house from seeing so many disagreeable objects, continued in a lingring way some months, was at last brought to his Barracks at Brussels, tho we had a good Hospital there, would not be perswaded to go to it, but chose to die in his qtrs always thinking of what he had seen in the hospital. Some are naturally lazy & indolent & are much more so after being some time in the hospital. Some pretend to be sick or Lamé & incapable of Duty but can do some work in the hospital when employed as servants, & have good wages. these are not easely detected, tho sometimes discovered by making them drunk, & carefully observing their motions. a Stiff Knee is a common complaint, but upon being fudled, can dance, jump, & cut capars.

*(quid non ebrietas dissignat. Hor: Ep.5. lib:i.<sup>428</sup>)*

Some suffer the part to be blistered, Seatons cut &c: but have recovered upon hearing the Surgeons whisper that a red hot iron must be applied for nine mornings in order to remove that humor from the bone. a foot Guard, by trade a taylor & Perruque maker was in the hospital for a fistula in Ano, had good business in his own trade, & was better pleased to continue there than go to the field; but the fistula being almost well, was told he must think of joining his *Regmt.* but he contrived a method to keep the fistula always open by introducing a pea after the Surgeones dressing & taking it out nixt morning. but being drunk overnight, & dressed sooner nixt morning than he expected, was discovered & turned out. [the following in heavier ink] vid. Roderic. a Castro Medic: Politic: lib:4. C:9. Qua ratione

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<sup>428</sup> "What a miracle cannot the wine-cup work"; Hor. Ep. 1.5.16; *Horace* (trans. Fairclough), p. 281.



Morbum Simulantes deprehendi queant.<sup>429</sup>

197 [continues from p. 195]:

mouth nor Gums sore, abstaining from the pills, salivation abated, was faint & weake as from violent purging. When the men have been often in for it, they are more cautious in their intrigues.

*cautus enim metuit foveam Lupus, Accipiterque  
suspectos laqueos, & opertum Miluus hamum.*

Hor: Ep.16. lib:i. V:50.<sup>430</sup>

*sed tacitus pasci si posset Corvus, haberet  
plus dapis et rixae multo minus invidiaeque.*

Ib: Ep:17. lib:i V:50.<sup>431</sup>

[margin: Scurvy.] Par: 24th. Scorbuticke complaints are not so frequent as one would expect, as they are said to be predominant in every English constitution.<sup>432</sup> but rare

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<sup>429</sup> Rodrigo de Castro [Rodericus a Castro], *Medicus-politicus: sive, De officiis medico-politicis tractatus, quatuor distinctus libris: in quibus non solum bonorum medicorum mores ac virtutes exprimentur, malorum vero fraudes & imposturae deteguntur, verum etiam pleraque, alia circa novum hoc argumentum utilia atque iucunda exactissime proponuntur* (Hamburg: Bibliopolio Frobeniano, 1614), IV, cap. ix (pp. 251-54): In this chapter, the author discusses cases of feigned illness, madness -- he notes Ulysses' attempt at deception -- and injuries, and advises how frauds can be detected.

<sup>430</sup> "For the wolf is wary and dreads the pit, the hawk the suspected snare, the pike the covered hook"; Hor. Ep. 1.16.50-51; *Horace* (trans. Fairclough), p. 355.

<sup>431</sup> "If the crow could feed in quiet, he would have more meat, and much less wrangling and envy"; *ibid.*, 1.17.50-51; *Horace* (trans. Fairclough), p. 365.

<sup>432</sup> During the 18th century it was widely believed that there were several varieties of scurvy -- "Sea Scurvy" was the most feared -- but Lind asserted that it had the same cause and nature regardless of location or climate and many writers, Monro among them, accepted his opinion. As Buchanan suggests, there was a widespread belief that the English were especially susceptible to scurvy. Buchan wrote, "the disease most common to this country is the scurvy. One finds a dash of it in almost every family, and in some the taint is very deep." He

amongst our Troopers.

[*margin: Method of Cure*] at first I use mercurial purgatives, rubbing the Spots with Ungt. Mercur: putting them under a course of Aethiop: Mineral.<sup>433</sup> Cornet Newton<sup>434</sup> is of a Scorbutick habite many red Spots at the bending of the arms & cannot abstaine from scratching. took Succ: Antiscorbutic: cum chalyb:<sup>435</sup> was very regular in Dyet, eating Spring Sallads, watercresses &c. abstaining from high Sauces,<sup>436</sup> rubbing the parts **Rx. Ungt. Pomat: oz.i Praecipit. mercur: alb: oz.i.**<sup>437</sup> recovered dayly, drinking whey<sup>438</sup> afterwards every morning for some weeks. Cpt. Marchame had it to the most violent degree I ever saw, especially his thighs & forearms being covered with large dry hard blotches, itchy & burning

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believed the cause to be the English propensity for animal food, noting, "As a proof that scurvy arises from this cause, we are in possession of no remedy for that disease equal to the free use of fresh vegetables." Buchan, *Observations concerning the Diet*, p. 11; James Lind, *Lind's Treatise on Scurvy: A Bicentenary Volume containing a Reprint of the First Edition of A TREATISE OF THE SCURVY by James Lind, M.D. with Additional Notes*, ed. C.P. Stewart and Douglas Guthrie (Edinburgh: Edinburgh Univ. Press, 1953), ch. 3; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 181.

<sup>433</sup> On mercurial ointment and *Aethiopsis mineralis*, see app. C-1, under "mercurials."

<sup>434</sup> Charles Newton (b. c. 1714) was commissioned a cornet in the Blues on 18 Sept. 1741; lieut., May 1745; capt.-lieut., Aug. 1753; capt., 22 Dec. 1753; sold out 14 June 1756. RADCP, Box 3/47; WO 27/4, return for Blues; *AL* 1756, p. 14.

<sup>435</sup> This was not an official drug. However, *succi scorbutici* was. See entry, app. C-1. Chalybs (steel, or more often iron; see app. C-1, under "chalybeates") was valued as a stimulant and a sudorific, and these qualities may explain its inclusion in the formula.

<sup>436</sup> On treatments for scurvy, see app. B-1.

<sup>437</sup> "One oz. pomatum [app. C-1] and 1 dr. white precipitate of mercury [app. C-1, under "mercurials"]."

<sup>438</sup> Whey may have been intended as a laxative. Buchanan would not yet have known of the "scorbutic whey" of London (*RP*, p. 201). Whey was not included in the materia medica by either London or Edinburgh, though the latter listed milk. Lewis wrote that watered whey "promotes the natural secretions in general, and if its use is duly continued, does good service in scorbutic, and other disorders, proceeding from thick phlegm and obstructions of the viscera": *New Dispensatory*, pp. 146-47.

hot, scaly skin like parchment, & crackled as I cut with my Lancet when

198: [facing p. 197; blank]

199: [continuing from p. 197]

bleeding.<sup>439</sup> urine high coloured with a thick red Sandy Sediment, hot & scalding, making water often & in small quantity, restless & tossing in bed, great oppression at breast, was purged and put on a whey & vegetable Dyet, drinking scorbutic juices. **Rx. fol: Nasturt: Aquat: M:iiii. Beccabung: Coch: hort: aa M:ii. rad: raphan: rustic: recent: oz.ii. exprime succum S:A: cujus cap: coch: iiii. cum Succ: Limon: coch: i. vitriol: mart: gr.x. Vin: Rhenan: generos: oz.ii omni mane, vacuo ventriculo et bibat seri Lact: lib:iv de die.**<sup>440</sup>  
bathed the parts affected with fomentation of Scorbutick plants rubbing with Ungt. Citrin:<sup>441</sup>  
lived much on Sparrow Grass, Spinage<sup>442</sup> & extremely regular in Dyet. recovered dayly, &

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<sup>439</sup> Since scurvy was generally considered putrid, standard therapy included little or no bloodletting. Although a strong believer in bleeding for many ailments, Monro suggested that it was unnecessary in scurvy cases, except if a patient were feverish. Possibly Newton insisted on being bled or it may be that Buchanan bled him for a different condition. Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 187.

<sup>440</sup> "Take 4 parts of the leaves of nasturtium and mix with 2 parts of equal quantities of becabunga and horseradish and 2 oz. of newly picked wild radish; express the juice according to art; of which let him take 4 spoonfuls with 1 spoonful lemon juice, 10 gr. vitriol martis, and 2 oz. of a generous Rhenish wine; to be taken every morning on an empty stomach, and whey to be drunk freely 4 times a day." On all components, see app. C-1, Rhenish wine under "wines and spirits."

<sup>441</sup> On *unguentum citrinum*, see app. C-1, under "mercurials."

<sup>442</sup> Like other greens, spinach was considered a mild laxative and cooling, and as Marcham's use of it suggests, it was thought by some to be an antiscorbutic, though 18th-century authorities did not list it as such. Salmon regarded it as beneficial in treating "hot Stomachs." He also claimed that it combated coughs and noted that it was applied externally to treat inflammations. During the 18th century, it was not listed among the materia medica. Salmon, *New London Dispensatory*, p. 106.

was thought a great cure, he had been Scorbutick fourteen years. after the juices he drunk Lymington well water in Warwickshire, a strong purgative water.<sup>443</sup> the Decoction of Quicksilver is much esteemed by Some, & is thus made. *Rx Hydrargyr. depurat: oz. iv. aq: fontan: lib: iv. coqre. ad medias.*<sup>444</sup> the quicksilver never loses weight nor changes colour & I have fluxed with it after being several times used for this purpose.

Some Gentlemen keep two or three pounds of it in their horse trough, & <the> water is reckoned good to kill

200: [facing p. 199; blank]

201: [continuing from p. 199]

and destroys worms. a Gentleman much afflicted with the Scurvy & having almost los'd the use of his limbs, taken many medecines and drunk mineral waters to no purpose; observing his farcy horses recover on being soyled with Fetches, imagined their juice would have the same affect on himself, & took it without any success, making him very sicke at Stomach. at last followed an old Woman's advise taking two Spoonfulls of juice of water Parsnips<sup>445</sup> every morning in warm milke, & recovered dayly, continued well many Years. when Scorbuticke juices become desagreable to the Stomach, (for few can bear them a long time), I then Substitute Aq: Benedict<sup>446</sup> &: pil: mercurial: nostr. [note, in a smaller hand,

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<sup>443</sup> Although water from the springs at Leamington was long used as a purgative, the spa appears to have become more fashionable during the latter half of the 18th century: L. F. Salzman, ed. *The Victoria History of the County of Warwick*, vol. VI (London: Oxford Univ. Press, 1965), p.155.

<sup>444</sup> "Take 4 oz. of purified mercury and 4 lbs. of spring water; boil down by half." On *hydrargyrus purificatus* (the official name), see app. C-1, under "mercurials."

<sup>445</sup> On water parsnips, see app. C-1.

<sup>446</sup> It is possible that Buchanan is referring to simple limewater (app. B-1), which was popularly called *aqua benedicta* ("blessed water"), though its official name was *aqua calcis*.

*subsequently entered at this point:* The Scorbutick Whey of Lond: Dispensary 1747. is a good Medecine as dyet Drink.<sup>447]</sup>

[*margin:* Ulcers on the Legs.] Par: 25th. Ulcers on the legs are difficult to cure especially if of long standing, the edges callous &c: & tho they appear to the eye a meer triefle yet they are always tedeous & sometimes never cured. a Surgeon gets no credite by them; the men will not keep a proper Regimen; You can hardly perswade them to take a Dose or two physick, the good effect of which is soon overballanced by the nixt debauch<sup>a</sup>.  
[*superscript in darker ink*].<sup>448</sup> they are to be dayly washed with something warm, the

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Limewater was allowed a number of virtues and was prescribed for many illnesses, among them scurvy, this use perhaps reflecting the belief that it resisted putrefaction and was "antiseptic." *Aqua benedicta* was also the official name of a drug that was included in the *Pharm. Lond.* until dropped in 1721. It was prepared (1682 ed.) by digesting antimony in canary (Salmon suggested other possible wines, e.g. Rhenish wine, or ale). Salmon regarded it as "excellent" against headaches and useful in treating various other illnesses, including gout, fever, and pleurisy, as well as "other Diseases arising from Obstructions." Nevertheless, like many waters that were respected during the 17th century it fell out of favor among physicians early in the 18th century and lost official status. There is no *aqua benedicta* mentioned in the "Dispensatory" of 1746, or in any of the comparator 18th-century list of drugs intended for the army. Alston, *Lectures on the Materia Medica*, I, 268-71; Lewis, *New Dispensatory*, pp. 397-98; Salmon, *New London Dispensatory*, pp. 319-20.

<sup>447</sup> On scorbutic whey, see app. C-1, under "milk."

<sup>448</sup> Sharp applied the term "ulcer" not only to an abscess that was no longer healing, but to a new sore that had "any degree of malignity." Echoing Buchanan's complaint, Hamilton wrote that officers tended to consider ulcers on the leg to be a minor problem, and were impatient with surgeons who detained the men for extended treatment. He noted the case of a soldier who was removed from the infirmary and put under the care of a sergeant, who claimed that he could successfully treat the man's ulcer. The soldier subsequently died from his sergeant's "irrational, if not criminal quackery." Hamilton commented, "In cases ... of this nature, the officer ought to rely on the fidelity and probity of the surgeon." To treat ulcers in the legs, Tissot advised rest. In general, he recommended a light and opening diet. He condemned as quacks those who treated ulcers with corrosive applications, and strongly cautioned against treatments that would cause them to close while they were serving as drains for dangerous humors. Like Buchanan, Sharp advocated using red precipitate (n. 407) on ulcers, but he claimed that practitioners were causing unnecessary pain by applying it directly (as does Buchanan), as an escharotic. He recommended using it first as a digestive by mixing it with basilicon or an oil-wax cerate; this would bring thick matter from the ulcer within 24

callosity pared off, making small incisions round the

202:

[*stroked through*]

<sup>a</sup>*in magna ulcerum parte inferiorem alvum purgare convenit, tum etiam in vulneribus capitis, et ventris, et articulorum, tum in quibus partis corruptela imminet. itemque in his quae suturam postulant, et in his quae excedunt et Serpunt[....] Saepius vero ulcus Spongia abstergendum, itemque linteam Siccum, et mundum crebro adhibendum, tum demum medicamentum quod utile videatur impositum alligandum, aut sine vinculo relinquendum[....] in rotundis ulceribus, si cavitatem nacta sint, quae abscesserunt, in orbem undique, aut ex toto, aut ex dimidio circuli, secundum hominis naturalem longitudinem praecidere oportet.* Hipp: de ulcerib: S.vi.<sup>449</sup>

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hrs; more precipitate was then to be added to the cerate, producing an escharotic; to treat proud flesh, the surgeon was to add alum. Sharp cautioned that ulcers were generally associated with an internal disease, and could not be successfully treated if the root problem were not attended to. He advised against trying to reduce the lips on a callused ulcer before the cause had been successfully treated, for otherwise they would grow back. Treating the ulcer with a powerful escharotic like *lapis infernalis* (Hellstone; lye boiled down to a stone) or cutting it with a knife he regarded as unnecessary and too painful. Noting that elderly patients who were under treatment for ulcers often developed asthma, he suggested that it might be advisable to leave their condition alone. In his influential treatise, Underwood advised relying on nature for a cure and considered diet and exercise to be important in regimen. Though his methods were moderate, he did recommend use of corrosive mercury. He concluded, "The large phagedenic ulcer is the only one that will create any great difficulty to the experienced surgeon." Culpeper, *Pharmacopoeia Londinensis*, p. 209; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 86-90; Sharp, *Treatise on the Operations*, xxviii-xxxix; Tissot, *Advice to the People*, pp. 230-32; Michael Underwood, *A Treatise upon Ulcers of the Legs; in which Former Methods of Treatment are candidly examined and compared, with One more Rational and Safe: Proving That a perfect Cure may generally be effected more certainly, without Rest and Confinement, than By the Strict Regimen in Common Use* (London: J. Mathews, 1783), pp. 23, 49, 58-63, 78-84, 88-91, 97, 125.

<sup>449</sup> "For the most part, purging the bowels agrees with ulcers, as well as wounds of the head, belly, and joints, where there is danger of gangrene, in such cases as require sutures, and in

203 [continuing from p. 201]:

circumference, in order to make them unite & grow together, sprinkling praecipit. in order to bring on a digestion & resemble a fresh wound, covering with Digestive. the callosity often returns, must be treated as at first, rubbing ungt. Mercurial: Constitutions are often pockie & pil: Mercurial: Nostr: are of great use, when almost well it's a difficult task to skin them over, & Ungt. Diapomphol.<sup>450</sup> with a few grains Mercur: Dulc.<sup>451</sup> is a good healer<sup>a</sup>. [*superscript in darker ink*]. When cured they often breake out from the least triffling hurt, & great care should be taken to preserve them from external injuries. the method is folding brown paper into many doubles and wearing it under the Stocking. some beat a lead bullet into a thin plate, others have a plate of tine lynned with soft leather to keep off the pressure of the boot &c. Ulcers of long continuance become natural issues. & being suddenly healed or dried up produce bad symptoms viz: headachs, sickness at heart &c: & I have been obliged to make a fresh sore & waite a more favourable opportunity in order to cure them, as was the case of Hans of Cpt. Loyde's troop. amongst old women a poultice of Bay leaves boyled in milk <sup>452</sup> is an infallible remedy for old ulcers; Qr. Mr. Wilcox tryed it, but not

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those where [ulcers] spread and creep.... Often, moreover, wash the ulcer with a sponge and then dry lint is to be frequently applied to it, then at length such medicine as is seen to be useful is to be applied, either with or without a bandage.... In circular ulcers, if somewhat hollow, you must scarify all along their edges, or to the extent of half the circle, according to the natural stature of the man"; Hip., Ulc., c. 2 and 3; cf. Hippocrates, *The Genuine Works of Hippocrates Translated from the Greek with a Preliminary Discourse and Annotations*, trans. Francis Adams (New York: William Wood & Co., 1929), II, 295, 296.

<sup>450</sup> On *unguentum diapampholygos* and three of its constituents (pompholyx, nightshade, and frankincense), see app. C-1.

<sup>451</sup> The official name was *mercurius dulcis sublimatus*; note entry in app. C-1, under "mercurials."

<sup>452</sup> See entry for bay, app. C-1. When Buchanan mentions milk here and elsewhere he probably has cow's milk in mind, though this was not the only form used medicinally; note entry, app. C-1.

succeeding was cured as above. The men ride or walk dayly,

204:

[*stroked through*]

<sup>a</sup>*at ubi oras ulceris committere voles, rubi canini folia eo modo quo lenticulam praeparato vel nasturtium (σαρπίδιον diatur) vinum et lini Semen contritum commiscentur. hoc quoque lini Semen, vitex cruda, et alumen melinum, haec aceto macerato.* Hip: de ulcerib. S:vi.<sup>453</sup>

205 [continuing from p. 203]:

despising such small sores, & find fault with their Surgn for not curing them; these men when confined to the Hospital, are obliged to keep to their roome & lye on bed so many hours a day, are soon cured by this method<sup>a</sup>. [*superscript in darker ink*].

[margin: Ulcers on the Sternum.] Ulcers of the Sternum & ribs are often attended with carious bones & seldom cured; are often the consequence of small abcesses in these parts.

[margin: & in urethra.] Venereal ulcers of the Urethra are difficult of cure. Derwen of Col. Beake's was Six weeks in the Hospital & under a mercurial course all that time, &

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<sup>453</sup> "When you wish to bring the lips of the ulcer together, prepare the leaves of the *rosa canina* [dog rose] as you would the lentil or nasturtium (called *suridion* [in Greek]), and mix it with wine and powdered linseed. Also, macerate linseed, crude chaste tree, and Melian alum in vinegar"; Hippocrates, *Ulcers*, c. 4; cf. *Genuine Works of Hippocrates* (trans. Adams), II, 298. The chaste tree (*vitex; agnus castus*) was still official into the 18th century; London dropped it in 1746. As in Ancient times, it was thought by some to be an anaphrodisiac, though Lewis considered this claim unfounded. Lewis, *New Dispensatory*, pp. 69-70; John Quincy, *The Dispensatory of the Royal College of Physicians in London: With Some Notes relating to the Manner of Composition, and Remarks on the Changes made in most of the Officinal Medicines, from their first Prescribers down to the present Practice*, 2nd ed. (London: J. Bettenham et al, 1727), p. 346.



not the better. on coming to his quarters used an injection of Lap: medicamentos:<sup>454</sup> which dried the running some measure but did not cure it.<sup>455</sup>

[*margin*: broken shins.] Par: 26. Broken-shins are very common amongst us, from kicks by the horses, falling throw Steps of the leather in going to the Hayloft, &c: the flesh often stripped from the bone & laid bare some inches, as was the case of Burry of Cpt. Gilbert's, his horse running against a post, the tibia was bare three inches, the fleshy part hanging down, being almost ready to drop off; Instances happen dayly both to Troopers & Ban-men.

[*margin*: Method of Cure.] I commonly dress with Bals: Universal:<sup>456</sup> covering with digestive: having first replaced the tore flesh into its natural situation, if the neighbouring parts are much bruised, inflammed or painfull, foment & poultice. if the Surface of the bone be

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<sup>454</sup> On *lapis medicamentosus*, see app. C-1.

<sup>455</sup> Urethral ulcers were a common complication of venereal disease, and they sometimes caused stricture in the urethra. Hunter recommended treating the stricture with caustic, using a cannula. However, he was most enthusiastic over a new tool, which Buchanan would not have had during the war: "The bougie, with its application, is, perhaps, one of the greatest improvements in surgery which these last thirty or forty years have produced. When I compare the practice of the present day with what it was in the year 1750, I can scarcely be persuaded that I am treating the same disease." Prior to the introduction of the bougie, he noted, practitioners had used lead (which sometimes broke off in the bladder) or small candles. Jacques Daran, who had improved on and popularized the bougie, had, Hunter believed, made foolish claims for it; Hunter added, however, "Improvements are often over-rated; but they come to their new value at last." Bougies were used to open strictures, but they could also force a new passage, which as Hunter noted could be dangerous, though it might in extreme cases be necessary. Hunter, *Treatise on Venereal Disease*, pp. 102-39 (quotations pp. 106, 107).

<sup>456</sup> "The Universal Balsam" was a popular name for *unguentum saturninum* (Saturnine Ointment; called *ung. e plimbo* in 1721 *Phar. Lond.*; renamed *ung. cerussae acetatae* in 1788 ed.). Lewis described this lead-based "balsam" as "an excellent cooler and dessicative." Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 572-73. However, on ms. p. 269 Buchanan equates bal. univ. with *balsamum traumaticum*; see app. C-1 on this balsam.

206:

<sup>a</sup>*stare autem ulceri minime convenit, idque praesertim in crure ulcus sit, imo neque sedere, neque ambulare, verum quies et ocium plurimum conducunt.* Hip de ulcerib: S.vi.<sup>457</sup>

vid Hoffmanni Op: Med: Tom.2. p443. de omnis generis Ulceribus tam benignis quam malignis praesertum Cancroris<sup>458</sup>

207 [continued from p. 205]:

Smooth & no Splinter I suffer the flesh to cover as fast as possible, taking care not to wipe too hard for fear of destroying the growing flesh. in case of a rough surface or Splinters I keep open with Sponge tent,<sup>459</sup> & waite their casting off; the edges grow hard and dry must be washed with something warm & greasie. the Stocking is a good & equal bandage<sup>C</sup>, the leg to be raised up equal with the thigh, which is natural to the men as they sit or lye in their tents. must never ride or put on a boot. their Comrades think nothing of a broken shin, saying they have had as much at foot ball & cured it with a leafe of tobacco; grudge doing duty for their lame Comrade & often oblige him to do his Duty befor he is well. but in order

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<sup>457</sup> "But to stand with an ulcer is not fitting, especially if that ulcer is situated in the leg; but neither, also, should one sit or walk. But quiet and rest are most beneficial"; Hippocrates, *Ulc.*, c. 1; cf. *Genuine Works of Hippocrates* (trans. Adams), II, 293.

<sup>458</sup> "Regarding sores of all types, benign as well as malignant ones and especially cancerous ones": Hoffmann, *Opera omnia*, III, cap. vii, pp. 443-59. Hoffmann begins his chapter by defining an ulcer and distinguishing it from an abscess or carious bone. He then discusses the different types of ulcers and accounts for their formation. Cancers, he asserts, are caused by the corrosion of ulcers. They are very difficult to cure if internal, and often it is best to simply give the patient pain-killers. Hoffmann recommends various remedies, notably ointments, cataplasms, and balsams, to clean ulcers. He concludes with eight case histories. Prior to the histories, he refers mainly to traditional sources, especially Hippocrates, Galen, and Celsus, as well as to more modern ones like Santorio.

<sup>459</sup> Sponge was often used as Buchanan is using it here i.e. as a tent for dilating wounds. On medical uses of the sponge, note entry, app. C-1.

to save him <I give> a certificate unfit for Duty a horse back directed to his Officer. Instances I could give many, but its needless. I have been often surprized at this Success, especially considering our manner of living & often walking abroad. Im [*sic*] persuaded many Surgeons by their overcare in wieping, probing, &c: often prolong the cure<sup>a</sup>. it's commonly said that a wound on an Englishman's leg is not easely cured, but I don't think them as bad as reported, tho many are Subject to swelled legs being full of humours

208:

[quotations are stroked through and are in lighter ink than text on p. 207]

*lintea autem admodum laxa tumori qui in extremis partibus existit primum injici debent ac deinde circumagendo sursum semper tendere, ac nullo quidem modo comprimi, verum ita aptari ut maxime ulceri obfirmata, minus autem reliquis partibus sentiantur[.]* Hip: de fractis.<sup>460</sup>

*tertio etiam quoque die solvere ac rursus deligate convenit, ferulas autem non apponere, tum magis etiam quam antea conquiescere et cibo abstinere[.]* Ib.<sup>461</sup>

<sup>a</sup>A horse's taile when nicked & sett, is commonly well in a fortnights time, tho the tendon be cut thro, & some part of it extracted; the first dressing is turpentine dissolved with the yolke of an egg<sup>462</sup> & some tincture of Myrrh,<sup>463</sup> this is continued the first three days, then

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<sup>460</sup> "But a linen cloth, rather loose, should first be applied to the swelling at the extremities; then it should be wound upwards, always stretched, avoiding constriction, but adapted so as to give the ulcer special support at the wound, but are less felt by the remaining parts"; Hip., Frac., c. 27; cf. Hippocrates, *Hippocrates*, trans. E. T. Withington, The Loeb Classical Library (London: William Heinemann; New York: G. P. Putnam's Sons, 1927), III, 159.

<sup>461</sup> "On the third day also [the dressings] should be loosened and tied again, but splints should not be used and even more than before, rest and refraining from food are necessary"; Hip., Frac., c. 27; cf. Withington, III, 161.

<sup>462</sup> On the use of egg yolk as an intermedium for turpentine and other substances, cf. n. 387.

<sup>463</sup> App. C-1, under "myrrh."

untied & suffered to fall off with the digestion, the wounds are then stroaked with a feather dipt in tinct: Myrrh: or Bals: Universal, & that only every 3d or 4th days.

209 [continues from p. 207]:

and like their greasie-heeled horses, purge them never so much will always swell.

[margin: Bruises.] Par: 27th[.] Bruises are common from the horse falling with his rider &c. & so violent that blood is sometimes squeezed from the toes, yet nothing broke nor dislocated. the part soon swells, turning black & blew; soon painfull & stiff.

[margin: Method of Cure.] the men rub immediately with Brandy & some use Spt. Vin: R:<sup>464</sup> but is so dear here that is not much in fashion. I use Liniment: Vol: nostr:<sup>465</sup> soaking brown paper, keeps the part moist & supple, assuaging pain, dispersing the swelling, though in some cases fomentations & poultices are necessary. & some use brandy & vinegar applied very hot. others boyle Cow Dung in milk, slycing & dissolving soape & is an excellent poultice.<sup>466</sup> Brandy & water make a good fomentation, & bread & milke the best poultice, tho very Simple yet keeps in vogue. Bleeding is usefull, especially if any bruise about the breast, head, &c. as in falls from horse backe, & so customary that on every slight fall or bruise the trooper thinks himself neglected if he is not blooded, many are fond of Irish

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<sup>464</sup> *Spiritus vini rectificatus* (rectified spirit of wine); cf. entry under "wines and spirits," app. C-1. The use of rectified wine to treat bruises was common and was endorsed by Heister, among others. Cf. *ms. p. 7, n. 9*. Tissot cautioned against the "common Practice" of applying brandy or other spirits to bruises or contusions, because they caused the blood to coagulate, often with dangerous results. He recommended instead applications of vinegar, to resolve the blood and tone the vessels in the affected region. He advised that contusions not be opened to allow the blood to flow out, for the pool would dissipate naturally in time and opening the wound might cause a dangerous ulcer. Theobald, *Every Man His Own Physician*, pp. 6-7; Tissot, *Advice to the People*, pp. 227-29

<sup>465</sup> cf. n. 259.

<sup>466</sup> On the medical uses of cowdung, see app. C-1, entry under "stercora."

Slate in Spruce beer,<sup>467</sup> which I never used, but often prescribe Spermacet: & Sal V:C:C:,<sup>468</sup> advising to live Sparingly on barley broths, drink whey &c. Bruises on the elbow are often troublesome forming into abcesses[;] in the head require large bleeding[;] are frequent in time

210: [facing p. 209; blank]

211: [continuing from p. 209]

of frost from falls on the Ice when learning to skate or in the fields by falls with trusses of forrage. Black eyes are common from Blowes & bruises, the men ask cons: Ros[a?]r. & cure themselves, some apply roasted rotten apples;<sup>469</sup> I often foment with warm milk in which elder or Chamomile<sup>470</sup> flowers are boyled. with some a thin slice of raw veal is much esteemed to draw out the blackness, and much used amongst children. Brown paper soaked in oil and vinegar<sup>471</sup> much in vogue with some<sup>x</sup>. <<sup>x</sup>others esteem fresh urine & Soap, & not without good reason [insert in heavier ink].<sup>472</sup>> Bruised toes are frequent from horses

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<sup>467</sup> Note entries for Irish slate and for spruce beer, app. C-1.

<sup>468</sup> On spermaceti and *spiritus volatilis cornu cervi*, see app. C-1. According to Salmon, spermaceti was "much used by some to dissolve congealed blood within, coming from falls, bruises, and the like." Salmon, *New London Dispensatory*, p. 404.

<sup>469</sup> Note entry on apples, app. C-1. Apropos of the use mentioned by Buchanan, Brookes notes, "roasted they are sometimes applied as Cataplasms in Inflammations of the Eyes." Brookes, *General Dispensatory*, p. 65.

<sup>470</sup> On elder flowers and chamomile, note entries, app. C-1; elder flowers and chamomile were thought by some to be anodyne, which may account for their use by Buchanan.

<sup>471</sup> In the nursery rhyme, of course, Jack dresses his broken crown "with vinegar and brown paper."

<sup>472</sup> Besides being valued as anodyne (app. C-1, "dung and urine"), urine was traditionally considered a good resolvent and therefore as useful in treating black eyes and contusions.

trampling on them, produce small abscesses & threatenng the loss of the naile, Spirituous dressings are of service here, viz: linit: Myrrh: & al:<sup>473</sup> or Spt. Vin: Gallic: aut Juniper:<sup>474</sup> Bruises on the Knee are very troublesome from the many membranes, tendons, Ligaments &c:

[*margin:* Sprains.] Par: 28th. Sprains are common as the above, viz: ankles, wrists, fingers &c: continue weake a long while.

[*margin:* Method of Cure.] the men are fond of Spt. Vin: & ol: tereb:<sup>475</sup> Lint Vol: nostr.<sup>476</sup> answer the purpose with proper bandage &c:

[*quotation diagonally stroked*]

*"ubi articuli suis sedibus elabuntur, aut iis illaesis quae circa ipsos sunt nervosae partes intorquentur===[....] ea vinculis deligare oportet,[....] idque vinculis, spleniis &c: [....] tum etiam extensione, frictione, directione &c:* Hip: de officina Medec:<sup>477</sup>

recommending rest, the men have a great regard for Strengthening plaister, Searcloths & are never satisfied without them[.] I have no esteem for them being perswaded these of the Shops are

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<sup>473</sup> App. C-1, under "myrrh."

<sup>474</sup> "... or brandy or gin"; note entries for juniper and for "wines and spirits," app. C-1.

<sup>475</sup> App. C-1, under "wines and spirits" and "terebinth." Oil of turpentine was most valued as a styptic or hemostat, so the intention of this application may have been, at least in part, to retard swelling by limiting blood flow to the affected area.

<sup>476</sup> cf. n. 259.

<sup>477</sup> "Where joints are dislocated or the nerves are twisted around them ... one should choose a bandage ... these bandages, compresses, etc. ... then extension, friction, adjustment, etc."; Hip., Medic., c. 23; cf. *Hippocrates* (trans. Withington), III, 79; *Genuine Works of Hippocrates* (trans. Adams), II, 18 (note: both Withington and Adams translate the title as "In the Surgery").

212: [facing p. 211; blank]

213: [continuing from p. 211]

too hard a consistence for the heat of the body to dissolve any good quality from them.<sup>478</sup> the French never use them. Brandy or Spt. of wine with Bandage & compress being their universal medicine. & it's customary with some of our Surgns to make good Strengthening plaisters out of the refuse of all others. but their chief use is to wear them six weeks or as long as they stick on, & during that time the part recovers strength. they are universally used by the common people of England & every private family had its own favourite Searchcloth,<sup>479</sup> & are applyed to all aching pains, which are commonly called Sprains, never distinguishing twixt an inflammatory Stich or old Sprain, as happened to Gisline of Cpt. Maden's,<sup>480</sup> his Lieut. applyed his favorite Searchcloth to a pleuretick Stich which he called a Sprain or Rensch, & keeping it on some days, had almost cost the fellow his life for want of bleeding. cases of this kind I see dayly. as Stiches often proceed from violent exercise, running, leaping, jumping, throwing stones, the dealers in Searchcloths name them Sprains or Rences, apply

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<sup>478</sup> Note entry for strengthening plaster, app. C-1.

<sup>479</sup> Cerecloths were cloths that had been dipped in a mixture of melted wax (hence, the name), oil of some sort, and often spices or other ingredients. Hartman provides recipes for three of them, as well as his endorsement of their ability to heal ruptures, wounds, and bruises, as well as to staunch bleeding and strengthen bones. In the official pharmacopoeias, they were subsumed by the plasters in the early 18th century. Prior to the nineteenth century, orthodox practitioners were contemptuous of bone-setters, at least some of whom returned their hostility. Bone-setters were usually drawn from the lower or working classes and practiced their craft on a part-time basis. During the Victorian period, bone-setting merged into standard surgery. Roger Cooter, "Bones of Contention? Orthodox Medicine and the Mystery of the Bone-Setter's Craft," *Medical Fringe & Medical Orthodoxy*, ed. Bynum and Porter, pp. 158-61; Hartman, *The True Preserver of Health*, pp. 258-60.

<sup>480</sup> James Madan (b. 1701) joined the Blues as a cornet, 5 April 1720, and gained a captaincy 30 April 1734. He then bought into the 2nd Horse Guards as a major, 25 April 1741, and advanced there to lieut.-col., dying in that rank 4 March 1756. WO 64/10, f. 8; *AL 1740*, p. 6.

their never failing Searchcloths, neglecting bleeding to the irreparable loss of the patient. the part continuing soft and numb, is to be put into warm Grains, or the paunch of a beast newly killed, keeping warm with flannel or fur, warm Soape Sudds, a good fomentation.

214: [facing p. 213; blank]

215 [continuing from p. 213]

*nam quae noxia est, eo praecipue comprimere oportet, subjicienda igitur lana mollis, affectui accommodata, deligatione vero ea utendum quae non amplius comprimatur.=[...] sed ita stabilimento sit, ut neque cogantur, neque concutiantur.*

Hip: de Officina Medeci<sup>481</sup>

Sprained backs are tedious & difficult of cure; severale Young healthie Lads were sent to Chelsea as incurables: all methods tryed in the hospital proving unsuccessfull. were occasioned by falls from their truss of forrage, lifting heavie weights &c:<sup>a</sup>. Im perswaded many Sprains pass for Dislocations amongst the English Bonesetters, & that they put in my [sic] bones which were never out. apply their infallible Searchcloth, & obtaine great reputation by the person walking abroad in a few days<sup>c</sup>. Some troopers come to me limping, saying their knee was out, assuring me it has been often so; & put in by a famous Bonsetter in their country. Some I did not deceive, but made a pretended reduction, applying Searchcloth &c. upon the least hurt on the knee they imagine the knee pan to be out or broke from what they have heard from Bonesetters. it's much disputed amongst Officers whether Brandy or Rum is more preferable in this Case, common people use Brandy, as being cheapest. but Surgeons

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<sup>481</sup> "Where the harm is, there especially one should press, therefore putting underneath soft wool underneath, suited to the affection. What is used should not excessively compress ... but should be firm enough to prevent shaking [from coughs and sneezes], while not being too confining"; Hip., Medic., c.24 [note: c.25 in Adams]; cf. *Hippocrates* (trans. Withington, p. 81); *Genuine Works of Hippocrates* (trans. Adams), II, 19.



are indiferent which they take. Opodeldoch<sup>482</sup> much in esteem

216:

[*margin:* Ruptures.] <sup>a</sup>Ruptures are occasioned at the same time by lifting heavie trusses, Sacks of corn &c: as happened to Rumson of Cpt. Marchame's, says he heard something crack in the left groine when he took up the Sacke, is reduced when he lies on his back, makes a rumbling noise, wears bandages & does Duty. It was the same with Newman of the King's. & some are occasioned by kicks from horses as was the case with Corple. Page. had it in Scroto, & was uncapable of Service. fat people have them in the navale & bandage the only remedy. its surprizing our hospital is not supplied with bandages for this purpose<sup>483</sup>

[*quotations diagonally stroked*]

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<sup>482</sup> On opodeldoch, see app. C-1, under "saponaceous preparations."

<sup>483</sup> The treatments suggested for rupture were numerous; James provides a review of many of them. John Douglas, a noted London surgeon, reported to James that he had successfully treated a patient by confining his descended intestines in the abdomen, then sealing off the wall by repeated applications of corrosive. During the 1710's, George I sponsored an attempt by Sir Thomas Renton to seal ruptures with caustics, but the experiment failed. Around 1750, Samuel Lee gained an appointment as surgeon at Chelsea, having promised to heal ruptures by external applications. He claimed success, but was dismissed, and Ranby and Hawkins charged him with fraud. They wrote that rupture could be easily controlled, and possibly healed, by well-fitted iron and cotton trusses, and cited successes using this method, but Lee challenged them in a rejoinder. Enterocoele was sometimes treated by castration, though James associated this practice with quacks. Tissot asserted that ruptures could sometimes be cured by bleeding. Enemas of tobacco smoke might also cure. Beyond these treatments, he advised rubbing the affected area repeatedly with ice water. When these treatments failed, surgery was, he wrote, a necessary recourse. James, *Medicinal Dictionary*, under "hernia"; Lee, *A Proper Reply to the Serjeant Surgeons Defence of Their Conduct at Chelsea Hospital* (London: W. Owen, 1754), esp. pp. 7-13; Ranby, and Caesar Hawkins, *The True Account of all the Transactions before the ... Commissioners for the Affairs of Chelsea Hospital, as Far as Relates to the Admission and Dismission of Samuel Lee, Surgeon*. (London: J. & P. Knapton, 1754), esp. pp. 7, 10-13 (text), 31-32 (appendix), Tissot, *Advice to the People*, pp. 240-42.

*C*urpe autem est, cum in omni arte, tum vero in arte medenci vel maxime, postum exhibitum negotium, multum apparatus multamque de se excitare opinionem, tondemque nihil opis ad ferre[.] Hip:de Articulis.<sup>484</sup>

ignari autem multi sunt, ex eaque ignorante quid lueri faciunt, quod illos istos persuasione imbuunt. Ib.<sup>485</sup>

217 [continuing from p. 215]:

by the Officers for themselves & horses. old Sprains are always painfull in frosty weather. old Verjuice & Dregs of wine greatly esteemed.<sup>486</sup>

[margin: Dislocations.] Par: 29th. Dislocations are not so frequent as one would imagine, considering the many accidents to which our men are dayly exposed from falls, &c: I'm still convinced had some of the above Sprains been seen & examined by English Bonesetters, many would have passed for Dislocations.

[quotation diagonally stroked]

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<sup>484</sup> "It is disgraceful in any art, but in the art of medicine especially, that after producing much trouble, display, and talk, nothing helpful is done"; Hip., Art., c. 44. cf. *Hippocrates* (trans. Withington, III, 289); *Genuine Works of Hippocrates* (trans. Adams), II, 117.

<sup>485</sup> "But there are many ignorant [practitioners] who gain profit from their ignorance, because they make others believe them"; Hip. Art., c. 46; cf. *Hippocrates* (trans. Withington, III, 293) and *Genuine Works of Hippocrates* (trans. Adams), II, 119-20.

<sup>486</sup> With particular reference to apples (entry, app. C-1), Withering noted that verjuice (so called by "country people") was "much used in recent sprains, and in other cases, as an astringent or repellant." Bell advised that the swelling of sprains could be prevented by using an astringent like lees of red wine, vinegar, or spirits. He also recommended the use of cold water to retard swelling. These remedies, he reported, also reduced effusions and inflammation. He also endorsed topical bleeding and opium if the pain was extreme. Warm baths (with added salt) and frictions with emollient applications were, he asserted, effective in reducing the thickening caused by sprains. Bell, *System of Surgery*, IV, 46-51; William Withering, *A Botanical Arrangement of British Plants: Including the Uses of Each Species in Medicine, Diet, Rural Economy and the Arts. With an Easy Introduction to the Study of Botany.*, 2<sup>nd</sup> ed. (London: G.G.J. and J. Robinson [etc.], 1787-92), II, 517.

*"Distentione abunde facta, ossa facile componuntur, et ad naturalem statum adducuntur, manuum palmis directa et convenienter aptata[....] composita autem ossa extenta fasciis deliganda.* Hipp; de fract.<sup>487</sup>

Sometimes bones are reduced by the men by pulling &c: as was Qr. Mr. Hudson's<sup>488</sup> elbow, both were on the floor & his Comrade's heel under his armpitt, pulling hard, the bone was heard to go into its place<sup>a</sup>. the joint swelled was painfull; being rub'd with Ungt. Vol. nostr<sup>489</sup> & proper bandage, did well. Cornet Ramsden catching a Creeket ball, dislocated the first joint of the little finger, was reduced, bandaged &c.<sup>b</sup> Meeke of Cpt. Gilbert's falling down Stairs, dislocated the left Humerus. the head of the bone thrust into the armpit, being fat & fleshy I expected it would be a hard taske to reduce it, but was easy; by taking a common broome Sticke, wrapping a napkin round the middle part pretty thicke, & put under the arm in order

218:

[quotations diagonally stroked]

<sup>a</sup>*at qui calce reponere tentant, ii prope ad naturalem repositionem accedunt. homine quidem humi supino reclinato, eum qui reponit humi sedere quam in partem articulus*

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<sup>487</sup> "When there is sufficient distension, bones are easily put together and returned to their natural position. The palms of the hands should be used to direct and join them together.... After reduction, extend the bone and apply bandages"; Hippocrates, *Frac.*, c.13-14 [note: 14 in Adams]; cf. *Hippocrates* (trans. Withington, III, 131) and *Genuine Works of Hippocrates* (trans. Adams), II, 49-50.

<sup>488</sup> Henry Hodgson was appointed a quartermaster of the Blues (and probably also a cornet) on 24 Dec. 1741. He was wounded at Fontenoy, but remained with the regiment at least until 1750, when he was noted on a return as absent because of sickness. It appears that he retired, or died, before 1755. WO 27/1, return for Blues; RADCP, Box 3/47; Arthur, *History of the Household Cavalry*, II, 418.

<sup>489</sup> No drug of this name appears in the "Dispensatory" of 1746, any comparator list, or *Practice*. It may have been similar in composition to volatile liniment (cf. n. 259). Medical applications denominated "volatile" were generally intended to warm or to produce sweat.

*exciderit, oportet, deinde affecta manu suis manibus apprehensa, eam extendere, cacce vero sub alam immiso, dextro quidem in dextram, sinistro in Sinistram, in contrariam partem impellere[.] Hipp: de Artul:<sup>490</sup>*

*hunc: igitur humerum mollibus manibus, tum alioqui blande, quod certe confert; perfricare convenit. Ib.<sup>491</sup>*

*<sup>b.</sup>at vero ubi digitorum articulus exciderit, sive primus qui ad manum est, sive secundus, sive tertius, eadem et aequalis est reponendi ratio. Hip: de Articul: S:vi.<sup>492</sup>*

219 [continuing from p. 218]:

to raise the head of the bone, one man pulling the arm & two lifting the Sticke at the same time & pressing the Scapula downwards. was reduced in an instant, making a noise as it went into its place. the Bandage applyed only to keep the arm from moving;<sup>493</sup> he was

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<sup>490</sup> "Those who attempt the reduction with the heel, operate in a way that approaches nature. The patient should lie on the ground, on his back, and the performer of the reduction should sit on the ground on whichever side the joint is dislocated. He should then take hold of the injured arm with both hands and extend it, putting his heel in the armpit, using the right heel for the right armpit, and the left for the left"; Hippocrates, Joints, c.3; cf. *Hippocrates* (trans. Withington), III, 205, and *Genuine Works of Hippocrates* (trans. Adams), II, 86-87.

<sup>491</sup> "Therefore, a shoulder in this state should be rubbed with soft hands, always gently"; *ibid.*, c. 9; cf. *Hippocrates* (trans. Withington), III, 221 and *Genuine Works of Hippocrates* (trans. Adams), II, 93.

<sup>492</sup> "If any joint of the fingers is dislocated, whether the first, second, or third, the mode of reduction is exactly the same"; *ibid.*, 80; cf. *Hippocrates* (trans. Withington), III, 389, and *Genuine Works of Hippocrates* (trans. Adams), II, 153.

<sup>493</sup> One of the common procedures for reducing luxations of the humerus, according to Bell, was "endeavouring to force the head of the bone into the socket with a rolling pin applied beneath it, while a sufficient force is employed for extending the arm, and for fixing the body in its situation"; Bell complained that this procedure threatened to drive the humerus under the scapula, although unlike Buchanan he did not mention the pressing down of the scapula; he commented (p. 214), "it has been the prevailing practice to press the scapula forward and downward: Nearly the reverse of this, however, should be adopted." During the 18<sup>th</sup> century, surgeons invented a number of machines for reducing dislocations. James described one of the better known, the work of Petit, but concluded, "I think the Hands and Napkin, with

drunk & scarcely complained of pain. <vid: Hipp: de Articulis<sup>494</sup>>

[margin: Fractures.] Par: 30th. Fractures happen rarely tho one would expect them dayly, from falls, kicks &c:

[quotation diagonally stroked]

*'eorum quae suis sedibus exciderunt et fracta sunt, Medicum quam rectissimas extensiones facere convenit. id enim maxime secundum naturam rectum est.=[...] atque ubi devinxeris, supra molle aliquid et aequabile deponere, ut ne in hanc vel illam partem pervertatur, aut in anteriorem aut in posteriorem partem inflectatur.*

Hip: de Fractis<sup>a. 495</sup>

[margin: of the Os Ischium.] Ward of Capt. Marcham's fell out of the hayloft & fractured the left Os Ischium about the middle, was put to bed in the most naturale Situation, the part being covered with thicke muscles. no reduction could be made, only applying Empl: Defensiv.<sup>496</sup> ordering him to lye quiet, but could not be perswaded to keep long enough in bed, getting up too soon continued lame, that thigh being longer than the other, & in walking is obliged to take hold of the wasteband of his breeches in order to pull it

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strong and prudent Assistants, are generally sufficient.” He warned, however, of excessive force being used in reducing a dislocation, for this could result in the rupture of nerves, muscles, or blood vessels; he noted, “such Accidents are frequent.” Bell, *System of Surgery*, IV, 205-14; James, *A Medicinal Dictionary*, under “luxatio.”

<sup>494</sup> Of the various methods Hippocrates recommends for reducing shoulder dislocations, Buchanan's operation most closely resembles the one discussed in Art. c.3 (Withington ed., III, 204-07).

<sup>495</sup> "Where there are dislocations and fractures, the physician should make extensions in as straight a line as possible, for this best accords with nature.... And when [the limb] is bound up, put it up on something soft and uniform, so that it does not get distorted to either side, or tend toward the front or the rear"; Hippocrates, *Frac.*, c. 1, 16; cf. *Hippocrates* (trans. Withington), III,95, 137, and *Genuine Works of Hippocrates* (trans. Adams), II, 35, 51. Foës (*Magni Hippocratis Medicorum*, p. 763) has "*aliquot*" for Buchanan's "*aliquid*" (l. 4), "*in illam*" (l. 4), and no "*in*" before "*posteriorem*" (l. 5).

<sup>496</sup> See app. C-1, *emplastrum defensivum*.

upwards: proving unfit for service was recommended to Chelsea.

[*margin:* of the leg.] Peckman of Capt. Gilbert's broke the left leg

220:

[*top of page, facing discussion of dislocations, p. 219*] some cases are so obstinate so as to require Six Strong men to pull with Napkins &c tyed round the Arm, the patient lying on a bed, his Arm round the Post to which a large Ball is tyed in order to raise the head of the bone &c.

[*stroked through*]

*<sup>a</sup>caeterum tardius firmantur omnia ossa, imbecillioreque callo obducuntur, nisi naturalem positum nacta fuerint, aut in eodem habitu immota permanserint: Ib.<sup>497</sup>*

221 [*continued from p. 219*]:

near the ankle, both bones transversly, by his horse falling with him; was easily reduced & common bandage applyed, & did well; the ankle & instep being much bruised, were fomented & rubed with Lint vol: nostr: but always remained thick & stiff[;] could never put on a boot. N:B: two days before he broke his leg, a Young puppy about Six months old, at my Lodgings, broke it's thigh about the middle, transversly; the callus was fairly formed in ten days time, & the bones adhered, & that without any external application or bandage, tho daily in motion.

[*margin:* of the Ribs.] the ribs are often broke from bruises, kick &c. & often do well without any formal reduction, as happened to Moor of Sir James's & Maddoxe's Wife of Cpt. Loyd's.

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<sup>497</sup> "All bones consolidate more slowly, and are covered by a weaker callus, unless they have been placed in their natural position and kept consistently in the same position"; Hippocrates, *Frac.*, c. 23; cf. *Hippocrates* (trans. Withington), III, 149, and *Genuine Works of Hippocrates* (trans. Adams), II, 56.

[quotation diagonally stroked]

*"iis abunde est victus ratio mediocris, [...] pauciore tamen victu ad decimum usque diem utendum, praesertim cum ex toto quiescat ac obsonia liquida adhibenda, quae ventrem modicum deducant, vino vero et carnibus abstinendum; post haec paulatim reficiendi.* Hip: de fractis<sup>a</sup>.<sup>498</sup>

[margin: of the Collar Bone] Cornet Frankland<sup>499</sup> broke his collar Bone which I reduced without informing him of the fracture, applyed the common bandage[;] he went abroad dayly & only wore the Bandage ten days, because it hurt him under the arm pits, nor was the bump larger than I have observed it after wearing the bandage Six weeks; had he been informed of this fracture he would surely be blooded, gone to bed

222 [misnumbered 223]:

[quotation diagonally stroked; placed across from line beginning with "of the Ribs" in margin]

<sup>a</sup>*Costa vero Viginti diebus callo firmatur, celeriter namque his ossibus callus obducitur[....] Vena quoque in cubitu secanda, et quam maxime habendum Silentium[.]*

Hip: de Articulis. S:vi.<sup>500</sup>

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<sup>498</sup> "A moderate diet is ample ... but few victuals should be provided for the first ten days, especially since [the patient] is resting; and soft food should be taken, such as encourages moderate evacuation. One should abstain from wine and meat, but afterwards gradually recoup"; Hippocrates, *Frac.*, c. 7; cf. *Hippocrates* (trans. Withington), III, 113, and *Genuine Works of Hippocrates* (trans. Adams), II, 42.

<sup>499</sup> Frederick Frankland was commissioned a cornet in the Blues on 23 April 1744. He appears to have left the regiment soon after it returned to England in 1746. RADCP, Box 3/47.

<sup>500</sup> "A rib consolidates in 20 days, for callus quickly covers these bones.... When a vein in the elbow is to be cut, it is especially necessary to observe silence"; Hip., *Art.*, c. 49, 50; cf. *Hippocrates* (trans. Withington), III, 309, and *Genuine Works of Hippocrates* (trans. Adams), II, 124.

223 [continued from p. 221]:

& kept his Chamber some days. this bone is easely broke & as easely reduced<sup>a</sup>, yet there's no credite got by it, for its not easely kept in its place & the Surgn is blamed for not setting it well, the bandage seldom presses on the part, but too much under the Armpits & becomes uneasy to the patient. I wish a proper Screw could be contrived for this purpose.

[quotation diagonally stroked]

*'in his autem circa deligationem maxime attendere oportet, ut appressus ita fiat, ut quae sunt imposita, neque absedent neque innitantur, sed apte quidem componantur non cogantur, idque in extremis minus, minimum vero in mediis=[...] vincula munda, levia mollia et tenuia esse oportet.* Hipp de Offic: Med:<sup>501</sup>

Simple Fractures are keep'd in our Barracks, the men not inclining to go to the hospital, but Compound fractures, being more difficult of cure and requiring much <time> are sent to the Hospital.

[margin: Compound fracture of the leg.] Castleton of Capt. Shipman's fractured his right leg by a fall from his horse, both bones transversly & near the upper extremitie, there was a large wound & two large Splinters from the Tibia. was carried to the hospital, an extension was made in order to reduce the bones, & required much force as the bones rode over each other, their extremities very unequale, were dressed dry covering with digestive,

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<sup>501</sup> "Moreover, regarding bandaging one ought to take care that they are fashioned so that the applications neither fall away nor are very tight, adjusted so that they do not force, less at the ends, least in the middle.... Bandages ought to be clean, light, soft, and thin"; Hip., Medic., c.8,10; cf. *Hippocrates* (trans. Withington), III, 65, 69, and *Genuine Works of Hippocrates* (trans. Adams), II, 10-11, 12. Withington notes (64n3) that Hippocrates gives rather different advice in c.12: "Make most pressure over the lesion and least at the ends" (ibid., p. 73). "*Absedent neque innitantur*" (ll. 2-3 of quotation) is rendered "*absedant neque innitentur*" in Foës (*Magni Hippocratis Medicorum*, p. 743).



applying the 18 tailed bandage,<sup>502</sup> blooded<sup>503</sup> & ordered spare Dyet. as some Splinters were loose the wound was kept open some time as in Broken Shins. Some days after

224:

[quotations diagonally stroked]

<sup>a.</sup>*jugulum vero ut et reliqua omnia ossa quae laxa sunt, prompte coalesci, talia namque callum celeriter obducunt.* Hip: de Artul.<sup>504</sup>

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<sup>502</sup> The 18-tailed bandage was designed to hold long splints in place. Note Bell, *System of Surgery*, IV, 149, 150. Drawing on Heister, James described the application of the bandage in a case of compound fracture of the tibia: *Medicinal Dictionary*, under "fascia." Turner discussed the use of the 18-tailed bandage. Bromfield recommended that generally fractures be reduced immediately, but if there was much swelling it should be allowed to subside. The limb was to be splinted in a position where the muscles were most relaxed. A variety of splints were used in 18<sup>th</sup>-century practice. In reference to luxations of the humerus, Turner observed, "For the further Security of this Reduction, and keeping out the Top of the *Humerus*, I have seen *Cerula's* of Tin, shaped to the Figure of the Bone, and being first quilted, laid over the same; others also of strong Past-board, and some of Wood: but I never found they answer'd Expectation, or that they were continued without Uneasiness and Disturbance to the Patient." Bromfield, *Chirurgical Observations and Cases*, II, 58-64; Daniel Turner, *The Art of Surgery: In Which is Laid Down such a General Idea of the Same, as is Founded upon Reason, Confirm'd by Practice* (London: C. Rivington [etc.], 1722), II, 151, 207.

<sup>503</sup> The bleeding was antiphlogistic. Boerhaave stressed the importance of countering inflammation before setting a fracture, claiming that otherwise the patient would die convulsive or of gangrene. Bell likewise advised recommended bleeding to forestall inflammation. If the fracture was accompanied by contusion, he recommended the use of leeches and astringents (e.g. *saccharum saturni*, Mindererus's spirit, *sal ammoniac*; note entries, app. C-1, except for *spir. Mind.* [q.v. n.892]); Inflammation was his greatest fear, but he also maintained that local bleeding would reduce the likelihood that a callus would cause "unseemly" healing. Bromfield advised that contusion accompanied almost all fractures, and this condition necessitated venesection, as well as purgation. Bell, *System of Surgery*, IV, 110; *Boerhaave's Aphorisms*, p. 87 (#350); Bromfield, *Chirurgical Observations and Cases*, II, 58.

<sup>504</sup> "The collar-bone and all other bones that are spongy, unites quickly, for with such the callus quickly covers"; Hippocrates, *Art.*, c.14; cf. *Hippocrates* (trans. Withington), III, 235, and *Genuine Works of Hippocrates* (trans. Adams), II, 99.

*curatioque cerato, Spleniis, et mollibus linteis instituitur. Ib.*<sup>505</sup>

225 [continuing from p. 223]:

reduction he had constant reachings to vomite, scarcely eating anything, & tho of a gross habite of body, never had the least flux of humours towards the wound, which were either revulsed by vomitings, or prevented by abstaining from victuals. He was three months in bed, this leg always shorter than the other, so was discharged as unfit for Duty June 1744.<sup>506</sup>

[quotation diagonally stroked]

***"Distensio praecipue ad ea quae maxima, crassissima, et aequalia et utraque ossa fracta habent. Hip: de offic: Medic.***<sup>507</sup>

it was much the same case with Marriot of Majr. Jenkinson's breaking his left leg near then ankle, being very much swelled was fomented, poulticed &c., no bandage applied till the 8th day.

[quotation diagonally stroked]

***"tumores vero in poplite, aut pede, aut alia quapiam parte, ex compressione sublatis, multis lanis probe carptis. vino et oleo respersis, cerato sublito, devincendi***

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<sup>505</sup> "Healing begins with cerate, compresses, and soft bandages"; Hippocrates, Art., c. 14; cf. *Hippocrates* (trans. Withington), III, 237, and *Genuine Works of Hippocrates* (trans. Adams), II, 99.

<sup>506</sup> It often happened, as in case one noted by Buchanan, that fractured limbs healed short, and in the case of a compound fracture of the severity reported by Buchanan some degree of shortening or malformation would have been almost inevitable. Note app. B-2, entry for "fractures."

<sup>507</sup> "Extension should be strongest for the largest and thickest bones and when both bones [of the arm] are broken"; Hip., Medic., c.16; cf. *Hippocrates* (trans. Withington), III,75, and *Genuine Works of Hippocrates* (trans. Adams), II, 16. "*Distensio*" (l. 1 in quotation) is "*distentio*" in Foës (*Magni Hippocratis Medicorum*, p. 746).

*sunt, ferulaeque si premant, cito laxandae.* Hip: de fract:<sup>508</sup>

[margin: Chilblaines.] Par: 31st[.] Chilblains were common amongst the men from being often wet & catching cold on night Duty &c: are very painfull & troublesome.

[margin: Method of Cure.] I ordered the feet to be bathed in warm water or with some emollient fomentation, applying the common white bread & milk poultice by which all complaints are often removed, tho some times they breake & run, become ugly sores & are treated as wounds or ulcers. the men rub with ol: tereb: as soon as they

226 [facing p. 225; blank]

227 [continuing on from p. 225]

perceive them.<sup>509</sup> tho looked upon as trifles yet are frequently of dangerous consequence & ought not to be neglected. Reid of Capt. Marcham's had them to a violent degree on his left foot from heel to toe, being drunk & falling asleep in the Stable, & sleeping some hours, his feet being wet; when awaked found them chill & cold, & hardly able to walke. I found large

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<sup>508</sup> "Swellings that arise in the ham, the foot, or elsewhere, owing to pressure, should be dressed with plenty of crude wool, well pulled out. Sprinkle them with oil and wine and smear them with cerate, and if the splints press hard relax them at once"; Hippocrates, *Fract.*, c. 21; cf. *Hippocrates* (trans. Withington), III, 145, 147, and *Genuine Works of Hippocrates* (trans. Adams), II, 55. In Foës (*Magni Hippocratis Medicorum*, p. 765), 1.2 reads, "... *lanis succidis probe ....*"

<sup>509</sup> A common strategy for treating chilblains -- apparently not followed by Buchanan -- was to begin by bathing or rubbing the affected parts in snow or cold water. After this might come warm wine and, if the chilblains ulcerated, fomentations or warm poultices, which were intended to cleanse and to encourage discharges. Heister advised dressing sores in yellow basilicon (app. C-1) with spirits of turpentine. Bell noted that it was common practice to use emollient ointments, but that they encouraged growth of fungous excrescences on the sores; to prevent this, he advised applying caustic or a digestive mixed with red precipitate (app. C-1, *mercurius praecipitatus ruber*, under "mercurials") or diachylon (app. C-1, *emplastrum diachylon cum gummi*). Bell, *System of Surgery*, IV, 44-46; Theobald, *Every Man His Own Physician*, p. 8; Tissot, *Advice to the People*, pp. 234-40.

blisters containing a sharp water & black at bottom & obliged to scarify deep before there appeared any florid blood. using a warm fomentation & dressing with ol: tereb: &c: had much ado to prevent a mortification, ordered the Barke internally.<sup>510</sup> & tho he recovered this, yet he lost the use of that ankle, the leg wasted, the toes numb & useless could not be moved, but imagining to stirr them, made frequent attempts in vaine. & several methods were tryed to restore the parts but all to no purpose so was discharged.

[*margin:* Boyles.] Par: 32d. Boyles happen dayly on all parts of the body.

[*margin:* Method of Cure.] if they tend to Suppuration apply the bread & milk poultice or Empl: Diachyl: cum Gum: then open with the Lancet, deterge with praecipitate & heal &c: they are often about the backside & render a Trooper useless a long time, are painful & tedeous in coming to

228 [*facing p. 227; blank*]

229:

Suppuration, being deep seated; I seldom waite for Suppuration but upon first seeing them plunge my Lancet into them, making a large incision & suffering them to bleed freely, & voide a large quantity of black blood, thick & clotted, dress with praecipt. and Digestive &

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<sup>510</sup> The use of bark to prevent or treat mortification became virtually standard during the century. It was administered not only inwardly, but also in poultices, a practice popularized by Alexander Monro primus. Bark appears to have been used freely, though Parr cautioned against using it if the condition was highly inflamed or if the patient suffered from a disease like asthma, which made it dangerous to administer. Bromfield, *Chirurgical Observations and Cases*, I, 130; Buchan, *Domestic Medicine*, p. 331; Manning, *Modern Improvements in the Practice of Physic*, p. 428; Mead, *Complete Works*, p. 254; Parr, *London Medical Dictionary*, I, 1005-07; *Practice of the British and French Hospitals*, p. 45 ("decoction of the bark"); Theobald, *Every Man His Own Physician*, p. 27.

so shorten the cure<sup>511b</sup>. Some are attended with troublesome Sinuses, are to be treated as occasion requires. are common on the feet & toes being pinched by too tight boots & frequently where a corn has been. [*the following sentence is stroked through vertically*] are often in the Gums & cured by scarification, washing with warm water & vinegar or Brandy.<sup>512</sup> if on the face & exposed to the cold as in Camp, sometimes threaten a mortification, should be scarified, kept warm dressing with warm Digestive &c: often in the Ears attended with deafnes & throbbing pain into which I introduce roasted Onions with [*crossed: a bit*] fresh butter<sup>513</sup> & when they breake & discharge, all complaints cease. they are said to do good to children when they heal kindly, & its observed they are more healthie & Sprightly afterwards<sup>c</sup>.

[*margin: Fistula in Ano.*] Fistula in Ano was rare, tho it's said to be a common distemper amongst horsemen, we had only one. Viz: Vickers of Sr James's an old Venereal,

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<sup>511</sup> Wiseman likewise recommended plaster of diachylon with gums in treating boils. Tissot advised an application of simple diachylon, after the core had been removed. Sharp reported, "It is a Maxim laid down in Surgery that Evacuations are pernicious in every Circumstance of a Disease that is at last to end in Suppuration," but just as physicians now believed that bleeding actually encouraged eruptions in pox, so should bleeding help in formation of abscesses, for vessels might be clogged. He opposed the use of suppurative plasters for abscesses and inflammations in weak or dropsical patients, for they were painful to remove and by their compress might encourage mortification. Of all applications to promote suppuration, he considered the best to be bread and milk with oil; if suppuration was likely to be slow, however, gum plasters were preferable in his opinion, because they needed to be changed only every 4-5 days, while poultices needed to be changed twice per day. Sharp, *Treatise on the Operations*, x-xi; Theobald, *Every Man His Own Physician*, p. 6; Tissot, *Advice to the People*, pp. 243-44.

<sup>512</sup> Tissot recommended that corns first be softened by repeatedly soaking them in warm water. They were then to be cut off and the part covered with a leaf of houseleek, ground ivy, or purslain dipped in vinegar or by diachylon or gum ammoniacum. Tissot, *Advice to the People*, pp. 248-49.

<sup>513</sup> On onions, see entry, app. C-1. Butter was seen as an emollient, smoothing and healing; note entry, app. C-1.

was treated & cured as Such<sup>a</sup>.<sup>514</sup>

[*margin*: Piles.] Piles are troublesome & render a horseman useless, if they appear turgide & large outwardly

230:

[*following quotations are in heavier ink than text, as are designators on p. 229; only the latter two quotations are diagonally stroked*]

<sup>b</sup>*ante omnia igitur cum ejusmodi tuberculum suboriri senseris antequam ad rectum intestinum suppuratio perveniat, crudum quam celerrime secare oportet.* Hip: de Fistulis.<sup>515</sup>

[*the following quotations are stroked through*]

<sup>c</sup>*in auris dolore, lana digito circumvoluta, unguen calidum instilla, deinde interiori manus volae lana imposita, auri supposito, ut aliquid ipsi exire videatur, deinceps in ignem immittito. in quo tibi aeger ipse fallendus est.* Hip: de morb:vulg: lib:vi. S:vii.<sup>516</sup>

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<sup>514</sup> An anal fistula might be located at the anus or within the rectum. It might be hardened or soft. There were various nostrums on the market that, according to their creators, were capable of curing anal fistulas. Surgery was a common recourse, however. Bell's technique was to use a bistouri, guided if necessary by a director, to open it up, in order to promote suppuration and, he hoped, disintegration. In an article published in the *Journal de médecine*, 41 (1774), Antoine Louis Joseph Majault claimed that while most surgery was much less painful than that practiced by the Ancients, the new style of operation for fistula was worse. He advocated a return to the traditional method, using a ligature, but suggested replacing the traditional silken ligature with a metallic one. He also discouraged the use of injections recommended by Foubert to discover the internal opening; these injections, he argued, were unnecessary and might lay open the intestine or cause fistulous openings. Bell, *System of Surgery*, II, 27-54.

<sup>515</sup> "In the first place, therefore, when you feel that such a tubercle has formed, you must cut it quickly, while it is still unripe, before it suppurates and penetrates into the rectum"; Hip., *Fist.*, c. 2; cf. *Genuine Works of Hippocrates* (trans. Adams), II, 311; *Oeuvres complètes d'Hippocrate* (trans. Littré), VI, 449.

<sup>516</sup> "Regarding earache, wind wool around your finger, apply by drops warm ointment, then holding wool in the hollow of your hand put it into the ear so that something is seen to go out

<sup>a</sup>. *Fistulae quidem partim ex collisis, partim ex tuberculis fiunt, oriuntur etiam vel ex remigatione vel equitatione, collecto in natibus juxta Sedem Sanguine[.] Hip: de fistulis. S:vi.*<sup>517</sup>

231:

apply two or three Leeches to the part, keeping the body open with this Electuary. **Rx. Elect: Lenitiv. oz.i flor: Sulphur: dr.iii: Diagrid: dr.i. Syr: de Rhamn: gtt. L ut f. Elect: cap: M:N:M: bis en die vel Mann: opt. oz.i. Elect: Lenitiv: oz.ii: Lact: Sulphur: dr.ii. ut supra sumend.**<sup>518</sup> Sometimes they are so much swelled & hard outwardly as to threaten a Gangrene[;] should then be cut off.<sup>519</sup>

[margin: Wormes] Par: 33. Troopers are seldom suspected of having worms, yet

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of it, then toss it into the fire: in this you must escape the notice of the sick person"; Hip., Epid. VI.v.12. "*Supposito*" (l. 2 of quotation) is "*supponito*" in Foës (*Magni Hippocratis Medicorum*, p. 1184, #12).

<sup>517</sup> "Fistulas arise partly from contusions and tubercles; they also arise from rowing or horseback riding; the blood accumulates in the buttocks near the anus"; Hip., Fist., c. 1; cf. *Genuine Works of Hippocrates* (trans. Adams), II, 311; *Oeuvres complètes d'Hippocrate* (trans. Littré), VI, 449. Foës has (*Magni Hippocratis Medicorum*, p. 883) the inverse of Buchanan's "*quidem partim*."

<sup>518</sup> "Take 1 oz. lenitive electuary [app. C-1, under senna], 3 dr. diagyrdium [app. C-1, under scammony], 50 drops syrup of buckthorn [app. C-1], according to requirements to make an electuary. To be taken M.N.M. [cf. n. 276] twice a day. Alternatively, 1 oz. of the best manna [app. C-1], 2 oz. lenitive electuary and 2 dr. of milk of sulfur [app. C-1, under sulfur] to taken as an extra." Both of these purgatives were simply combinations of drugs that individually were laxative.

<sup>519</sup> Sydenham recommended treating piles by a combination of a drug (composed of lenitive electuary and flowers of sulfur; an "electuary for the piles" used in 18th-century army hospitals also included these), an ointment, and leeches. According to Withering, an oil extracted from box was used commonly, and successfully, to relieve the pain of hemorrhoids. Cullen cautioned that repelling the hemorrhoidal flux, as by cold bathing, was dangerous. Cullen, *First Lines of the Practice of Physic*, II, 222; *Practice of the British and French Hospitals*, p. 48; Theobald, *Every Man His Own Physician*, p. 29; Withering, *Botanical Arrangement*, II, 1069.

I have seen them pass upwards & downwards, dead & alive, chiefly of the earth kind, without any preceeding Symptom to foretell them. our Sutler's servant brought up red worms of the Earth kind a quarter of a yard in length, & alive, but never had any complaints indicating worms. Stubbs of Sr James's often Sick at Stomach with frequent reachings to vomite, voracious appetite; suspecting worms, I ordered a vomite, which operating briskly brought up many small short white worms alive; he was lately fluxed for an obstinate Itch & some venereale complaints, & briskly purged afterwards, & one would have thought the best remedy for this disorder. in Sickness at Stomach I commonly vomite, & worms are sometimes brought up, tho I could not have ventured to prognosticate them. Some pass downwards from a common purge Jalap: & has been highly commended as an excellent worm powder;<sup>520</sup> some crawl upwards

232 [facing p. 231; blank]

233 [continuing from p. 231]

when the Person is asleep, without any medecine, & many pass downwards imperceptibly. Succ: Marrub: alb: is esteemed by some as a Specifick.<sup>521</sup> they are Suspected in horses when

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<sup>520</sup> Buchan observed, "Though numberless medicines are extolled for killing and expelling worms, yet no disease more frequently baffles the physician's skill. In general, the most proper medicines for their expulsion are strong purgatives; and to prevent their breeding, stomachic-bitters, with now and then a glass of good wine." Brocklesby valued jalap and aloes as anthelmintics, but perhaps the remedies most often cited by British writers were calomel and powdered tin. Buchan thought that common seawater was effective, but warned his readers against nostrums, for these, he asserted, tended to be heavily reliant on mercury. Brocklesby, *Oeconomical and Medical Observations*, pp. 280-85; Buchan, *Domestic Medicine*, 280-82, 282n; James, *Medicinal Dictionary*, "vermes"; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 54.

<sup>521</sup> On *succus marrubium album*, see app. C-1. Like all anthelmintics, this juice was cathartic.



they do not thrive & have a voracious appetite, looking often towards their flanks, which they often pinch & bite, tearing their body cloaths. are put on a course Aethiop: Mineral: or Crocus Mettallor:<sup>522</sup> Sabine or Box<sup>523</sup> cut small amongst their oates is much esteemed; or the hairs of his Maine or taile cut small. if worms are voided during the course of any medecine, it's always looked upon as a good Vermefuge.

[*margin: Cholicks.*] Par: 34. Colicks with reachings to vomite are generally relieved by drinking warm water & washing the Stomach giving opiates afterwards in large Doses, Viz: *Op: pur: ad gr.ii. or Laud: Liquid: ad gtt.L:*<sup>524</sup> which procures a sound sleep & some hours rest; for fear the same complaints return I order mixtur: Antiemet: nostr.<sup>525</sup> tho the Patient seem to be in danger of present death, yet so soon as the opiate takes effect, all complaints cease; this desease greatly alarms the Bystanders, attacking suddenly, & often attended with severe convulsions, ravings, beating the Breasts, grinding the teeth, extermities cold, clammy sweats, &c: nixt day complaine of soreness at breast & bowells.

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<sup>522</sup> A powerful cathartic. Note entry under antimony, app. C-1.

<sup>523</sup> Note entries on box and savine, app. C-1.

<sup>524</sup> "Take up to 2 gr. purified opium or up to 50 drops liquid laudanum." On both ingredients, note entry under opiates, app. C-1. Buchan likewise recommended laudanum, i.a. Tissot discussed treatment of several types of colic and did not prescribe opiates for any. His regimen relied heavily on bleeding. Leigh claimed that most of his contemporaries used a course of opiates and purgatives to treat colic. Duncan recommended opium and advised venesection if there was pulsing in the head. However, Hunter, in his influential treatment of "dry belly-ache" (Devonshire colic), reported that "Physicians have been much divided with respect to the use of opium in this disease," but he advised against it in most cases, claiming that the relief obtained by it was brief and limited and that the primary indication was to open the body. NLM, MS B 332 ("Observations from Dr. Duncan's Lectures"), p. 147; Buchan, *Domestic Medicine*, p. 228; John Hunter, *Observations on the Diseases of the Army in Jamaica; And on the Best Means of Preserving the Health of Europeans, in that Climate*, (London: G. Nicol, 1788), pp. 260-61; Leigh, *An Experimental Inquiry into The Properties of Opium*, p. 139; Tissot, *Advice to the People*, pp. 155-63; Wallis, *Art of Preventing Diseases*, pp. 356-59.

<sup>525</sup> cf. n. 119.

[*margin*: Method of Cure.] & gentle purge of Rhab: with thin mutton

234 [*facing p. 233; blank*]

235 [*continuing from p. 233*]:

broth or Ryce Gruelle, compleat the cure. fomenting the parts, all nourishment to be taken in small quantity for some time, least it provoke vomiting.<sup>526</sup>

[*margin*: Causes] Colicks are often occasioned from drinking too freely of Cyder, sower milk, small sharp wines, or bad Beer of which are dayly instances on marching. when Gouty people have Cholickie complaints & probably proceed from good living: I order Enema com: nostr. & warm purgatives tinct: Sacr: & Elixr. Salut.<sup>527</sup> complaints of this kind are common about the end of Summer & beginning of harvest, from eating unripe fruits, Grapes, old Cucumber: <Nuts><sup>528</sup> &c: of fat luscious eels taken out of slymie ditches, or fat wyld Dukes, or fresh fat pork when in too large quantities, as our men do frequently after long marches & fastings.

*'Qui vero pisces caenosis et lutosus locis cibum capiunt, velut [...] anguillae et reliqui id genus, graviores existunt ab aqua et luto, et his quae illic producuntur, nutriuntur, ex quibus etiam Spiritus haustus hominem laedit ac aggravat.* Hip: de

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<sup>526</sup> For colics, Quincy recommended Daffy's Elixir [cf. n. 351] or rhubarb. Buchan cautioned against the use of evacuations (or venesection), Buchan, *Domestic Medicine*, pp. 227-28; Theobald, *Every Man His Own Physician*, p. 8.

<sup>527</sup> cf. n. 302 on enema; note entries on *tinctura sacra* and *elixir salutis*, app. C-1.

<sup>528</sup> Nuts were widely thought to be difficult to digest, though some authorities recommended them as an aid to digestion, especially of fish. Green walnuts (n. 705) were sometimes used as a purgative or emmenagogue. James, *Medicinal Dictionary*, under "nux"; Moore, *Essay on the Materia Medica*, p. 103.

vict: rat: lib:2.<sup>529</sup>

*qui pinguedinem hominis naturae maxime infensam habent.* H: de intern:

affect.<sup>530</sup>

Hartine of Sir James's dayly subject to complaints of this kind, often vomited without relief, but always eased by drinking warm water. lately drunk a large quantity & vomiting briskly, brought up a bag about the size of a

236 [facing p. 235; blank]

237 [continuing from p. 235]

pullets egg, resembling a hard boyled egg, & broke in coming up. it contained a green coloured Stuff, bitter as Gall; he imagined it was his Gall bladder & was much alarmed. I put it into warm water, was of a thicke membranous Substance, & seperated into sloughs like the white of an egg when hard boyled; some part was yellow resembling the yolke of an egg, & at one end was the appearance of a Stalke as if it had grown to the coates of the Stomach. there were two small bags of the same form & substance, containing a green coloured liquor. as I supposed some others might be in the Stomach, I ordered a strong vomite; which

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<sup>529</sup> "Assuredly, those fish that feed in places with mud and clay, such as ... eels and the rest of that kind, are heavier [to digest], because they take their nutrition from water and mud and other things produced there, the air of which also drains the breath of life from a person [Jones: "entering a person"], hurts and oppresses him"; Hip., Vict., c. 48; cf. *Hippocrates* (trans. Jones), IV, 321, and *Oeuvres complètes d'Hippocrate* (trans. Littré), VI, 549, 551. For "lutosi" (l. 1 of quotation), Foës (*Magni Hippocratis Medicorum*, p. 357) gives "aquosis"; he concludes the passage with "*et aggravat.*" Although Buchanan deals with eels alone in the relevant passage, Greek medicine left behind a general bias against fish, and this was reinforced by Boerhaave and von Haller, who cautioned against foods (fish among them) that were alkaline: Erwin H. Ackerknecht, "The End of Greek Diet," *BHM*, 45 (1971), pp. 243, 247.

<sup>530</sup> "[These fish (eels and bottom feeders)] contain a fat especially [Littré: *la plus*] dangerous to man's constitution"; Hippocrates, Internal Affections, c. 6; cf. *Hippocrates* (trans. Potter), VI, 89, and *Oeuvres complètes d'Hippocrate* (trans. Littré), VII, 181.

operated well, but brought up nothing. his dyet was always the same as his Comrades. Some days thereafter Gowld of the same troop brought up a bag of the same nature. Whitaker of Captn. Gilbert's had often colickie complaints with sicknes at Stomach, & often violent vomitings, brought up a white hard substance four inches long, so thicke that it could scarcely pass the Gullet; there were many others of the same sort, but small[;] he lives mostly on milk, which I suppose grudled on the stomach & might lye there some time. his Father lived in the same manner & was often subject to the same complaints, at last was choaked in vomiting up a Substance of this kind, which was so large

238 [facing p. 237; blank]

239 [continuing from p. 237]:

that it could not pass the Gullet. I have frequently observed substances of this kind amongst country people, who live chiefly on milk. vid: Tulp: obs: med: p. 131.<sup>531</sup>

[margin: Burns & Scalds.] Par: 35. Burns & Scalds are rare amongst us, & there have been only triffling accidents of this kind from Gun Powder. I cut the Blister rubbing with Lint: vol: nostr. & heal with cerat: e lap: Calaminar:<sup>532</sup> oyle & Brandy is the common

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<sup>531</sup> Tulp relates the case of an 18-year-old boy who from birth drank milk plentifully, while rejecting other food: *Observationes medicae*, II, cap. xxiii, pp. 131-32.

<sup>532</sup> Buchanan may have lanced the blisters out of a concern, shared by others, that otherwise the fluid in them would turn acrid and corrosive. Cerates, so called because they had a wax base, were preparations of a consistency intermediate between ointments (with which they were classed in the *Pharm. Lond.*) and plasters. Quincy complained that the cerates of the shops varied markedly, in accordance with the private recipes of the preparers, and claimed that the class in general was little used. On *ceratum lapis calaminaris*, see app. C-1. To treat burns or scalds, Wesley (claiming that his experience demonstrated success) recommended holding the damaged part in cold water for 1-5 hours, while other writers advocated various applications, e.g. ointment of poplar (Culpeper), cream of lead (Kirkland), pomatum (Tissot). James cautioned against putting plasters on third-degree burns, for they would dry the affected area and cause scarring. Sharp warned that many applications caused pain, and recommended simple remedies, especially linseed oil and (as an analgesic) milk. Culpeper,

remedy amongst the men, & an exceeding good medecine, & much better than Spirite only, for without the oyle the dressings are not easily removed.

[margin: Whiteloves.] Par: 36. Whiteloves are common amongst the men & Servants from being pricked by thorns, thistles &c: in making up trusses of forrage, & are extreemely painfull & vexing, & are mocked by their Comrades for complaining so much for a sore finger. are poulticed with Bread & milke. laid open, discharge a sharp matter, or bloody Ichor, rarely good pus. dressed with Bals: Tereb: &c: are very common about the latter end of the Campn. I often open them before there's any appearance of Suppuration. & by this method much paine & time are saved.<sup>533</sup> St. Antonies Fire is treated much after the same manner: I never saw it so bad as described by Authors.<sup>534</sup>

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*Pharmacopoeia Londinensis*, p. 192; James, *Medicinal Dictionary*, under "ambustion"; Thomas Kirkland, *An Inquiry into the Present State of Medical Surgery: Including the Analogy betwixt External and Internal Disorders* (London: J. Dodsley, 1783-86), I, 305; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 580; Quincy, *Dispensatory*, p. pp. 205-06; Sharp, *Treatise on the Operations*, xlvi-xlxxxix; Tissot, *Advice to the People*, p. 221; Wesley, *Primitive Physic*, p. 47.

<sup>533</sup> Tissot warned that whitlows was a more serious problem than it was commonly thought to be, for it could result in gangrene. He advised concentrating the inflammatory humors, and promoting suppuration, in the fingers by means of poultices, a decoction of mallow flowers boiled in milk, or simply warm water. He felt that a speedy discharge was necessary, and that as soon as the matter had fully ripened it had to be released by an incision. While allowing for moderate therapy in mild cases, Parr emphasized aggressive treatment: topical bleeding, removing the cuticle or opening the finger to relieve inflammation and allow pus to drain; and, if swelling continued and inflammation was spreading, amputation. Parr, *London Medical Dictionary*, II, 106-07 (under "paronychia"); Tissot, *Advice to the People*, pp. 146-50.

<sup>534</sup> A fever arising from erisypelas or St. Anthony's Fire could kill, Buchan reported. Noting that it was common to treat the problem by applying ointments, salves, and plasters, cautioned that these remedies obstructed discharges and advised, "the safer course is to apply nothing." He recommended bleeding if there were inflammatory signs, especially if it appeared that the disease was attacking the head (he also recommended bathing the feet in warm water, since they derived from the brain). To treat mild cases, Tissot suggested promoting perspiration by encouraging the patient to drink plentifully of nitre in elder flower tea. More serious symptoms might prompt bleeding and enemas, while various herbal remedies were applied to the affected region. Patients were to abstain from meat, eggs, and wine.

*Si erysipelas foras diffusum intro vertatur, alum; si vero intus effusum foras vertatur, bonum.* Hip: de morb: lib:i.<sup>535</sup>

240 [facing p. 239; blank]

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Characteristically, Brocklesby favored a regimen that focused on bleeding and nitre. Kirkland likewise advised bleeding, since the morbid matter was locked into the fingers and membranes, and could not be eliminated through suppuration. Bromfield cautioned that while erysipelas should generally be treated with bleeding, cooling purges, and a generally antiphlogistic course, if it was critical, it was unwise to repel it. The author of *The London Practice of Physic* recommended reliance on purgatives, though allowing that venesection was appropriate when inflammation was present. Bell noted that it was common practice to apply warm poultices (as Buchanan does here), in order to promote suppuration. He argued, however, that additional effusion was painful and had no apparent positive effect, and that the serum in the sores could not be converted to pus. He instead recommended a course to reduce effusion: localized bloodletting (he suggested leeches) and dipping the affected fingers into astringents like brandy or spirits of wine or alcohol; after the sores began to heal, he advised, spirits of turpentine or vinegar might be applied. If effusion began (meaning that this course had failed), the swellings were to be opened with a lancet. He reported that many practitioners disliked using unctuous remedies or other moist applications for erysipelas, fearing that they would encourage acidity; instead, flour, starch, or hair powder used, in hopes of absorbing acrid matter. Bell agreed that they should be applied, but mainly to retard formation of this matter, rather than to absorb it; when they did not provide relief, however, he recommended that a weak solution of saccharum saturni be applied. Noting that there had earlier been a belief that this was a putrid condition, so bloodletting had been discouraged, he added that bloodletting was now known to be useful, as were other aspects of antiphlogistic regimen. Bell, *System of Surgery*, IV, 13-16, 40-42; Brocklesby, *Oeconomical and Medical Observations*, pp. 138-41; Bromfield, *Chirurgical Operations and Cases*, I, 107; Buchan, *Domestic Medicine*, pp. 189-90; Kirkland, *Inquiry into the Present State of Medical Surgery*, I, 338-39; Tissot, *Advice to the People*, pp. 244-46; *The London Practice of Physic: For the Use of Physicians and younger Practitioners, wherein The Definition and Symptoms of Diseases are laid down, and the present Method of Cure. With the Doses of Medicine now given. Also, an Index; and a Table for Computing the Quantity of Purgatives, Opiates, and Mercurials in the Compositions of the London Dispensatory* (Dublin: James Williams, 1770), pp. 53-54.

<sup>535</sup> "If erysipelas that has been diffused outwardly turns inward, bad; but if having been spread on the inside it turns outward, good"; Hip., Morb. 1.7; cf. *Hippocrates* (trans. Potter), V, 115, and *Oeuvres complètes d'Hippocrate* (trans. Littré), VI, 153.

241 [continuing from p. 239]:

[margin: Officers more healthie abroad than at home] Par: 37. Our Officers were more healthie abroad than at home, & such as were at great pains to take dayly exercise a horsebacke or walk an hour or two every forenoon, now scarcely take either yet enjoy perfect health. sicknes was scarcely known amongst them during our stay in Garrison at Ghent. Majr. Jenkinson used to bleed every six weeks or two months when in England, being subject to inflammation of the Lungs, but now two or three times a year is sufficient. & some Valetudinarians who could not live in London are in good health here.

*inde vides agilem nocturnaue bella gerentem.*

Ov: Amor: lib:i. Eleg:9. V:45.<sup>536</sup>

[margin: Causes.] this proceeds from a lighter dyet; in England solid meats are most common[;] here a light soup is always the first dish. in place of malt liquor, wine & water is drunk. nor are dressed Suppers much in fashion, nor any excess of drinking at taverns, it being customary to retire to each others private Lodgings & pass the evening in a Sober manner; here are no country rambles.

----- *victus tenuis quae quantaue secum  
afferat. in primis valeas bene. nam variae res  
ut noceant homini, credas. memor illius escae,  
quae simplex olim tibi sederit.*

Hor: Sat:ii. lib:ii. V:69.<sup>537</sup>

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<sup>536</sup> "For this [i.e., love] you see me full of action, and waging the wars of night"; Ovid Amores 1.9.45; *Heroides and Amores* (trans. Showerman), p. 359.

<sup>537</sup> "What and how great are the blessings that simple living brings in its train. First of all, good health. For how harmful to a man a variety of dishes is, you may realize, if you recall that plain fare which agreed with you in other days"; Hor. Sat. 2.2.70-73; *Horace* (trans. Fairclough), p. 143. The second line begins "*adferat*" in Fairclough.

242 [facing p. 241; blank]

243 [continuing from p. 241]:

----- *vides ut pallidus omnis*

*Caena desurgat dubia.*

Ib:<sup>538</sup>

*Caena brevis iuvat.* Ep:14. lib:i.<sup>539</sup>

*immane est vitium, dare millia terna macello,*

*angustoque vagos pisces urgere catino.*

Ib: Sat:4. lib:2. V:76.<sup>540</sup>

light french wines are drunk daily instead of Strong Port.

*tu lene tormentum ingenio admoves*

*plerumque duro: tu sapientium*

*curas et arcanum jocoso*

*consilium retegis Lyaeo:*

*tu spem reducis mentibus anxiiis,*

*viresque: et addis cornua pauperi.*

Hor: Od:21. lib:3.<sup>541</sup>

Plays & other entertainments are never so late as in London. the Gentlemen keep

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<sup>538</sup> "Do you see how pale rises each guest from his 'puzzle feast'"; Hor. Sat. 2.1.76-77; *Horace* (trans. Fairclough), p. 143.

<sup>539</sup> "... takes pleasure in a simple meal"; Hor. Ep. 1.14.35; *Horace* (trans. Fairclough), p. 341.

<sup>540</sup> "It is a monstrous sin to spend three thousand on the fish market, and then to cramp those sprawling fishes in a narrow dish"; Hor. Sat. 2.4.76-77; *Horace* (trans. Fairclough), p. 193.

<sup>541</sup> Addressed to wine: "Pleasant compulsion dost thou apply to wits whose wont is dullness; thou unlockest the thoughts of the wise and their secret purpose by merry Bacchus' spell; thou restorest hope to hearts distressed, and addest power and courage to the poor man"; Hor. Ode 3.21.13-18; *Horace: The Odes and Epodes* (trans. Bennett), p. 247.



themselves warmer than at home. some from prudence in preserving health, others from the custome of the Country.

*pellibus et sutis arcent mala frigora braccis  
oraeque de toto corpore sola patent.*

Ov: trist. lib:3. V:521.<sup>a.542</sup>

here is no coale smoake, nor strong malt liquor, & no night ridings.

[*margin:* Horses more healthie that (*sic*) at home.] & I never knew our horses more healtie, very few are greased.<sup>543</sup> which is imputed to feeding with less hay being only Sixteen pounds in 24 hours. riding in the dry streets, & being more under the eye of the Officers. nor are any colded, tho our Stables in Ghent were all of boards & so open that we would not

244:

[*diagonally stroked*]

<sup>a.</sup>*jactare solitus est Caesar, milites suos, etiam unguentatos bene pugnare posse.* tom<sup>544</sup>

245 [continuing from p. 243]:

use such in England. When quartered at Northampton our horses are dayly walked in the dry market place, & watered in the house when wet weather. so their legs are always dry & were

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<sup>542</sup> "With skins and stitched breeches they keep out the evils of the cold; of the whole body only the face is exposed"; Ov. T. 3.10.19-20; *Ovid* (trans. Wheeler), p. 137.

<sup>543</sup> There was a traditional belief that the fluid that caused horses' legs to swell after journeys was grease. Gibson recommended that greased horses be bled and purged, and have warm fomentations applied to their legs. Gibson, *The Farrier's New Guide*, pp. 239-44.

<sup>544</sup> "[Caesar was] in the habit of boasting that his soldiers could fight well even when reeking of perfume"; Suet. Caesar 67.1; *Suetonius*, trans. J. C. Rolfe, The Loeb Classical Library (Cambridge, Mass.: Harvard U. P.; London: William Heinemann, 1914), I, pp. 87, 89. *Est Caesar* is Buchanan's interpolation. I wish to thank Jim Marks and Gary Ferngren for tracking down this citation.

always more free from Grease than the neighbouring quarters where the roads are wet & dirty. Some horses had the canker in their mouths, viz: many small ulcers about the root of the tongue & inside of the mouth.

[*margin:* method of Cure for the Canker in horses mouths.] which easly cured by touching the sores with Sharpwater viz: water & Vinegar with allum & Vitriol.<sup>545</sup> are occasioned from feeding with a particular sort of rough hay. the Flanders coach horses are remarkably fat & in fine order & seldom eate above eight pounds of hay in 24 hours; are mostly fed on chapped wheat Straw mixed with Brand & oats, always soaked in water & often fed. I have heared some Gentlemen curious in horses say that a necessary house near the Stable was dangerous for horses, that the smell of it would breake their wind. but here it's customary to have them in the corner of the Stable, & it's rare to see a broken winded horse. after frost we commonly bleed our horses, especially the fattest, we do the same in hot weather, & when the Stables are warm & much crowded as we were at Brussells, where

246 [facing p. 245; blank]

247 [continuing on from p. 245]:

some dyed suddenly for want of this precaution.

[*margin:* Deseases on the March to Germany.] Par: 38th. We marched from Brussells Aprl 20th 1743. O:S: to Louvaine, the morning rainy & cold.

[*margin:* slight Rheumatick complaints.] Some Sick men were carried on waggons, & had slight Rheumatick Complaints that evening. had a gentle opiate, drinking something

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<sup>545</sup> On alum and vinegar, see nn. 63, 65, respectively; on vitriol, n. 142; note also respective entries, app. C-1. All three were likewise used to treat sores in the mouths of human patients. E.R. included alum, vitriol, and vinegar in a number of preparations to be used in treating canker, though never all three in combination. *The Experienc'd Farrier*, pp. 302-03, 318, 418, table of diseases (not paginated).

warm. those with Buboes suffered much from the joalting of the waggons on the pavement. our men had no beds, were obliged to lay on Straw in open rooms, covering themselves with their cloakes. the Sicke hired Lodgings. all were contented & in high spirits at this new way of life, & pleased with seeing a fine Country.

*Quo nos cumque feret melior fortuna parente*

*ibimus O Socii Comitesque*

*nil desperandum Teucro Duce et Auspice Teucro.*

Hor:<sup>546</sup>

nixt day we marched to Tirlmont, the day dry & warm.

[margin: sore Eyes.] many had inflammed eyes. & as we halted some days were blooded, purged, &c: bathing with warm milk in which Chamomile or Elder Flowers<sup>547</sup> are boyled. I have no great dependence on the common eye-waters. our Farriers deale much in

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<sup>546</sup> "Whithersoever Fortune, kinder than my sire, shall bear us, thither let us go, O friends and comrades! Never despair under Teucer's lead and Teucer's auspices!"; Hor. Ode 1.7.25-27; *Horace: The Odes and Epodes* (trans. Bennett), p. 25.

<sup>547</sup> Buchanan also notes this combination on p. 211; note app. C-1 on chamomile and elder. To treat sore eyes or ophthalmia, Pringle recommended topical bleeding, often with leeches, although he noted that in slight cases that were not accompanied by fever or inflammatory signs this could be omitted. Inflammations caused by dust could, he advised, best be treated with warm milk and water mixed with brandy. He favored ointment of tutty for excoriated eyelids. Pringle recommended *coagulum aluminosum*, proceeded by eyewash, and, to assuage the pain, a fomentation of the decoction of white poppies. Monro reported that patients recuperating from putrid or petechial fever often experienced ophthalmia or eye-pain, usually in one eye, sometimes in both. If the patients were strong, they were bled, blisters put behind their ears, and if pain was great poultices of bread and milk was applied to the painful eye. With cooling physic, these treatments usually worked. If pain persisted, leeches were applied to the temples, and eyewash was administered. Manning, *Modern Improvements in the Practice of Physic*, pp. 223-24; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 282-83; Pringle, *Observations on the Diseases*, pp. 139-41; Theobald, *Every Man His Own Physician*, p. 14; Wallis, *Art of Preventing Diseases*, p. 315.

them, are chiefly made of white Vitriol, & are too sharp, smarting & making pain.<sup>548</sup> when the eye Lashes are excoriated, Ungt. Tutiae<sup>549</sup> <or Bals: Lucatell.<sup>550</sup>> heals them<sup>a</sup>. this Lint was some time ago in great vogue at London & sold by the Apothecary at half a Guinea. **Rx**  
**Lap: calamin: Tut: ppt. aa dr.fs.**

248:

<sup>a</sup>they became universal on the march from dust & high winds. washing with warm milk & water with a little brandy, was our only remedy. so soon as we came to our quarters; & had I concealed it as a nostrum, it might have passed for a famous Eye water.

[the remainder of what appears on p. 248 is written in heavier ink; perhaps inserted later]

**Oculorum dolores meri potio, aut balneum, aut fomentum, aut venae Sectio, aut medicamentum purgans exhibitum, solvit.** Hip: Aph: N.31. S:6.<sup>551</sup>

**Oculorum dolores exhibita meri potione, et copiosae aquae calentis balneo, venae**

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<sup>548</sup> Buchanan is probably complaining about the concentration of vitriol, not its presence. Eye waters were frequently, if not generally, based on vitriol, and Pringle and Monro were among the prominent writers on military medicine who advocated these. The army "Dispensary" includes *collyrium e vitriolo* ("A Vitriol Lotion for the Eyes"), which was prepared by shaking 10 gr. white vitriol in one pint of spring water. Theobald regarded this collyrium as soothing and repellent, and recommended that it be used in association with bleeding, blistering, and diuretics. Buchan recommended an eye water composed of bole armeniac, white vitriol, and sugar candy, in water. Buchan, *Domestic Medicine*, p. 200n; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 283; Pringle, *Observations on the Diseases*, p. 141; Theobald, *Medulla medicinae*, pp. 17-18.

<sup>549</sup> On *unguentum tutiae*, tutty, and other tutty-based applications for the eyes, see app. C-1.

<sup>550</sup> On *balsamum Locatelli*, see app. C-1.

<sup>551</sup> "For pains of the eyes, provide undiluted [Adams and Littré: pure] wine, or a bath, or fomentation, or venesection, or a purging medicine"; Hip., Aph. 6.31; cf. *Hippocrates* (trans. Jones), IV, 187, *Genuine Works of Hippocrates* (trans. Adams), II, 255; and *Oeuvres complètes d'Hippocrate* (trans. Littré), IV, 571.

*Sectione curato.*<sup>552</sup>

Fred: Hoffmanni Op: Med. Tom:5 p.575. de morbis Peregrinatum.<sup>553</sup>

249 [continuing from p. 247]:

**Ol: Viperar: dr.ii. M.**<sup>554</sup> it's a custom with some old travellers & Sportsmen when their eyes are hot & smarting, to wash with warm water & a little Brandy. Some had slight Pleuretick fevers & treated as in page 113. We were eighteen days on our March to Hochest where we encamped May 31st. N:S: on the Banks of the Mayne. during the march the weather was very dry & warm, roads dusty. Men & horse stood the march better than could be expected. only three men were so bad as to be left at the Hospital at Duren; were inflammatory fevers.

[margin: Feverish Complaints.] the chief complaints were feverish, but as our dyet was spare, a gentle sweat promoted by the heat & exercise, & the body open from Ammonition bread, there was no great occasion for bleeding. small Rhenish wine<sup>a</sup> [designator in heavier ink] & water with Sal: Prunel: was drunk freely, with an opiate h:S: if we halted nixt day, a day's rest was the best medecine, & the opiate the best cordiale, procuring a good nights rest, enabled them for the nixt day's fatigue. [there is a penciled line in the margin next to the following sentence] I used Opium freely & from seeing it's good

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<sup>552</sup> "For pain in the eyes, provide undiluted wine, bathe in copious hot water, and bleed [Littre indicates this should come last] to cure"; Aph. 7.46; *Hippocrates* (trans. Jones), IV, 203, *Genuine Works of Hippocrates* (trans. Adams), II, 267, and *Oeuvres complètes d'Hippocrate* (trans. Littré), IV, 591.

<sup>553</sup> The page reference does not accord with Hoffman's text. Perhaps Buchanan is referring to Hoffmann, *Opera omnia physico-medica*, V, sect. iii, treatise xi (*De peregrinationibus sanitatis causa instituendis*), cap. iv, pp. 325-26, which is entitled, "*De morbis in quibus peregrinationes conducunt*" ("Of diseases that benefit from travelling").

<sup>554</sup> "Mix equal parts of *lapis calaminaris* [app. C-1] and prepared tutty with 2 dr. viper oil." This is very similar to the recipe for *ung. tutiae* that appeared in the *Pharm. Lond.* of 1746; cf. app. C-1. On the medicinal applications of viper, see app. C-1.

effects, became a favorite medicine. Swelled legs were common from hanging so long a horseback & walking in boots afterwards, were rubbed with Ungt. vol: Nostr. ordering the boots to be put off so soon as possible, a halting day was of the greatest service in

250:

<sup>a</sup>vid: Fred: Hoffmanni Op: Med: Tom:3. p.349. de Salubritate Vini Rhenani &c[;]<sup>555</sup> Ibid. de praestantissima Nitri virtute Medica.<sup>556</sup>

251 [continuing from p. 249]

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<sup>555</sup> “Regarding the excellence of Rhenish wine”; Hoffmann, *Opera omnia physico-medica*, V, sect. iii, cap. xiv, pp. 341-54. James translates much of this chapter in his entry for “vinum,” *Medicinal Dictionary*. Hoffman introduces his piece by briefly describing more than two dozen European wines. He discusses the appearance, composition, and medicinal qualities of Rhenish wine, and considers the reasons why it is so useful medicinally. Wine, he asserts, can both prevent and cure disease, and lengthen life. Ancient poets had written of its glorious effects, as had classical medical authorities, Hippocrates and Galen among them. They even recommended occasional drunkenness, but Hoffmann believes abuse of wine to be unwise, and the physician should take care in deciding which wines, if any, are desirable during treatment. According to Hoffmann, wine promotes all evacuations and clears obstructions. It is useful in treating most fevers and any sort of weakness, as well as nausea, colic, dysentery, jaundice, and scurvy, though it may be harmful in cases of hypochondria and the stone, as well as in disorders of the head and diseases where there is inflammation or plethora. It is a fine stomachic. Noting the controversy over whether it is proper for a sufferer from gout to drink wine, Hoffmann asserts that it helps clear morbid matter through the kidneys, as well as to strengthen the stomach (weakness of the stomach he considers a common cause of gout); nevertheless, the attending physicians should carefully consider the patient's constitution, as well as which wine is proper.

<sup>556</sup> “Of the great medicinal virtues of nitre”; Hoffmann, *Opera omnia physico-medica*, VI, sect. i, cap. viii, pp. 55-60. James provides a translation of most of this chapter in his *Medicinal Dictionary*, under “nitre.” Hoffmann asserts that nitre can correct antimony, even its regulus; cantharides and other insects used to blister; powerful purgatives like scammony; and other drugs that may be too violent if used without correction. It also corrects peccant bile. It is a preeminent cooler and febrifuge. It is antiseptic, so useful in treating putrid fevers. It promote stools, urine, and sweat. It is an excellent carminative and antispasmodic and resists inflammations. Hoffmann finds the core virtue of nitre to be its ability to cool; its other virtues flow from this.

this case, & laying down at full length.

[*margin*: faces sun burnt.] None of the Officers were sicke, but their faces were red & hot, the skin peeling off. uncocking the hat would have proved a good preservative but was unmilitary, they rubed with Pomatum<sup>557</sup> or creame, or droped their wax candle into oyle made a good Liniment. We were quartered in villages near the roade, there was a generale rendezvouze for the whole Regmt on our nixt days march, where I heard all complaints & dispensed medecines. the Men laye in Barns, haylofts &c. Officers set up their tent beds, or laid their bedding on clean Rye strawe, & slept sound, were their own Cookes.

[*margin*: Deseases on our March from Germany.] Nixt Novr. we marched the same route back to winter quarters in Brussells. the men were remarkably healthie, only one was so bad of a fever as to be left at the Hospital at Duren. Swelled legs & feverish complaints were not so common, the weather cool, & days short[;] gave the men more time to rest & pull off their boots<sup>a</sup> [*designator in heavier ink*]. horses stood the march well & recovered flesh, their legs swelled much at night & many were greased, all were blooded, some rowelled<sup>558</sup>, legs kept dry & much strawe used as litter to tempt them to lye down. *Sal.*

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<sup>557</sup> App. C-1.

<sup>558</sup> Gibson recommended bleeding for swollen legs. Roweling was the insertion of a long needle, piece of leather or horn, etc., into an incision; the rowel was typically left in place for about a week. Unlike the seton, its equivalent in human practice, the rowel had been used since antiquity. There were 2 types in common use in the 18th century: the hair rowel, which was the same as a seton; and the French rowel (fontanel), which according to Gibson was preferred by many because it was less likely to leave an abscess. Roweling was intended to promote a discharge of "corruption" and was especially used to relieve lameness or swollen limbs. In Gibson's view, it served mainly to make a revulsion from relaxed or obstructed parts, not through removing humors, as some believed. He regarded roweling as "very profitable in all Aches, cold, flegmatick Swellings, and even sometimes in Lameness and Infirmities of the Legs." He cautioned, however, against its use on weak or spare horses. Assessing the practice, E.R. commented: "The Roweling of Horses is so common amongst our simple Smiths, that they will Rowel him for any disease almost, without any sense or reason, whereby they needlessly torment the Horse, and bring a Flux of naughty humours down to the place, which causes him to be Lame, which might otherwise be sound. But I must say of it, that if it be well used by a skilful Farrier, it is not only commendable, but

*Prunel. & flor. Sulphuris aa oz.fs.*<sup>559</sup> was given each horse in his oates once a day for a weeke. some gave croc: mettal:<sup>560</sup> or Aethiop: Mineral: one ounce per day; pissing drinks were much used; some gave Crude Antimony and

252:

<sup>a</sup>the Sick were brought down the Rhine in Barges; suffered much from cold & wet & bad provisions, were Sick, faint & weake, pains in all their bones, Limbs numb & threatning a mortification.<sup>561</sup> hot pedeluviums<sup>562</sup> with frictions, warm medecines & wine were of great service; & blistering. Stamfield of Cpt. Marchame's was reduced to a meer skeleton from the Rheumatick <fever>; upon being brought to quarters at Brussells he appeared to be passed recovery & his Comrades thought it needless to carry him to the hospital, yet recovered by this Decoction to the Surprize of all. **Rx. cort: peruvian. oz.i. Diascord: dr.ii. coqr. S:q: Aq: ad lib:ii e dulcoretur Sacharo. cap: oz.iii: 3tia quaque hora.**<sup>563</sup>

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causes great good to a Horses Body and Limbs." E. R., *The Experienc'd Farrier*, pp. 117-19; Gibson, *The Farrier's New Guide*, pp. 17, 216.

<sup>559</sup> "Equal quantities of *sal prunella* [n. 167; app. C-1] and flowers of sulfur [n. 26; app. C-1, under "sulfur"]." The combination given to the horses was probably intended to serve as a diuretic. Salmon, *New London Dispensatory*, p. 368.

<sup>560</sup> App. C-1, under "antimonials."

<sup>561</sup> According to Pringle, many of the sick were from the hospital at Feckenheim and had contracted a malignant fever there (this is the outbreak that occasioned his influential observations on jail or hospital fever; cf. app. B-1). Confined to bilanders, these troops infected sick men from other hospitals, and more than half of the patients died en route. *Observations on the Diseases*, p. 27.

<sup>562</sup> A pediluvium was a bath of the feet. Parr considered its effects to be nearly the same as those from a warm bath. Review of Parr's dissertation, "De Balneo," *Medical Commentaries*, I (1773), p. 300; Quincy, *Lexicon Physico-Medicum* (1719), p. 337.

<sup>563</sup> "Mix 1 oz. Peruvian bark with 2 dr. diascordium boiled in up to 2 lbs. of water with sugar to make it palatable. Take 3 oz. every 3 hours." Note entries on the three components, app. C-1 (bark under "cortex Peruvianus," sugar as "saccharum").



[quotation diagonally stroked]

*'profecto nostra hac aetate nullum calamitosius vitae genus excogitare licet quam illud, quod milites, gregarii saltem, ducunt, tum in acie, ac arcium oppugnationibus, tum in hybernis quoque, sive ob diversam a veteribus praeliandi formam, sive ob neglectam militarem disciplinam, cum non ea diligentia, ut olim, bonae militum valetudini consulatur[.]* Ramaz: Cap:42. de morb: Artif.<sup>564</sup>

253 [continuing from p. 251]:

flowers of Brimstone aa oz.i. in a mash of Brands [i.e. bran] & continued a week<sup>a</sup> [*designator in heavy ink*]; this scoures & cleans the body. others give Markam's Balls, & this is said to be the Originale[:] **Rx. Sem: Cumin: anis. faenugreek Pulv: Diapent: Helen: Liquirit: flor: Sulphur: Turmeric. aa oz.ii. Mell: lib: fs. ol: Com: gr.S: ut f. inassa &c.**<sup>565</sup> Cracked heels are dressed by the Farriers with an Oynt of Verdigrease,<sup>566</sup> & appear to be too sharp,

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<sup>564</sup> "Certainly in our day one cannot imagine a more deplorable kind of existence than a soldier's; this is true at any rate of the rank and file, whether they are on the battle-field or besieging a fortress, and even when they are in winter barracks. Perhaps our neglect of the military service is to blame, for not nearly so much attention is paid to the health of the army as in the past"; Bernardini Ramazzini, *De Morbis artificum Bernardini Ramazzini diatriba: Diseases of Workers. The Latin Text of 1713*, trans. and ed. Wilmer Cave Wright (Chicago: Univ. of Chicago Press, 1940), p. 359. The phrase "*sive ob diversam a veteribus praeliandi formam*" is omitted in the edition used by Wright.

<sup>565</sup> "Take 2 oz. each of powdered cummin seed, aniseed, fenugreek, diapente, helenium, licorice, flowers of sulfur, and turmeric, ½ pound honey as required to make a mash, etc." See entries on components (flowers of sulfur under "sulfur"), app. C-1. This recipe is similar to the one for "cordial balls," which were recommended by E.R. for "Scouring, to take away Moulton Grease and Foulness," as well as to relieve horses' colds and glanders, and fatten them. Neither cummin, helenium, fenugreek, nor turmeric had a significant place in 18th-century British professional medicine. No drug containing any of them is listed in the "Dispensatory" or in any later comparator, and none is noted in *Practice*. Gibson advised Markham's balls (named for the inventor, Gervase Markham) for broken-winded horses. E. R., *The Experienc'd Farrier*, pp. 121-22; Gibson, *The Farrier's New Guide*, p. 96.

<sup>566</sup> This was probably a nostrum. On verdigris, see app. C-1, under *unguentum Aegyptiacum*. Verdigris was intended to corrode away dead or proud flesh and prepare the way for

rather fretting than healing. I use Basilicon with a small portion of Ungt. Aegyptiac., & is then digestive, cleaning & healing. the parts to be washed with greasie dishwashes, or warm stale urine, or allum water with Salt, or white vitriol & Salt.<sup>567</sup> the best farriers are of opinion that horses should not be purged or rowelled till they have recovered their flesh. it's common to purge them, which some years ago was looked upon as the last remedy, & seldom practised till all other methods failed.<sup>568</sup> My horses had no medecines nor were they blooded, stood in a cool Stable, had dayly exercise & recovered well. were always treated in the same manner after each Campaign. in long Marches we have two halting days a weeke, which is of great service to the Sicklie men.

[*margin*: Deseases in Camp.] Par: 39. All encamped May 31st N.S. 1743 <on the banks of the Mayne<sup>a</sup> [*insert in heavier hand*]>. had much fatigue from pitching tents, driving picketts, cleaning the ground, &c: the day very dry & warm.

*aestas erat, magnumque labor geminaverat aestum.*

254:

[*top of page; opposite "a," but not so designated*]

----- *et infundet jumentis hordea lassis.*

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incarning plasters and ointments (caustics were still stronger, in that they burned through skin). E. R. warned that corrosives "burn, eat and corrode the Flesh, putting the poor Beast to a great deal of pain": *The Experienc'd Farrier*, p. 115.

<sup>567</sup> On alum, *unguentum Aegyptiacum*, vitriol, and basilicon, see app. C-1.

<sup>568</sup> Given that many purgatives also worked as emetics, the reluctance to purge horses may have stemmed from their inability to vomit. Gibson recommended purging in many cases, but often specified that the laxatives be mild and that the strength of the horse be considered; e.g., he wrote, "Because a Horse can seldom or never disgorge himself by Vomit; gentle Purging may therefore be allowed in Disorders of the Stomach, before other things are administered." *The Farrier's New Guide*, p. 20.

Juv: S:8. V.154.<sup>569</sup>

[*the following stroked through*]

<sup>a</sup>----- *mali culices ranaeque palustres*

*avertunt Somnos.*

Hor: Sat.v. lib.i. V.14.<sup>570</sup>

255 [*continuing from p. 253*]:

Ov: met: lib:5. V:586.<sup>571</sup>

three men were so bad of Pleuretick fevers as to be sent to the hospital.

[*margin: Sore Eyes.*] sore eyes were very frequent, the ground dry & Sandy, hot winds & warm weather promoted this distemper. warm milk was not so easely had in Camp as on our march, but warm pot liquor was substituted in it's place & proved an excellent fomentation. viz: the liquor in which the men boyle their fresh meat with green herbs & roots. & became an universal.

[*stroked through*]

*eripit interdum, modo dat Medecina salutem,*

*quaeque juvans monstrat. quaeque sit herba nocens.*

Ov: trist: lib:ii. V:629.<sup>572</sup>

[*margin: swelled legs.*] many had swelled legs[;] were fomented with pot liquor &

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<sup>569</sup> "... and deal out the fodder to his weary beasts"; Juv. Sat. 8.154; *Juvenal and Persius*, trans. G. G. Ramsay, The Loeb Classical Library, rev. ed. (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1965 [1918]), p. 171.

<sup>570</sup> "Cursed gnats and frogs of the fens drive off sleep"; Hor. Sat. 1.5.1415; *Horace* (trans. Fairclough), p. 65.

<sup>571</sup> "The heat was great and my toil had made it double"; Ovid Met. 5.586; *Metamorphoses* (trans. Miller), I, 279.

<sup>572</sup> "Medicine sometimes removes, sometimes bestows safety, showing what plant is healthful, what harmful"; Ov. T. 2.269-70; *Ovid* (trans. Wheeler), p. 75.

treated as above, some parts were poulticed with crumbs of Ammonition bread soaked in pot liquor; were suppurated opened & digested &c:

[*margin:* sore Lips.] many have sore lips, blistered & chopped; soon cured with Bals: Lucatell: if in the mouth are washed with allom water or touched with Mel: Rosar:<sup>573</sup> acidulated with Spt. Vitriol:

[*margin:* sore feet.] many had sore feet from being excoriated twixt the toes, from Sand & sweating; are to wash & keep clean. dress with Cerat: e lap: Calamin.<sup>574</sup> when the Foot have long marches they wash their feet in urine<sup>x</sup> [*designator in heavy ink*][.]

[*margin:* feverish disorders.] Feverish disorders soon appeared, always attended with Vertigo & inclination to vomite, & slight Rheumatick complaints,

256:

[*top of page; stroked through*]

***hic oculis ego nigra meis Collyria lippus  
illinere.***

Hor: Sat:5. lib:1. V.30.<sup>575</sup>

<sup>x</sup>***Remedia autem tanquam Arma Medici sunt, quibus morbos aggreditur, et ut quisque cognitione artis medicae atque Scientia pollet, ita arma ista efficacissime tractare intelliget.*** Russell de Oeconomia Naturae in morb: Acut: et Chron: Glandularum. Lond. 1755. 8°. p. 183.<sup>576</sup>

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<sup>573</sup> On *mel rosarum*, see entry under rose, app. C-1.

<sup>574</sup> App. C-1.

<sup>575</sup> "Here I put black ointment on my sore eyes"; Hor. Sat. 1.5.30-31; *Horace* (trans. Fairclough), p. 67.

<sup>576</sup> "Remedies are the physician's weapons, to combat diseases; and a man of science will always try how far he can carry the utility of them": Russell, *Oeconomy of Nature*, p. 182 [Latin quotation in *Oeconomia naturae*, p. 183.]

257 [continued from p. 255]:

were cured by plentiful bleeding & vomiting, & blisters were often necessary before the headach could be removed. great drought was the worse complaint for which they drunk freely of Rhenish wine & water with Sal: Prunel: all were Sick & faint from being so much exposed to the heat of the Sun.

[the following quotations are stroked through]

the Sun when it appeareth, declaring at it's rising a mervalous instrument, the work of the most high: at noon it parcheth the country, & who can abide the burning heat thereof -- [...] breathing out fiery vapours, & sending forth bright beams, it dimmeth the eyes -- [...]nor can any one hide himself from it's heat. Ecclesiaticks. Chap.43<sup>a</sup>.<sup>577</sup>

*ast ubi me fessum Sol acrior ire lavatum*

*admonuit fugio rabiosi tempora Signi.*

Hor: Sat:6. lib:1. V:125.<sup>578</sup>

[margin: air of the tents changeable] the air of the tent is suffocating; should therefore be covered on the outside & opened at bottom in order to let in fresh air, or boughs of trees stuck round it, to keep off the Sun, & by this means some recovered without medecines. one can scarcely believe how desagreably hot a <Soldiers> tent is on a warm day. I have much adoe to bear it whilst I ask a sicke man how he does, being almost ready to faint. they are changeable from heat to cold to a surprizing degree, the perspiration

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<sup>577</sup> Ecclesiasticus 43:2-4; "nor can any one hide himself from it's heat" is not quoted from this source.

<sup>578</sup> "But when I am weary and the fiercer sun has warned me to go to the Baths, I shun the Campus and the game of ball"; Hor. Sat. 1.6.125-26; *Horace* (trans. Fairclough), p. 87, and see Fairclough's note, p. 86. Although Pringle asserted that exercise and labor were essential to maintaining the health of soldiers, he advised that short marches and other forms of exercise not take place in the heat of the day, and that the men not exercise to the point of fatigue: *Observations on the Diseases*, pp. 115-17.

sometimes greatly promoted and then suddenly checked; the weather Glass varying 30 or 40

258:

[*stroked through*]

"which cometh forth as a bridegroom out of his chamber, & rejoiceth as a Giant to run his Course. it goeth forth from the uttermost part of the heaven, & runneth about unto the End of it again: & there is nothing hid from the heat thereof. Psalm:19. V:5th & 6th.

259 [continuing from p. 257]:

degrees in one day, & we suffer more from the sudden change of weather than from reale cold.<sup>579</sup>

*cum modo frigoribus premimur, modo solvimur aestu,  
aere non certo corpora languor habet.*

Ov: art: amat: lb:ii. V:317.<sup>580</sup>

but now of turbide elements the Sport,  
from clear to cloudy tost, from hot to cold,  
and dry to moist, with inward-eating change

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<sup>579</sup> According to Home, the British troops marching through Germany suffered greatly from the heat, as temperatures sometimes rose to 100 degrees in the sun and even higher in tents. More generally, he wrote, "I believe that all epidemic camp diseases arise from what we call the sensible qualities of the air, heat, cold, and moisture." Pringle reported that during the spring of 1743 many soldiers contracted inflammatory disorders and he explained the outbreak by noting that at that time warm days were succeeded by cold nights that condensed vapor and that these sudden shifts, "joined to the moisture inseparable from tents, could not but affect the health of troops unused to the field." Home, *Medical Facts and Experiments*, p. 28 (his general discussion of the impact of weather on the troops is pp. 26-37); Pringle, *Observations on the Diseases*, p. 17.

<sup>580</sup> "At one time we were stiffened with cold, at another melted with heat, then in the uncertain air a languor holds the body"; Ovid Art. Amat. 2.317-18; *Art of Love, and Other Poems* (trans. Mozley), p. 87.

our drooping days are dwingled [*sic*] down to nought.

Thomp: Spring. V:331.<sup>581</sup>

our tents are excessive hot all day but cool at night<sup>x</sup> [*designator in heavier ink*], especially the mens tents, being only single canvas, so that Sudorficke medecines taken at bedtime seldom answer expectation, rather create a burning heat, but sweat plentefully all day if they drink their wine & water warm. Should be strucke often & cleaned at bottom, otherwise Grass or corne spring up & make it damp, & the straw should be often changed, otherwise vermine is bred in abundance; it should always be burnt & not used as litter to the horses.<sup>582</sup>

[*margin: bites of Pismires &c:*] Many men were bitten by Pismires & other insects, face & hands much swelled, eyes almost shut up, & many red Spots like flea bites, itchy & cannot forbear scratching, all complaints ceased upon rubbing with [*crossed out: Ungt.*] Lint. comm: Nostr:<sup>583</sup> & some men tho in the same tent were never bite.

[*margin: Rheumatick complaints.*] Rheumatick complaints were common, &

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<sup>581</sup> “Spring,” v. 331-35; James Thomson, *The Seasons*, ed. James Sambrook (Oxford: Oxford Univ. Press, 1981), p. 18.

<sup>582</sup> Pringle also complained of the heat and closed air in tents. He and other writers on military medicine stressed the importance of airing tents regularly, as well as shaking the straw and sheets, to rid them of effluvia. Brocklesby reported that barrack masters, impressed by the durability of flock bedding, had made it the standard in barracks and hospitals, though it could not be cleaned once “infected with putrid and contagious distempers.... I would substitute good clean straw, inclosed in strong ticking mattresses, or paliasses, as they are called, which admit, upon the easiest terms, of being washed often, and of having the contents frequently renewed by fresh supplies of wholesome straw, according to the exigencies of the sick.” Many writers saw it as crucial to regularly wash and change the bedding of infectious patients, and some set out methods for fumigating it. Blair, *The Soldier's Friend*, p. 83; Brocklesby, *Medical Observations*, pp. 229-30; Charles Dunne, *The Chirurgical Candidate; or, Reflections on Education: Indispensable to Complete Naval, Military, and Other Surgeons* (London: Samuel Highley, 1808), pp. 73-74; Pringle, *Observations on the Diseases*, pp. 79n, 98-99.

<sup>583</sup> No composition named *linimentum commune nostrum* is listed in the “Dispensatory” or any comparator, nor was *linimentum commune* an official preparation. Dunne recommended applications of lime juice to cure insect bites. Buchan recommended salad oil. Buchan, *Domestic Medicine*, p. 350; Dunne, *The Chirurgical Candidate*, p. 123.

occasioned from catching cold by lying on the damp ground,<sup>584</sup> or night dews, the men having but

260:

*meridianis temporibus calor, nocturnis atque matutinis, simulque etiam vespertinis frigus, est: corpus ergo ... subinde meridianis caloribus relaxatum, subito frigore excipitur.* Cels: lb:2. C.1.<sup>585</sup> -- Sancto: medicin: Static: Sect.2. Aphor.41.<sup>586</sup>

261 [continuing from p. 259]:

little covering in the night time, tho much better provided than the foot on account of their cloakes, boots, &c.

[margin: Officers assist their Servants in pitching their tents & worke hard & catch cold.] in pitching tents Officers commonly assist their Servants, in order to give them more time to take care of their horses, & have a particular pleasure in this kind of worke, & worke

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<sup>584</sup> Rowley and other military medical writers cautioned that soldiers should not be permitted to sleep in the open night air, because of damps. On the other hand, Blair endorsed Rush's observation that troops who slept in the open air tended to stay healthier than those who slept in tents. Blair, *The Soldier's Friend*, pp.105-06; Rowley, *Medical Advice, for the use of the Army and Navy*, p. 23.

<sup>585</sup> Of autumn: "About mid-day there is heat, but at night and in the early morning, cold, as also in the evening. Thus the body, relaxed ... by the mid-day heat, is caught by the sudden cold". Celsus De Med. 2.1.2; *De Medicina*, (trans. Spencer), I, 87.

<sup>586</sup> "From the Autumnal *Aequinox*, to the Winter *Solstice*, the Quantity every Day perspired, scarce exceeds a Pound; from which Time even to the Vernal *Aequinox*, the Body begins to perspire more freely": *Medicina statica*, p. 156 [the Latin original is in *Aphorismi*, p. 46]. Quincy uses this aphorism to explain why illness is so often linked to the season: as perspiration decreases, the solids gain weight; if they "do not acquire a proportionate increase of Firmness and Strength, there cannot but be lost that *Equilibrium* between them and the Fluids, without which, it is absolutely impossible to maintain a State of Health." Following from this, Quincy asserts that increasing the discharge of perspiration helps to prevent autumnal disease.



hard in dressing the ground &c:

*rident vicini glebas et Saxa moventem.*

Hor: Ep:14. lb:i. V:39.<sup>587</sup>

& You can scarcely imagine how soon one is sweated violently, whilst confined to the inside of a tent in supporting the poles, till the tent be fixed; are soon tyred of this worke & from the fatigue of the preeceding [*sic*] march, naturally take to rest, & inadvertently sleep in the cool air, from hence proceed many camp deseases,<sup>588</sup> the men sleeping on the cold ground for want of Straw, & exposed to the injuries of the weather. & when warm at worke drinke sower milke, bad beer, sower wine, or bad water.

[*this quotation is stroked through here and on p. 263*]

*'plurimum enim momenti ad Sanitatem confert aqua. quae igitur sunt palustres, ac stabiles, et lacustres, eas per aestatem, quidem calidas, crassus, et olidas esse necesse est. cum enim non perfluant, sed semper novo imbre accedente augeantur, et a Sole exurantur, eas decolores esse ac pravas, et biliosas necesse est. per hyemem vero glaciatas et frigiditas, et tum a nive, tum a glacie, returbidas adeoque maxime pituitam gignere et*

262:

[*facing start of "Officers assist their Servants" section*]

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<sup>587</sup> "As I move sods and stones the neighbours laugh"; Hor. Ep. 1.14.39; *Horace* (trans. Fairclough), p. 341.

<sup>588</sup> The obstruction of perspiration as overheated soldiers lay on cold ground was widely seen as a common cause of disease. Pringle, writing of this same march, noted a rise in illness during the spring of 1743, as the days were warm and the nights cool, commenting, "This, with little variation, is the course of the first camp-diseases." He also reported that soldiers were "apt to lie down on the grass, and fall asleep in the sun." *Observations on the Diseases*, p. 18.

-- *su aque pericula jungunt.*<sup>589</sup>

263 [continuing from p. 261]:

*raucedinem excitare=[...] Bibentibus aquae inter cutem tum frequentus, tum maxime lethales contingunt. multes enim intestino febres etiam quartanes diuturnes=[...] sin vero nulla sint flumina aquasque statarias et spale olentes bibant has ventri et lieni necras esse necesse est.* Hip: de Aere, locis, et Aq.<sup>590</sup>

June 15th N:S: 1743. we decamped late at night & had two long days march to Aschaffenberg, [*penciled line in margin, beginning here and extending though most of subsequent paragraph*] without pitching tents: the weather very warm roads dry & Sandy. sore Eyes, swelled legs were universal &c:

[*margin: much fatigue from Camp-Duty.*] here we had much fatigue from Camp-duty; Out-parties &c: being in sight of our Enemy, only the Mayne betwixt us. we were badly provided with provision either for man or horse, yet the men continued heartie & well, rather more healthie than usuale, there seemed to be a cessation of Sicknes. lucky for us the weather continued dry. we talked so much of decamping every day, that for Six nights I did

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<sup>589</sup> "They unite owing to their common danger"; possibly Buchanan's rendering of "*nunc ipsa pericula iungunt*," "whom now our very perils join": Ovid, Met.1.353; *Metamorphoses* (trans. Miller), I, 27.

<sup>590</sup> "For water is of great importance to health. Therefore, such as are marshy, standing, and belonging to lakes [Jones: "stagnant"; Littré: "*d'étangs*"] must throughout summer be warm, thick and stinking, because there is no drainage; but as fresh rain-water is always being added and the sun heats [the waters] greatly, they must be discolored, unhealthful, and bilious [i.e. tending to promote bile]. But through winter they must be frosty, cold and, from snow and ice, turbid, which will especially give rise to phlegm and excite hoarseness [Jones and Adams: sore throats].... For in the summer there are epidemics of dysentery, diarrhoea and long quartan fever stagnant and stinking water. These harm the stomach and spleen.... But if there be no rivers, and the water that the people drink be marshy, stagnant, and fenny, the physique of the people must show protruding bellies and enlarged spleens"; Hip. Aer, c. 7, 24; cf. *Hippocrates* (trans. Jones), I, 83, 85, 135, *Genuine Works of Hippocrates* (trans. Adams), II, 161, 182, and *Oeuvres complètes d'Hippocrate* (trans. Littré), II, 27, 29, 89 .

not put off my cloaths, nor boots, lay on the ground & happy if I could get a little straw in a Soldiers tent. & very few Officers pitched their tents.

*Sub Jove pars durat: pauci tentoria ponunt.  
sunt quibus e ramis frondea, facta casa est;  
pars ubi pro rigidis calamos statuere columnis  
desuper extentas imposuere togas.  
<Sole tamen vinoque calent.>*

Ov. fast: lib:iii. V:527.<sup>591</sup>

264 [facing section beginning "much fatigue"]:

*Aere ciere viros martemque accendere Cantu.*

Virg.<sup>592</sup>

*Nulli certa domus, lucis habitamus opacis,  
riparumque toros, et prata recentia rivis  
incolimus.*

Aeneid: 6.656.<sup>593</sup>

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<sup>591</sup> "Some camp under the open sky: a few pitch tents: some make a leafy hut of boughs. Others set up reeds in place of rigid pillars, and stretching out their robes place them upon the reeds <But they grow warm with sun and wine>"; Ovid Fast. 3.527-31; Ovid, *Ovid's Fasti*, trans. (Sir) James G. Frazer, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd., 1967 [1931]), p. 159. The bracketed line appears before the Ovid quotation, but should in fact be placed after, as it is in this transcription, since it concludes the passage.

<sup>592</sup> "... stirring men with his bugle's blare, and in kindling with his clang the god of war"; Virg. Aen. 6.165; Virgil, *Virgil*, trans. H. Rushton Fairclough, The Loeb Classical Library, rev. ed. (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1957 [1916]), I, 519.

<sup>593</sup> "Fixed home hath none. We dwell in shady groves, and live on cushioned river-banks and in meadows fresh with streams"; Virg. Aen. 6.673-75; *Virgil* (trans. Fairclough, I, 553).

265 [continuing from p. 263]:

this was the case with many others & that without any great Complaint.

*Angustam, Amici, pauperiem pati*

*Robustus airi militia puer*

*condiscat, et Parthos feroces*

*vexet eques metuendus hasta:*

*vitamque sub divo et trepidis agat*

*in rebus.*

Hor: Od:ii. lib:iii V:1.<sup>594</sup>

[margin: the army in want of Provisions.] Ammunition bread was our chief food, of which we were some times disappointed by the Enemies <Hussars> surprising the bread waggons. our Maraders had plundered & freighted the country people, that no provision was brought to Camp<sup>a</sup>. we were almost starving. Gin became a greater favorite than ever, was mixed with poor-sower Rhenish wine plundered from the neighbouring villages.

*Quae virtus, et quanta, boni, sit vivere parvo.*

Hor: Sat:ii. lib:ii. v:i.<sup>595</sup>

here we continued to the 26th N:S & lay on our Arms that night.

*proque toro, terrae non semper gramen habenti*

*incubat infelix, limosaque flumina potat.*

Ib: [sic] Met: lib:i. V:632<sup>596</sup>

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<sup>594</sup> "Let the youth, hardened by active service, learn to bear with patience trying hardships! Let him, a horseman dreaded for his lance, harass the warlike Parthians and pass his life beneath the open sky amid stirring deeds!"; Hor. Ode 3.2.1-6; *Horace: The Odes and Epodes* (trans. Bennett), p. 175.

<sup>595</sup> "What and how great, my friends, is the virtue of frugal living"; Hor. Sat. 2.2.1; *Horace* (trans. Fairclough), p. 137.

<sup>596</sup> Of Io: "And instead of a couch the poor thing lay upon the ground, which was not always grassy, and drank water from the muddy streams"; Ovid Met. 1.633-34; *Metamorphoses*

[penciled stroke in margin extends from this point to bottom of page] it was remarkable to see old Lord Stair's every day a horseback & undergo so much fatigue with great cheerfulness; the Soldiers had a particular pleasure to see him & placed their confidence in him.

[quotation stroked through, continuing through close on p. 267]

***Quis melior quam senex imperat?[....] imperatorem te, non militem facimus.[....]  
tu jube, milites pugnent;[....] animum tuum, non***

266:

<sup>a</sup>***mendicitas militaris ad omnem desperationem vocat armatum.***<sup>597</sup>

Fred: Hoffmanni Op:Med: Tom:5. p.253. de Medice noxa atque utilitate.<sup>598</sup>

[facing line that begins "it was remarkable"; entry is in heavy ink, as were Vergil quotations on p. 264]

----- ***Quem semper amatum,  
semper honoratum, sic Dii voluistis, habebo.***

Virg.<sup>599</sup>

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(trans. Miller), I, 47.

<sup>597</sup> "The poverty of soldiers leads them to all forms of despair": Provenance untraceable.

<sup>598</sup> There is no chapter with this title in Hoffmann, *Opera omnia physico-medica*, nor does the page reference (or p. 253 in the other volumes) lead to a relevant entry. Possibly Buchanan had in mind "*De remediorum benignorum abusu & noxa*" ("Of benign remedies abused and harmful"; *ibid.*, VI, cap. x, pp. 331-39). On p. 338, Hoffmann asserts that when a person consumes citrus fruits and then Rhenish wine, it can have a disastrous effect on his system. In any case, Hoffmann appears to be cited here because Buchanan is concerned by the effects of mixing gin with raw Rhenish wine (*RP*, p. 265).

<sup>599</sup> "I shall keep [this day] (such, O gods, was your will) ever as a day of grief, ever as of honour" [note: Buchanan, perhaps quoting from memory, renders "*acerbum*" ("grief") as "*amatum*" ("love"); possibly this is intentional]; Virg. *Aen.* 5.49-50; *Virgil* (trans. Fairclough, I, 449).

267 [continuing from p. 265]:

*corpus eligimus.* Vopisc: in vita Probi et Taciti.<sup>600</sup>

*compluribus injuriis lacessitus, in eodem animi habitu permansit, nec unquam sibi Reipublicae permisit irasci: tam perseverans in amore civium fuit.*

Val: Maxim: de Fabio Maximo.<sup>601</sup>

*non facit ea quae juvenes: ac vero multa majora, et meliora facit. non viribus – [...] aut celeritate corporis res magnae geruntur, sed consilio, auctoritate, et Sententia; quibus non modo [...] orbari, sed etiam augeri Senectus solet.* Cic: de Senect: 6<sup>a</sup><sup>602</sup>

[margin: Gunshot wounds.] June 27th N.S: 1743. marched at breake of day &

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<sup>600</sup> "Can anyone rule more ably than an old man?.... We are choosing you as an emperor, not as a soldier.... Do you but give commands, and let the soldiers fight.... It is your mind and not your body we are choosing": Vopiscus, Tacitus V.1,2; [Flavius Vopiscus et al.,] *The Scriptorum Historiae Augustae*, trans. David Magie, The Loeb Classics (London: William Heinemann; New York: G.P. Putnam's Sons, 1932), III, 303, 305. In the Loeb text, the quotation begins "*equis melius*" (ibid., p. 303). This passage is drawn from the acclamation by the Senate of Tacitus, who had declined to serve as emperor and general because of his advanced age. Why Buchanan also refers to Probus is unclear. As reported by Vopiscus, he was quite young when he became a general. Perhaps Buchanan is alluding to Vopiscus's assertion that Probus was much loved by his men (note Magie ed., p. 350).

<sup>601</sup> Of Fabius Maximus: "Provoked by a number of other slights, he remained in the same frame of mind and never permitted himself to be angry with the commonwealth. Such was his resolution in loving his countrymen"; Val. Maxim. Factorum et Dictorum Memorabilium 3.8.2. Valerius Maximus, *Memorable Doings and Sayings*, trans. and ed. D. R. Shackleton Bailey, The Loeb Classics (Cambridge, Mass.: Harvard Univ. Press, 2000), I, 321. Note: Buchanan's version differs slightly from the text provided in the Bailey ed., which reads (significant variants in bold italics), "*compluribus praeterea iniuriis ... habitu mansit ... rei publicae permisit irasci ... amore civium, quid?*"

<sup>602</sup> "He may not be doing what younger members of the crew are doing, but what he does is better and much more important. It is not by muscle ... or physical dexterity that great things are achieved, but by reflection, force of character, and judgement; in these qualities old age is usually not only not poorer, but even richer"; Cic. de Sen. 6.17; *De Senectute* (trans. Falconer), p. 27. The Falconer text reads "*faciat*" for "*facit*" and "*corporis*" for "*corporum*," and omits "*et*" before "*sententia*."

engaged the French that morning near the village of Dettenghem. its impossible to describe the variety of wounds from Cannon Shot, small arms, swords & Bayonets<sup>c</sup>.

----- *Neque enim quivis horrentia pilis  
agmina, nec fracta pereuntis cuspidе Gallos  
aut labentis equo describat vulnera Parthi.*

Hor: Sat:1. lib:2. V:xi.<sup>603</sup>

my first intention in dressing wounds was to stop bleeding, which I did by stitching the vessels, dry dressings, bandange [*sic*] &c.<sup>a:604</sup>

*vulnera saeva ligo; conorque inhibere cruorem.*

Ov: met: lib:8. V:849.<sup>605</sup>

having no assistant avoided amputations as much as possible, tho necessity obliged me in

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<sup>603</sup> "Not everyone can paint ranks bristling with lances, or Gauls falling with spearheads shattered, or wounded Parthian slipping from his horse"; Hor. Sat. 2.1.13-15; *Horace* (trans. Fairclough), p. 127.

<sup>604</sup> Unlike French surgeons, who in general treated wounds by applying lint, then leaving them to be healed by nature, English practitioners did not typically leave wounds open to suppurate, but instead treated them aggressively, through "first intention," the application of suture (pin, followed by a waxed silk ligature) or adhesive strips (an adhesive plaster was sometimes called a "dry suture"). Heister, concerned by the prospect of pain and inflammation, opposed suturing penetrating wounds, while Boerhaave and Fallopius recommended it. Noting the French tendency not to unite by first intention, Cross observed that gangrene often resulted from their practice. In reviewing English practice, Edward Churchill has noted, "It has been thought that it was a widespread custom for surgeons to invite or at least promote suppuration by greasy salves and irritating applications[;] the primary closure of incised wounds was eminently sound." Edward D. Churchill, "Pandemic of Wound Infection in Hospitals: Studies in the History of Wound Healing." *Journal of the History of Medicine*, 20 (1965), in *Hospitals: Studies in the History of Wound Healing.* *JHM*, 20 (1965), pp. 401-02; John Cross, *Sketches of the Medical Schools of Paris: Including Remarks on the Hospital Practice, Lectures, Anatomical Schools, and Museums, and Exhibiting the Actual State of Medical Instruction in the French Metropolis* (London: Callow, 1815), pp. 77-84; James, *A Medicinal Dictionary*, under "abdomen," "sutura," and "vulnus"; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 441, 782.

<sup>605</sup> "...bound up the cruel wound and tried to staunch the blood"; Ovid Met. 7.849; *Metamorphoses* (trans. Miller), I, 401.

some cases.<sup>606</sup>

*si non perficiant artes, veniemus ad arma.*

Ov: Ep. [sic] 20. V:47.<sup>607</sup>

Majr. Jonston<sup>608</sup> of the horse Guards received a Cannon shot on the left ankle, the bones smashed to pieces & the foot hanging by the great tendon, the large arterie bleeding at

268:

[the following quotations are diagonally stroked]

<sup>a</sup>[crossed out with x's in heavy ink: *vegetum ingenium in vivido pectore vigebat virebatque integris sensibus, et civiles jam res haud magnopere obeuntem bella excitabant.* Liv-<sup>609</sup>

*qui quoniam prohibent anni bellare, loquendo pugnat et incessit*<sup>610</sup>]

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<sup>606</sup> An assistant would have restrained patients during the amputation and twisted the tourniquet on the targeted limb, cutting off bloodflow and reducing pain. Buchanan may have enlisted troopers to provide constraint; adjusting the tourniquet properly required experience, so finding a suitable person to do this may have been more difficult. Amputation became far safer during the 18<sup>th</sup> century. Note app. C-1-2.

<sup>607</sup> "If art will not serve, I shall resort to arms"; Ovid Her. 20.47; *Heroides and Amores* (trans. Showerman), p. 279.

<sup>608</sup> James Johnston (b. c.1719) was commissioned a cornet in Hawley's (13<sup>th</sup>) Dns., 6 Oct. 1736; capt., May 1744; major, Oct. 1745 (note: after the narrative point referred to by Buchanan). He later bought into the Blues, becoming a major in that regiment 29 Nov. 1750 and lieutenant-col. 17 Dec. 1754. Johnston sold his commission and retired, 22 June 1761. WO 27/4, return for Blues; *AL 1740*, p. 67; *Army List for 1763*, p. 17.

<sup>609</sup> "But a lusty spirit flourished in his [i.e. Marcus Furius Camillus] sturdy breast, and his senses were as keen as ever; and though he no longer much concerned himself with politics, wars excited him"; Livy 6.22.7; *Livy*, trans. B. O. Foster, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1967 [1924]), III, 273.

<sup>610</sup> "He [i.e. Emathion], since his years forbade warfare, fought with his tongue, and strode forward...."; Ovid Met. 5.101-02; *Metamorphoses* (trans. Miller), p. 245. Possibly Buchanan



it may be said of his Lordship what Rollin says of Paulus Aemilius, in his Roman History vol.8th. but age, without having at all impaired his Strength, had only added to his character, maturity of counsel & prudence, still more necessary to a General than courage & bravery.<sup>611</sup>

[the following quotations are written in a progressively smaller hand, suggesting that Buchanan inserted them after entering "b" (below) -- on which the last line abuts -- and that he needed to make room]

*neque enim quisquam hoc Scipione elegantius intervalla negotiorum otio dispunxit: Semperque aut belli aut pacis serviit artibus. semper inter arma ac studia versatus, aut corpus periculis, aut animum disciplinis exercuit.* Vell. Paterc: 1. 13.<sup>612</sup>

*omnibus belli ac togae dotibus, ingeniique ac studiorum eminentissimus saeculi sui: qui nihil in vita nisi laudandum aut fecit, aut dixit aut sensit.* de ib: 1.12.<sup>613</sup>

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crossed this quotation, and the preceding one, because he felt that the image they conveyed, that of men physically enfeebled (whatever other abilities they retained), was inappropriate in the case of Stair. In his next analogy, to Paulus Aemilius, he refers to a warrior still strong despite advanced years.

<sup>611</sup> Charles Rollin, *The Roman History from the Foundation of Rome to the Battle of Actium: That is, To the End of the Commonwealth*, rev. ed. (Dublin: R. Reilly, 1743), VIII, 60; "but age ... bravery" is a quotation. Paulus was near 60 when he commanded an army that defeated Perseus (169-68 b.c.e.).

<sup>612</sup> "No one ever relieved the duties of active life by a more refined use of his intervals of leisure than Scipio, or was more constant in his devotion to the arts either of war or peace"; Paterc. Hist. Rom. 1.13.3; Velleius Paterculus, *Compendium of Roman History*, trans. Frederick W. Shipley, The Loeb Classical Library (London: William Heinemann; New York: G. P. Putnam's Sons, 1924), p. 33.

<sup>613</sup> "[Scipio Aemilianus was] endowed with all the qualities essential to a good soldier and a good citizen, the most eminent man of his day both in native ability and acquired knowledge, who in his whole life was guilty of no act, word, or thought that was not praiseworthy"; *ibid.* 1.12.3 (trans. Shipley, p. 31).

*Sulla [...] literis Graecis atque latinis, juxta atque doctissime eruditus, animo ingenti cupidus voluptatum, gloriae cupidior; otio luxurioso esse, tamen ab negotiis numquam voluptas remorata– [...] facundus, callidus et amicitia facilis; ad simulanda negotia altitudo ingenii incredibilis: multorum rerum et maxime pecuniae largitor.* Salust.<sup>614</sup>

<sup>b</sup>during the action, the Bystanders & lookers on are greatly concerned for the event of battle.

*ut primo, statim concursu increpuere arma, micantesque fulsere gladii, horror ingens Spectantes perstringit, et neutro inclinata Spe torpebat vox Spiritusque – consertis deinde manibus cum jam non motus <tantum> corporis, agitatio anceps telorum armorumque, sed vulnera quoque et Sanguis Spectaculo essent.* Liv: lib:1.<sup>615</sup>

<sup>a</sup>none of our Regimental Surgeons pretend to any private Stypticke nor is Eaton's Stypticke in use. loosing some blood is of service, for it prevents inflammations &c.<sup>616</sup>

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<sup>614</sup> "Sulla ... was well versed alike in Grecian and Roman letters, of remarkable mental power, devoted to pleasure but more devoted to glory. In his leisure hours he lived extravagantly, yet pleasure never interfered with his duties.... He was eloquent, clever, and quick to make friends. He had a mind deep beyond belief in its power of disguising his purposes, and was generous with many things, especially with money"; Sall. J. 95.3; Sallust, *Sallust*, trans. J. C. Rolfe, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd., 1965 [1921]), p. 343.

<sup>615</sup> "The instant they encountered, there was a clash of shields and a flash of glittering blades, while a deep shudder ran through the onlookers, who, as long as neither side had the advantage, remained powerless to speak or breathe. Then, in the hand-to-hand fight which followed, wherein were soon exhibited to men's eyes not only the struggling bodies and the play of the sword and shield, but also bloody wounds ..."; Livy 1.25.4-5; *Livy* (trans. Foster), I, 87.

<sup>616</sup> Virtually all 18th-century authorities on gunshot wounds advocated bleeding the wounds. Concerns over the potential inflammation encouraged this. Ranby asserted that if the wound had not caused much bleeding, the surgeon should extract "a good large quantity" and "as circumstances require" bleed again on the second and third day. He explained, "Repeated bleedings in the beginning draw after them many advantages. They prevent a good deal of

Soldiers often grumble at seeing nought but dry lint & old rags applied to a wound, it's therefor necessary to use ol: tereb: Spt. Vin: tinc Myrrh: cum al:<sup>617</sup> &c: & think themselves neglected if they are not dressed once in 24 hours whether necessary or not.

-vid: Remarks on Dr. Eaton's Balsamick Styptic in Philosoph: Trans:<sup>618</sup> & french Brandy per Se, or with Sal: Mart.<sup>619</sup> or Sachar: Saturn:<sup>620</sup> is just as good. D<sup>o</sup> -- La Pierre vulnenaire Simple. Mem: de L'acad. 1713.<sup>621</sup>

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pain and inflammation, lessen any feverish assaults, forward the digestion, and seldom fail to obviate impostumations, and a long train of complicated symptoms." He also recommended bleeding later in treatment if it were necessary to relieve pressure on a damaged artery, advising that the proper time for it was when the patient complained "of great weight and fulness in the limb, which are ever accompanied with more or less pulsation in it." John Ranby, *The Method of Treating Gunshot Wounds*, 2nd ed. (London: Robert Horsfield, 1760), pp. 21, 34-35.

<sup>617</sup> See app.C-1, entries for: *oleum terebinthinae* (under "turpentine"); proof spirit (under "wines and spirits"); and *tinctura myrrhae*.

<sup>618</sup> [Conrad Joachim] Sprengell, "Observations on Dr. Eaton's Styptic," *Philosophical Transactions of the Royal Society of London*, 33 (1724-25), pp. 108-14. The core of Sprengell's article is reprinted in James's Medicinal Dictionary, in the entry "styptica." Sprengell compares two styptics, the first of which had been popularized by Helvetius and had then become identified with Pierre Rettermond, an apothecary at the Hague. This was a ball, prepared by mixing iron filings and tartar in French brandy; to apply, the ball was steeped in warm brandy. In a pamphlet published in 1723, Eaton boosted a styptic that he claimed to have invented, and in 1724, in *A Treatise of Consumptions*, Sir Richard Blackmore lauded it as useful in combating both internal and external bleeding. In his article, Sprengell reports that with the assistance of Ranby he had conducted experiments on a dog, severing an artery and then applying both styptics in turn. He concludes that the brandy ball is somewhat more effective in closing wounds.

<sup>619</sup> *Sal Martis* (app. C-1, under "chalybeates") may in this case have been used because of its perceived astringency. Iron filings, *saccharum saturni* (app. C-1, under "plumbic preparations"), and spirit of salt (prepared from common salt and oil of vitriol) were the components of Colbatch's styptic powder, a popular styptic. James, *Medicinal Dictionary*, under "sal" and "styptica."

<sup>620</sup> On *saccharum saturni*, see app. C-1, under "plumbic preparations."

<sup>621</sup> In the article referred to by Buchanan, the anonymous author ridicules claims made on behalf of a styptic: "*Sur la maniere d'arrester les hemorrhages, qui viennent après de membres*

269 [continuing from p. 267]:

full stream<sup>a</sup>. I stiched the artery, cut off the ankle, dressing dry with proper bandage &c: leaving the amputation of the leg to a more convenient opportunity. it's surprising how some people bear pain better than others, this Gentleman never changed his voice or altered his Countenance; when I told him You must loose your leg, he answered cooly, that shall be the work of another day.<sup>622</sup>

[marginal entry in dark ink, designated for insertion here: Adm. Benbow after losing his leg was brought upon the quarter-deck in his Cradle & continued the fight, Biograph: Britannic: Art. Benbow. V:i. p.684.<sup>623</sup> Siward Count of Northumberland when he found his

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*coupés,*” *Histoire* [not *Memoires*] *de l’Académie royale de sciences*, 1733 [not 1713] (Paris: Impr. Royale, 1735), pp. 30-32. James reported, “Alcohol, or pure Spirit of Wine, is the most usual, and, perhaps, the best Styptic.” Vitriol, turpentine, and alum were also much used as styptics. Richard Wiseman and John Hunter were strong advocates of the Royal Styptic, a French item that was prepared from oil of vitriol and spirits of wine. Another early method of staunching blood-flow was cautery. During the 16th century, it had been common to use a red-hot amputation knife, which cauterized as it cut. Paré preferred ligature, however, and his influence, coupled with a widespread sense that it was more humane, made it the standard, though cautery was occasionally used, especially in cases where bleeding was particularly bad, until the late 19th, when electrocautery was introduced. Cautery retained a high degree of popularity as an antiputrefactive. Even when he moved to ligature as a treatment for bleeding, Paré continued to used cautery for gangrene and infected wounds. Peter Lowe, a Scot, wrote in 1597 that cautery should be used when there was putrefaction, otherwise to rely on ligature, and his dictum became standard. James, *Medicinal Dictionary*, under “sal” and “styptica”; Owen H. and Sarah D. Wangensteen, *The Rise of Surgery: From Empiric Craft to Scientific Discipline* (Minneapolis: University of Minnesota Press, 1978), pp. 18-34.

<sup>622</sup> In British military practice, amputation tended to come soon after battle. Atkins wrote, "The heat and surprise in action makes it the properest time for amputation, men meeting their misfortune with greater strength and resolution than when they have spent a night under thought and reflexion" F. Tubbs, "John Atkins, an 18th century naval surgeon," *Brit. Med. Bull.*, 5 (1947), p. 83.

<sup>623</sup> The leg of Vice-Admiral John Benbow was shattered by French chain-shot at a battle off Santa Marta in Aug. 1702, and after it was amputated he resumed direction of the fighting; the wound proved to be mortal, though Benbow lived long enough to accuse several subordinates of having shown cowardice during the battle. *Biog. Brit.*, I, 684.

end approaching, called for his Armour, & being buckled on, said, thus should a Soldier die. & expired as he stood upright. Smolets hist: of Engld. V:i. p.354. 8<sup>o</sup> & v.3 p.226-p.410.<sup>624</sup>]

the like accident happened to Genll. Campbell<sup>625</sup> at Fontenoy; as I could not get at the blood vessells in order to secure them, was obliged to perform the Amputation, during the action; & during the operation he asked an exact report of battle from his aid de Camp<sup>b</sup>. Some cannon balls cut the bones smooth as if done with a saw, as happened to one of Coll: Beakes men, I had nothing to do but cut the muscles & stitch the artery near the Humerus. <he was left in the field and Dyed that evening with many of his Comrades &c.<sup>626</sup>> others

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<sup>624</sup> On Siward, Tobias George Smollett, *A Complete History of England, from the Descent of Julius Caesar, to the Treaty of Aix la Chapelle, 1748*, 2<sup>nd</sup> ed. (London: J. Rivington [etc.], 1758), I, 354-55; "when he ... stood upright" is quoted. *Ibid.*, III, 226, deals with Robert Bruce, who led his forces to victory at Inverury (1310) although he was so ill that he had to be placed on horseback by his attendants. *Ibid.*, III, 410, relates that John, the blind king of Bohemia, on learning that the English were winning the day at Crécy and that his son had been wounded in the battle, mounted a horse and ordered his knights to lead him to the hottest part of the battle. There he briefly exchanged blows with Edward III, but the two were separated and John and the knights were slain on the battlefield.

<sup>625</sup> Lieutenant-General James Campbell commanded the horse at Fontenoy. He died of his wound shortly after the battle.

<sup>626</sup> According to Hawkins, in the wake of the battle, wounded British prisoners were tended to by French medical personnel: "Hawkins Journal," f. 14v. However, there were also reports of British wounded being killed on the battlefield despite begging for quarter. De Saxe requested that the British carry off their prisoners, but when Cumberland sent 105 wagons to pick up the men, both they and the soldiers were seized by the French, an action that the British believed to be contrary to international law. In an anonymous letter published in *Gentleman's Magazine*, an army surgeon reported that he and other medical officers had been taken prisoners of war and deprived of all of their possessions, including their instruments, "altho' the barbarians saw hundreds continually imploring our assistance. In this unprecedented way we remain'd three days, numbers dying every hour, because we had nothing to dress them with, when they were flung in waggons and drove along the causey to Lisle, Valenciennes, &c. In this jolting journey you may easily conceive the misery of these poor wretches, most with their legs, arms, &c., shatter'd to pieces." Cumberland complained to de Saxe of the harsh treatment suffered by wounded British prisoners. He also collected and sent to de Saxe chewed balls and other irregularly shaped projectiles that had been extracted from wounds. Louis XV, on being shown some of them, reportedly turned pale and ordered that thereafter English prisoners be treated more humanely. H. A. L. Howell, "The

were miserably shattered into many large Splinters, the fleshy parts much tore, & large bleeding.

*nec quicquam nisi vulnus erat, cruor undique manat  
detectique patent nervi: trepidaeque sine ulla  
pelle micant venae. salientia viscera possis,  
et perlucentes numerare in pectore fibras.*

Ov: met: lb:6. V:388<sup>x</sup>.<sup>627</sup>

slight wounds were dressed with Bals: Universal: <i:e: Bals. Traumatic:<sup>C</sup>><sup>628</sup> his Royale Highness the Duke of Cumberland was shot thro the calf of the leg with a small bullet, vid. Ranby's treatise on Gunshot

270:

<sup>a</sup>[...] *cruor emicat alte –  
non aliter, quam cum vitiato fistula plumbo  
scinditur, et tenues [fyi "tenuis" before correction] stridente foramine longe.  
ejaculatur aguas, atque ictibus aera rumpit.*

Ov: met: lib:4. V:121.<sup>629</sup>

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Story of the Army Surgeon and the Care of the Sick and Wounded in the British Army, from 1715 to 1748." *Journal of the Royal Army Medical Corps*, 22 (1914), pp. 457-58; C. V. F. Townshend, *The Military Life of Field-Marshal George First Marquess Townshend 1724-1807* (London: John Murray, 1901), p. 81.

<sup>627</sup> "And he [i.e. Amyas, being flayed by Apollo] is all one wound: blood flows down every side, the sinews lie bare, his veins throb and quiver with no skin to cover them: you could count the entrails as they palpitate, and the vitals showing clearly in his breast"; Ovid Met. 6.388-91; *Metamorphoses* (trans. Miller), I, 315.

<sup>628</sup> See app. C-1, *balsamum traumaticum*.

<sup>629</sup> "The spouting blood leaped high; just as when a pipe has broken at a weak spot in the lead and through the small hissing aperture, sends spurting forth long streams of water, cleaving the air with its jets"; Ovid Met. 4.121-24; *Metamorphoses* (trans. Miller), I, 187.

<sup>b</sup>as he was retiring from the field to his quarters he was taken prisoner by a party of the Enemy, & used ill, & being informed of the bad success, soon fevered, lost his Senses & dyed the 3d. or 4th day. tho his wound was by no means mortal, & lost very little blood in the operation.

*Ossa quieta precor tuta requiescite in urna:*

*et sit humus cineri non onerosa tuo.*

Ov: Amor: lib:iii. eleg.9. V:67.<sup>630</sup>

*Sit tibi terra levis, mollique tegaris arena*

*ne tua non possint eruere ossa canes.*

Mart: Ep: 30. lib:9.<sup>631</sup>

*[the following is in darker ink than other quotations on the page and may have been inserted later]*

<sup>x</sup>here a hand sever'd, there an Ear was cropp'd;  
here a chap faln, & there an Eye put out;  
here was an arm lopp'd off, there a Nose dropp'd;  
here half a man, and there a less piece fought:  
like to dismembered Statues they did stand,  
which had been mangled by time's iron hand.

Battle of Crescey by Charles Aleyn. 1633: 8<sup>o</sup>. p.50.<sup>632</sup>

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<sup>630</sup> "O bones, rest quiet in protecting urn, I pray, and may the earth weigh light upon thine ashes!"; Ovid Amores 3.67-68; *Heroides and Amores* (trans. Showerman), p. 485.

<sup>631</sup> "May upon thee earth be light, and thou be covered with crumbling sand, that thy bones dogs may not -- be unable to root up!"; Martial Ep. 9.29[not 30]; *Epigrams* (trans. Ker), II, 91, 93.

<sup>632</sup> Charles Aleyn, *The Battailles of Crescey and Poictiers: under the Fortunes and Valour of King Edward the Third of that Name, and His Sonne Edward Prince of Wales, Named the Black* 2<sup>nd</sup> ed., enl. (London: Thomas Knight, 1633), p. 50.

*ac (ut in summa dicam) quo graviora vulnera sunt eo accuratiore et longiore victus ratione utendum.* Hip:de fractis.<sup>633</sup>

271 [continuing on from p. 269]:

wounds [this citation, both closing p. 269 and concluding here, is in heavier ink].<sup>634</sup>

*illum ruricolae, Sylvarum numina, Fauni  
et Satyri fratres, et tunc quoque carus Olympus,  
et Nymphae flerunt. et quisquis montibus illis  
lanigerosque greges, armentaque bucera pavit.*

Ov: met: lb:6. V:392.<sup>635</sup>

[penciled in margin, in hand different from Buchanan's: Battle of Dettingen; also, penciled vertical line in margin covers most of paragraph] when the action was over we encamped near to the field of battle. had violent raine for Sixteen hours, & few tents pitched, many having lost their tent poles, tent pins &c: & no straw. were obliged to lye on wet ground. many men were wet to the skine especially such as were on duty. we had no provision; some men had not broke bread these eight & forty hours<sup>a</sup>. the wounded were left in the field that night, excepting a few taken up by the enemy. We were like the Roman army commanded by Fabius in Campania, when defeated by the Samnites. viz: in the most unhappy & deplorable condition imaginable, without provisions for the troops, remedies for

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<sup>633</sup> "And (to sum up) the more severe the wound is, the more strict and prolonged should dietary restrictions be"; Hip., Frac., c. 26; cf. *Hippocrates* (trans. Withington), III, 157, and *Genuine Works of Hippocrates* (trans. Adams), II, 59.

<sup>634</sup> Ranby discusses Cumberland's case at length, though referring to the patient (p. 45) only as "a young prince, no less distinguished for his martial prowess, than high birth": *Method of Treating Gunshot Wounds*, pp. 45-55.

<sup>635</sup> "The country people, the sylvan deities, fauns and his brother satyrs, and Olympus, whom even then he [i.e. Amyas] still loved, the nymphs, all wept for him, and every shepherd who fed his wooly sheep or horned kine on those mountains"; Ovid *Met.* 6.392-95; *Metamorphoses* (trans. Miller), I, 315.



the sick & wounded, or any means of Reposing themselves, of which they were in so much want[....] the night passed amidst the Groans of the dying, & the complaints of those who survived them. Rollin's Rom.<sup>636</sup>

Men & horses were greatly fatigued & could bear it no longer.

----. *nec jam tolerare labores*

*ulterius poteram; quin nunc quoque frigidus artus,*

*dum loquor, horror habet, parsque est meminisse doloris.*

Ov: met: lb:9. V:290.<sup>637</sup>

None of our officers were wounded. Cornet Davis<sup>638</sup> was thrown from his horse, much bruised, being draged & trampled, <vomiting blood,> urine bloody &c:<sup>a</sup> was

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<sup>636</sup> Rollin, *Roman History*, III, 276; "in the ... survived them" is quoted. The reference is to Fabius Gurges, son of Fabius Rullianus Maximus. Townshend condemns the decision by the British to abandon their wounded, and claims that peasants murdered and plundered wounded soldiers as they lay on the battlefield overnight, exposed to a heavy rain: *Life of Field-Marshal Townshend*, p. 31.

<sup>637</sup> Alcmena, relating her travail in the birth of Hercules: "Nor could I longer bear my pangs. Nay, even now as I tell it, cold horror holds my limbs and my pains return even as I think of it"; Ovid Met. 9.289-91; *Metamorphoses* (trans. Miller), II, 23.

<sup>638</sup> John Davis, or Davies, entered the Blues as a cornet on 11 Dec. 1739. He was promoted to lieut. 25 Dec. 1744, but left the regiment, and the army, about July 1745. As Buchanan notes, Davis was the only officer in the Blues who was reported wounded at Dettingen. One drummer and seven privates were returned as killed, eleven privates wounded. The relatively low casualty figures suggest that the Blues were not heavily involved in the action, and indeed soon after the battle it was rumored that the officers commanding the regiment refused to obey an order to charge. Packe claims that the regiment performed well, though only in a support role, and that the charge of disobedience was politically motivated, as it fed on the king's tendency to favor his Hanoverian forces. Arthur vehemently defends the Blues, quoting at length documents that relate to the issue, including a letter in which Beake, Jenkinson, and Chamberlain defend the regiment and report that Stair regarded the allegation as "false, scandalous and groundless." RADCP 3/47; WO 63/10, f. 8; *The Court and City Register, Compleat for the Year 1744* (London, 1744), p. 10; Arthur, *Story of the Household Cavalry*, I, pp. 387-400; Edmund Packe, *An Historical Record of the Royal Regiment of Horse Guards, or Oxford Blues* (London: William Clowes, 1834), pp. 81-82, 82n.

272:

[in reference to "eight & forty hours"; quotations are diagonally stroked]

<sup>a</sup>-- [...], *et sibi et hosti*

*iratus pariter, jejunis dentibus acer:*

Hor. Ep:ii. lib:ii. V.28.<sup>639</sup>

*deficient inopem venae te, ni cibus atque*

*ingens accedit Stomacho fultura ruenti.*

Hor: Sat:iii. lib:ii. V:53.<sup>640</sup>

[in reference to Davis; stroked through]

<sup>a</sup>... *rutilum vomil ille iniorem:*

*et resupinus humum moribundi vertice pulsat.*

Ov: met: lb:5. V.83.<sup>641</sup>

273 [continuing from p. 271]:

blooded, &c: went to Aix la chapelle for the benefit of the warm bath and recovered dayly.

We had many wounded at Fountenoye & such variety of cases that it's impossible to narrate them.<sup>642</sup>

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<sup>639</sup> "...angry with himself and his foe alike, and fiercely showing hungry teeth..."; Hor. Ep. 2.2.28-29; *Horace* (trans. Fairclough), p. 427.

<sup>640</sup> "You are weak and your veins will fail you, unless food and strong support be given to your sinking stomach". Hor. Sat. 2.3.153-54; *Horace* (trans. Fairclough), p. 165.

<sup>641</sup> "The red blood spouted forth as he [i.e. Eurytus] lay dying on his back, beating the floor with his head"; Ovid Met. 5.83-84; *Metamorphoses* (trans. Miller), I, 245.

<sup>642</sup> Ralph Smith, an Elizabethan, asserted that regimental surgeons should have skill in all cures, but "specially to take oute a pellett." Thomas Gale (1507-87), the most prominent English army surgeon of his time, recommended cleaning foreign matter from gunshot wounds, enlarging the opening if need be, then applying a mixture of precipitate mercury and oil,

*dicere difficile est, quid Mars tuus egerit illic,  
quotque neci dederis, quotque quibusque modis.*

Ov: De Ponto. lb:4. V:335.<sup>643</sup>

there were many contusions from spent Balls, at first sight are small but soon spread, growing black & blew, should be fomented, poulticed, scarified &c: fomentations of herbs smell too strong in a tent; I therefore use milk & water adding some Brandy<sup>a</sup>. Drought is the most universal complaint from all the wounded, & surgeons would do better in filling their Chests with proper liquors for this purpose, than stuffing them with Apothecaries Drugs; Shrub & water answer this intention. during the cure the body is to kept open by proper dyet.

*Febricitanti <autem> aut accepto vulnere, alvus resiccata, malum denunciat.* Hip:  
de morb:<sup>644</sup>

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butter, or "Barowes" grease. Clowes asserted that during his time in the Low Countries, "there did not dye, to my remembrance, one man that was then hurt with gunshot, so that he was not first wounded to death." As Hunter noted, gunshot wounds had by his time become "almost a distinct branch of surgery." It was also one that saw theory and practice vary considerably. Paré's assertion that gunshot wounds were not poisoned, but rather were in most respects the same as others, and required no special treatment seems to have been widely known to army surgeons of his time and the 17th century, but not everyone accepted it. Woodall believed that the gunshot activated a humor that was subject to corruption, and that the surgeon should initiated treatment by administering an alexipharmic to the patient. The most influential 18th-century British writer on gunshot wounds, at least prior to Hunter, was Ranby. On the treatment of gunshot wounds, note also app. B-2. Cantlie, *A History of the Army Medical Department*, I, 16-18; Francis Grose, *Military Antiquities respecting a History of the English Army from the Conquest to the Present Time*, 3rd ed. (London: L. Stockdale, 1812), I, 240; Hunter, *Treatise on the Blood*, p. 246; Henry J. Webb, "English Military Surgery during the Age of Elizabeth," *BHM*, 15 (1944), pp. 268, 274; Woodall, *Surgeon's Mate*, p. 95.

<sup>643</sup> "'Tis hard to tell of your martial deeds there, how many you gave to death, who they were and how they fell"; Ov. P. 4.7.45-46; *Ovid* (trans. Wheeler), p. 449.

<sup>644</sup> "In [a patient] with a fever or a wound, dried bowels [Littre: "constipation"] is a bad sign"; Hip., Morb. 1.7; cf. *Hippocrates* (trans. Potter), V, 115, and *Oeuvres complètes d'Hippocrate* (trans. Littre), VI, 153. In the quotation, for "autem" (l. 1), Foës (*Magni Hippocratis Medicorum*, p. 449) has "vero."

our Cuirasses saved many lives <at Fontenoy>, during the action both body & mind are violently agitated, & require some time to settle; here rest is to be indulged, & large bleedings are necessary. many are deeply concerned for the loss of the day [--]

[*quotation diagonally stroked*]

----- *hunc cine solem*

*tam nigrum surrexisse mihi.*

Hor: Sat:9. lib:1. V:72.<sup>645</sup>

[--] are morose & melancholy, require cheerfull company & a Glass

274:

contusions from cannon balls seldom recover, tho at first they appear to be trieffling, yet soon spread upwards & downwards, commonly attended with large Emphysema over the whole body, as happened to Campbell of Cptn Gilbert's from a bruise on the outside of the right knee; face & body greatly swelled, his very eyes were shut up. & this was the case with many.<sup>646</sup>

[*stroked through*]

*Vulnera omnia cum contusione, veluti sclopetorum ac praesertim in capite, ut ut*

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<sup>645</sup> "To think so black a sun as this has shone for me!"; Hor. Sat. 1.9.73; *Horace* (trans. Fairclough), p. 111.

<sup>646</sup> Bell wrote, "it is a frequent effect of contusion and laceration to prevent the effusion of blood, by which inattentive observers, in forming opinions of injuries of this kind, are very apt to be deceived.... Practitioners of experience, however, will not be deceived by this: for it has long been known, that injuries of this kind prove always more dangerous than any other kind of wound." The greatest risk was gangrene. Bell recommended bleeding the wound to the extent commensurate with its scope, then legating the arteries, then clearing the wound of any foreign bodies. Boerhaave, who likewise advised of the great danger associated with contusions, recommended extensive bleeding, prompt administration of a strong but cooling purge, and application of a fomentation to the wounded part; for medicines, he prescribed diuretics and sudorifics. He recommended that the wound be opened and, if mortification was occurring or likely, the part was to be removed. Bell, *System of Surgery*, III, 254-58 (quotation p. 254); *Boerhaave's Aphorisms*, pp. 80-84 (esp. #'s 324-28, 334, 337).

*leviuscula, curatu esse difficillima, ac licet summa diligentia tractata, cum summo tamen chirurgorum dedecore persaepe lethalia fuisse, superveniente nimirum inflammatione, ac postmodum gangrena, ut locus interdum suspicione fuerit, hostes veneno plumbeas glandes armasse.* Ramaz: de morb: artif. cap.42.<sup>647</sup>

Gunshot wounds should be keep'd open a long time, in order to give passage to extraneous bodies, & when seemingly healed often breake out again from part of the cloaths being forced in with the bullet & not extracted.<sup>648</sup>

[*stroked through*]

*tempore ducetur longo fortasse cicatrix  
horrent admotas vulnera cruda manus  
non est in medico semper, relevetur ut aeger  
interdum docta plus valet arte malum.*

Ov: de Pont: lib:1. V:247.<sup>649</sup>

275 [continuing from p. 273]:

of wine, or to be employed in some new enterprize. Cort: Peruvian: was much used,

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<sup>647</sup> "All contused wounds, e.g. from fire-arms, were very difficult to cure however slight they were, especially when they were in the head, and and though they were treated with the utmost care they were very often fatal, which brought great discredit on the surgeons; I mean that inflammation would intervene and later gangrene, so that sometimes they were led to suspect that the besieged enemy had poisoned their lead bullets"; Ramazzini, *De morbis artificum* (trans. Wright), p. 369. In the edition used by Wright, ll. 5-6 reads "... *hostes obsessos veneno ...*"

<sup>648</sup> On the treatment of gunshot wounds, see app. B-2.

<sup>649</sup> "Perhaps in long time a scar will form; a raw wound quivers at the touch of a hand. 'Tis not always in a physician's power to cure the sick: at times the disease is stronger than trained art"; Ov. P. 1.3.15-18; *Ovid* (trans. Wheeler), p. 281.

especially where the Suppuration was large & attended with fever<sup>a</sup>.<sup>650</sup>

[*stroked through*]

*'eos qui vulnera acceperunt, fame conficito, et quae insunt ex alvo, vel per infusum, vel per medicamentum deorsum purgans exhibitum subducito, aquam vel acetum potui exhibeto.* Hip: de Affect.<sup>651</sup>

Gunshot wounds from being small at first grow daily larger from a large suppuration of the bruised parts, and are tedious of curing.

*curando fieri quaedam majora vidimus vulnera.*

Ov: de Pont: lb:3. V:641.<sup>652</sup>

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<sup>650</sup> Ranby set out as "the principal design of [his] treatise" a wish "to recommend plentiful bleeding very early in the treatment of Gun-shot wounds; to advise, likewise, the application of light, easy, dressings to them; and, particularly, to introduce the signal use of the Bark." He indeed claimed credit for being the first to recommend bark for gunshot wounds and in his treatise discussed a number of cases that involved it. Typical was that of a man who broke his leg. Ranby amputated it. Sometime later the patient's surgeon complained that the stump was bleeding, but did not follow through when Ranby advised bark, since there was no fever. Ranby later found the man very ill, with gleet pouring from stump. He gave him bark, every two hours, and he eventually healed, after taking "near nine pounds of the Bark." He also reported the case of a wounded officer who began to hemorrhage and was bled, but at first refused the bark that Ranby recommended; he later accepted it, but stopped, despite improvement; he then worsened, but was finally cured with use of more bleeding (especially from foot, which Ranby believed was more useful in stopping discharges than was the arm), bark, and Royal Styptic. Besides praising bark as a styptic (though not effective in stopping massive bleeding), Ranby thought it helped wounded men procure rest, countered infection, and aided healing. But he conceded that bark was not always effective and cited cases of failure. Home likewise advocated the use of bark in treating gunshot wounds and contusions, to brace up the circulatory system and solids. Home, *Medical Facts and Experiments*, pp. 112, 120; Ranby, *Method of Treating Gun-Shot Wounds*, pp. 5, 36-77, 82-85.

<sup>651</sup> "Those who are wounded should be kept hungry, and their bellies should be cleaned downwards through use of an enema or a purgative. Water or vinegar may be provided"; Hippocrates, Affections c.38; cf. *Hippocrates* (trans. Potter), V, 61, and *Oeuvres complètes d'Hippocrate* (trans. Littré), VI, 247, 249.

<sup>652</sup> "Some wounds are made worse by treatment, as we see"; Ov. P. 3.7.25-26; *Ovid* (trans. Wheeler), p. 417.

[*margin: a remarkable Gunshot wound; below is a penciled "X"*] they are not only confined to the day of battle; are frequent from accidental Shots. Prichard of Cpt. Marcham's was shot by a Dutch Soldier in the Streets of Brussels the ball entering about the middle of the Penis, took off one testicle & bruised the other so much as to render it useless, entered the inner side of the right thigh, passed thro & made it's exit near the Anus. There was no great haemorrhagie: the testicles were taken out as in Castration; the penis cut off about an inch from its root, stiching a small artery. dressed dry covering with digestive, blooded, clystered, drinking Tamarind Ptisane, the parts constantly fomented. there was soon a good digestion. the wound healed surprizingly well from this simple method & was thought a remarkable cure. was naturally healthie & thin habite

276:

**<sup>a</sup>Rx Ther: Androm: oz.fs. pulv: cort: Peruvian: dr.ii. Syr: caryophillor: q:S: ut f. elect: cap: M:N:M: 3tia quaque hora.**<sup>653</sup>

277 [continuing from p. 275]:

of body, bearing this misfortune with great patience. his beard never grew afterwards, only a few hairs on the upper lip & round the [*penciled stroke in margin, beginning here and ending on line that concludes with "so much duty"*] point of his chin, but not near so strong as formerly; his cheeks are perfectly smooth. nixt Summer did Duty in the field tho not near so strong & heartie as formerly, used to say he was not half the man & never had the least inclination to Venery. he grew dayly more effeminate & of a peevish temper, would cry like a child on the smallest affront, & could not bear the least joacke from any of his comrades, was so troublesome in making frivolous complaints that it was necessary to discharge him<sup>x</sup>.

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<sup>653</sup> "Take ½ oz. of *Theriac Andromachi* [app. C-1], 2 oz. powdered Peruvian bark, and *Syrupus caryophillorum* [syrup of clove-July-flowers; see app. C-1], as required, to make an electuary. A nutmeg-sized dose to be taken every 3 hours."

after the action we had many swelled knees, inflammed & painfull from being squeezed in the ranks during the action, & swelled legs were common from so much duty a horseback.

[*margin*: Gunshot wound in horses.] The wounded horses would not foresake their Regmts though they had lost their Riders, & followed so long as they could walk, & some had only three legs to stand on.

[*the following quotations and citations are diagonally stroked*]

he paweth in the valley, & rejoiceth in his Strenght [*sic*], neither turneth he back from the sword, &c: Job: cap: 39.<sup>654</sup> Vid: Buch: Eleg: ad Briand. Vallium<sup>655</sup> et de Equo Elogium.<sup>656</sup>

***post bellator equus positus insignibus Aethon  
it lacrymans, guttisque humectat grandibus ora.***

Virg: Aen: xi: V:89.<sup>657</sup>

our Farriers were strangers to Gunshot wounds & I treated some wounded horses much in the same manner as I did the men,

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<sup>654</sup> v. 21-22.

<sup>655</sup> Buchanan apparently has in mind these lines from George Buchanan's elegy, "*Ad Briandum Vallium, Senatorem Burdegal, pro Lena apologia*" ("To Briand de Vallee, Public Official of Bordeaux, an apology for the Procuress"): "For though the spirited horse may be broken by inactive old age, when the harsh horns have given the war signals, he rages in his mind, he strikes the earth with his hoof, he pricks up his ears, still retaining his fighting spirit though his powers are failing"; Sabrio, "Buchanan's *Elegies*," p. 63.

<sup>656</sup> Buchanan's *Silva VI*, "*De equo elogium*" ("A Short Statement concerning the Horse"), includes the passage, "If battles call, keen energy flows into its trembling joints, and with its master it pours forth a shared rage from the mouth and nostrils. And it exposes its noble breast to wounds, and alone with its master, it takes and lays aside the joys and sorrows in every chance": *ibid.*, p. 158.

<sup>657</sup> "Behind, the war-steed Aethon, his trappings laid aside, goes weeping, and big drops wet his face"; Vir. Aen. 11.89-90; *Virgil* (trans. Fairclough, II, 241).



278:

he afterwards enlisted into General Honeywood's Dragoons<sup>658</sup> & was soon discharged for the same reason. [*slightly heavier ink*] was afterwards in Montague's<sup>659</sup> & turn'd out for the same reason.

[*facing line, "tho they had lost their Riders"; in darker ink*]

***Bello armantur equi, bellum haec armenta minantur.***

Virg: Aen: 3-540.<sup>660</sup>

279 [continuing on from p. 277]

Viz: extracting the bullet, digesting &c.

The wounded are often neglected as to dayly dressings, especially after a general action, Corpll. Orford of Sr James's was not dressed for ten days after I amputated his forearm, tho he was sent from camp to the Hospital. the part stunke abominably, the dressings were almost rotted, a large discharge of sharp stinking matter, & a long bare stump; but did well with proper care. he often imagined he wanted to stir the fingers of that hand, & in the night time would often start as if something pricked them. it's the same with toes after the amputation of the leg, they even complaine of their corns aching. the Corpll fainted at the beginning of the operation & did not know he had lost his arm till he observ'd the dressings\* [*asterisk in heavier ink*].

[*margin: Deseases after the Battle.*] The day after the battle of Dettenghem we encamped twixt Hanau & Francfort on the Banks of the Mayne, & were well supplied with all sorts of provision <but no straw the first night>.

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<sup>658</sup> 3rd Dns.

<sup>659</sup> 2nd Dn. Gds.

<sup>660</sup> "For war are horses armed, war these herds portend"; Virg. Aen. 3.540; *Virgil* (trans. Fairclough, I, 385).

[*margin*: Grieps & purging.] Many men complained of grieps & purging, saying, they got cold the night of the battle;

[*margin*: Method of cure.] as they have frequent reachings to vomite I order a Dose of Ipecacuan: & op: h:S: & a Dose Rhabarb with Nutmeg nixt morning, repeating the opiate, & continuing this method three or four days, compleating the cure with Discord dr.i in burnt Gin every night at bedtime. this was the most common distemper in our hospital & treated such in the same manner. if this Desease continued some time the Stools

280:

*\*Falciferos memorant currus abscindere membra  
saepe ita desubito permista caede calentes,  
ut tremere in terra videatur ab artibus id quod  
decidit abcissum cum mens tamen, atque hominis vis  
mobilitate mali non quit sentire dolorem.  
et simul in pugnae studio quod dedita mens est.  
corpore cum reliquo pugnam, caedesque petissit.*

Lucret. de rerum natura. lib:iii. V.643.<sup>661</sup>

281 [*continuing from p. 279*]:

grew bloody, attended with all the complaints of the Bloody-Flux. I then ordered *vitr: Cerat:*

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<sup>661</sup> "They tell how scythed chariots, reeking with indiscriminate slaughter, often shear off a limb so suddenly, that it is seen to quiver on the ground when it falls shorn from the trunk, although the man's mind and strength from the swiftness of the blow can feel no pain; and at the same time, because the mind has been absorbed in the ardour of battle, with what is left of his body, he pursues battle and blood"; Lucretius 3.642-48; Lucretius, *De Rerum Natura*, trans. W. H. D. Rouse, The Loeb Classical Library, rev. ed. (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1937 [1924]), p. 215.

*Antimon: gr.vi. Ther: Androm: gr.S: ut S. pil: mane Sumend: et pil: op: h:S:*<sup>662</sup> this being continued some days many recovered in Camp tho reduced to great weaknes<sup>a</sup>. this encreased so much by the midle of July that five or Six of a troop were ill at one time; the weather being dry favoured their recovery. by the midle of Augst it was so common that I could not keep a list of the mens names or cases; the Vitr: cerat: Antim: was the universal medicine & never failed to stop the bleeding, excepting two cases, & Diascord<sup>663</sup> in Burnt Gin seldom failed of removing the grieps. the Grieps were always in the lower belly, twixt the Navel & os Pubis, the sick man commonly covering the part with his hand as he told his complaints<sup>b</sup>. as the complaints were in the lower belly there was no occasion for vomits; there was seldom any fever & bleeding was never used in Camp;<sup>664</sup> but in the Hospital many recovering, fevered & dye.

[*margin:* our hospital in great disorder.] Here our hospital was in great disorder as their baggage was not yet arrived from Flanders, the Sick lyeing on straw only in Barns, Stables, outhouses, &c: there was commonly a Dunghill befor the Door where all their Pots, Bedpans, &c: were emptied, & stinke abominably in warm weather, & great swarms of vermine are dayly produced\*; those Dunghills are lower situated than the Street, & when raine falls the common Channel empties

282:

<sup>a</sup>our Allies knew nothing of this medecine, so treated it with small Doses Ipecacaon: & Rhabarb. & some of our Surgeons do the same, never making tryale of Vitr. Cerat: Antimon:

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<sup>662</sup> "Six gr. *Vitrum ceratum antimonii* [app. C-1, under "antimonials"] and ½ gr. *Theriac Andromachi* [app. C-1, "opiates"] to make a pill to be taken in the morning. An opium pill should be taken at bedtime."

<sup>663</sup> On diascordium, see n. 88.

<sup>664</sup> On the issue of venesection for dysentery, note app. C-1.

& probably the good success from it may be in a great measure owing to my persisting in its use.

<sup>b</sup>when the tenesmus is troublesome I have used clysters of burnt Claret with Theria: Androm: & that with good success. especially where the parts are weakened by the long continuance of the Disease, & the patient complaining when he stands upright, that he perceives his bowells, as it were, bearing downwards. they are seldom used amongst the men, having a foolish aversion to them. vid Young on Opium Sect. 8th[,] the effects of Opium in the Tenesmus.<sup>665</sup> vid Fred: Hoffman: Op: Med: Tom:3. p. 151. de Dysenteria.<sup>666</sup>

\*Fred: Hoffmanni Op: Med: Tom:i. p.207. de Venenis in Aere contentis Epidemionum Morborum Causis.<sup>667</sup>

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<sup>665</sup> In sect. 8 of *Treatise on Opium* (pp. 53-55), Young comments, "The *tenesmus* arises from a *stimulus* in the *rectum*, which is sometimes mild, and easily mitigated, corrected, or expelled by stool. Opium will often make the *stimulus* less, or abate the sense of it, till the acrimony is removed, and the patient cured"; but stimulus is often too great or prolonged to be countered by opium (e.g., in one case it resulted from inner wall of intestine separated, & did not end till lining emerged thru anus & was cut off. The author of *Observations on the State of the Dispute*, noting that Cleghorn recommended large doses of opium in treating dysentery, advised that opiates be administered by enema, as Sydenham had, for much larger doses could safely be given this way than orally. In James's estimation, "In a Tenesmus, the last Refuge is to Opiates." James, *Medicinal Dictionary*, under "tenesmus"; *Observations on the State of the Dispute Between A Physician and An Apothecary, concerning a Prescription of Sydenham, in which A Vindication of this Author's Character as a Scholar, is attempted; And His Method of curing the Dysentery by injection of Milk and Venice Treacle, is confirmed by Facts and Experience* (London: W. Johnston and B. Thorn, 1765), pp. 26-29.

<sup>666</sup> Opiates play a very limited part in the course of treatment outlined by Hoffmann. He does allow for a small dose of theriaca to be used to help manage the pain, but he warns against the use of strong opiates. *Opera omnia*, part III (vol. III), sect. ii, ch. 7, pp. 156, 157; cf. *System of the Practice of Medicine*, II, 179, 183.

<sup>667</sup> "*De venenis in aere contentis epidemiorum morborum causis*" ("Of airborne poisons that cause epidemic diseases"); Hoffmann, *Opera omnia*, I, pars ii, cap. v, pp. 207-12. Hoffmann writes that the air contains things that can harm the human body and cause epidemics. The most dangerous poisons are putrid or caustic. People should avoid stagnant or marshy water and corruption carried in air. Pestilence is associated with inundations, e.g. the Nile floods. Marshy waters produce multitudes of putrid insects and worms, and epidemics follow in the

283 [continuing on from p. 281]:

itself into the Dunghills, carrying much filth along with it, & after raine the stench was almost insufferable<sup>a</sup>. vid: Degneri hist: medic: de Dysenteria.<sup>668</sup>

*'Nihil tamen aequae morborum phalanges in Castra invehere posse crediderim, quam Castrorum sordes, et neglectam munditiam. divino edito olim Israelitis interdicebatur, ne intra Castra alvinas foeces auderent deponere, sed extra ipsa[....] Deut: Cap. 23. cujus verba haec sunt. habebis locum extra Castrum, ad quem egredieris ad requisita naturae, et habebis baxillum cum armis tuis, cumque sederis per circuitum, et egesta operies, quo relevatus es: Deus enim ambulabat in medio Castrorum.* Ramaz: de morb: Artif. Cap:42.<sup>669</sup>

[margin: flux & fevers are universal & very mortal.] fevers & fluxes were almost universal, & thought infectious; few Apothecaries or their Mates escaping one or other of those diseases, & many dyed; the Nurses dyed so fast that private Soldiers were obliged to

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wake of swarms (Hoffmann quotes Varro's assertion that insects cause certain diseases). Camp diseases, which are always very bad, are caused by corrupted air and virulent exhalations. They are malignant and contagious. Virulent air enters the body through various passages. People can avoid epidemic disease through temperance in food and sex, avoiding evening and night air and strengthening their bodies and the circulation of their blood by promoting healthful transpiration.

<sup>668</sup> Johann Hartmann Degner [Degneri], *Historia medica de dysenteria bilioso-contagiosa* (Utrecht, 1738); Degner discusses the role of filth in spreading dysentery on pp. 53-54.

<sup>669</sup> "However, of all the causes that introduce these legions of diseases into a camp, not one does as much harm in my opinion as the filth and neglect of personal cleanliness in the camp itself. The Israelites of old were forbidden by a divine statute to venture to void faeces within the camp; it must be done outside the camp.... This is the passage in Deuteronomy [chapter 23; *Buchanan's interpolation*]: "Thou shalt have a place without the camp whither thou shalt go for the calls of nature; and thou shalt have a paddle with thy weapons, and when thou hast eased thyself thou shalt turn back and cover that which cometh from thee; for thy God walketh in the midst of thy camp"; Ramazzini *De morbis artificum* (trans. Wright), pp. 359, 361. The Wright edition differs slightly from Buchanan, in the following words (Wright versions): "*muditien*" (l. 2), "*edicto*" (l. 3), "*castra*" (l. 5), "*paxillum*" (l. 6), "*ambulat*" (l. 8).

nurse their Comrades.<sup>670</sup> We suffered more from this sickness than from the day of battle.<sup>671</sup> it put me in mind of the plague in the Roman & Carthaginian Army at the Siege of Syracuse. Viz: 'at first the distemper was moderate, & occasioned only by the bad air & Season, afterwards communication with the Sicke, & even the care taken of them, spread the contagion: from whence it happened that some, neglected and abandoned, dyed thro the malignity of the Desease, others received help that became fatale to all that approached them, so that the eyes were continually strucke with the sad sight of death, & of the funerals that followed it, & the ears

284:

*<sup>a</sup>Non Domus apta satis; non hic cibus utilis aegro.*

*nullus Apollinea qui levet arte malum.*

*Non qui soletur, non qui labentia tarde*

*tempora narrando fallat, amicus adest.*

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<sup>670</sup> Nurses would have had more frequent contact with patients than had physicians and surgeons. Buchan cautioned those visiting the sick to stuff tobacco or some other strong-smelling herb up their nose. The patient was to be kept clean, and the sick room sprinkled with vinegar or another acid. Visitors were to avoid the patient's breath. Those leaving the sick room were to wash their hands and face, and change their clothes before they make outside contact. Buchan, *Domestic Medicine*, p. 80.

<sup>671</sup> The progression of epidemics that beset the army in 1743, notably the outbreaks of dysentery and of jail or hospital fever, are discussed by Pringle. Like Buchanan, he notes that mortality was very high, though he does not provide precise totals. At Dettingen, British losses were 265 killed, 561 wounded. On 31 July a letter-writer reported, "the army have by their inactivity so sickened that there is scarce a Regiment that has not from 100 to 200 in the Hospitals, most of the Flux." Howell, "The Story of the Army Surgeon," pp. 329, 331; Pringle, *Observations on the Diseases*, pp. 20-27. What was perceived to be mismanagement of the hospital in Flanders prompted an inquiry. The key documents in this affair are: the report by Ranby and by George Garnier, Hanau, 28 July 1743 o.s., recommending the dismissal of John Ellis as director (and his replacement by George Garnier's brother Charles) and an augmentation of the hospital staff. (SP 44/183/272); and a letter from the secretary of state, Lord Carteret, to the secretary at war, dated 30 July o.s., reporting that the king had decided to execute the key recommendations by Ranby and Garnier (SP 44/183/275).

*lassus in extremis jaceo populusque locisque  
et subit affecto nunc mihi quicquid abest.*

Ov: trist: lib:iii. V:121.<sup>672</sup>

[*margin:* French Hospital.] the day after the battle I was sent to the French camp in order to visite the wounded of our Army.<sup>673</sup> their Surgeons went round the hospital carrying a tub of Brandy & Syringes, with which they washed the wounds, dressing with dry lint dipt in brandy, & covering with digestive. Such of their wounded as could be transported & require time to recover, were sent to the nearest French towns. the wounded lay on Strawe or hay in houses, churches, Barns &c: our men say the French bleed often & cut much.<sup>674</sup>

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<sup>672</sup> "There is no house here well suited to a sick man, no beneficial food for him, none to relieve, with Apollo's art, his pain, no friend to comfort, none to beguile with talk the slow-moving hours. Aweary I lie among these far-away peoples in this far-away place, and thoughts come to me in my weakness of everyting that is not here"; Ov. T. 3.3.9-14; *Ovid* (trans. Wheeler), pp. 109, 111).

<sup>673</sup> On 17 June Stair informed Noailles that the king had decided to withdraw to Hanau, leaving "an independent company in the field, who were strictly ordered to commit no hostilities: therefore the French might send a detachment to bury their slain; and it was hoped, they would treat with humanity those who were left behind." The French did in fact treat the British wounded in their own hospitals, though after the men healed they were detained as prisoners of war. A lack of supplies may have prompted the British decision to desert the wounded. The army was critically short of food and tents, and lacked the number of wagons required to transport sick or wounded soldiers. And despite the debacle at Dettingen, the French were in a strong position, as they controlled the Rhine, so the British were cut off from reinforcements and supplies. Howell, "The Story of the Army Surgeon," p. 330.

<sup>674</sup> Among the English, French surgeons had a reputation for being quick to bleed and to cut. According to Alexander Sutherland, after Pocok's first naval battle with the French, English men brought to Pondicherry and treated by British medical officers survived, while their French counterparts, who were tended by French surgeons, died in large numbers because they were bled excessively. He added, "Mr. Morgan, Surgeon of a regiment at Guadaloupe, assures me that bleeding is the universal remedy among the French practitioners in that island. In intermittent fevers particularly, they bleed five or six times, and always in the cold fit. Many of our officers and private men have thus expired, before their arms could be bound up." *Attempts to Revive Antient Medical Doctrines* (London: A. Millar, 1763), II, 153; cf. Kopperman, "The British Army in North America and the West Indies, 1755-1783," p. [?].

[*margin:* Hanoverian hospital.] The Hanoverians had their hospital baggage in the field; their hospital was soon put in good order; their men in good houses, lye on palliases stuffed with Straw, have good coverings; their dressings are very neat of drawn lint, wounds cleaned with fine Sponge, soaked in warm water & brandy, use the caustic on the first appearance of proud flesh. their common Digestive is Lint Arcae<sup>675</sup> with ol: Ovor:<sup>676</sup> their hospital medecines are carried on a large waggon, divided into many different partitions, & opening at many places; any particular medicine may be easely got at, the whole easely packed & unpacked. one of their Physicians visits the kitchene dayly & examines the provision. their Regimental Surgeons charge what medecines they use & are paid by the public;<sup>677</sup> use many chemical preparations & great variety of Specieses &c:

*medicinam in castris non adeo rudem esse, neque tam irregularum, ut vulgo creditur, cum Principes, ac exercituum Ductores, tum sibi, tum suis copiis peritos medicos cum magna pharmaceutica suppellictile, magnisque stipendiis conductos, adesse velint sicuti in Trojano bella Mechaonem Medicum, ac celebrem chirurgum*

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<sup>675</sup> On *linimentum Arcae*, see app. C-1.

<sup>676</sup> Olive oil. Note entry, app. C-1.

<sup>677</sup> In the British Army, a portion of pay of privates and noncommissioned officers was stopped to provide regimental surgeons with “medicine money.” In the 1780's, Hamilton estimated that this fund provided £70-80 p.a. per regiment – the figure would have been higher in the 1740's, since regiments were larger. Medicine money was intended to cover purchases of drugs, surgical instruments, and some other supplies. In fact, however, regimental surgeons received fully loaded medical chests and cases of instruments on going abroad. Moreover, during wartime, they were usually supplied with drugs gratis by the hospitals. Hamilton was sharply critical of the system, asserting that it encouraged surgeons to skimp on purchases so that they could pocket whatever remained, while stoppages deprived the soldier of his “pittance.” Other medical personnel were upset by what they saw as abuse of the hospital by surgeons who wasted drugs, then demanded resupply in large quantities. Cantlie, *History of the Army Medical Department*, I, 61, 105; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 179-82; Kopperman, “Medical Services,” pp. 445-46, 451-52.



*inter Graecos fuisse legimus.* Ramaz: de morb: Artific: C:42.<sup>678</sup>

[margin: Dutch hospital.] The Dutch seldom use praecipitate in dressing wounds thinking it too corrosive; their's is seldom good, being much adulterated with Minium<sup>679</sup> & remains unactive like red lead; mel: Rosar:<sup>680</sup> their chief detergent. tereb: cum vitello ovi solut.<sup>681</sup> their common digestive, fomenting chiefly with red wine. when in garrison often agree with the town hospital to take care of their men & provide dyet & medecine for twelve pence pr day.<sup>682</sup>

285 [continuing on from p. 283]:

heard nothing night & day but the groans of the dying & those who lamented them. Roll: Rom: hist.<sup>683</sup>

I attended the hospital dayly, yet never had the least Complaint<sup>c</sup>. when I suspected a beginning mortefication of the Bowells, or observed livid Spots on the skine, I ordered extract: Cort: Peruvian: Bark<sup>684</sup> & often succeeded well. Ryce gruell with cinnamon was

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<sup>678</sup> "Medical treatment in camps is not as unskilled and irregular as people think, and ... princes and commanders of armies take care that they and their troops shall have skilful doctors furnished with an ample supply of medicines, and they pay these doctors large salaries. This was so in the Trojan War, for we read that the physician Machaon, a celebrated surgeon, accompanied the Greek army"; Ramazzini, *De morbis artificum* (trans. Wright), pp. 361, 363. Wright has "*Machaonim*" (l. 5).

<sup>679</sup> On minium (red lead), see entry "plumbic preparations" in app. C-1.

<sup>680</sup> App. C-1, under "roses."

<sup>681</sup> A solution of turpentine and egg yolk; cf. app. C-1, "terebinth" and "vitellum ovi."

<sup>682</sup> On occasion, the British likewise made use of civilian practitioners.

<sup>683</sup> Rollin, *Roman History*, V, 210-11.

<sup>684</sup> On *extractum corticis Peruviani*, see app. C-1, entry for Peruvian bark. Whytt reported that bark was useful in treating dysentery. Extracts were preparations of drugs, in which a particular feature of a simple was removed by the use of a solvent, leaving behind other features. Gums were usually extracted by water, resins by spirits. Generally extracts were

their common drink, & Ryce gruell their chief dyet. small milk punch was common drink in Camp. living on mutton broth with Ryce or Barley.<sup>685</sup> Some men eat a pennyworth of Blea Berries <Bill Berries, or Vitis Idea><sup>686</sup> every morning, & found them of great service in stopping the flux. it was common to all, even to such as did not eat fruite, nor drink beer, nor eat Ammonition bread. Some think it occasioned amongst the men from eating their flesh meat too new killed, but we did so long befor the desease appeared<sup>a</sup>. more probably from the bad provision befor the battle & great fatigue & violent raine thereafter<sup>b</sup>.

*'Morbi igitur omnes oriuntur partim, quidem ex his quae in corpore sunt, pituita et bile; partim vero ex his quae extra obveniunt, laboribus et vulneribus, quin et a calido supra modum calefaciente, et frigido supra modum refrigerante, et sicco plus aequo resiccante, et humido etiam plus humido humectante.* Hip: de Morb: lib:1<sup>687</sup> et de vict: rat: lb:3.

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inspissated, often to the thickness of honey. Quincy believed that extracts were overvalued in medicine, claiming that the value of the simple was lessened either by the process of distillation or during the subsequent inspissation. He saw the process as worthwhile only when it served to purify the simple and remove dross.

<sup>685</sup> Besides being reckoned as nourishing, the mutton broth may also have been intended to soothe or sheathe abraded intestines. To treat bloody flux, Buchan recommended whey as the best drink, and often a cure. He also recommended chamomile tea, arguing that it strengthened the stomach, while "its antiseptic quality" prevented mortification of the bowels, and also barley water. A mild vomit, as with ipecacuanha, he thought good at the first treatment; the next day, the patient was to be given rhubarb. Buchan, *Domestic Medicine*, p. 266; Townsend, *Elements of Therapeutics*, p. 278.

<sup>686</sup> See app. C-1, "blueberry."

<sup>687</sup> "Therefore, all diseases arise partly from things inside the body -- phlegm and bile -- and no doubt partly from things outside it -- toil and wounds -- as well as from heat that makes it too hot and cold that makes it too cold, dryness that makes it too dry and moisture that makes it too humid" [Potter excludes, and does not translate, the phrase that begins "dryness," but does refer to the additional text in a note; Littré includes the phrase]; Hip., Morb. I, 1; cf. *Hippocrates* (trans. Potter), V, 101, 103, and *Oeuvres complètes d'Hippocrate* (trans. Littré), VI, 143. The close of the quotation reads "*plus aequo humectante*" in Foës (*Magni Hippocratis Medicorum*, p. 446).

*at ubi calefacto corpore acria purgantur, et intestinum raditur et exulceretur, cruentaque per alvum dimittuntur, hoc Dysenteria, hoc est intestinorum difficultas appellatur, tum gravis, tum periculosus morbus.*<sup>688</sup>

Many thought it infectious, of which I have no certain proof. it decreased about

286:

[in darker ink than "a" and "b" (through "seized with it")]

<sup>c</sup>Some constitutions are proof against infection. Socrates, by temperance & constant perseverance in the virtuous toil of martial exercises, acquired a constitution superior to the attacks of Disease; for when an almost universal plague had seized upon the Camp, insomuch that more than Eleven hundred men were carried off by contagion in the army before Potidaea, & Athens itself was half depopulated, he escaped in both places the malady, & was the only one in the first that had not in some measure felt the Severity of it. vid: The life of Socrates, by John Gilbert Cooper, jun: Esqr. Lond. 1749. 8<sup>vo</sup>.<sup>689</sup>

<sup>a</sup>*miserabili enim militiae, quae a ferro, et igne ab expeditione aliqua superstes fuerit, saepenumero malorum incumbit cohors, raroque evenit, ut a maligna aliqua epidemica exercitus non decimentur. hinc celebres, seu potius infames, sunt febres castrenses, aliique morbi exitiales, et contagiosi[.]* Ramaz: de morb: Artif: C:42.<sup>690</sup>

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<sup>688</sup> After a passage defining diarrhea: "But when, as the body grows hot, the purging becomes harsh, the intestine is scraped and ulcerated, and the stools are bloody; this intestinal trouble is called dysentery, a difficult and dangerous disease"; Hip., Vict. III, 74; cf. *Hippocrates* (trans. Jones), IV, 397, and *Oeuvres complètes d'Hippocrate* (trans. Littré), VI, 617.

<sup>689</sup> Cooper, *The Life of Socrates: Collected from the Memorabilia of Xenophon and the Dialogues of Plato* (London: R. Dodsley, 1749), p. 25; "by temperance ... Severity of it" is quoted.

<sup>690</sup> "Too often our poor soldiers survive the risks of fire and sword in some campaign only to be overtaken by a host of maladies; armies are almost always decimated by some malignant epidemic. Camp fevers, then, and other fatal and contagious diseases are famous or rather infamous"; Ramazzini, *De morbis artificum* (trans. Wright), p. 359. Wright renders

<sup>b</sup>It was not known among the Hessians nor Hanoverians, nor any other troops who were not at the battle, nor were any of the country people seized with it.

[*in darker ink*]

*per assiduos imbres morbi magna ex parte oriuntur, cum febres longae, tum alvi fluxiones, putredines, comitiales, apoplexiae et Anginae, per magnas autem siccitates, tabitudines, lippitudines, articularum dolores, urinae stillicidia, et intestinorum difficultates.* Hip: Aph: No.16. S:iii.<sup>691</sup>

287 [continuing from p. 285]:

the end of Augst, only two of the Regmt dyed viz: Qr. Master Barbar,<sup>692</sup> he had it to a violent degree, voiding pure foetid blood with many white philms on his first complaint; never was better of any medecine; of an unwholesome swarthy complexion; thought he got a cold a foraging<sup>a</sup>. Livins of Sr James's was the only private man. had been some time in the hospital & under a mercurial course, upon coming to camp, catched cold, & dyed of this Distemper, nor was he in the least relieved by any medecine.

[margin: fruite not to be blamed as the principale cause.] fruite is always blamed as the principale cause of this disorder, especially grapes & Plumbs, yet none were large enough to be gathered when the disorder made its first appearance, & we see it decline when the fruite is in plenty. I have known a Soldier have the Bloody flux to a great degree; who never tasted fruite from a natural aversion. Officers eat much more fruit than private men,

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"epidemica" (l. 3) as "Epidemia."

<sup>691</sup> "During incessant, heavy rain, the diseases that generally arise are protracted fevers, fluxes of the bowels, mortifications, epilepsy, apoplexy, and angina, but in dry weather occur consumption, inflammations of the eye [Adams and Littré specify ophthalmias], pains in the joints, strangury, and dysentery"; Hippocrates, Aphorisms, III, 16; cf. *Hippocrates* (trans. Jones), IV, 127, *Genuine Works of Hippocrates* (trans. Adams), II, 214, and *Oeuvres complètes d'Hippocrate* (trans. Littré), IV, 493.

<sup>692</sup> Untraceable.

yet in our German Campn. only two of our Officers were ill of this Distemper.<sup>693</sup>

[*margin*: Bloody flux in Campn. 1744.] This disease appeared in Campn 1744 about the middle of August the weather at that time wet & rainy, & was preceded all summer by a slight Diarrhea. the above method proved successfull, for none of the Regmt dyed. it was peculiar to the Soldier, none of the Officers having the least Dysenterick complaint, & only one Qr. Master. nor were any women or children ill of it. We had fruit in abundance, tho Plumbs were forbid by publicke order. this flux was more obstinate than in Germany, tho

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<sup>693</sup> Generally, 18th-century medicine moved away from the belief, possibly of Greek origin, that fruit caused dysentery. Pringle discounted it, as did Buchanan, because outbreaks of dysentery during the War of the Austrian Succession preceded the months when fruit was plentiful, and he noted that common soldiers were less able to afford fruit than were officers (and consequently ate little), but were more prone to dysentery. He noted Degner's assertion that fruit was not responsible for a dysentery epidemic that struck Nimwegen during the 1730's. Pringle also reasoned deductively: that camp diseases, "being either of an inflammatory or putrid nature, cannot be owing to what is so much acid." Tissot -- whom Blair credited for the new direction -- recommended that patients suffering from acute diseases be allowed both ripe fruit and fruit juice. He noted that nature compelled patients to ask for these and that their condition sometimes deteriorated if they were refused. Challenging the common belief that fruit caused dysentery, he asserted that fruit was actually a preservative against the disease and he also advised it in treating dysenterics. He did believe, however, that unripe fruit could cause diarrhea. Fruit was commonly viewed as laxative, but increasingly writers argued that regularity prevented dysentery, while costiveness encouraged it. Le Pois, however, saw the excessive use of fruit as one cause of dysentery (obstructed perspiration was another), and Huxham blamed a 1743 dysentery epidemic on excessive consumption of fruit. Moseley believed that even a small amount of acid fruit, such as a piece of orange, could cause a relapse. After 1750, most writers condemned only the consumption of fruit that was unripe; such fruit, asserted Mead, caused pestilential and malignant diseases. There was still a widespread belief that the acid in unripe fruit could cause gout and rheumatism, by constricting the fibers. Buchan cautioned, "fruit should be eaten in the early part of the day, when the stomach is not loaded with food, and it ought never to be eaten raw till it is thoroughly ripe." Nevertheless, he also wrote, "The prejudice against fruit in this disease is so great, that many believe it to be the common cause of dysenteries. This however is an egregious mistake" Ackerknecht, "The End of Greek Diet," p. 243; Blair, *The Soldier's Friend*, pp. 99-100; Buchan, *Domestic Medicine*, p. 265; Buchan, *Observations concerning the Diet*, p. 13; Mead, *Complete Works*, p. 107; Benjamin Moseley, *A Treatise on Tropical Diseases; on Military Operations; and on the Climate of the West-Indies*, 2nd ed., enl. (London: T. Cadell, 1789) pp. 254, 317, 343, 348-49; Pringle, *Observations on the Diseases*, pp. 20, 88-91; Tissot, *Advice to the People*, pp. 33-34, 173-74; Wilson, *Rational Advice to the Military*, p. 42.

the blood Stopt, yet the scouring continued, probably from being so late in the Season, & the best medecine was warm cloathing,

288:

<sup>a</sup>he was said to have almost starved himself by a poor dyet three weeks befor. I recommend a good dyet, warm clothing, & good Wine with cheerfull company as the best preservative.

<sup>b</sup>there was but one Dysenterick in Windsor Camp 1740, viz: Hall of Capt. Gilbert's. yet all sorts of summer fruits were eaten in great plenty, but we had little or no fatigue, nor night grand Guards. the Season dry & warm, plenty of Straw for the mens tents. the Regmt was remarkably healthie; some slight feverish complaints, Pleuretick or Rheumaticke, sore throats. only one man dyed during that Campn. viz: Marriot of the Kings, of the dry belly ach, & thought it proceeded from eating too freely of Salt Bacon not well boyled; & swallowing many cherry Stones of late.<sup>694</sup> in Campn 1745 Sepr 29th there was neither flux nor Ague in the Regmt. tho we had plenty of fruite; there was no hard Duty.

[*margin:* a Lady, subject to hysterick cholicks, but is free from complaints of this kind during the Summer Season & eats freely of fruite, yet Green Tea occasions cholicky complaints, but not so with Bohea.]

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<sup>694</sup> Dry belly-ache was often treated by enemas, warm baths, and balsam of Peru. Sir George Baker, in an essay published in 1766, asserted that a variant of the disease, Devonshire Colic, was caused by lead poisoning, and Dr. John Hunter drew the same conclusion about dry belly-ache in an article published in *Medical Transactions* in 1775. The disease was a major problem for the troops in Jamaica, because the rum was distilled in lead containers, and Hunter pointed out that connection, as well, based on his experience there. John Quier, however, argued that dry belly ache in Jamaica was not caused by lead or acid of fruit, but by corrupted bile, and often followed intermitting fevers, when bilious matter in intestines had not been removed. Note also entry for colic in app. B-1. Hunter, *Observations on the Diseases in Jamaica*, pp. 263-66; Quier et al., *Letters and Essays on The Small-Pox and Inoculation, The Measles, The Dry Belly-Ache, The Yellow, and Remitting, and Intermittent Fevers of the West Indies. To Which are Added, Thoughts on the Hydrocephalus Internus, and Observations on Hyatides in the Heads of Cattle* (London: J. Murray, 1778), pp. 151-61; Theobald, *Every Man His Own Physician*, p. 14.

[the two following references are in darker ink]

This is the most universal Camp disease: it appeared in Wm the Conqueror's Army, with which he was himself seized as he marched towards London after the Battle of Hastings[;] vid Carte's Genll. hist: of Engld Vol.1. lib:5 p.391. fol.<sup>695</sup>

The English army in Ireland commanded by Marshall Schomberg, were encamped near Dundalk, which being <a> marshy, unwholesome place, half his troops soon died of fluxes &c. Parker's memoirs of the military transactions in Ireland, &c: p.16.<sup>696</sup>

289 [continuing on from p. 288]:

viz: flannel westcoat nixt the skin & socks on the feet. Diascord was given in burnt brandy, the Gin being not so good as in Germany, & the German Gin seemed more effectuale.

*quaecumque herba potens ad opem, radixque medendi.*

*utilis in toto nascitur orbe, mea est.*

Ov: Ep: 5. V:47.<sup>697</sup>

such Regmts as came lately from England were more subject to it, than those who stood the Campn last year<sup>a</sup>. We had many private receipts as infallible, but I would rather trust good nursing than family medecines, nor do I think this disorder so dangerous as is commonly

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<sup>695</sup> Dysentery delayed William's army at Dover for eight days, and soon afterwards he himself contracted it and was forced to stop on the road to London: Thomas Carte, *A General History of England* (London: printed for the author, 1747), I, bk. v, p. 391.

<sup>696</sup> Buchanan refers to the epidemic that struck an allied force as it prepared to enter winter quarters in 1689; according to Parker, who served in that army, three-quarters of the English recruits died (Parker does not claim that one-half of the entire forced died.) Robert Parker, *Memoirs of the Most Remarkable Military Transactions from the Year 1683 to 1718. Containing a Very Particular Account of the Several Battles, Sieges, &c. in Ireland and Flanders during the Reigns of K. William and Q. Anne* (Dublin: Geo. and Alex. Ewing, 1746), pp. 17-18.

<sup>697</sup> "Whatever herb potent for aid, whatever root that is used for healing grows in all the world, is mine"; Ovid Her. [note: not Epistles] 5.147-48; *Heroides and Amores* (trans. Showerman), p. 69).

reported; people are alarmed at the very name of blood, & when they begin to faint & weake, which is the consequence of all fluxes, they impute <it> to the quantity of blood they have lost, tho it may be, does not amount to a Spoonfull or two. Nor does blood always appear at first, being rather the consequence of violent straining; as violent blowing the nose brings first some drops of blood & then a bleeding.<sup>698</sup> it generally appears first amongst the foot; they have harder Duty than the horse & not so well clothed.

[*margin:* The men have their own particular method of cure.] Many men attempt curing themselves, by eating hard boyled eggs, old cheese toasted, boyled milk thickened with eggs, abstaining from liquids of all kinds, &c.<sup>699</sup> but soon grow sicke at Stomach, complaining of weight & loade, retching to vomite, but bring up nothing. & I have often been obliged to give two or more vomits in order to remove these complaints. I have used Ipecacoan: gr.vi. in a Glass of wine every fourth hour with good success. it occasioned frequent retchings but seldom vomited. In England the inner pyth of Walnuts viz

290:

<sup>a</sup>Chomley's Regt.<sup>700</sup> had upwards of thirty men ill, about the beginning of Septr.

291 [continuing on from p. 289]:

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<sup>698</sup> For nosebleed, Theobald, citing Sydenham and Boyle, recommended applying to the neck a linen cloth dipped in cold water containing sal prunella (n. 167; app. C-1); bleeding at foot in obstinate cases; internally, nutmeg size of an electuary composed of ½ oz each of seeds of white henbane and white poppies (app. C-1), 3 oz cons. of red roses (app. C-1, entry for roses), mixed with syrup of diacodion (app. C-1). Nosebleeds were often treated with styptics. Another remedy endorsed by Sydenham was the powerful coagulant *aqua vitriolica caerulea* (blue vitriolic water), which was prepared from blue vitriol, oil of vitriol (app. C-1), and alum (app. C-1). Brookes, *General Dispensatory*, pp. 157-58; Theobald, *Every Man His Own Physician*, p. 5.

<sup>699</sup> These remedies were all aimed at curbing looseness.

<sup>700</sup> 48th F.



that which divides the Kernel into four parts, is esteemed as infallible in this diorder [*sic*], if taken in powder or steep'd in Brandy & taken by way of Dram. Mr. Douglas, Surgn to the Welch-Fuziliers,<sup>701</sup> gave it to some of his men, without any more effect than a Dram of plaine Brandy. to the taste it's gently astringent<sup>a</sup>.<sup>702</sup>

[*margin:* Bloody flux in Campn 1745.] This Desease appeared in Campn. 1745, about the middle of May, from catching cold during the preceeding wet weather, & fatigue at the battle of Foutenoye. it was not universal, being confined to such troops only, as had most fatigue. alarms were so frequent amongst our out parties, that there was scarce time to pitch tents, or untye cloaks, all lay on the cold ground exposed to the open air, & tho the days were warm the nights were cold. they were not very obstinate; the dry weather afterwards favoured their cure.<sup>703</sup> the month of June was more like winter than Summer & many relapsed, the weather was so wet & cold that medecines could not be given in Camp. all Dysentericks were sent to the Hospital, & if they returned to camp befor their health was well established, they were sure to relapse & be useless that Season. Now fruite is not blamed, there being at this Season no such thing; yet irregularity must be charged to the poor Soldier

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<sup>701</sup> James Douglas was commissioned surgeon to the Fusiliers (23rd Foot) 19 April 1742 and held the post until 19 June 1752. In August 1750 he received his M.D. from Aberdeen (Mariscal.); according to Anderson, he was "Present himself and examined and came off with great applause." He may have been the James Douglas MCS who as of 1783 was practicing at Bedford Square. *Medical Register for 1783*, p. 19; Anderson, *Fasti Academiae Mariscallanae Aberdonensis*, p. 116; Johnston's *Roll*, pp. 11 (#195), 13 (#238 [note: Johnston incorrectly identifies him with another James Douglas]).

<sup>702</sup> Astringents were commonly used to treat dysentery and looseness; cf. n. 267. On medicinal applications of the walnut, see app. C-1.

<sup>703</sup> Many writers on military medicine noted a link between fatigue and disease. Blane wrote, "Nothing tends more to shorten life than excessive bodily labour and watching." Buchan, Hooper, and many others linked dysentery to chilly weather or exposure to night air, because this blocked perspiration. It was also common, however, to blame the spread of dysentery to uncleanliness. Blane, *Observations on the Diseases of Seamen*, p. 346; Buchan, *Domestic Medicine*, pp. 263-64; Kopperman, "The British Army in North America and the West Indies, 1755-1783," p. [?]; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 276-77.

& gin is blamed; yet I have always observed the drunken Soldier the most healthie, but when seized with Sickness, often attended with greatest danger. the weather was dry & warm next Sepr. & we had no such disorder, tho we had fruite in great plenty but no

292: <sup>a</sup>the yolke of an egg beaten with a lump of fine Sugar, adding a Glas brandy is recommended as an infallible remedy. I often advise it to our men on their recovery, as a nourishing cordial, taken in the morning befor we march.<sup>704</sup>

293 [continuing from p. 291]:

great fatigue from Camp: Duty. this desease has never been attended with that dangerous fever as in the hospital in Germany.<sup>705</sup> I always imagined that fever proceeded chiefly from the bad air & stinking vapour of that nasty place. here is the same Disorder tho not so frequent, a neat clean hospital, well aired, & not much crowded.<sup>706</sup> which was just the

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<sup>704</sup> On the role of the egg in medicine, see the entry in app. C-1.

<sup>705</sup> Buchanan appears to refer to the great mortality suffered by patients in the hospital facilities in Germany, especially at Feckenheim, in 1743. His review of the weather and of the generally good health of the army during 1745 is quite similar to Pringle's. According to Pringle, the dysentery outbreak of 1745 was mild and "The deaths from the beginning to the end of the campaign, exclusive of those who were killed in battle, or died of their wounds, did not exceed 200." At Fontenoy, the British lost 48 officers killed, 153 wounded, and 16 missing; men lost, 1442 killed, 1926 wounded, and 294 missing (these totals, based on the breakdown by regiment, total 3879, rather than the 4074 casualties noted on the same return, which is printed in Townshend; the Hanoverians lost 1742, the Dutch, 1554.). The Blues lost 5 officers wounded (Beake, Miget, Lloyd, and 2 quartermasters), plus 10 men killed and 39 wounded. Pringle, *Observations on the Diseases*, pp. 21-22, 35-39; Townshend, *Military Life of Field-Marshal Townshend*, pp. 76-78.

<sup>706</sup> Hygiene was a major consideration in the treatment of dysenterics. Dancer reported that in common army practice the disease was combated with pure air, quickly removing infectious feces, and keeping the patient as clean as possible. Nevertheless, though he asserted that the treatment of dysentery had recently improved, he thought that it might still be the *opprobrium medicorum*. Part of the problem, he believed, lay in a misunderstanding of the cause of the disease. Since dysentery tended to follow on intermittents and to come in the same season, he noted, many writers had inferred that the two diseases had the same cause

reverse in Germany & that in a violent hot Summer. Some Dysentericks had hard swelled bellies, & were more common with the foot than horse; were difficult of cure; Saponaceous & mercurial medecines were prescribed, poultices, &c: issues cut in the thighs,<sup>707</sup> few recovered, many dyeing Dropsical. this was not know<n> amongst our men <Troopers [darker ink]>.

[*margins*: Dysentericks dissected.] Such Dysenterics as were desected, their intestines from the Colon were mortified & remarkably so near the Anus; the bladder ready to mortifie & so tender that it was easely tore to pieces, tho gently handled. the Stomach in tollerable good order. the body had a strong putride smell, & the Dissector often imagined himself indisposed nixt day, being sicke at Stomach & grumbling pains in his bowells; fearing infection took a Vomite & Dose Rhubarb.

[*margin*: Camp fever 1743.] a Slowe fever appeared about the end of Augst in Campn 1743. attended with violent headach, watchfulnes, faintness & universal weakness.

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and had postulated that it was putrescent bile, though this was manifestly untrue. Rather, he maintained, it was more likely that the fever made patients subject to a new infection. *A Brief History of the Recent Expedition*, pp. 58-59.

<sup>707</sup> Issues were, in Bell's words, "small artificial ulcers which we form in different parts of the body, for the purpose of procuring a discharge of purulent matter." He noted that it had earlier been thought that they were effective because they served as drains of noxious humors, but he believed that they worked by discharging the serous part of the blood. Positioning of issues had also changed. Previously it had been common practice to place them next to the affected area, but according to Bell his contemporaries believed that their value was not linked to where they are placed, and that the most commonly used site was just below the knee, because there was little tissue to interfere. Issues were formed by removing the skin with a caustic or scalpel, then applying a blister the size of the intended sore, and daily dressing the sore with an ointment containing cantharides. If an issue was opened by incision, Bell cautioned, it needed to be kept open by the insertion of a pea or similar device, covered with a digestive ointment like basilicon (n. 572) or *lint. Arcaei* (n. 679). If a deep discharge were desired, as for pains in the breast, he recommended a that seton – a cord of cotton or silk, inserted with a needle – be used. James defended the use of issues, but noted that Helmont and others believed that they were virtually worthless and simply tormented the patient. Bell, *System of Surgery*, III, 194-97; James, *A Medicinal Dictionary*, under "fontanella."

pulse so low that bleeding did not seem proper,<sup>708</sup> a constant drought.

[*margin: Method of Cure.*] all drunk freely of Rhenish wine & water & found great benefite from the Op: pill: when given in large quantities. viz: *ad gr.v. op:pur:*<sup>709</sup> blisters behind the ears were of great service. Decoct: Serpentar:<sup>710</sup> the chief medecine & Camphorated boluses.<sup>711</sup> those who recovered

294 [*facing p. 293; blank*]

295 [*continuing from p. 293*]

continued faint and weak many days, greatly low-Spirited, & despairing of doing well, & fearing being left behind. which is always the case with Soldiers & greatly prevents recovery, their Mind being never easie<sup>a</sup>. I ordered Assafoetid:<sup>712</sup> scr.i. pr diem with a Glas strong wine, & proved a good medecine, & so was the Barke infused with wine.<sup>713</sup> this was

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<sup>708</sup> Slow (or nervous) fever was in fact usually identified with a weak pulse in the early stages and a quick or intermitting one in the next. Consequently, Buchan and many other writers cautioned against bleeding. Pringle refers to the disease that Buchanan reports here as "bilious, or autumnal-remitting fever" and advocates massive bleeding. See app. B-1, under "remittent fever."

<sup>709</sup> "Up to ½ gr. of purified opium." The course that Buchanan is outlining is generally stimulant in nature, and it is possible that the opium, which was widely thought to be a stimulant as well as a sedative (app. C-1), was likewise given to raise the patient's system.

<sup>710</sup> App. C-1, "serpentaria."

<sup>711</sup> The "camphorated bolus" mentioned by Buchanan was probably similar or identical to the "camphire bolus" used in army hospitals of the period. This was composed of camphor and gum Arabic in syrup of orange peels; note entries on these ingredients in app. C-1. It was recommended for fevers attended by delirium or twitching tendons. *Practice of the British and French Hospitals*, p. 38.

<sup>712</sup> On asafetida, see app. C-1.

<sup>713</sup> Again, the combination of bark and wine is consistent with a course that is tonic, cordial, or stimulant in nature. Buchan also recommended the use of cordials, especially good wine,

very common & greatly resembling the Lingring fever in Par: 10th. Rushworth of Sir James's dyed Sept. 22d. in the hospital: all sorts of medecines were tried but to no purpose, nor had they any visible effect. his looks were always naturale but his voice sunke & broke. would eat & drink such things as were offered but never called for any. Munke of Capt. Shipman's dyed the Sixth day, would neither eat nor drink, nor taste medecines, saying he was certaine he must dye, & did dye in his tent. our men had taken a dislike to the hospital, would rather suffer the injuries of the weather in the field, or think themselves happy if they got into a Boners out-house & lye on straw. Many nurses & children dyed & it seemed to be more mortal with them than with the men.

[*margin*: Bleeding is prejudicial in some fevers<sup>x</sup>.] About the midle of Sepr. I had twelve men ill of this fever & all lay in houses adjoining our camp, one insisted on being blooded, which I did in order to please him; he was more faint & weake than formerly, & longer a recovering than any of his Comrades. the Officers enquiring after their Sicke men & hearing they ["y" *is in heavier ink, apparently correcting "the"*] had fevers, naturally asked if they had been blooded, & upon answering in the negative, they seemed angry as if I had neglected them[.]

*vel quia nil rectum, nisi quod placuit sibi ducunt*<sup>a</sup>.

Hor: Ep:1. lb:2. V:83.<sup>714</sup>

they imagined bleeding was necessary in all fevers. this <was> often attended

296:

[*this note is vertically crossed*]

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which he regarded as the only medicine necessary in treating the disease. Like Buchanan, he also emphasized the need to keep up the patient's spirits. Buchan, Domestic Medicine, pp. 142, 144.

<sup>714</sup> "either because they think nothing can be right, save what has pleased themselves..."; Hor. Ep. 2.1.83; *Horace* (trans. Fairclough), p. 403.

<sup>a</sup>-when delirious in fevers talk of their horses, arms, accoutrements, &c: & Rollin in vol: 10th Roman: Hist: observes of Marius that he abandoned himself to excesses of the table, & passed his nights in drinking with his friends. by this regimen he soon inflamed his blood. he was taken with a fever, which presently seized his head, & in his delirium he raved on nothing but the war with Mithridates. he imagined that he had the command of it, & not when he spoke, but made gestures & assumed the attitudes of a man that fights, or of a General giving orders. so violent & incurable was the passion & so deeply had it taken over in his heart, with which ambition & jealousy uniting, had inspired him for that command.<sup>715</sup> and our men after the battle of Fontenoy raved of entrenchments, batteries, Dispositions &c [the following quotation and citation are in heavier ink]

<sup>x</sup>*observavimus in Xenodochio; omnes sere ab acutis evassisse, quorum Sanguini venae Sectionae extracto, crusta alba atque chylosa super crescebat; contra mortuos, quorum Sanguis valde rutilans erat; sive cum superficie nimium rubicunda.* Bagl. Prax: Med: lib:1. C.13.<sup>716</sup>

[ink slightly darker than in previous]

Tissot on Bilious fevers, does not approve of bleeding[.] p.180.<sup>717</sup>

[diagonally stroked; ink comparable to "a" at top of page]

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<sup>715</sup> Rollin, *Roman History*, X, 46; "abandon[ed] himself ... that command" is quoted.

<sup>716</sup> "[We observed in the Xenodochium] That in acute Diseases, most of those whose Blood drawn by Venesection had a white chylous Crust upon it, recover'd; and those dy'd, whose Blood was very rutilant, or had too red a Surface": Baglivi, *The Practice of Physick*, p. 166; *De praxi medica*, I, cap. xiii, p. 120. There is a possibility that Buchanan took this passage not directly from Baglivi, but rather from Johnstone, who also quotes it (*Historical Dissertation*, p. 56). In Baglivi, l.1 reads, "*ab acutis morbus evassisse*," but Johnstone, like Buchanan, omits "*morbus*."

<sup>717</sup> In his *Essay on Bilious Fevers*, Tissot asserts (pp. 179-85) that both his reason and logic had led him to oppose bleeding in bilious cases, and that his recent experiences had confirmed this, as he had seen patients worsen or die after being bled by other practitioners or (at their insistence) by himself.

<sup>a</sup>----- *quid faciam vis?*

*denique non omnes eadem mirantur amantque.*

Hor: Ep:ii: lib:ii V:57.<sup>718</sup>

297 [continuing on from p. 295]:

with inflammation of the eyes. Lieut. Pawlet<sup>719</sup> dyed the 23d. day at Worms. was treated in the same manner as Rushworth, nor had medecines any better effect. was remarkably healthie & hardy, never made use of a bedstead, always laying on Straw on the ground, & says he got cold. Qr. Mr. Cumbers<sup>720</sup> dyed in the hospital after a month's illness exactly in the same <manner [darker ink]> as the Lieut & <it> was remarkable that he & Qr. Mr. Barbar always lay on Straw upon <the ground>, & these three were the <only> Officers who dyed in this Campn. this fever continued to the end of the Campn. <& was always a constant attendant on the Army.[darker ink]> all complained of catching cold. as this was our first campn the men might be more easely affected. 'it is observed in Authors, that the Roman Army which made war in so many climates, perish seldom much with sickness, whereas it often happens now a days, that armies without engaging, lie dead on the field. Roll: in his preface to the Rom: Hist:<sup>721</sup> but their Youth were more accustomed to labour & hardships, & we were just come from good quarters & strangers to the Camp life<sup>a</sup>.

[diagonally stroked]

*'jamprimum juvenus; simul ac belli patiens erat, in castris per laborem usu*

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<sup>718</sup> "What would you have me do? After all, men have not all the same tastes and likes"; Hor. Ep. 2.2.57-58; *Horace* (trans. Fairclough), p. 429.

<sup>719</sup> John Pawlet had entered the Blues as a cornet 2 Oct. 1731 and had been promoted to lieut., 10 Dec. 1739. WO 64/10, f. 8; *AL 1740*, p. 6.

<sup>720</sup> Untraceable.

<sup>721</sup> Rollin, *Roman History*, I, xxiii-xxiv; "observed ... field" is quoted.

*militiam discebat; magis in decoris armis et militaribus equis, quam in scortis atque conviviis, lubidinem habebat: igitur talibus viris non labor insolitus, non locus ullus asper aut arduus erat, non armatus hostis formidulosus; virtus omnia domuerat. sed gloriae maximum certamen inter ipsos erat. Quisque hostem ferire, murumque ascendere, conspici dum tale facinus faceret, properabat, eas divitias, eam bonam famam, magnamque nobilitatem putabant.* Sall: in bell: Catilini.<sup>722</sup>

*Olim haec experientia juventutio, haec voluptas erat, his artibus futuri. Duces imbuebantur, certare cum*

298:

[top of page; darker ink]

many thought this was a new distemper, the like being never known, but men read in Biograph. Britann. Art. Spelman. he was seized with the camp-desease at Brazen Nose College, which put an end to his life July 25th 1644.<sup>723</sup>

[stroked through]

<sup>a</sup>at the Siege of Agrigentum they were greatly distressed both by famine, & deseases which are always the effect of it. & at the Seige of Lilybaeum they were forced to subsist

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<sup>722</sup> Of the early Romans: "To begin with, as soon as the young men could endure the hardships of war, they were taught a soldier's duties in camp under a vigorous discipline, and they took more pleasure in handsome arms and war horses than in harlots and revelry. To such men consequently no labour was unfamiliar, no region too rough or too steep, no armed foeman was terrible; valour was all in all. Nay, their hardest struggle for glory was with one another; each man strove to be first to strike down the foe, to scale a wall, to be seen of all while doing such a deed. This they considered riches, this fair fame and high nobility"; Sall. Cat. 7.4-6; *Sallust* (trans. Rolfe, p. 15).

<sup>723</sup> *Biog. Brit.*, VI, pt. i, p. 3793; "he was seized ... 1644" is quoted. The entry on Sir John Spelman does not provide any other details on the nature or course of the disease. Spelman actually died in 1643.



chiefly on horse flesh, & 10,000 dyed in a short time. Roll: Rom: hist.<sup>724</sup> & Pompey ruined his army by continuing the Siege of Numantia during the winter, the rigor of the Season, & the air & water of the country, to which those Soldiers were not accustomed, occasioned many diseases, & particularly very painfull cholicks, which made a great havocke in the Army. Roll: Rom: hist: vol. 8th.<sup>725</sup> see Reflections on the Causes of the Rise & fall of the Roman Empire, by M: de Secondat. Lond. 1752. 8<sup>vo</sup>: Chap. 2d. of the Science of war as practised by the Romans.<sup>726</sup>

[interleaved between pp. 297 and 298 (glued to p. 297)]

N.B: a fever of this nature appeared at Stone in Staffordshire 1752. & was brought there by the Welch Fuzileers in marching from N: to S: some of their Sick were left here & continued in a lingring [*word obliterated*] condition for sometime; the poor family where they were quartered soon sickened & were a long time afflicted with a slowe-lingring fever, their nixt neighbour catched it, & it soon becam general amongst the poor people nor did the better sort [*crossed out: of people*] escape it, nor was it confined to the town only, for it soon got into the Neighbouring Farmhouses, & at the time is very frequent & mortal -- vid

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<sup>724</sup> Rollin, *Roman History*, IV, 39, 103; "were greatly ... effect of it" and "to subsist ... short time" are quoted.

<sup>725</sup> Ibid., VIII, 253-54; "during the ... the army" is quoted.

<sup>726</sup> Charles Louis de Secondat, baron de Montesquieu, *Reflections on the Causes of the Rise and Fall of the Roman Empire*, 2nd ed., enl. (London: W. Innys [etc.], 1752). In vol. I, ch. ii, Montesquieu asserts (p. 14) that Roman soldiers benefited from labor that was heavy but consistent, while the modern soldier faced work that was taxing (e.g., "throwing up of the ground"), but only occasional: "'Tis observ'd in this age, that the immoderate labour which soldiers are obliged to undergo, destroys our armies." He further observes (p. 16), "We don't find by historians, that the Roman armies, which wag'd war in so great a variety of climates, fell often a prey to diseases; whereas in the present age we daily see armies, without once engaging, perish and melt away, if I may use the expression, in a single campaign." Similarly, Bruce claims that illness was not common among the Romans because their soldiers labored and carried heavy packs: *Inquiry Concerning the Cause of the Pestilence*, p. 91.

Regimental Practice M.S: p. 297. (March 29th 1753)

[*crossed out*: it Returned in April 1753]

Nov. 1755. it appeared at Stafford among the Poor-people & many dyed without help. last Summer it was in the neighbouring villages, & it was remarkable that four people dyed in one house. Dr. James's powder<sup>727</sup> has been tryed sometimes in full Doses, & sometimes ½. promotes Stools & slight reachings, but seldom Sudorific. unless from Regm. its much in Eccleshall workhouse

April 1756. it continues at Stafford, chiefly confined to poor people & Prisoners, workhouses. the Jailors wife dyed; James's powder was the chief medecine, had no visible effect May 6th. the jaile's Situation low & damp. The justices at the last meeting ordered the feverish Prisoners to be removed from the Dungeon to an upper room to have a bed & firing &c. winter wet & open[.] One woman recovered without any medecine; small whey or Chamomel Tea was her only drink, & a blister was applied when very low. viz: Mrs. Hordine.

April 1758. many are sick in Jaile, the Justices ordered three hundered wt. of Coals pr. week, & double quantity of Straw; the judge recommended Ventilators, & the Sheriff to have an open Casement in each window &c.

[*interleaved between pp. 297 and 298; loose; apparently a later draft of preceding*]

N:B: a fever of this nature appeared at Stone in Staffordshire Feby 1752. & was brought there by the Welch Fuziliers in marching from N: to S: some of their sicke were left [*crossed*: here] and continued in a lingring condition [*crossed*: for] sometime; the poor family where they were quartered soon sickened & were a long while afflicted with a slowe lingring fever, their nixt neighbour catched it, & it soon became general among the poor people, & many dyed without any help. nor was it confined to the town only, for it soon got

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<sup>727</sup> On James's Powder, app. C-1.

into the neighbouring farm houses, nor did the better sort escape it, & is at this time is very frequent & mortal.

Novr. 1755. it appeared at Stafford among the poor people & many dyed; last Summer it was in the neighbouring villages, & it was remarkable that four people died in one house. it is much in Eccleshall workhouse.

April 1756. it continued at Stafford but chiefly confined to poor people & Prisoners, the Jailors wife died, & some Prisoners. the Jail's Situation lowe & damp, winter wet & cold, so many Prisoners sicke that the Apory<sup>728</sup> was afraid to attend them. The Justices at their last meeting were so humane to the unhappy Prisoners as to order the sicke in the Dungeon to be removed to an upper room to be allowed a Bed & firing for which the County made an allowance of I sh. pr. weeke, & many recovered without much medecine. <the dirty Straw to be burnt, & a greater quantity of fresh allowed weekly.> a poor woman took only small whey & Chamomile tea for some weeks, with the help of a Blister did well.

Aprl 1758 Many Prisoners were sicke & could not take their tryale at the Spring Ass[izes] (*part of word torn off*) & the Judges were cautious, for fear of infection. <3 poor folks dyed in one house in the forehead.> The Justices at last Sessions granted further indulges to the Prisoners by allowing them three hundered weight of Coals weekly from the first of Octr. to the 1st. of May, & double quantity of Straw. Ventilators have been recommended <& put up>, or having an open Casement in each roome. our Summer Assizes are nixt week, & there is not one feverish Prisoner, nor do I know of any in town. this fever has raged greatly at Congleton some years, appeared at first among the working folks at the Silk Mill; some imagined the infection was brought home with the Silk. it was very mortal, Apothecaries, Surgeons, Nurses &c: dyed. & some of the principal inhabitants. some

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<sup>728</sup> During the 18<sup>th</sup> century, apothecaries increasingly practiced medicine; many continued to prepare and dispense drugs as well, but this role was eventually assumed by druggists and chemists. A number of historians have examined the shifting practice of apothecaries; note Burnby, *A Study of the English Apothecary*, ch. 1.

families left the place for fear of infection. it was common among the Potters at Henley Green, Boslem & Stoke, especially with the poorer sort, nor did the better sort escape it. Mr. Keeline of Henley Green died July 20th, after two weeks illness.

Spring 1758. it appeared at Leeke amongst the workers of Moyhair & Silk & was confined to them only, was thought to be imported with those commodities. it encreased towards Summer, in Augst. Mr. Jackson one of the chief Manufacturers lost two sons in one week, & had twenty seven workmen ill of this fever; & another Workman had Sixteen of his Servants down of it at the same time. they generally dye about the Eleventh day. have <many> red, black & blew Spots on their skins; such as come to suppuration have a chance to recover.

Winter 1759. it was much at Eccleshall[.] Young Mr. Garrison laboured under it upwards of Six weeks & recovered to the surprize of all his neighbours. it was thought infectious as others of the family were seized with it as also some of his Nurses; it run through the Apothecaries family[.]

Summer 1760 it appeared in Mrs. Dickinson's boarding School at Stafford. few of the children escaped it. it was said to be occasioned from eating fruite, of which there is great plenty, especially pears. sickness at Stomach their first complaint with reaching to vomite & soon after loose stools, frothy & foetid. Emeticks & cathartics were always used & at first were successfull & often put an end to all complaints. some laboured under it many days, were treated with mild acescent drinks,<sup>729</sup> Rhubarb in small Doses, gentle cordials[.]

about the latter end of Octr 1761 it was very common at Stafford & only among the poor people & such as live near the River & damp places, viz: the broad eye, & Mill-Lane, the Green &c: whole families are down, three in a bed, are miserably poor, having scarcely the common necessaries of life, no fire. Emeticks with Camamile tea [& (*edge torn*)] vinegar

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<sup>729</sup> Putrid diseases were routinely treated with acidic remedies.

they are the universal medecines. infusions of snakeroot, to a poor <woman> it was given by way of Clyster with immedeate good effect.<sup>730</sup> many die. last Summer was remarkably dry & warm & so was the harvest, but suddenly changed to wet & cold. its common in the workers. at Newport, where many die. at Stafford the better sort of people generously collected in order to support the poor with good nursing wch proved the best medecine. towards Xmas it decreased as the weather became dry & frosty. Dr. James's powder was only given to one poor woman & she died.

299 [continuing from p. 297]:

[continued stroke]

*feris, cursu: cum audacibus, robore cum calidis, astu: nec mediocre pacis decus habebatur submota campis irruptio ferarum, et obsidione quadam liberatus agrestium labor.* Plin.<sup>731</sup>

Many men relapsed on their return to camp, & being put too soon on Duty; when I order them to Camp I give a certificate excusing a week's Duty, especially from night Guards or out-parties.

[diagonally stroked]

*'quod si ex vehementi labore gracilis evadat, de eo remittat et quietem agat. hic ubi convaluerit; ad ventum ne celeriter currat; neque in equum, neque in currum conscendat. vitet autem clamorem et excandescantiam. periculum est ne redeat*

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<sup>730</sup> The snakeroot (*serpentaria*, app. C-1) was probably intended as a stimulant.

<sup>731</sup> "In the days of old this was the training and the delight of youth, these were the skills which formed the leaders of the future – to pit speed against an animal's swift-footedness, and strength and dexterity against its courage and; while in times of peace it brought no small honour to sweep marauding beasts from the plains and raise the siege they laid to the farmers and their work." Pliny, Paneg. 81.2, Pliny, *Pliny: Letters and Panegyricus*, trans. Betty Radice, Loeb Classics (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd., 1969), II, 513.

*morbus. verum haec omnia vitanda sunt=[...] cum enim quis curatus aut sanis factus fuerit, nisi sui curam habuerit; plerisque revertens morbus. interitus causam attulit=[...] si quid enim laborarit, aut in currum aut in equum ascenderit, aut humeros oneri suppositos fatigarit, periculum erit ne morbus rursus revertatur. quod si contingat, periculum est ne corrumpatur=[...] morbus enim reversionem faciens magis quam ab initio urget.[...] ad summum, quietem agens, accommodatis cibis vescatur.* Hip: de intern: affect:<sup>732</sup>

[margin: Rheumatism.] By the latter end of Sept<sup>r</sup>\* [asterisk in heavy ink] 1743.

Rheumatick Stiches with pain <in> bones were common, the limbs benumbed that they could scarcely move them in the morning, from catching cold in the night time. tho the days were dry & pleasant, yet the nights were cold & frosty air, winds often easterly. & used to have ten or twelve complaining every morning, the pulse quick & full, required bleeding. Bol: ad Rheumatismum Nostr. with Op:<sup>733</sup> was the chief medecine. it was needless to attempt

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<sup>732</sup> "If, owing to violent exertion, [the patient] becomes emaciated, let him give it up, relax, and rest. When he has recovered, he should not run speedily into the wind, nor mount a horse or a chariot, and he should avoid shouting and excitement; for there is a danger that the disease will return.... For if you do not take care of him after he has been restored to health, unless he takes care of himself, the disease often returns, causing death.... If he exerts himself by riding in a chariot or on a horse, or exhausts himself by placing a burden on his shoulders, he faces a danger that the disease will come back, and if this happens there is a danger that he will be destroyed [although Buchanan indicates an elision here, this sentence and the next are consecutive]. The disease, on returning, presses harder than it did at the beginning.... Above all, keep him quiet, and give him suitable food"; Int., 1.8; *Hippocrates* (trans. Potter), VI, 77, 79, 99, and *Oeuvres complètes d'Hippocrate* (trans. Littré), VII, 171, 173, 187. This passage, as presented in Foës (*Magni Hippocratis Medicorum*, pp. 532, 535), includes several phrases that differ from Buchanan: "*periculum enim est ne redeat*" (l.4); "*curatus et sanus*" (ll.5-6); "*ne rursus morbus revertatur*" (ll. 10-11).

<sup>733</sup> On *bolus ad rheumatismum nostrum*, see n. 257. Opium was presumably added to relieve the pain associated with rheumatism. According to Monro, rheumatism was one of most common disorders to be found in military hospitals, especially in wet, cold weather. Pains in individual joints were uncommon his military experience; rather, they were general. Van Sweitan asserted that rheumatism was mainly caused by exposing an overheated body to cold. When pain started to travel, he advised, it was a bad sign, since it meant that the disease had gone inward. He warned that, although rheumatism was seldom mortal, if

sweating in tents at this Season. were sent to the neighbouring villages, had warm roomes with Stoves, were sweated with Success; the knees were often swelled

300:

\*vid: Hoffman: Op: Med: Tom:3. p:63. de temporibus Anni Insalubribus.<sup>734</sup> & p.70 de Siderum in Corpora humana, influxu Medico.<sup>735</sup>

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ignored it might cause joints to stiffen permanently (ankylosis). Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 55-56; van Sweitan, *Diseases incident to Armies*, pp. 39-40.

<sup>734</sup> "De temporibus anni insalubribus" ("Of unhealthful seasons of the year"): Hoffmann, *Opera omnia*, V, sect. i, cap. v, pp. 63-69. Hoffmann asserts that bad air causes illness; that the west wind is most healthful; and that dry air is usually most salubrious. He notes that Egypt is generally healthful, but that the Nile floods bring pestilence. Heavy rain and hot, humid weather bring swarms of insects, which herald epidemics. Sulfurous air is dangerous, for it is corrosive and by its nature causes many diseases. Sudden changes in weather cause illness, as do inconsistencies in the composition of the air. Wine and certain medicinals are good corroborants, but venesection is not useful. For authority on the relationship between weather and disease, Hoffmann relies primarily on Hippocrates, although in the course of his chapter he likewise quotes or cites other ancient writers, as well as some recent ones (e.g., Ramazzini, Sydenham, Forestus). Throughout, his assertions are quite conventional.

<sup>735</sup> "De siderum in corpora humana influxu medico" ("Of sidereal influence on the human body"): *ibid.*, cap. vi, pp. 70-76. Although this dissertation, which originally was published at Halle in 1706, appears in Hoffmann's collected works, the author was Johann Andreas Usenbenz. Usenbenz does, however, cite Hoffmann as an authority. Hoffmann, as professor of medicine at Halle, guided the dissertation and defense, and as was common practice, he was therefore accorded a share of authorship. In his dissertation, Usenbenz argues that while it is necessary for medical men to reject astrology and superstition, the sun and moon clearly influence human health and body rhythms. His assertion is quite common in 18th-century British medical literature, having Mead as a major advocate, and later Lind. Writers most often noted that the onset or exacerbation of fevers was tied to the full moon, but the stages of other diseases as well were seen as linked, and so were qualities of the air that might promote health or disease. Robert Jackson, *A Treatise on the Fevers of Jamaica: With Some Observations on the Intermitting Fever of America, and an Appendix, containing Some Hints on the Means of Preserving the Health of Soldiers in Hot Climates* (Philadelphia: Robert Campbell, 1795), pp. 60-65; Kirkland, *An Inquiry into the Present State of Medical Surgery*, I, 271-72; William Lempriere, *Practical Observations on the Diseases of the Army in Jamaica, as They Occurred between the Years 1792 and 1797; on the Situation, Climate, and Diseases of that Island; and on the Most Probable Means of Lessening Mortality among*

301 [continuing on from p. 299]:

and stiff; much swelled, red & painfull; fomentations of great Service, rubbing with Ungt. Vol: nost:<sup>736</sup> & covering with flannel.

[the three following are diagonally stroked]

*'huic confert, cum dolor detinet, balneis calidis et fomentis emollire ad quamcunque cruris partem dolor forte decumbuerit, alvumque subducere cumque lavatus dolor fuerit, medicamentum infra purgans exhibere.* Hip: de affect:<sup>737</sup>

*ex hoc morbo multi claudi evadunt.* Ib: de intern: affect:<sup>738</sup>

*quam levissima victus ratione utatur[....] morbus autem difficilis et diuturnus est.* Ib.<sup>739</sup>

Lafters of Cptn Gilberts was thirty days in the hospital for an obstinate Rheumatism, never the better of any medecines unless he sweated; was sweated one and twenty nights successively & recovered, but continued weake sometime. Sap: castiliens: pulveris:<sup>740</sup> is

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*the Troops, and among Europeans in Tropical Climates* (London: T. N. Longman and O. Rees, 1799), I, 155-56; Mead, *The Medical Works*, pp. 123-24, 140-45, 200; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 118-19; Anna Marie Roos, "Luminaries in Medicine: Richard Mead, James Gibbs, and Solar and Lunar Effects on the Human Body in Early Modern England," *BHM*, 74 (2000), pp. 433-58.

<sup>736</sup> cf. n. 489.

<sup>737</sup> "Whenever pain is present, warm baths and fomentations help to soften whichever part of the leg pain happens to settle in, and to evacuate the bowels. And when the pain is washed away, give a medication to purge downwards"; Hip., Aff. c.29; cf. *Hippocrates* (trans. Potter), V, 51, and *Oeuvres complètes d'Hippocrate* (trans. Littré), VI, 241.

<sup>738</sup> "From this disease many become lame"; Hip., Int., c. 51; cf. *Hippocrates* (trans. Potter), VI, 247, and *Oeuvres complètes d'Hippocrate* (trans. Littré), VII, 297.

<sup>739</sup> "[The patient] should observe as light a diet as possible.... But the disease is difficult and prolonged"; Hip., Int., c.51; cf. *Hippocrates* (trans. Potter), VI, 249, 251, and *Oeuvres complètes d'Hippocrate* (trans. Littré), VII, 297, 299. In Foës (*Magni Hippocratis Medicorum*, p. 561), the last line reads, "... *difficilis admodum et diuturnus est.*"

<sup>740</sup> On *sapo Castillion*, see app. C-1, under "saponaceous preparations."



used by some as a favorite medicine in this case; is powdered by toasting before a gentle fire in a paper bag, & given ab dr.fs. ad dr.i. in milk, whey or small beer. Is much commended in the Gravale & jaundice. I have often seen the good effects of a whey dyet in Rheumaticks, but it's impossible to perswade a Soldier to continue it a sufficient time. Opiates were of the greatest service, especially when given in large Doses, ad gr.ii. op: pur: with something warm, a good night's rest was always procured & sweats promoted, & seldom or never observed any bad effects from this free use of Opium, but am convinced it's the most universal medicine for soldiers. it became a universal practice, & the pure Opium is equal to any of it's preparations. should be kept moiste or beat up with Sap. otherwise it grows dry & hard, passing thro the body without any good effect. this became a great favorite with the men, all asking for

302 [facing p. 301; blank]

303 [continuing on from p. 301]:

the little black pill, saying, it <does> them a deale of good & was worth it's weight in gold. None of the Officers had complaints of this kind, but it was common with their Servants, being more exposed to the injuries of the weather. Many men were seized on Duty viz: the grand Guard &c: this continued to the end of the Campn. & the above method seldom failed of Success.

[the following two quotations are vertically crossed]

*Ego quidem in castris longe diversam esse medicinae faciem, ab ea, quae in civitatibus visitur, et exlegem esse censebam, et cum quadam temeritate essent rapienda remedia.* Ramaz: de morb: Artif. Cap:42.<sup>741</sup> *aitque*

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<sup>741</sup> "I used to think that the practice of medicine in camps had peculiar features very different from what one observes in cities, and that it was so abnormal and irregular that one had to snatch at what remedies were to be had and apply them with a certain rashness"; Ramazzini,

*sicuti enim Castrensis vita brevis esse consuevit, ita inibi artem medendi non adeo longam esse debere existimabam, sed expeditam, et secuti occasio est praeceptis, ita experimenta esse periculosa, sicque medicum, etiamsi velit, ob inopinos casus, et frequentem Castrorum mutationem, praestare non se posse opportuna, facientem, neque Aegros ipsos=[...] multosque praeclaros viros scio interiisse, quibus a Medicis militaris Medicinae, et genii castrensiurn ignaris, administrata sunt intempestiva remedia, ut venae Sectiones, et valida purgantia.*<sup>742</sup>

[margin: Leeches applied to the joints.] in obstinate Rheumatism with swelled joints I have known Leeches applied to the part, with such good success that the Patients often desire to have them renewed.<sup>743</sup> in the hospital this form is much used as a Sudorificke, **Rx. Vin: Emet: tinct: Antimon: Spt. C.C. aa: p:e:M: cap: gt. 80. ad 100.**<sup>744</sup> with warm posset drink[.] this Disease is the certaine attendant of a late Campn. when the Evenings grow long, yet the weather may be pleasant, tho cold; & moonshine invite to walk abroad, rather than sit confined to

304 [facing p. 303; blank]

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*De morbis artificum* (trans. Wright), p. 361. Wright renders "et cum" (l. 2) as "**ut cum.**"

<sup>742</sup> "Men spend so short a part of their life in camp that it seemed to me that their medical treatment ought not to demand too much time but be prompt and offhand; that in proportion as the emergency itself is urgent, any experiments must involve risks; that is, in short, a doctor, however willing, could not on account of unforeseen accidents and the constant shifting of a camp, undertake a regular course of treatment, any more than his patient could.... Many distinguished men perished because the doctors, who knew nothing of military medicine or the peculiar character of camp diseases, prescribed for them ill-chosen remedies such as venesection and strong purgatives" *ibid.*, pp. 361, 375. Wright renders "non se" (l. 3) as "*se non.*"

<sup>743</sup> On treatments of rheumatism, see app. C-1.

<sup>744</sup> "Take equal quantities of *vinum emeticum* [app. C-1, under "wine and spirits"], *tinctura antimonii* [app. C-1, under "antimonials"], and *spiritus cornu cervi* [app. C-1, under "cornu cervi"]; mix an electuary; 80 to 100 drops."

305 [continuing from p. 303]:

a small tent: at this time the dews fall heavie, the grass is damp, & the Summer cloaths are yet worn, & by this time our tents are wore thin & tore, raine & damps passing easely thro them<sup>a</sup>.

[margin: Westbaden bath.] in the neighbourhood of our Camp in Germany was a famous warm Bath for Gouty & Rheumatic limbs &c: viz: at Westbaden. The water comes smoaking hot from the Spring with a strong Sulphureous smell, boyling like a Copper, so hot that I durst not keep my finger in it the least moment of time, nor touch it with my toes for fear of scalding. it's said to be hot enough to harden an egg in five minutes, & will codle Apples &c: tastes of a Strong Sea Salt & Sulphur. is drunk to two pots in a morning & purges briskly. is said to be good for all deseases of old age; many Rheumatick & Gouty patients were bathing, cupping &c:<sup>745</sup> Some Officers & Soldiers bathed on account of Stiff joints from Gunshot wounds & received great benefit.

*atque ita semineces partim ferventibus artus*

*mollit aquis*

Ov: Met: lib:i. V:228.<sup>746</sup>

& here I received immedeate relief for a swelled knee which had continued upwards of Six weeks, & threatned a stiff joint, was occasioned by a horse falling with me in the Streets of Mayence. I was much refreshed by bathing. the water seems to be of a stronger body than that of Aix la chapelle, for my body could hardly sink in it. cold water is brought in by pipes

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<sup>745</sup> Cupping to assist local bloodletting was a traditional practice. The cupping glass was wetted and heated before it was applied. Woodall recommended first rubbing the chosen spot with hot water. To treat topical pains, Bell advocated the use of cupping glasses to draw blood from smaller vessels; he also recommended leeches, scarification, or use of the edge of the lancet. Bell, *System of Surgery*, I, 97-99; Woodall, *Surgeon's Mate*, p. 22.

<sup>746</sup> "And some parts of him, still warm with life, he boiled"; Ovid Met. 1.228-29; *Metamorphoses* (trans. Miller), I, 19. This quotation is drawn from Jupiter's account of an attempt by Lycaon to deceive him into eating human flesh. Buchanan may be using the passage ironically.

to make it what heat You please.

[*margin*: Lumbago Rheumatica.] Many had Lumbago Rheumatica[,] could not stand upright[;] were rubed with Lint. vol: covering with flannel; when in hospital, were blistered, or issues cut.<sup>747</sup>

We tooke the field May 19th N:S: 1744. and

306:

*Soles vitandi et frigora tum matutino, tum vespertina, quae si unque a fluminibus, aut spagnis, aut nivibus spirant.* Hip: de vict: rat: lib.2.<sup>748</sup>

[*opposite close of comments on baths at Wiesbaden; darker ink*]

vid: Philippus Weberus, *Therमारum Wisbadensium descriptio*. Oppenheimi 1617. 4<sup>to</sup>.<sup>749</sup>

307 [continuing from p. 305]:

encamped on a wet Soyle amongst ranke corn; the weather cold & wet.

[*penciled line in margin covers this paragraph before quotation*]

[*margin*: Deases (*sic*) in Camp. 1744.] Agues & Quincies, with slight aching pains were frequent. at first taking the field it's common to have many kicks from the horses, being then in great heart & full of play. Slight wounds do not Suppurate so well as in Garrison,

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<sup>747</sup> Lumbago was generally seen as being a form of rheumatism, distinguished only by its locus. Consequently, it was treated the same way (note app. B-1). Brookes, *The General Practice of Physic*, II, 11; Wallis, *Art of Preventing Diseases*, p. 369.

<sup>748</sup> "The sun should be avoided and the cool of morning and evening and whatever breezes come from rivers, pools, and snow." Hip., *Vict.* II, c. 68; cf. *Hippocrates* (trans. Withington), III, 379.

<sup>749</sup> Philipp Weber, *Therमारum Wisbadensium descriptio. Complectens antiquitatem et utilitatem harum therमारum* (Oppenheim: Hieronymi Galleri, 1617). Weber discusses the antiquity of the baths, the quality and mineral component of the waters, the illnesses and infirmities that they relieved, and regimen for bathers. He sees the baths as a virtual panacea.

should be keep'd warmer with flannel &c: On leaving Garrison the men & Servants are apt to get drink over night in taking leave of their Landlords, &c. & we have many accidents. nixt day & much confusion in passing the Gates. attended with many inconveniences, carriages are overturned, broke down, men hurt & horses lamed.

*consternantur Equi: et saltu in contraria facto*

*colla jugo eripiunt, abruptaque lora reliquunt.*

*illic frena jacent, illic temone revulsus*

*axis, in hac radii fractarum parte rotarum:*

*sparsaque sunt late laceri vestigia currus:*

Ov: met: lib:ii. V:314.<sup>750</sup>

*at Phaeton [...]*

*volvitur in praeceps.*

V.388.<sup>751</sup>

When the weather become dry & warm, the ground dry, Complaints were much the same as last Season, but having little or no fatigue, the weather was not so excessive hot, they were neither so frequent nor violent. The men were accustomed to a Campn life, were always supplied with plenty of good provision, abundance of Straw, lived well & made huts to shed themselves from the Sun, which we never did in Germany on account of frequent marching, nor did the Country afford such plenty of wood, nor durst we make free with it as in Flanders.

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<sup>750</sup> "The maddened horses leap apart, wrench their necks from the yoke, and break away from the parted reins. Here lie the reins, there the axle torn from the pole; in another place the spokes of the broken wheels, and fragments of the wrecked chariot are scattered far and wide"; Ovid Met. 2.314-18; *Metamorphoses* (trans. Miller), I, 83.

<sup>751</sup> "But Phaethon ... is hurled headlong [and falls with a long trail through the air]"; *ibid.*, 2.319, 320; *Metamorphoses* (trans. Miller), I, 83.

308 [facing p. 307; blank]

309 [continuing on from p. 307]:

[right margin, through "hedera," written vertically after text and stroked]

*patria est militaris haec sedes, vallumque pro moenibus et tentorium suum cuique  
militi Domus ac penates sunt.* Liv: xlv.99.<sup>752</sup>

Speaking of the Roman encampments & Caesar observes in lib:3 of the civile wars,

*L: etiam Lentuli et nonnullorum tabernacula protecta hedera.*<sup>753</sup>

*hae latebrae dulces, etiam (si credis) amenae*

*incolumen tibi me praestant Septembribus horis.*

Hor: Ep:16. lib:1.<sup>754</sup>

*..., multa Dominum juvat umbra.*

Ib: Ep:17: lib:i.<sup>755</sup>

*...? ubi gratior aura*

*leniat et rabiem canis, et momenta Leonis*

*quum semel accepit solem furibundus acutum.*

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<sup>752</sup> "This abode is a second home for the soldier, its rampart takes the place of city walls and his own tent is the soldier's dwelling and hearthside"; Livy 44.39.5; *Livy* (trans. A. C. Schlesinger), XIII, 221, 223.

<sup>753</sup> "[In the camp of Pompeius...] huts ... of Lucius Lentulus and some others [were] covered over with ivy"; Caesar, C.W. 3.96; Caesar, *The Civil Wars*, trans. A. G. Peskett, The Loeb Classical Library (London: William Heinemann; New York: The Macmillan Co., 1914), p. 333. Caesar notes the ivy as one of the reflections of arrogance and overconfidence on the part of Pompey's army, on the eve of its destruction at Pharsalus.

<sup>754</sup> "This retreat, so sweet -- yes, believe me, so bewitching -- keeps me, my friend, in sound health in September's heat"; Hor. Ep. 1.16.15-16; *Horace* (trans. Fairclough), p. 351.

<sup>755</sup> "...their lord with plenteous shade"; Hor. Ep. 1.17.10; *Horace* (trans. Fairclough), p. 351).

Ep.x. lib:i.<sup>756</sup>

*hic, in reducta valle, caniculae*

*vitabis aestus.*

Od:17. lib:i. V:17. &c:<sup>757</sup>

*te flagrantis atrox hora caniculae*

*nescit tangere.*

Od:13. lib:3tis.<sup>758</sup>

[*margin:* the Regiment remarkably healthie in Campn 1744.] Our men drunk freely, eating all sorts of Summer fruits in abundance, yet there was not the least appearance of fluxes; the whole army remarkablie healthie. July 30th the return of Genll Cope's Regmt of Dragoons<sup>759</sup> amounted to only Nine Sicke & Lame & all triffling Cases. the first man I sent to the hospital was Robinson of Sr James's, being lately recovered a slight fever, & so weake that he was unfit to march. July 31st. When at Anstaine Camp the Hospital was fix't at Tournay, & preparations being made for fifty Sicke, twenty were ordered to be sent from the Cavalry & thirty from the infantry. the Cavalry sent but Sixteen tho we were three Regmts of horse, Six of Dragoons, & three troops of horse Guards.

*Multos Castra juvant, et lituo tubae*

*permixtus sonitus, bellaque Matribus*

*detestata.*

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<sup>756</sup> "Is there any where winters are milder, where a more grateful breeze tempers the Dog-star's fury and the Lion's onset, when once in frenzy he has caught the sun's piercing shafts?"; Hor. Ep. 1.10.15-17; *Horace* (trans. Fairclough), p. 315.

<sup>757</sup> "Here in retired valley shalt thou escape the dog-star's heat"; Hor. Ode 1.17.17-18; *Horace: The Odes and Epodes* (trans. Bennett), p. 53.

<sup>758</sup> "Thee the fierce season of the blazing dog-star cannot touch"; Hor. Ode 3.13.9-10; *Horace: The Odes and Epodes* (trans. Bennett), p. 225.

<sup>759</sup> 7th Dns.

Hor: Od:i. lib:i<sup>a</sup>.<sup>760</sup>

about the latter end of Augst. our Duty began to be very hard and

310:

<sup>a</sup>Desertion was the most prevailing distemper, & thought to proceed from the inactivity of our Army; all nations equally subject to it, but more especially the Irish. it was not known amongst the horse, their pay was too good to run away from: nor was there any such thing amongst the Highlanders, being ashamed of their great desertion on coming over.<sup>761</sup> mild remedies were at first tryed viz: wheeping, but not proving succesfull, & the desease growing dayly more desperate, desperate remedies must be put in practice, & hanging was the only Specifick. the Romans punished desertion with great Severity. C: Matienus had quitted the army in Spain without a discharge. he was accused for this reason befor the tribunes, & by their Sentence condemned to be whipped with the *Furca* (or Gibbet) on his neck, & afterwards to be sold for the lowest price, (*Sestertio nummo*. about three half pence) as being of less value than the meanest of Slaves. this Sentence was executed in the presence of the new raised Soldiers the Consuls were then levyng. Roll. Rom: hist. V:8th.<sup>762</sup>

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<sup>760</sup> "Many delight in the camp, in the sound of the trumpet mingled with the clarion, and in the wars that mothers hate"; Hor. Ode 1.1.23-25; *Horace: The Odes and Epodes* (trans. Bennett), p. 5.

<sup>761</sup> About 200 soldiers in the Royal Highlanders (later known as the Black Watch) had deserted on 14 May 1743, shortly after the regiment had been reviewed in London. The main cause of their anger seems to have been a rumor that the regiment was being sent abroad, perhaps to the West Indies, whereas they believed that they should not have to serve outside the Highlands. After the mutiny was put down, with three deserters being executed and the rest drafted, the regiment was sent out, but only to Flanders, where it performed well, notably at Fontenoy. Philip Howard, *The Black Watch (Royal Highland Regiment) (The 42<sup>nd</sup> Regiment of Foot)* (London: Hamish Hamilton, 1968), pp. 19-28.

<sup>762</sup> Rollin, *Roman History*, VIII, 256; "had quitted ... levyng" is quoted.



311 [continuing on from p. 309]:

fatiguing from out parties, forraging, &c: the covering party for forraging turning out at break of day, & the forragers an hour or two thereafter. worke hard all day in cutting corn, mowing Grass, making trusses &c: and don't return till evening; the old Grand Guard is often employed on this duty, are thirty or forty hours a horsebacke, & often without forrage. we sometimes went fifteen miles in search of forrage, (which at home would be reckoned a long march) & return with heavie trusses, the men mounted. Some parties were ordered out over night, in order to cover the forragers nixt day, were obliged to lye on their arms in the open field, stand to their arms all nixt day, & return to Camp at night & often wet to the skine, & some accidents of Gunshot wounds from skirmishing with the Enemies out parties<sup>a</sup>.

[margin: The Regmt sickly from much fatigue.] then Sicknes began, & September 6th my Return was Bloody fluxes three, Agues 6. Fevers nine; Rheumatisms two, Venereals five, Surgery cases Six, Sick & Lame in the hospital eight.

[margin: Officers healthy.] the Officers all in good health, neither Sick not Lame during this Camp.

*nec laterum dolor, nec tussis nec tarda Podagra.*

Hor.<sup>763</sup>

[penciled vertical line in margin next to the following]

Spare dyet with good exercise & light wines seems to be the best preservative from Distempers. their constant Dyet was green tea with bread & butter for breakfast. Soupe with plaine boyled or roasted meats for Dinner, drinking Burgundy or Spanish mountaine[,] bread & cheese or some slight thing for Supper, with a Glas wine in moderation & were merry over their Cups. Many lose their bellies being obliged to shorten their sword belts & take in the west band

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<sup>763</sup> "No cough or pleurisy or gout" would kill Horace (part of a prophecy); Hor. Sat. 1.9.32; *Horace* (trans. Fairclough), p. 107.

312:

[*diagonally stroked*]

<sup>a</sup>*sub jove duravit multis inmota diebus  
et lunae patiens, et pluvialis Aquae.*

Ov: fast: lib:4. V.505.<sup>764</sup>

*fors sua, cuique loco est.*<sup>765</sup>

313 [continuing on from p. 312]:

of their breeches, & think themselves some Stones lighter, being every way more active & nimble.

*attenuant juvenum vigilantae corpora noctes,  
curaque.*

Ov: art: Amat: lb:ii. V:737.<sup>766</sup>

[margin: health or Sickness greatly depend on the weather.] During this Campn I keep't an exact journal of the weather from a small Thermometer, as to heat or cold, wet or dry; and accordingly observed my return of Sick & Lame, rise & fall like a weather Glas.

[margin: horses healthie in Camp.] Our horses were healthie eating all sorts of green forrage, & that without any bad consequence, tho some dyed, & said to be from over-eating. the men were carefull in feeding sparingly & mixing some dry forrage with the green. feeding with Rye when full in the Ear, gives a sore mouth, so that they can neither eat oates

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<sup>764</sup> "For many days [Ceres] tarried motionless under the open sky, patiently enduring the moonlight and the rain"; Ovid, Fasti, 4.505-06; *Ovid's Fasti* (Frazer trans., p. 227).

<sup>765</sup> "Not a place but has its own peculiar destiny"; *ibid.*, 4.507; *Ovid's Fasti* (trans. Frazer, p. 227).

<sup>766</sup> "Nights of vigil make thin the bodies of lovers, and anxiety and the distress that a great passion brings"; Ovid Art. Am. 1.735-36; *Art of Love, and Other Poems* (trans. Mozley), p. 63.

nor dry forrage, the Groome should be carefull in cleaning his mouth. as they had little or no fatigue they were exceedingly fat & in fine order.

[*margin:* horses much affected by change of weather.] it's surprising how suddenly this creature is affected by the change of weather. all were in fine order Sepr 9th but that night being cold & frosty wind, their coats stared nixt morning as if it had been the midle of winter, which continued during this Campn.

[*margin:* horses suffer much from fatigue in Camp.] Many had sore backs being bruised from carrying heavie trusses; the common method of cure is applying warm Dung & covering with a thick horse cloth, some use blacke Soape & brandy<sup>a</sup>.<sup>767</sup> Some were sprained across the Loins, not able to walke & never able to carry a weight; the cure is attempted by Strengthening plaisters or charges, first rubbing with warm oils, some

314:

<sup>a</sup>the German servants make use of the juice of the long leaved plantane, if the skin was broke; covering the part with the leave, & proved a good dryer and healer.<sup>768</sup>

315 [continuing on from p. 313]:

cover with a Sheep's skin newly taken from the beast, but it requires long time & much rest; Such as did not recover to carry burdens were employed as draught horses nixt Campn. Some were shoulder slip't were blooded & oyled, rowelled &c: few recovered as Troop horses, but did well enough to go at a foot's pace in a plough or cart. Complaints of this kind were frequent by the latter end of the Campn from the great fatigue of forraging. Some

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<sup>767</sup> Snape wrote, and Gibson affirmed, that a sway-backed horse might be relieved by being sweated on a dunghill. Gibson, *The Farrier's New Guide*, p. 225.

<sup>768</sup> Plantain was widely used as a vulnerary, especially in treating horses. Note entry in app. C-1.

horses dyed on the road, others had their backs broke & were shot as useless.

*acer equus quondam magnaëque in pulvere famaë,  
degenerat palmas: veterumque oblitus honorum,  
id præsepe gemit morbo moriturus inertî.  
omnia languor habet: Silvisque, agrisque, viisque  
corpora saeda jacent: vitiantur adoribus aures.*

Ov: met: lb:7. V:542.<sup>769</sup>

[margin: hair rubed off their huckle bones.] few escaped having the hair rubed off their huckle bones & other parts from carrying trusses.

*Mantica cui lumbos onere ulceret, et Eques armos.*

Hor: Sat:5. lb:i.<sup>770</sup>

this Oynt. was recommended by my Lord Albemarle<sup>771</sup> in order to make the hair grow in 24 hours. Rx. hogs lard lb.i. Turpentine, St. John's wort, Assafoetida aa oz.i. make into an

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<sup>769</sup> "The horse, once of high courage and of great renown on the race course, has now lost his victorious spirit and, forgetting his former glory, groans in his stall, doomed to an inglorious death.... Lethargy holds all. In woods and fields and roads foul carcasses lie; and the air is defiled by the stench"; Ovid Met. 7.542-44, 547-48; *Metamorphoses* (trans. Miller), I, 381.

<sup>770</sup> "[Horace may ride a mule,] the saddle-bag's weight galling his loins, and the rider his withers"; Hor. Sat. 1.6[not 5].106; *Horace* (trans. Fairclough), p. 85.

<sup>771</sup> William Anne Keppel, 2nd earl of Albemarle (1702-54), was born to wealth and influence. A godson of Queen Anne, he became, at the age of fifteen, a lieutenant-colonel and captain of the grenadier company in the Coldstreams. In 1718 he succeeded to his father's title and estates, including lands in the Netherlands. He enjoyed three colonelcies: 29th Foot 1731-33; 3/Horse Guards, 1733-44; and Coldstreams, 1744 until his death. He rose to the rank of major-general in February 1742 and held important commands at Dettingen, Fontenoy (where he was wounded), and Culloden. After the '45, he returned to Flanders and was present at Val. In 1748 he attended peace negotiations as ambassador extraordinary and was also appointed commander-in-chief in North Britain. During the subsequent peace he served as a privy councillor. *DNB*.

Oynt.<sup>772</sup> Many horse Officers mark'd it in their pocket books, but I never remember any thing of its good effect. it seems to be rather commanding than assisting Nature, and puts me in mind of what Dioscorides says of the Vitex or Agnus Castus. viz: being held in the hand it preserveth the Rider from galling, which must have been a valuable Recepe, especially as Saddles were scarcely in fashion in his time<sup>773a</sup>.

316:

[*margin:* Crib-biting horses.] there's a great affinity 'twixt the deseases of men & horses, but I don't know any desease incident to the humane body resembling the crib-biting in horses, unless it be the custome of children sucking their fingers. the horse takes a fancy to bite the Manger, picket or picket roape, pinching & squeezing with his teeth, making a grunting noise, & straining hard with the muscles of his neck, as if convulsed; by frequent biting they wear away the foreteeth, lick often with their tongue & suck in wind at the same time filling their belly so full that they are in danger of bursting. are in great pain & agony, the body being much swelled, rolling and tumbling about. the Farriers bleed in the mouth, & racke, giving a drink of some warm seeds in order to breake wind & scower thro them. this is infectious, for he who Crib:bites learns his nixt neighbour to do the same. We therefor make such horses stand by themselves, driving their picket so close to the ground, that they cannot catch hold of it; yet they often snap & catch hold of the collar, & this they often attemp [*sic*] even when blind. some naile a Sheep's taile or greasie wool to the manger, or picket, & the horse does not touch it, & some tye a broad Strap round the horse's neck, as tight as he can bear it, which prevents their sucking wind, & breaks them of that custome.

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<sup>772</sup> "Mix 1 lb. of lard and 1 oz. each of turpentine, St. John's wort and asafetida to make an ointment." On the four ingredients (lard as *auxungia porcina*), see entries, app. C-1.

<sup>773</sup> "The seeds thereof being smeared on with water, do lessify the chaps in ye seate";Dioscorides, *The Greek Herbal of Dioscorides*, trans. John Goodyer, ed. Robert T. Gunther (Oxford: Oxford Univ. Press, 1934), p. 74.

317 [continuing on from p. 315]:

[margin: English horses much tormented by the flies, for want of their taile.] English horses for want of their tails are greatly tormented with flies during the warm weather; fatigue themselves with kicking & stamping, wear out their Shoes, breake & Spoyle the ground; tossing their heads backwards to beat off the flies, lose their forrage. the fatigue is so much that it makes them sweat as they stand at the picket, & fall off their flesh. None of our Allies docke their horses & are allowed a smaller ratiate than ours, by two or three pounds of hay, yet are fatter & look better than ours by the latter end of the Campn.; their Masters are more carefull in cutting wheat Straw & mixing with their oates, which fills their bellies & keeps them healthfull, whilst we throw the Straw befor our horses uncut, which is trampled into the ground & lost.

[margin: very bad weather at the latter end of Campn 1744.] Sepr 29th N:S. we decamped from Anstaine camp, had violent rains, high winds, & cold weather during the remaining part of the Campn.

*Matutina parum cautos jam frigora mordent.*

Hor: Sat:6. lb.2. V:45.<sup>774</sup>

& tho encamped near Ghent we were in want of provision, the weather being so very bad, none of the inhabitants could come to Camp. Some tents were tore to pieces, & some could not be pitched on account of the high winds. the men & their accoutrements were so wet as to be unfit for duty. the horses starving with cold & hunger.

*non hoc semper erit liminis aut aquae*

*caelestis patiens latus.*

Hor: Od:10. lb:iii. V.19.<sup>775</sup>

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<sup>774</sup> "The morning frosts are nipping now, if people are careless"; Hor. Sat. 2.6.45; *Horace* (trans. Fairclough), p. 215.

<sup>775</sup> "Not for ever will my body endure thy threshold or the rain of heaven"; Hor. Ode 3.10.19-20; *Horace: The Odes and Epodes* (trans. Bennett), p. 215.

During this weather the Officers sat in the Sutlers tent night &

318 [facing p. 317; blank]

319 [continuing on from p. 317]:

day, tho almost tore to pieces & the ground wet under foot. yet none caught cold, all bearing well, laughing at each others misfortunes, & taking a cheerful Glas.

*irriguumque mero sub noctem corpus habento.*

Hor: Sat:1. lb:ii. V:9.<sup>776</sup>

*...: neque*

*mordaces aliter diffugiunt sollicitudines.*

*quis post vina gravem militiam aut pauperiem crepat?*

*quis non te potius, Bacche pater; teque decens Venus?*

*ac ne quis modici transiliat munera Liberi.*

*centaurea monet cum Lapithis rixa super mero*

*debellata:*

Hor: Od:18. lib:1. V:3.<sup>777</sup>

but in England had any one of them lodged in a room lately washed, it must have been well aired, & the bed warmed; here were noe complaints, all bearing their misfortunes with great patience.

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<sup>776</sup> "Then, as night comes on, let them steep themselves in wine"; Hor. Sat. 2.1.9; *Horace* (trans. Fairclough), p. 127.

<sup>777</sup> "Nor are cankering cares dispelled except by Bacchus' gift. Who, after his wine, harps on the hardships of campaigns or poverty? Who does not rather glorify thee, O Father Bacchus, and thee, O comely Venus? And yet, that no one pass the bounds of moderation in enjoying Liber's gifts, we have a lesson in the Centaurs' contest with the Lapithae, fought out to the bitter end over the festal board"; Hor. Ode 1.18.3-9; *Horace: The Odes and Epodes* (trans. Bennett), p. 57.

*obsecro vos, venandi studium ac voluptas homines per nives ac pruinas in montes  
Sylvasque rapit: belli necessitatibus eam patientiam non adhibebimus, quam vel  
lusus ac voluptas elicere solet?* Liv: lib:5.<sup>778</sup>

Cpt. Gilbert did not put off his cloaths for nineteen nights, always laye on Straw in his  
Servants tent; yet had no complaints tho a delicate man.

*... contemnere honores*

*fortis, et in se ipso totus teres atque rotundus.*

Hor:<sup>779</sup>

The Dutch & Hanoverians kep't the field ten days after us, the weather continuing wet &  
cold, the whole country flooded. & tho I imagined we could stand it no longer, yet I don't  
remember to hear of an extraordinary sickness amongst them. it's surprizing what people can  
do when forced to it. many tender women & young children marched

320 [facing p. 319; blank]

321 [continuing on from p. 319]:

with us last year thro Germany, were never a horseback, nor carried in waggons. at Windsor  
Forest Camp, children of eight years old marched from Glasgow to that Camp in a month's  
time<sup>a</sup>. One of our Troopers wives in Germany marched 36 hours with the child in her arms,  
the fourth day after delivery.

*inque sinu puerum, qui nondum impleverat annum*

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<sup>778</sup> Appius Claudius speaks: "Do the eagerness, pray, and delight that men have in hunting carry them through snow and frost into the mountains and the forests; and shall not we use in the stress of war the same resolution which even sport and pleasure are wont to call out?"; Livy 5.6.3; *Livy* (trans. B. O. Foster), III, 19.

<sup>779</sup> "[A free man is one who] scorns ambition [and] in himself is a whole, smoothed and rounded"; Hor. Sat. 2.7.85-86; *Horace* (trans. Fairclough), p. 231.



*dulce ferebat onus: tepidique ope lactis ferebat.*

Ov: met: lib:9. V.359.<sup>780</sup>

[margin: Diseases in Camp. 1745.] We took the field April 30th N:S: 1745. encamping on good dry ground. tho a short march, we had much fatigue; were mounted at four in the morning, but did not come to our ground till near Sunset, & our baggage did not come up till ten at night<sup>x</sup> [designator in heavy ink]. The beginning of May was wet & cold. Quincies & Rheumaticke complaints, & grieps threatning a flux, were common. as we approached near the Enemy, we had great fatigue from advanced Posts, Grand Guards &c: & complaints were much the same as befor the battle of Dettenghen.

[penciled vertical line in margin next to following paragraph]

after the action of Fontenoye the Sick & wounded were sent to the Hospital at Ath, the Soldiers barracks being fitted up for that purpose, & are the most commodious we have yet had, each apartment containing only Six or Seven beds, a proper fire place, are well aired, & each roome seperated by a wall, & our sicke recovered well.<sup>781</sup> it's a general fault in all hospitals, that the apartments are too large, & containe too many sicke, by which the air is infected, especially in warm weather, & when the house is crowded after an action<sup>a</sup>.<sup>782</sup>

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<sup>780</sup> Of Dryope: "In her arms she bore a pleasing burden, her infant boy not yet a full year old, and nursed him at her breast"; Ovid Met. 9.338-39; *Metamorphoses* (trans. Miller), II, 27. Soldiers' wives and children seldom travelled in wagons, except when seriously ill: Paul E. Kopperman, "The British High Command and Soldiers' Wives in America, 1755-1783," *Journal of the Society for Army Historical Research*, 60 (1982), pp. 29, 30n56.

<sup>781</sup> According to Pringle, about 600 wounded were sent to the facility at Ath, which was opened the day after the battle. It remained in service until 25 Aug., in all treating 991 patients, of whom 59 died, a low percentage compared to other hospital bases and especially impressive given that some of the patients had been seriously wounded at Fontenoy. Howell, "The Story of the Army Surgeon," p. 458; Pringle, *Observations on the Diseases*, p. 35.

<sup>782</sup> Pringle was concerned by the problem of close air in wards; complaining that nurses and patients refused to open windows or doors to allow for free circulation, he observed that facilities with broken windows were the most healthful. He also advocated employing a Hales ventilator (cf. n. 5) to maintain fresh air: *Observations on the Diseases*, pp. 109-12.

Octr 1st I was ordered to attend a party from Vilfort to Mons,<sup>783</sup> which continued fourteen days, tho we did not expect it would have lasted half that time, & of course

322:

<sup>a</sup>...: *vires sibi colligat usu;*  
*si bene nutrieris tempore firmus erit.*

Ov.<sup>784</sup>

[darker ink than elsewhere on page]

<sup>x</sup>the men of most distinction of Philip of Macedon's army were not permitted to make use of any carrages in their march, either for themselves or their baggage; which was allowed to be no more than their Servants could carry: nor were the number of these permitted to be any greater than strict necessity required. Leland's history of the life & reign of Philip King of Macedon. one of his Officers was dismissed from his service for using warm Baths, & two others for entertaining a singing Girl. Ib Vol. 1st. their wives were never suffered to attend his Officers. Ib.<sup>785</sup>

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<sup>783</sup> In the wake of Fontenoy, Cumberland sent a detachment to Mons. In July, after the fall of Ghent, Bruges, Ostend, and several other cities, he established his headquarters at Vilvord, hoping to support both Brussels and Antwerp. Meanwhile, the size of the British force at Mons increased, especially when the men who garrisoned Ostend came there after the French took that city. According to Pringle, the men were initially healthy, but soon sickened because of the dampness of the barracks at Mons, and they and other British sick were treated at the hospital facility there. Although the diseases treated included, by his account, dysentery, remittents, intermittents, and hospital fever, mortality was low, as it was during the campaign in general, battle-related deaths aside. Fortescue, *History of the British Army*, II, 121-22; Howell, "The Story of the Army Surgeon," pp. 459-60; Pringle, *Observations on the Diseases*, pp. 37-39.

<sup>784</sup> "Let it gather strength by experiencing; so but you nurture it well, in time it will be strong"; Ovid A.A. 2.339-40; *Art of Love, and Other Poems* (trans. Mozley), p. 89.

<sup>785</sup> Thomas Leland, *The Life and Reign of Philip King of Macedon, the Father of Alexander*, 2nd ed. (London: E. Johnston, 1775), I, 79; "the men ... required," "one officer was dismissed ... singing girl," and "their wives ... his officers" are all quoted passages.

[penciled line in right margin by the following]

<sup>a</sup>feverish complaints were common after the battle, the day was very hot, & great fatigue, some being fourty hours a horseback. large bleeding the best remedy. with rest<sup>x</sup> and opiates. with some those fevers continued a long while, from the great concern of the mind only\*, nor could they refraine from talking of the action. were sometimes delirious, & talked of Entrenchements, Dispositions, Batteries &c: I blooded Coll F: twice in less than ½ an hour's time. & it was necessary to bleed his Royale Highness<sup>786</sup> by way of prevention.

[Claudianus quotation is interlinear and diagonally stroked]

----- *Diis proximus ille est*

*quem ratio non ira movet*

Claudianus.<sup>787</sup>

... *tristi turbatus pectore bello*

*procubuit, seramque dedit per membra quietem.*

Virg: -- vid: *L'art de conserver la Sante de Princes &c* par Cornaro.<sup>788</sup>

*\*ingentes animo, dignas Jove concipit iras.*

Ov:<sup>789</sup>

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<sup>786</sup> i.e., Cumberland; "Coll. F." was presumably Col. Robert Fraser of the 3<sup>rd</sup> (Scots) Foot Guards, who was wounded at Fontenoy; note Townshend's return, *Military Life of Townshend*, p. 77.

<sup>787</sup> "He whom reason, not anger, animates is a peer of the gods"; Claudian, "Panegyric on the Consulship of Manlius," 227-28; Claudian, *Claudian*, trans. Maurice Platnauer, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1956 [1922]), I, 355.

<sup>788</sup> "[Aeneas] his heart troubled by woeful war, stretched him on the bank under the sun's chill cope, and let late sleep steal over his limbs"; Virg. Aen. 8.29-30 (trans. Fairclough, II, 63). This passage is quoted in *L'art de conserver*, p. 207. Ramazzini continues, "The prince must have the care of all, and an eye on everything; he cannot have a spirit gluttoned by disquietude or troubles that torment him continually" (my translation.)

<sup>789</sup> "He [Jupiter] conceived a mighty wrath worthy of the soul of Jove"; Ovid Met. 1.166; *Metamorphoses* (trans. Miller), I, 15.

[written across in margin]

<sup>x</sup>*Somme, quies rerum, placidissime somne Deorum.*

*pax animi, quem cura fugit, qui corpora duris*

*fessa ministeriis mulces, reparasque labori.*

Ov:<sup>790</sup>

323 [continuing on from p. 321]:

made little or no preparation for such an expedition, marching with as little baggage as possible. we had great fatigue, marching night & day, horses stood Saidled three or four days. the men often without Straw, & one night without their tents<sup>c</sup>. having so much duty there was no time to provide victuals, ammonition bread was their chief food, & sometimes obliged to drink muddy water with their horses. being always in boots, there were many swelled legs. the weather was cold, frosty, but dry, & there was no great Sickness. slight Rheumaticks & sore throats the chief complaints.

[margin: great fatigue on out parties.] few officers had any bedding, & some never put off their cloaths<sup>b</sup>; cooked what they could most easely find<sup>d</sup>, were healthfull & cheerfull all the while.

*Nox, et hiems, longaeque viae, saevique dolores*

*mollibus his castris, et labor omnis inest.*

*saepe feres imbrem caelesti nube solutum:*

*frigidus et nuda saepe jacebis humo.*

Ov: art: amat: lib:ii. V:234<sup>a</sup>.<sup>791</sup>

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<sup>790</sup> "O Sleep, thou rest of all things, Sleep, mildest of the Gods, balm of the soul, who puttest care to flight, soothest our bodies worn with hard ministries, and preparest them for toil again"; Ovid Met. 11.623-25; *Metamorphoses* (trans. Miller), II, 165.

<sup>791</sup> "Night, storm, long journeys, cruel pains, all kinds of toil are in this dainty camp. Oft will you put up with rain from melting clouds of heaven, and oft will you cold lie on the bare

The Highland Regmt marched in our front, some had sprained ankles & sore feet. they were in high Spirits, & stood the March well. the Prince of Waldeck's Regmt of Grenadiers brought up the rear, a most beautefull Regmt & remarkable for their large size; were greatly fatigued & much ado to reach camp, many dropping on the March.

[*diagonally stroked*]

*'Qui regionem quidam montanam, asperam, altam, et aquis carentem incolunt, et anni temporum mutationes habent admodum differentes, illic hominum formas magnas esse par est, tum ad laborem, tum ad robur, a natura esse optime comparatas, at agrestibus et ferinis moribus ejusmodi, naturae non parum sunt praeditae.* Hip: de Aere, locis et Aqua.<sup>792</sup>

if we continue

324:

*<sup>c</sup>quod caret alterna requie, durabile non est  
haec reparat vires, fessaque membra novat.*

Ov: Ep:4. V:89.<sup>793</sup>

*<sup>b</sup>...: requievimus arbore tecti;*

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ground"; Ovid Art. Amat. 2.235-38; *Art of Love, and Other Poems* (trans. Mozley), p. 83.

<sup>792</sup> "Such as inhabit a region that is mountainous, rugged, high, and poorly watered [Jones and Adams translate the Greek as well watered], and the seasons of the year exhibit sharp contrasts, are likely to be big [Adams: "likely to have great variety of shapes among them"], with a nature well adapted for toil and vigor, and such have not a little brutality and wildness [Adams: "enterprising and warlike"]; Hip., Aer., c. 24; cf. *Hippocrates* (trans. Jones), I, 133, 135, *Genuine Works of Hippocrates* (trans. Adams), I, 181, and *Oeuvres complètes d'Hippocrate* (trans. Littré), II, 87. In l.1 of quotation, "*quidam*" in Buchanan is "*quidem*" in Foës (*Magni Hippocratis Medicorum*, p. 294); "*esse optime*" (l.4) is inverted in Foës.

<sup>793</sup> "That which lacks its alternations of repose will not endure; this is what repairs the strength and renews the wearied limbs"; Ovid Her. 4.89-90; *Heroides and Amores* (trans. Showerman), p. 51.

*mixtaque cum foliis praeuit herba torum.*

Ov: Ep:5. V.13.<sup>794</sup>

<sup>d.</sup>*Silva domus fuerat, cibus herba, cubilia frondes.*

Ov:<sup>795</sup>

<sup>a.</sup>*Quique fugax rerum securaque in otia natus,*

*mollis et impatiens ante laboris eram;*

*ultima nunc patior, suffessitque malis animus*

*-- nam corpus ab illo*

*acceptit vires, vixque ferenda tulit.*

Ov: tris: lib:iii. V:91.<sup>796</sup>

325 [continuing on from p. 323]:

long in one Camp our <men> grow lousy & itchy.

[margin: some inconveniences from encamping too long in the same ground.] their straw should be often changed; the old always burnt & not thrown as litter to the horses. the men have much ado to keep their long hair free from vermine, & it's a custom with them to anoint their hair with Ungt. Mercurial instead of Pomatum, & kill vermine of all sorts. some

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<sup>794</sup> Oenone, addressing Paris: "We reposed beneath the sheltering trees, where mingled grass and leaves afforded us a couch"; Ovid Her. 5.13-14; *Heroides and Amores* (trans. Showerman), p. 59.

<sup>795</sup> "Woodland was their home, their food grass, their bedding leaves"; Ovid A.A. 2.475; *Art of Love, and Other Poems* (trans. Mozley), p. 99.

<sup>796</sup> "I, who once shunned affairs, who was born for a care-free life of ease, who was soft and incapable of toil, am now suffering extremes.... And my spirit has proved equal to misfortune; for my body, borrowing strength from that spirit, has endured things scarce endurable"; Ov. T. 3.2.9-11, 13-14; *Ovid* (trans. Wheeler), p. 107. Although Buchanan indicates that the ellision comes after "*animus*," it actually follows "*patior*."

use an Oynt. of red precipitate one pennyworth mixed with butter,<sup>797</sup> Ryslie of Cpt. Loyd's used it often, but catching cold in the wet weather in the latter end of Campn 1744 got into a high Salivation, & with difficulty was purged off. if we remaine a long time in the same Camp, there's an ugly smell, from the horse Dung, & large swarms of flies become troublesome, especially in hot weather. if the ground be wettish, with many ditches of stagnating water, fish ponds, &c: the water stinks in hot weather & is useless, being full of frogs Spawn &c: Fabius the Roman General said, that it was not for the advantage of an army to continue always or long in the same place: that marching & change rendered it fitter for action, & contributed to the health of the Soldier. Roll: Rom: Hist.<sup>798</sup>

*mutandus locus est, et diversoria nota*

*praeterendus equus[.]*

Hor: Ep:15. lib:1. V:10.<sup>799</sup>

[margin: The Dog days.] people look for much sickness about the Dog days & expect excessive heats; but I have not observed any particular sickness at this time.

*est canis (Icarium dicunt) quo sidere moto*

*tosta sitit tellus, praecipiturque Seges.*

Ov: fast: lib:5. V:939.<sup>800</sup>

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<sup>797</sup> On ungt. mercuriale and red precipitate (under "mercurials") and pomatum, see app. C-1; another common treatment for scalp vermin was stavesacre. The importance of good grooming was stressed by various writers on military medicine, e.g.: Blair, *The Soldier's Friend*, pp. 76-81; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 37.

<sup>798</sup> *Roman History*, III, 246; "said ... soldiers" is quoted. The passage refers to Fabius Rullianus Maximus, and action in 295 b.c.e.

<sup>799</sup> "I must change my resort, and drive my horse past the familiar lodgings"; Hor. Ep. 1.15.10-11; *Horace* (trans. Fairclough), p. 345.

<sup>800</sup> "There is a Dog (they call it the Icarian dog), and when that constellation rises the earth is parched and dried, and the crop ripens too soon"; Ovid, *Fasti*, 4(not 5).939-40; *Ovid's Fasti* (trans. Frazer, p. 259).

in hot weather the men are too much clothed, especially when fully accoutred & mounted with all their baggage, & some faint under the

326 [facing p. 325; blank]

327 [continuing on from p. 325]:

Burden, & others from real fatigue & long fasting<sup>a</sup>. common custom calls out for bleeding immediately, & that without Ryme or Reason. I order them to have the free use of the coole refreshing air, & to be laid at full length, giving a little wine by way of cordial. if from a Plethora, bleeding is then necessary & a Glas of water the best Cordiale. When the men find themselves faint & spent, they imagine bleeding might relieve them & beg to be blooded, but I rather advise them to compose themselves to rest, refreshing themselves with wine & bread rubed with Nutmeg<sup>801</sup> &c:

*Cardiacorum morbo unicum spem in vino certum est.* Plin: lib:22.<sup>802</sup>

[margin: Convulsive fitts.] Convulsive Fits proceed from passions of the mind.  
[penciled line in margin next to following sentence] Mercer of Cpt. Loyds's is often subject to them on being drunk or vexed; he has acted sometime as Depute-Corporale & expected being appointed full Corpll on the first vacancy, but was put by, & greatly disappointed; fell into a violent fit, & continued near two hours, struggling so hard that four of his Comrades could scarcely hold him, he endeavoured to bite everything, his tongue often in danger, but was prevented by putting a tent-pin across his mouth. I give Op: in large doses & compose

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<sup>801</sup> On nutmeg, see app. C-1.

<sup>802</sup> "In cardiac disease the one hope of relief lies undoubtedly in wine"; Pliny, Nat. Hist. 23[not 22].25.50. cf. above, n.158. This is the only case in which Buchanan quotes the same passage twice.



them to sleep.<sup>803</sup> Smith of the King's Troop, took Laud: Liquid gt.120 & upon recovery found himself greatly refreshed, whereas at other times he always complained of great soreness about the breast. Jeffard of Capt. Shipman's is a very irregular fellow, often drunk, & is often ordered to be picketed; but so soon as he is mounted, falls into violent convulsive fits, & by this means escapes punishment.<sup>804</sup> I have often given him fourscore drops Laudanum.

*Abrotanum aegro*

*non audet, nisi qui didicit, dare:*

Hor: Ep.i. lib:ii. V:114<sup>b</sup>.<sup>805</sup>

328:

<sup>a</sup>the old & wore out men are daily subject to complaints of this kind; rest & nourishing dyet the only medecine.

*arma diu senior desueta tremantibus aevo*

*circumdat nequiquam humeris, et inutile ferrum*

*cingitur.*

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<sup>803</sup> Opium was also given for lockjaw; cf. app. B-1. Tissot advised that in general fits were not dangerous and no treatment was necessary. The sufferer was merely to be restrained from doing himself harm and a roller of linen or something similar was to be forced between his teeth. If it appeared that the fit was apoplectic, bleeding might be desirable. Wallis reported that he had found musk to be effective, both in preventing fits and in relieving them. Tissot, *Advice to the People*, pp. 259-60; Wallis, *Art of Preventing Diseases*, p. 421.

<sup>804</sup> One of the duties of the regimental surgeon was to halt punishments when he felt they were endangering the health of the soldier. Hamilton discusses this duty and reviews health risks associated with whipping: *Duties of a Regimental Surgeon Considered*, II, ch. 12.

<sup>805</sup> "No one dares to give southernwood to the sick unless he has learned its use"; Hor. Ep. 2.1.114-15; *Horace* (trans. Fairclough), p. 407.

<sup>b</sup>[margin: Apoplexy] Apoplecticks are blooded largely, purged briskly, blistered &c: ordered to live sparingly & abstaine from drinking.<sup>807</sup> are most frequent on long marching & hot weather, fatigue &c: our troopers cloathing are too heavie for the Summer, especially when fully accoutred & mounted with all their baggage,<sup>808</sup> some faint under the burthen. it's

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<sup>806</sup> "... old as he [i.e. Priam] is, he vainly throws his long-disused armour about his aged trembling shoulders, girds on his useless sword..."; Virg. Aen. 2.509-11; *Virgil* (trans. Fairclough), I, 329.

<sup>807</sup> The method of treatment outlined by Buchanan -- bleeding, purging, blistering, moderation in food and drink -- was quite standard. To combat an attack, Sydenham and Mead recommended cupping the patient's neck, as well as using stimulating enemas and warm purges, and a strong blister on the back and legs; afterwards, the patient was to be put on a spare diet. Cullen's advice was similar, but more rigorous: bleeding from the jugular, acrid blisters, drastic purgatives (though he advised against vomits, which some advocated). However, apoplexy was generally regarded as nearly incurable and as desperate, for as Wallis put it the brain itself was endangered by "congestion.". Wallis himself recommended copious bleeding -- first in the arm, then in the foot, and so on, including the jugular -- until the patient revived, at which point he was to be given strong purgatives. Tissot distinguished between sanguine and serous apoplexy, the former usually striking robust, plethoric individuals, the latter more frail types. Sufferers from the sanguine form were to be bled in quantity and repeatedly, while serous sufferers might require little or no bleeding. For both types, enemas and purgatives were essential, and blisters might be helpful. A diet of fruits and vegetables, ample rest, and avoiding excessive exposure to the sun might reduce the likelihood of another attack. Buchan asserted that apoplexy could be prevented (by good diet, exercise, regularity, and avoidance of extreme passions), but seldom cured, though he, too, advised phlebotomy. Buchan, *Domestic Medicine*, pp. 311-13, 326; Cullen, *First Lines of the Practice of Physic*, II, 326-28; James, *A Medicinal Dictionary*, under "apoplexy"; Mead, *Complete Works*, pp. 361-63; Theobald, *Every Man His Own Physician*, pp. 3-4; Tissot, *Advice to the People*, pp. 78-82; Wallis, *Art of Preventing Diseases*, pp. 424-26.

<sup>808</sup> A number of writers on military medicine asserted that in warm weather or tropical climates the troops should wear wool (Wilson advised coarse cotton), rather than linen, so that they would sweat copiously. Some also saw this as beneficial in cold weather. Rush noted with approval the British practice, instituted by Gage, of providing the troops with flannel shirts. Jackson, however, argued strongly against flannel, claiming that if not regularly washed it tended to retain contagion. He accepted that his "heretical opinion" was held by few, but McLean, who like him had mainly served in warm climates, supported him, as he did on many issues. Blair, *The Soldier's Friend*, pp. 50-52; Dunne, *The Chirurgical Candidate*, pp. 122-23; Jackson, *A Systematic View*, pp. 251-53; McLean, *Enquiry into the Nature, and*

commonly said the third Apoplectick fit carries off the Patient; but I have known Carter of Cpt. Gilbert's have many, as also Maynard of the King's.

329 [continuing on from p. 327]:

[margin: Melancholy.] Soldiers sometimes take a melancholy turn, become lowe spirited, senseless & childish, avoid company, cry or mutter to themselves, love to be solitary. upon asking their case, they tell long stories about their past & present condition, are in great fear of being some way or other lost.<sup>809</sup> such as make hasty resolutions of abstaining from all sorts of strong liquors, to which they were formerly accustomed, are most subject to this complaint, & those who have been disappointed of their due preferment, nor is there any end of their complaints & of the injustice done them after so long service. Vomits & exercise are the chief medecines, but a heartie bottle gives present relief.

*sunt verba et voces quibus hunc lenire dolorem.*

Hor: Ep:1. lib:1.<sup>810</sup>

& to make it more medicinal I order pil: Assafoetid.<sup>811</sup> to be taken two or three times a day,

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*Causes of the Great Mortality*, pp. 268-70; Benjamin Rush, *Directions for Preserving the Health of Soldiers* (Lancaster, Pa.: John Dunlap. 1776), p. 4; Wilson, *Rational Advice to the Military*, pp. 26-27.

<sup>809</sup> In treating "Hypochondriac affection," Rollo recommended, "A Careful attention to prevent the patient from being by himself, a change of situation, exercise, chalybeate preparations, and cold bathing, if no topical affection existed, were the means we found most successful." Noting that melancholic patient were seldom willing to take medicines, Buchan advised issues, setons, and warm baths; beyond these, he recommended a diet rich in fruits and vegetables (though not onions or garlic, which thickened the blood), as well as music, friends, and cheerful stories. Buchan, *Domestic Medicine*, pp. 324-26; Rollo, *Observations on the Diseases on St. Lucia*, p. 89.

<sup>810</sup> "There are spells and sayings whereby you may soothe the pain and cast much of the malady aside"; Hor. Ep. 1.1.34; *Horace* (trans. Fairclough), p. 253.

<sup>811</sup> There was no official "asafetida pill." *Practice* lists two nervine pills that include asafetida, "gum pills" and "nervous pills": *Practice of the British and French Hospitals*, pp. 67, 68.

& washed down with a Glass of wine<sup>x</sup>, <<sup>x</sup>Pechlin: obs: Med: lib.3 no.16.<sup>812</sup> [*heavier ink*]>  
& advise cheerfull company.

*tristis eris si solus eris[....]*

*Nee fuge colloquium: nec sit tibi janua clausa;*

*nec tenebris vultus flebilis ab detius.*

Ov: rem: Am: V:585.<sup>813</sup>

Some are so morose & sulkie in their tempers that they will not be perswaded to take anything, much ado to prevaile on them to eat or drinke. I endeavour to make them merry by putting wine into their Soupe &c[.]

*Eloquioque virum morbis ira frementem*

*molliet; aut aliqua producet callidus arte.*

Ov: met: lb:13. V:322.<sup>814</sup>

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<sup>812</sup> Pechlin's chapter (*Observationum*, III, no. xvi, pp. 432-35) is entitled, "Morbus imaginarius" ("Imaginary illness" or "Illness caused by the imagination"). In it, he states the importance of treating the patient's mind as well as body and of using deceit when necessary to "cure" an imagined illness. Pechlin notes that a patient who imagines that he has a large growth on this nose can be cured if a physician shows him a piece of flesh and claims that this is the growth. A leaden cap (cf. n. 424) can be placed on the head of a patient who believes that he has sprouted large horns, to persuade him otherwise. (Note: These examples appear to be patterned directly or indirectly on cases discussed in Robert Burton's *The Anatomy of Melancholy*, part 2, sec. 2, mem. 6, subs. 2; Burton recounts i.a. the case of Philodotus, who disabused a king of his belief that he had been beheaded by placing a leaden cap on his head. I wish to thank Darrel Amundsen for providing the Burton reference.) A final case reported by Pechlin is that of Sempronius, a Roman aristocrat who became ill when outdoors because he considered the air to be defective. His physician cured him by persuading him to drink wine whenever he felt such an attack coming on. Pechlin concludes his chapter by praising wine.

<sup>813</sup> "If alone, you will be sad.... And fly not intercourse, nor let your door be closed, nor hide your tearful countenance in darkness"; Ov. Rem.Am. v.583, 587-88; *Art of Love, and Other Poems* (trans. Mozley), p. 217.

<sup>814</sup> Ulysses, in reference to Ajax: "By his eloquence he will calm the hero [i.e. Philoctetes], mad with pain and rage, or else by some shrewd trick will bring him to us"; Ovid Met. 13.322-23; *Metamorphoses* (trans. Miller), II, 251.

vid: L'Eloge de Lyvresse<sup>a</sup>. [*designator in heavy ink*].<sup>815</sup>

[*margin: Drunkards healthie.*] The Drunken fellows have been remarkably healthie since we came abroad; the same was observed in the late West Indian expedition, the Drunken fellows only lived to come home:<sup>816</sup>

330:

[*margin: Deafnes.*] <sup>a</sup>Many complain of deafnes from catching cold by lying on the wet ground, or on being long confined at the Provoes.<sup>817</sup> the ears are Syringed in hopes of bring out some wax, oyle being first poured in, in order to soften or loosen it. the common method of Syringing the ears with a small Syringe is good for nothing; there not being a sufficient quantity of water injected at one time to soften the wax; I therefor use a large clyster Syringe, nor does there appear any danger in breaking the Tympanum, having tried as much force as could be applyed to this Syringe in injecting the ears of a dead person, yet the Tympanum not in the least hurt. Soap & water is my injection, & has often succeeded

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<sup>815</sup> *L'Eloge de L'Yvresse*, by Albert Henri de Sallengre (La Haye: Pierre Gosse, 1714), appeared in a free English translation by "Boniface Oinophilus" (probably Robert Samber) in 1723, under the title, *Ebrietatus Encomium: or, The Praise of Drunkenness; wherein is Authentically, and Most Evidently Proved, the Necessity of Frequently Getting Drunk is Most Ancient, Primitive, and Catholic. Confirmed by the Example of Heathens, Turks, Infidels, Primitive Christians, Saints, Popes, Bishops, Doctors, Philosophers, Poets, Free Masons, and Other Men of Learning in All Ages* (London: E. Curll). In citing this work, Buchanan may have had in mind particularly chs. 2-3 ("That *Wine* drives away Sorrow and excites Mirth"; "That it is good for one's health to get drunk sometimes").

<sup>816</sup> This is a reference to the Vernon expedition to Cartagena in 1741-42, which was abandoned after the Anglo-American force lost more than 10,000 men, the preponderant majority to disease, especially yellow fever. Although he does not praise drunkenness, Cheyne asserts that since drinking encourages sweat, it wards off diseases such as colds. Cheyne, *An Essay of Health*, pp. 14-15; Fortescue, *History of the British Army*, II, 59-79; G. A. Kempthorpe, "The Expedition to Cartagena, 1740-1742," *Journal of the Royal Army Medical Corps*, 64 (1935), p. 277; Lloyd and Coulter, *Medicine and the Navy*, III, 105-07.

<sup>817</sup> cf. above, p. 101.

in bringing out hard wax & some cotton which was introduced some years ago, & become hard as a Stone. this method was tryed with Ashberry of Majr. Jenkinson's, but without any good effect; his deafnes was suspected by his Comrades, as a pretence to obtaine his discharge & had the desired effect; & they [*second "they," smudged*] say, he recovered his hearing as he returned home.<sup>818</sup>

[*the following quotations are in heavier ink*]

<sup>a.</sup>*abducendus etiam nonnunquam Animus est, ad alia Studia, Sollicitudines, curas, negotia, loci denique mutatione, tanquam aegroti non convalescentes, saepe curandus est.*

Cic: Thus: 1:5.<sup>819</sup>

*passiones animi non medicinis, sed alia passione contraria superari. ira enim et Spes auferunt timorem, et laetia Moestitiam[.] Sanct: Aph: 4 C7.*<sup>820</sup>

<sup>818</sup> In 1775, Robert Gordon, surgeon to the 54th F., reported the case of a private, John Bluet, who went deaf bathing in the sea at Galway in July 1771. There was no change for the next three months, and the commanding officer made plans to discharge him, at which point, Gordon put Bluet, who had earlier been successfully treated with mercury for gonorrhoea, on a mercurial course, although Gordon believed there was "little or no hopes of success." In Dec., after the sixth treatment, Bluet began to regain his hearing. The condition improved further as the course continued, with gentle salivation, and in Feb. 1772 Bluet returned to duty, his hearing fully restored. Gordon, "A remarkable Case of Deafness cured by Salivation," *Medical Commentaries*, III (1775), pp. 80-82.

<sup>819</sup> Treatment of someone maddened by love: "Occasionally also he must be diverted to other interests, disquietudes, cares, occupations; finally he is frequently curable by change of scene as is done with sick people who are slow in making recovery"; Cicero, Tusc. 4.74; Cicero, *Tusculan Disputations*, trans. J. E. King, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1950 [1927]), p. 413. The passage as rendered by Buchanan differs at several points from Cicero's original, and this, plus the hazy and incorrect citation, suggests that he was quoting from memory.

<sup>820</sup> "A Passion of the Mind is not to be conquered by Medicine, but by some contrary Passion. Anger and Hope remove Fear, and Joy takes away Sorrow"; *Medicina statica*, p. 306 [I have changed the sentence order in Quincy's translation, to make it better accord with the Latin original]; Quincy adds, "Contraries are under the same **Genus**." The original aphorism (*Aphorismi*, sect. vii, aph. xii, p. 113) differs from Buchanan's quotation in that it begins, "*passio* [not "*passiones*"] *enim* [no "*enim*" after "*ira*," 1.2] *animi*"; Sanctorius has "*superatur*" for "*superari*" and "*laetitia*" for "*laetia*."

331 [continuing on from p. 329]:

but when taken ill, their distempers are more violent, & some dye suddenly<sup>x</sup>. Vid. Carr. Epist: Medic: No. 4.<sup>821</sup> Chapman of Captn. Gilberts dyed suddenly in the hospital, as he was recovering a violent fever, & was ready to be discharged, but was suddenly seized with an acute pain in the upper & inside of the left thigh, saying it came like a shot of a Gun, & that it was so violent that it would certainly kill him; the part was neither swelled nor discoloured, nor any thing observable to the touch, tho fomented & poulticed, found no relief; continued in great Agony that night, next morning said he could bear it no longer, that he was sure to dye, drunk a dish <of> Coffee, & dyed presently. the thigh swelled a little by nixt morning, was of a livid colour. in the affected part there was much ichorose-gelatinous-jelly, & the appearance of a beginning mortification, tho no deeper than the cellular Substance. Quaer: 1mo. was this an attempt of nature to form a criticale absess here. 2do. would scarifications with warm digestives been of any use.<sup>822</sup>

[margin: Dissection of a Drunkard.] Upon dissecting the body all the cartilages of the ribs were strongly ossified, were cut with chizel & mallet[;] all the bowels remarkably

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<sup>821</sup> Richard Carr, *Dr. Carr's Medicinal Epistles Upon Several Occasions: Done into English, as a Supplement to the Explanations of Sanctorious's Aphorisms*, trans. John Quincy (London: William Newton and J. Phillips, 1714), pp. 31-39; cf. Carr, *Epistolae medicinales variis occasionibus conscriptae* (London: Stafford Anson, 1691), pp. 36-46. Carr's fourth epistle, addressed to the mother of a young drunkard, warns of the dangers of excessive drinking, and especially of "Morning Tipling": "There is scarce any one Disease incident to humane Bodies but what some time or other has its Rise from this filthy Custom. Some it carries off immediately, and others continually expect it, unless some sudden Death prevents it" (*Medicinal Epistles*, p. 32; cf. *Epistolae medicinales*, p. 37).

<sup>822</sup> Synonymous with an aposthume, an abscess was seen as being an attempt by nature to effect a critical discharge of humors, by routes other than the normal emunctories; as the humors collected in the capillaries they would burst them, unless a surgeon intervened. It was common practice to promote the process by applying warm fomentations and poultices. Brocklesby, *Oeconomical and Medical Observations*, pp. 151-53; Quincy, *Lexicon Physico-Medicum* (1719), pp. 2-3.

sound & in good order, no dry or burnt liver as is said to be the case with Drunkards, & was probably owing to his drinking malt liquor rather than Gin.

[*margin*: Deseases on coming into Garrison.] After coming into Garrison many have coughs, & feverish disorders with aching pains, &c: from catching cold in the latter end of the Campn, & are treated accordingly. it's observed many people fall ill on their coming from Camp, & some Officers who are carefull of preserving

332:

[*both in darker ink*]

*⁂siquidem etiam Spes <interdum> frustratur, et moritur aliquis, de quo Medicus securus primo fuit. quaeque medendi causa reperta sunt, nonnunquam in pejus aliquibus vertunt. neque id evitare humana imbecillitas in tanta varietate corpoum potest.* Cels: lib:2. C:vi.<sup>823</sup>

[*mid-page, facing report on death of soldier*] Tissot on Bilious fevers. has much such an other case of a Young fellow, afflicted with a most violent pain in the left arm, p. i09 [*sic*].<sup>824</sup>

333 [continuing on from p. 331]:

health, endeavour to live at their first coming into Garrison, in the same manner they did in

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<sup>823</sup> "... seeing that hope is disappointed now and again, and that the patient dies whom the practitioner at first deemed safe; and further that measures proper for curing now and again make a change into something worse. Nor, in the face of such a variety of temperaments, can human frailty avoid this"; Celsus de Med. 2.6.17-18; *De Medicina*, (trans. Spencer), I, 115, 117. This passage is also quoted by Johnstone, *Historical Dissertation*, p. 28n.

<sup>824</sup> Tissot reports (*Essay on Bilious Fevers*, pp. 109-10) that the young patient, a soldier, experienced severe pain for several days, but that it ceased, causing attending practitioners to conclude that gangrene had set in; delirium and lethargy followed, and death shortly afterwards. A post mortem revealed that the muscles in the arm had separated from the humerus and that there were traces of pus in the area, as well as "matter" in the ventricles of the brain.



Camp, or as near to it as possible. tho a fire in the roome, they seldome sit near it, nor do they air a shirt, walk a foot in the dirty street. those who are of a sedentary disposition are most subject to be taken ill; they were healthie during the Campn. from being much on their legs & moving about, by the latter end of the Season the field began to be tyresome to them & wished heartely for Winter Quarters, where they shut themselves up in their rooms, indulging in bed<sup>a</sup> or loitering in an easie chair, taking to their books & study, not caring to stir abroad, saying, they have had enough of that lately. from this sudden change they become heavie & dull, lowspirited, their appetite failes, grow sicklie & unactive; then bleed, vomite, & take bitters, & unjustly blame the cold they caught last Campn. it's to be wished our Young Gentlemen would take to some wholesome exercise in Garrison, riding the great horse would be of great service, fencing, playing at tennise, &c: that of doing Garrison duty is a meer triffle & scarcely deserves the name of exercise<sup>c</sup>.<sup>825</sup>

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<sup>825</sup> The importance of exercise in maintaining health was standard in 18th-century medical literature. Buchan wrote, "exercise is not less necessary than food for the preservation of health" and he cautioned about the dangers (e.g., weakened nerves, obstructed perspiration) of a sedentary or studious lifestyle. Many military medical writers expressed concerns over the indolence of garrison life. Bell asserted that the boring life of troops in the West Indies brought on depression, which in turn caused them to drink excessively. He considered the life of sailors to be more active and therefore healthier. Pringle linked much disease to the fatigue that common soldiers suffered through taking long marches when fully loaded; he noted, "the cavalry have a more uniform life, having little fatigue by marches, and a constant, but easy exercise, both in the field and quarters, in the care of their horses: one reason for their better health." Bruce suggested, "an article should be added to the present articles of war, by which the sea and land captains may be made answerable for the lives of their men." Officers, he went on, were to encourage "many exercises." Pringle, Monro, and Jackson were among the writers who stressed that soldiers exercise in order to promote both physical and mental health. The exercise that they favored included recreation, marching and other strenuous duty, and labor, though of the last they noted that work should be regular though not excessive, on the Roman model. John Bell, *An Inquiry into the Causes which Produce and Means of Preventing Diseases among British Officers, Soldiers, and Others in the West Indies* (London: J. Murray, 1791), pp. 91-94, 97-98; Blair, *The Soldier's Friend*, pp. 61-74; Bruce, *Inquiry Concerning the Cause of the Pestilence*, pp. 108-09; Buchan, *Domestic Medicine*, pp. 35-42, 59-61; Jackson, *Systematic View*, pp. 266-67, 270-71, 319-22, 334-37; Jackson, *Outline of the History and Cure of Fever*, pp. 360-63; Pringle, *Observations on the Diseases*, p. 92.

[margin: Manner of living in Garrison (*penciled line in margin; continued on p. 335, to beginning of Latin quotations*)] Their common way of life is making a visite or two in the fore noon, & that in a coach; dressing, & sitting down to dinner at two, & there continue till four or five in the evening, then take coach to the Coffee-house; drinke Coffee or tea, playing Billiards, Draughts, or Bagamonde. tho this be

334:

*<sup>a</sup>deinde eo dormitum, non sollicitus, mihi quod cras  
surgendum sit mane.*

Hor: Sat:6. lib:i. V:19.<sup>826</sup>

[*the following in darker ink*]

<sup>b</sup>Dissertation on the Olympic Games by G: West Esq.<sup>827</sup> Alexander broke his horse Bucephalus. See Cyrus's love of hunting, in Xenophon's *Cyropaedia*.<sup>828</sup> Henry the

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<sup>826</sup> "Then I go off to sleep, untroubled with the thought that I must rise early on the morrow"; Hor. Sat. 1.6.119-20; *Horace* (trans. Fairclough), p. 85.

<sup>827</sup> Gilbert West, *Odes of Pindar, With Several other Pieces in Prose and Verse, Translated from the Greek. To which is Prefixed a Dissertation on the Olympic Games* (London: R. Dodsley, 1749). West does not mention Bucephalus, but Buchanan would in any case not have required a source to note the well-known story of how Alexander broke the horse. In citing West, Buchanan seems to have had in mind the association of horse riding with the upper class lifestyle -- he is, after all, dealing with the officer class and "Young Gentlemen" -- for West notes the tie at several points in his "Dissertation," esp. pp. lxxvii-lxxx. During the 18th century riding was widely used as a treatment for various ailments, notably gout and rheumatism. Quincy asserts (*Medicina statica*, pp. 266-67) that because of advocates like Baglivi, "The Advantages arising from Riding, has been of late so much talk'd of, as to bring this Exercise into good Esteem"; he argues, however, that riding was used indiscriminately, and needed to be adjusted to suit the requirements and constitution of each individual -- a trot, for example, might be too jarring for some.

<sup>828</sup> The *Cyropaedia* provides several references to Cyrus as a hunter, esp. 1.4.5-15; Xenophon, *Cyropaedia*, trans. Walter Miller, The Loeb Classical Library (London: William Heinemann; New York: The Macmillan Co., 1914), I, 48-59. According to Xenophon, Cyrus also encouraged boys to spend long hours hunting, in order to toughen themselves physically and mentally: *ibid.*, 1.2.9-11 (Rolfe ed., I, 16-21).

4th of France was fond of horses & Dogs. so was King Wm of hunting & horse racing &c.

335 [continuing on from p. 333]:

a large Roome, the air is unwholesome from a desagreable heat from a Stove in which sea coale is burnt; all complain of this, especially Phthisicale constitutions, yet cannot refraine going to it, & from hence retire amongst themselves or go to the Tavern, or Playhouse &c: going to the course in fine weather is a favorite diversion, all sit in coaches, bowing to each other en passant, & with some this is the only exercise; few care to get a horseback or ride out for pleasure. many are fond of Concerts, Masquerades, Balls, dress &c:

[the following quotations all diagonally stroked]

*in cute curanda plus aequo operata juventus,  
cui pulchrum fuit in medios dormire dies, et  
ad strepitum citharae cessatum ducere curam.*

Hor: Ep:ii. lb:i.<sup>829</sup>

*nunc tibicinibus, nunc est gavisus tragoedis:*

Ib: Ep:ii: lb:ii. V.98.<sup>830</sup>

*verum Equitis quoque jam migravit ab aure voluptas  
omnis ad incertos oculos et gaudia vana.*

Ib:<sup>831</sup>

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<sup>829</sup> "Unduly busy in keeping their skins sleek, whose pride it was to sleep till midday and to lull care to rest with the sound of the cithern"; Hor. Ep. 1.2.29-31; *Horace* (trans. Fairclough), p. 265.

<sup>830</sup> "[The Greeks'] joy was now in flautists, and now in actors of tragedy"; Hor. Ep. 2.1.98; *Horace* (trans. Fairclough), p. 405.

<sup>831</sup> "But nowadays all the pleasure even of the knights has passed from the ear to the vain delights of the wandering eye"; *ibid.*, 2.1.187-88; *Horace* (trans. Fairclough), p. 413.

*pugna nocet: citharae noxque Venusque juvant.*

*tutius est jacuisse toro, tenuisse puellam,*

*Threiciam digitis increpuisse lyram:*

*quam manibus clypeos, et acutae cuspidis hastam*

*et galeam pressa sustinuisse coma.*

Ov: Ep:3. V:116.<sup>832</sup>

*sint procul a nobis juvenes, ut femina, comiti.*

Ib: Ep.4. V.75.<sup>833</sup>

*bella gerant alii. Protesilaus amet.*

Ov: Ep.13. V.84<sup>a</sup>.<sup>834</sup>

[*the last quotation is inserted interlinearly*]

how much does this differ from Scipio's behaviour in winter quarters when only twenty seven years of age. *et juvenis, et Caelebs, et victor.*<sup>835</sup> says Rollin, he passes the winter, not in idleness & inactivity, not in eating, drinking, & gaming, but to inform himself secretly

336 [facing p. 335; blank]

337 [continuing on from p. 335]:

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<sup>832</sup> "The fight brings danger; while the zither, and night, and Venus, bring delight. Safer is it to lie on the couch, to clasp a sweetheart in your arms, to tinkle with you fingers the Thracian lyre, than to take in hand the shield, and the spear with sharpened point, and to sustain upon your locks the helmet's weight"; Ovid Her. 3.116-20; *Heroides and Amores* (trans. Showerman), p. 41.

<sup>833</sup> "Away from me with your young men arrayed like women!"; *ibid.* 4.75; *Heroides and Amores* (trans. Showerman), p. 49.

<sup>834</sup> "Let others go to the wars; let Protesilaus love!"; *ibid.*, 13.84; *Heroides and Amores* (trans. Showerman), p. 165.

<sup>835</sup> "Young, unmarried, and victorious": *Roman History*, V, 359.

of all that related to the enterprize he meditated, & without noise to prepare all that he could to the success of it.<sup>836</sup> when he had taken Carthage & continued there in garrison he daily exercised his troops by Sea & land, by which he enured both their bodies & minds to real battles, by which the Romans were rendered indefatigable, & accustomed to observe in all times & places, the military discipline with the outmost exactness<sup>a</sup>.<sup>837</sup>

[*diagonally stroked*]

*jam tum minime salubris militari disciplinae Capua, instrumento omnium voluptatum delinitos militum animos avertit a memoria Patriae.* Liv: lb:7.<sup>838</sup>

[*margin:* Diseases in Cantonment near Antwerp.] Octr.26. N:S: 1745. we canted in the neighbourhood of Antwerp; the Officers in good Chateaux, which have been <un>inhabited sometime & are unfurnished, (expecting the army to march this way) are mottled round with water & consequently are damp; it's therefore necessary to keep good fires, which all do; the men are quartered with the Peasants, have good beds, & plenty of fire. the first complaints were sore throats from catching cold at night:<sup>839</sup> it was our custome

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<sup>836</sup> Ibid., 358; "he passes ... success of it" is quoted.

<sup>837</sup> Ibid., 360; "enured ... exactness" is quoted.

<sup>838</sup> "Capua was even then a far from wholesome place for military discipline, and with its means for gratifying every pleasure proved so fascinating to the soldiers that they forgot their native land"; Livy 7.38.5; *Livy* (trans. Foster, III, 495, 497).

<sup>839</sup> The common sore throat, or inflammatory angina, frequently afflicted soldiers, especially in wet, and was a particular hazard for sentries. Monro advised treating it with standard antiphlogistic methods, plus frequent gargarisms. Sometimes a cloth rubbed with camphorated oil or linimentum volatile, and applied around the patient's neck was useful, as was a blister, applied after bleeding. Brocklesby prescribed venesection, as well as mild purgatives, blisters, and steams of water and vinegar. He also recommended fomentations and poultices, to assist nature in producing and an abscess. Van Swieten likewise recommended bleeding, plus medicines. In the case of putrid sore throat, the symptoms were more severe: the pulse was usually fast (100-130 per minute) and low, and the blood loose. Fever tended to increase between the second and the seventh day of the disease, with a crisis coming on the eleventh. Dying patients might either have convulsions or be comatose. Red pimples signaled the end of the disease, but recovery was often complicated by sloughs,

to pass the evening by visiting at our Country Seats<sup>a</sup>, returning home late, in a thick fog, which is naturale to this Country; many were fond of fishing or sailing in the Motte, & often got cold, bleeding & keeping warm proved a certain cure; the Regmt continued healthie, slight feverish complaints from colds were the only complaints. Genll. Honeywoods Regiment came from Camp directly viz: their quarters in Garrison at Antwerp, & were more sickly

338:

<sup>a</sup>on his arrival in Africa his first care was to re-establish discipline amongst the troops, which he found entirely ruined. they had neither order, subordination, nor obedience. their sole care was to plunder, eat, drink & divert themselves. he made all the useless mouths quit the camp, regulated the Species of provisions the Sutlers were to bring in, & would suffer none but what were Simple & military, industriously banishing all that tended to luxury & voluptuousness. which cost him neither much time nor pains because he set others the example in his own person. Roll: Rom: hist: Vol:8.<sup>840</sup>

*[Horace quotation diagonally stroked]*

<sup>a</sup>*[sic]plerumque gratae divitibus vices,  
mundaeque parvo sub lare pauperum  
caene, sine aulaeis et ostro,  
Sollicitam explicuere frontem.*

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which caused recovered patients to speak through the nose for some time. Brocklesby, Oeconomical and Medical Observations, pp. 149-54; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 16-17, 298-303, 305-13; van Swieten, *Diseases incident to Armies*, pp. 15-18.

<sup>840</sup> VIII, 195; "first care ... own person" is quoted. The reference is to Scipio Aemilius, the younger Africanus.

Hor: Od:29. lib:3tis.<sup>841</sup>

*frequentius caenam quam Castra visentes.*

Justin: lb:vi.<sup>842</sup>

339 [continuing on from p. 337]:

than we in our Country quarters; our men lived sober & boarded with their Landlords, which prevented debauches. So soon as our Barracks were prepared for us, we marched into Garrison; the jaundice soon appeared, & some slight fevers from private debauches. the weather was frosty & cold, we had many coughs with pleuretick stiches. We were only a few weeks in Garrison when we were ordered for England; such men as were sicke were greatly concerned in mind, for fear of being left behind in the hospital; which is always the case with Soldiers, none caring to leave their Regmt even when marching to attacke the Enemy. When we marched to relieve Tournay, some sick and lame were carried in waggons, upon hearing an alarm of engaging the Enemy, many quitted the waggons & mounted their horses<sup>a</sup>.<sup>843</sup>

[the following quotations are all stroked through]

*'propterea quod est quaedam animi incitatio atque alacritas naturaliter innata*

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<sup>841</sup> "Often a change is pleasant to the rich, and a simple meal beneath the poor man's humble roof, without tapestries and purple, has smoothed the wrinkles on the care-worn brow"; Hor. Ode 3.29.13-16; *Horace: The Odes and Epodes* (trans. Bennett), p. 273.

<sup>842</sup> Buchanan probably meant "*cenam*" (dinner), rather than "*caenam*" (properly declined, "*caenum*": mud or mire), so the line would translate, "Going out to dinner more often than to the camp"; Justin Pompei Trogi vi.9.4. Seel has "*scenam*" for "*caenam*," which accords with Watson's translation, "visiting the stage oftener than the camp": M. Juniani Justini, *Epitoma historiarum Philippicarum. Pompei trogi. Accedunt prologi in Pompeium trogum*, ed. Otto Seel, 2nd ed (Stuttgart: B. G. Teubneri, 1985), p. 70; *Justin, Cornelius Nepos and Europius*, trans. John Selby Watson (London: G. Bell and Sons, Ltd., 1910), p. 68.

<sup>843</sup> The French siege of Tournai was antecedent to Fontenoy. Reports of sick soldiers rallying when a battle was imminent were common in 18th-century medical literature; note William Falconer, *A Dissertation on the Influence of the Passions upon Disorders of the Body: Being the Essay to Which the Fothergillian Medal was Adjudged*, introd. John Coakley Lettsom (London: C. Dilly, etc., 1788), pp. 83-88.

*omnibus, quae studio pugnae incenditur. hanc non reprimere, sed augere Imperatores debent.* Jul: Caesar.<sup>844</sup>

*divisa inter exercitum Ducesque munia, militibus cupido pugnandi convenit. Duces providendo, consultando, prosunt. <cunctatione saepius quam temeritate prodesse.> [insert is caretet in] Tac. Hist: lib:3. cap.20.<sup>845</sup>*

*Vobis arma et animus sit: mihi concilium et virtutis vestrae regimen relinquite.* ib: lib:i. cap.84.<sup>846</sup>

[penciled line beside this in margin]

When the mind is so greatly concerned, the body is soon affected, grows restless & unease, tossing & tumbling in bed, nor have medecines the same effect<sup>x</sup>, <<sup>x</sup>Pechlin: obs: Med: lib.3. No.13.<sup>847</sup> [in heavier ink, as is "x" after "effect"]>, whether given internally or applied externally, nor do wounds suppurate so kindly in this condition<sup>b</sup>.

340:

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<sup>844</sup> "There is a certain keenness of spirit and impetuosity implanted by nature in all men which is kindled by the ardour of battle. This feeling it is the duty of commanders not to repress but to foster"; Caesar C.W. 3.92; *Civil Wars* (trans. Peskett), p. 327.

<sup>845</sup> "There is a division of duties between soldiers and generals; to soldiers belongs the eager enthusiasm for battle, but generals must help by foresight, by counsel, and more often by delay than by rash action"; Tacitus Histories 3.20; Tacitus, *The Histories*, trans. Clifford H. Moore, The Loeb Classical Library (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1968 [1925]), p. 363.

<sup>846</sup> "Yours be the arms and spirit; leave to me the plan of campaign and the direction of your valour"; *ibid.* 1.84 (trans. Moore, p. 143).

<sup>847</sup> *Observationum*, III, no. 13, pp. 420-22, is entitled, "Imaginationis vires in determinandis medicaminum effectibus" ("The imagination of men in determining the effects of drugs"). According to Pechlin, the patient's imagination can enhance, diminish, or otherwise alter the effectiveness of drugs in his case. In a case where a studious hypochondriac had been costive because mucus blocked his belly, Pechlin had relieved him with a dose of white vitriol and tartar. The imagination of credulous persons can cause many remedies to succeed, even pills of bread.



*<sup>a</sup>intenti expectant signum, exultantiaque haurit  
corda pavor pulsans, laudumque arrecta cupido.*

Virg: Aen:5. V.137.<sup>848</sup>

[penciled line beside this in right margin]

<sup>b</sup>I remember Blackburn of Capt'n Madan's troop ill of the smallpox & likely to do well, yet dyed suddenly on the 9th day. As the troop marched out of town that morning, hearing the Trumpet sound as they pased his window, was greatly concerned, immediately changed, the pustules flattned, his skine became of a deep scarlet colour, fell into violent ravings & dyed that night; the body soon swelled strong & was buried in 24 hours. Bellamy his Comrade was ill at the same time & dyed in the same manner.

341 [continuing on from p. 339]:

***Qui timet ut sua sit, ne quis sibi detrahat illam;  
ille Machaonia vix ope sanus erit.***

Ov: rem:Am: V:545.<sup>849</sup>

[the following quotation stroked through; others not]

***Quantum erat o magni perituro parcere Divi  
ut saltem patria contumularer humo.***

Ov: trist: lib:3. V:142.<sup>850</sup>

***tam procul ignotis igitur moriemur in oris***

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<sup>848</sup> "They await the signal, while throbbing fear and eager passion for glory drain each bounding heart"; Virg. Aen. 5.137-38; *Virgil* (trans. Fairclough), I, 455.

<sup>849</sup> "He who fears lest she be his no more, lest someone take her from him, will scarce be healed by Machaon's art [i.e., medicine]"; Ovid Rem.Am v.545-46; *Art of Love, and Other Poems* (trans. Mozley), p. 215.

<sup>850</sup> "How small a thing, ye mighty gods, to show mercy to one on the eve of death so that at least I might have been covered with my native soil!"; Ov. T. 3.3.31-32; *Ovid* (trans. Wheeler), p. 111).

*et fient ipso tristia fata loco?*

Ib. V:149. &c.<sup>851</sup>

Decr. 22d. 1745. we marched out of Garrison for Williamstadt, & such men as were unfit for marching were sent to the hospital yesterday; & three dyed last night unexpectedly, all being greatly concerned at the thoughts of being left behind, & telling their Comrades they should certainly dye. all earnestly wished to return home, yet many dyed.

*qui patriam quaerit, mortem invenit.* Ramaz: de morb: Artif. C:42.<sup>852</sup>

[*margin:* Diseases in our Dutch Cantoontment.] Decr. 25. we halted at Etten & canted amongst the Dutch Boovers, the frost preventing our embarking at Wmstadt: many of the men lay upon Straw in barns & outhouses, & tho the weather was cold, they bore it with great patience in hopes of seeing old England soon; Officers were billeted in <the> best houses, & contented, tho badly lodged; all were remarkably healthie, much more so than in Garrison, few complaining of catching cold; they were much in the open air, little or no Duty, & free from town debauches. many <private men> board with their Landlords for Seven Stivers pr day, beer included, live moderately & are sober. all the dirty fellow have the Itch, & say, they catch it from the Boovers, who live much on salt pork,<sup>853</sup> hung

342 [facing p. 341; blank]

343 [continuing on from p. 341]:

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<sup>851</sup> "So far away, then, on a strange shore I shall die, and the very place shall render harsh my fate"; *ibid.*, 3.3.37-38; *Ovid* (trans. Wheeler), p. 111.

<sup>852</sup> "Who seeks his fatherland finds death"; Ramazzini calls this "a camp proverb"; *De morbis artificum* (trans. Wright), p. 369.

<sup>853</sup> Cadogan asserted that smoked or salted meats were difficult to digest and that in the blood, salts caused an itch that was erroneously called scurvy. On the perceived link between scurvy and salted meat, see app. B-1. Cadogan, *Dissertation on the Gout*, p. 41.

beef, Potatoes, &c: We had many scalded feet & toes from sitting near the harth & not accustomed to the heat of turff ashes. Thornton of Captn. Loyd's was slightly scalded on the inside of the right leg, & so much dejected as to take to bed & laye so long in the same posture that the outside of that ankle mortified, attended with slowe fever & dyed. from the first day he was greatly concerned & affraid of the Regmt's marching & leaving him behind them. our Cantoontment is pretty wyde & the sicke in some cases are neglected both as to medecine and nursing; nor do the men incline to complaine, hoping to get aboard soon & recover at Sea from Seasickness. The Officers were healthie, tho their rooms are cold & smokie, either door or window must be open, yet none complaine. are much abroad, taking country diversions, as skating, shooting, & live soberly. we had some accidents from shooting, by the piece bursting in the hand, & Cornet Frankland's servant lost his hand. our horses improved dayly, being fed at large, not confined to weight, & the hay remarkably good.

[*margin:* Reparations for embarking our horses.] so soon as the frost broke we were ordered to prepare for embarking. as our horses were in good order, bleeding was thought absolutely necessary. some bleed the whole troop, taking three pints from the fattest horses & a quart from the others; but this depends more on the opinion of the Officer than judgement of the Farrier, who is for bleeding the fattest only, thinking it needless to bleed the others on account of the cold weather; tho all were blooded at

344 [*facing p. 343; blank*]

345 [*continuing on from p. 343*]:

our coming over.

[*margin:* Embark at Williamstadt.] Febry. 22nd. N:S: we had a long & dirty march to Wmstadt & embarked that evening, had scarcely time to clean our horses.

[diagonally stroked]

*O fortes pejoraque passi*

*mecum saepe viri, nunc vino pellite curas.*

*cras ingens interabimus aequor.*

Hor.<sup>854</sup>

the men had the same allowance as in Par:1. the weather being cold we had no occasion to open the Port-holes to air & cool the horses. in small & narrow ships, after being some days aboard, they began to be hot & sweat; it was then necessary to open the Port holes & remove the boat off the hatch-way<sup>x</sup>.

The men were healthy, only some slight pleureticks & Rheumaticks; bleeding the chief remedy, small punch with Sal: Prunel:<sup>855</sup> their universal drink. after some days it began to be hot & suffocating twixt-decks, & the men were more subject to catch cold when upon decke, few incline to take medecines, expecting to find an infallible cure from Seasickness. when we sailed all were seasicke, as also the greatest part of the Sailors, which they imputed to their lying six weeks in fresh water & within Land; lying quiet & still is reckoned the best preservative against this disorder. Some drink thine chicken or mutton broth in order to promote vomiting with the greater ease. One of our women was delivered of a child the night before we sailed, having violent grinding pains, I ordered a mixture with a large quantity of Laudanum,<sup>856</sup> of which she took frequently, & was not in the least

346:

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<sup>854</sup> "O ye brave heroes, who with me have often suffered worse misfortunes, now banish care with wine! To-morrow we will take again our course over the mighty main"; Hor. Ode 1.7.30-32; *Horace: The Odes and Epodes* (trans. Bennett), p. 25.

<sup>855</sup> Note entry, app. C-1.

<sup>856</sup> App. C-1, under "opiates."

[*dark ink*]

in 1625 a grand supply was sent from England, but, by ill management, the forces were kept so long on board the Transports, that an Epidemick distemper broke out amongst them, which differed very little from the Plague, & carried off the greatest part. Biograph: Britannic: V.3. p.1679. Art. Devereux Earl of Essex.<sup>857</sup>

347 [continuing from p. 345]:

Sicke during the passage, tho it blew a hard gale & run a very rough sea. our men lived mostly on fresh provisions, which they dayly bought ashore, whilst we remained wind bound at Helvoetslys.

[margin: Desembarke at Gravesend.] March 2nd. O:S: 1746: we arrived at Gravesend in high Spirits & well pleased with seeing old England[.]

*Cum procul obscuros colles, humilemque videmus*

*Italiam. Italiam primus conclamat Achates.*

*Italiam laeto socii clamore salutant:*

Virg: Aen:3. V:222.<sup>858</sup>

& desembarke our horses in good condition, having lost Six by accidents whilst aboard. as it blew hard during our passage, & tho we were but one night at Sea, many were sick at landing, but soon recovered and fed as usuale. when landed could scarcely walk, their legs being numb'd & stiff, but recovered by gentle exercise and rubbing. some troops were twenty two days on board.

Many men had sore shins from hurts a shipboard as in Par:1. were much inflammed from being so long aboard & wanting poultices; as sea bisket was their only bread, they could

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<sup>857</sup> This passage is actually a quotation: "in 1625 ... greatest part"; *Biog. Brit.*, III, 1679.

<sup>858</sup> "... when far off we see dim hills and low-lying Italy. 'Italy!' first Achates shouts aloud; Italy the crews hail with joyful cry"; Virg. Aen. 3.522-24; *Virgil* (trans. Fairclough), I, 383.

not make poultices of the Crumbs, therefore the Meals ought to be kept in readiness. washing with warm water & brandy was their common fomentation, rubbing with brandy was their universal medecine, to which a small quantity of oyle should always be added, otherwise the rag dries too soon & sits into the

348 [facing p. 347; blank]

349 [continuing on from p. 347]:

sore. Ungt. Dealth:<sup>859</sup> much used in rubbing the sore parts. Many were itchy, as they lye amongst the dirty hay, & seldom shift nor wash & keep clean. nixt day marched for Country quarters.

[diagonally stroked]

*Hoc opus exegi. fessae date serta carinae.*

*contigimus Portum, quo mihi cursus erat.*

Ov: rem: Amor: V:8ii.<sup>860</sup>

**Finis**

[end of pagination; three blank pages follow]

Authors on Military Diseases & Gunshot Wounds.

A.

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<sup>859</sup> Note entry under marshmallow, app. C-1.

<sup>860</sup> "I have finished my task; hang garlands on the weary vessel; the haven whither my course was set is reached"; Ovid Rem. Am. v.811-12; *Art of Love, and Other Poems* (trans. Mozley), p. 233.

ABeille, *Le Parfait Chirurgien d'Armee, et Traite de Playes d'Arquebuscade*. 8°. Par:1696.<sup>861</sup>

[*sharper quill*]

Atkins[.] *Navy Surgeon* -- 1737. 8°. <sup>862</sup>

B.

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<sup>861</sup> Scipion Abeille, *Le parfait chirurgien d'armèe, le traitè des playes d'arquebusade, le chapitre singulter tirè de Guidon, l'anatomie de la teste et de ses parties. Pour l'instruction de ètudiens en chirurgie*. Paris, Jean Guignard, 1696. Abeille (b. Riez, before 1650; d. 9 December 1697) served two campaigns as surgeon-major on the regimental level and in the French military hospital in Flanders. *Le parfait chirurgien* comprehends three of his earlier publications: *le traite ... d'arquebusades* (1695); *le chapitre ... Guidon* (1689); and *l'anatomie ... parties* (1689). It includes discussions of medicines and surgical instruments needed by medical officers, and an extended discourse on the analysis and treatment of gunshot wounds. His only other book was an anatomical treatise embroidered with verse. His brother, Gaspard, was a successful poet, and his son wrote comedies. *Biographie universelle, ancienne et moderne, ou Histoire, par ordre alphabétique, de la vie publique et privée de tous les hommes qui se sont fait remarquer par leur écrits* (Paris: Michaud, 1811-28); *Biographisches Lexikon der hervorragenden Ärzte aller Zeiten und Völker*, ed. Franz Hübötter et al. (München, Berlin: Urban & Schwarzenberg, 1962); *Biog. Lex.; Dictionnaire des sciences médicales. Biographie médicale*, ed. A. J. L. Jourdain (Paris: C.L.F. Panckoucke, 1820-25), I, pp. 9-10.

<sup>862</sup> John Atkins, *The Navy-Surgeon; or, A Practical System of Surgery. Illustrated with Observations on such Remarkable Cases as have Occurred to the Author's Practice in the Service of the Royal Navy. To Which is Added, a Treatise on the Venereal Disease...* London, C. Ward and R. Chandler, 1734. There does not appear to have been a new printing or edition in 1737, although an enlarged version was published in 1742 and was reprinted in 1758. Atkins (1685-1757) seems to have entered the Navy as a surgeon soon after completing his apprenticeship, for in his writings he mentions treating wounds incurred in battle in 1703. He remained on active service through the balance of that war and in 1721-23 served as surgeon in an expedition to put down piracy on the West African coast. Thereafter, he was unable to gain a surgical appointment on another ship and he turned to writing. *The Navy-Surgeon* was a highly popular work, judging not only from its various editions and reprints, but from the fact that it was also put out in condensed form. Atkins advocated prompt amputation of wounded limbs, asserting in *The Navy-Surgeon* that delaying the operation allowed patients time to reflect and fear. *DNB*; Lloyd and Coulter, *Medicine and the Navy*, p. 20; Tubbs, "John Atkins," *passim*.

Brand. (Paul) de Dysenteria Castrensi. exact: Act: Haf: Vol:5. No.3i.<sup>863</sup>

Boscus[.] de Vulneribus a bellico fulmine illatis[.] Ferrariae. 1603. 4<sup>to</sup>.<sup>864</sup>

Botallus (Leonh) de Sclopitorum Vulneribus. Ven: 1566 & 1598 -- 8<sup>o</sup> -- Francf.1575. 4<sup>to</sup>. Ludg:  
1560. 12mo.<sup>865</sup>

[*lighter ink*]

Brocklesby (Dr.) Oeconomical & Medical observations. Physician to the Army in Germany. Lon.  
1763. 8<sup>o</sup>.<sup>866</sup>

C.

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<sup>863</sup> Johann Valentin Wille, *Tractatus medicus de morbis castrensis internis*, Hafniae [Copenhagen], 1676. Brand (d. 1687) was the respondent at the defense of this dissertation. Wille (1651-76), a native of Colmar, also studied at Strassbourg. He served as a military doctor in the Danish army, and despite his early death he published two works besides the one noted by Buchanan, one being a poem on the use and abuse of hartshorn. Coupled with *De militis in castris sanitate tuenda*, by Luca Porzio (n. 907), *Tractatus medicus de morbis castrensis* was republished at The Hague in 1739 and at Leiden in 1741, suggesting that it enjoyed some popularity. *Biog. Lex.*; *Dictionnaire des sciences médicales*, VII, 504.

<sup>864</sup> Ippolito Boschi, *De vulneribus a bellico fulmine illatis, tractatus*. Ferrariae, 1596. Boschi (c.1540-1612) was physician to a hospital in Ferrara, the city where his brother, Giovanni, also practiced medicine. Besides *De vulneribus*, he was responsible for four other books, in which he dealt with the treatment of head wounds, dislocations, and other surgical problems. He has been criticized for considering gunshot wounds as burns, rather than as contusions. *Biog. Lex.*; *Biog. univ.*

<sup>865</sup> Leonardo Botallo, *De curandis vulneribus sclopetorum...* Leiden, 1560; Venetiis, 1564. Botallo (b. Asti, 1530-c.1587) studied medicine at Pavia. Fallopius was among his teachers. He later practiced in France, where it appears that he enjoyed a great reputation, serving as physician to Charles IX and Henry III. In *De curandis*, he condemns the popular belief that gunshot wounds were venomous, by so doing supporting the position of Paré and Maggi, though he does not mention either by name. He also criticizes the practice of tenting and plugging in the process of dressing gunshot wounds. *Biog. Lex.*; *Biog. univ.*; J. F. Malgaigne, *Surgery and Ambroise Paré*, trans. and ed. Wallace B. Hamby (Norman: Univ. of Oklahoma P., 1965), pp. 261-62.

<sup>866</sup> On Brocklesby and his treatise, note Curran, "Dr. Brocklesby of London," passim; Irving, "A Concise View of the Progress of Military Medical Literature," pp. 292-96.



Chesne (Jos: du) de la Cure des Arquebusades. Lyon 1576. 8<sup>o.867</sup>

Clowes (Wm)[.] a profitable & necessary book of Observations, for all those who are burned with the flame of Gunpowder &c: 1637. 4<sup>to.868</sup>

Coberi[.] Observationes Medicae Castrensiū Hungaricarum. Helms. 1685.

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<sup>867</sup> Joseph du Chesne, *Sclopetarius, sive, De curandis vulneribus, quae sclopetorum & similium tormentorum ictibus acciderunt, liber* (Leiden, 1576). In medical literature, du Chesne (b. Armagnac, c. 1544; d. Paris, 1609) was often called by the Latinized form of his name, "Quercetanus" (cf. n. 910). He received his M.D. at Basle in 1573 and practiced for some years in Switzerland, gaining experience in military medicine and surgery while serving with the forces of Bern. He then practiced in Germany, before moving on to Paris, in 1593. His reputation appears to have been high, a conclusion suggested by the fact that he was appointed physician to Henry IV, but he had a number of critics in the profession. Du Chesne took a middle position on the question of whether gunshot wounds were poisoned, but was nevertheless criticized in writing by Paré. Ultimately, du Chesne's greatest influence lay in pharmacy. An avid chemist, he was strongly influenced by Paracelsian doctrine (Multhauf, feels that the extent has been exaggerated by some writers) A pharmacopoeia that he wrote was recommended by Boerhaave to his students, and several drugs bearing his name were still in use in the eighteenth century. *Biog. Lex.; Biog. univ.*; Alexander Chalmers, ed., *The General Biographical Dictionary: Containing an Historical and Critical Account of the Lives and Writings of the Most Eminent Persons in Every Nation; Particularly the British and Irish, from the Earliest Accounts to the Present Time*, new ed., rev. and enl. (London: J. Nichols and Son [etc.], 1813), under "Chesne"; Malgaigne, *Surgery and Ambroise Paré*, p. 298; Robert Multhauf, "Medical Chemistry and 'The Paracelsians'," *BHM*, 27 (1954), pp. 108-09..

<sup>868</sup> William Clowes, *A profitable and necessarie booke of observations, for all those that are burned with the flame of gun-powder*, 3rd. ed. (London: 1637). Clowes (c.1540-1604) served as surgeon on a number of army and naval expeditions, 1563-88 (with gaps), his last service coming on the fleet that confronted the Armada. He was also surgeon at Christ's Hospital and St. Bartholomew's. The surgical practice that he recommended in his various writings was for the most part drawn from personal observation, and contemporaries and historians have credited him with several worthwhile innovations. In the estimation of Norman Moore, Clowes's works are "the best surgical writings of the Elizabethan Age." *DNB*. For a fuller appraisal of Clowes, see De Witt T. Starnes and Chauncey D. Leake's introduction to the facsimile ed. of *A profitable and necessarie booke*; Irving, "A Concise View of the Progress of Military Medical Literature," pp. 87, 88-89; Webb, "English Military Surgery," pp. 273-75.

Crausius[.] de Sclopetorum Vulneribus. Jenae. 1695. 4<sup>to.870</sup>

[*sharper quill*]

Cockburn's Sea Diseases. 1736. 8<sup>o.871</sup>

D.

- <sup>869</sup> Tobias Cober, *Observationum medicarum castrensiarum Hungaricarum decades tres* ([Helmstadt] 1685). Cober (b. Gorlitz, c.1570; d. Hungary, 1625), as a student in Helmstadt, gained notoriety for a comedy he wrote in Latin. He received his M.D. there in 1595. In 1596 he was appointed surgeon in the army of the emperor and accompanied the troops that fought the Turks in Hungary. After some years with the army, he retired to practice medicine in Hungary. *Observationum medicarum* was his most important work. *Biog. Lex.*, under "Kober, Thomas."
- <sup>870</sup> Ludwig Christoph Guckelin, *Dissertatio inauguralis medico-chirurgica de sclopetorum vulneribus, vulgo Schuss-Wunden* (Jena: Litaris Mullerianis, 1695). Rudolphus Guilielmus Crausius (1642-1718), dean of the medical faculty of the University of Jena, presided at Guckelin's defense, and consequently his name was affixed to the dissertation. Little is known of Guckelin, whose only other contribution to medical literature is a case history published by Rosinus Lentilius in 1700 in a brief treatise on hydrophobia. *Biog. univ.*, under "Crause."
- <sup>871</sup> William Cockburn, *Sea diseases; or, A treatise of their nature, causes, and cure. Also an essay on bleeding in fevers; shewing the quantities of blood to be let in any of their periods*, 3rd ed., "corrected and much improved" (London, 1736). Cockburn (1669-1739) studied at Leiden in the early 1690's, but took his M.D. at Aberdeen. He served as physician to the fleet 1694-96, and soon after leaving the service he published *Nature and Cure of Distempers of Seafaring People...*, which, in later editions, was entitled *Sea Diseases*. He then entered upon a profitable practice in London, where he counted Swift among his patients. Cockburn was perhaps best known to contemporaries for an electuary against dysentery that he invented in the late 1690's. He supplied this drug to the navy, and possibly the army, for forty years, but never revealed the recipe. Cockburn enjoyed a great reputation during his later years, especially in the navy, and served as physician to Greenwich Hospital from 1731 until his death. His medical and surgical practice, however, tended to be traditional, as he argued, e.g., for bleeding as a common course of treatment and advocated exercise as the primary cure for scurvy (this, despite the fact that he observed successful treatment with lemon juice). After his death, the writings of reformers like Lind caused his reputation to decline, and modern assessments of his work tend to be negative. Lloyd and Coulter, *Medicine and the Navy*, III, 40- 41; *DNB*.

Drari (Henr. Franc: Le) Traite ou reflexions sur les playes d'Armes a feu[.] Par: 1737. 8o.<sup>872</sup>

Daillaeus (Peter) de vulneribus ab armis igni vomis inflictis. Par:1668.

12mo.<sup>873</sup>

Traite des Playes d'Armes a feu, par M. Desprot. 12<sup>o</sup>. 1758.<sup>874</sup>

E.

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<sup>872</sup> Henri François le Dran, *Traité ou réflexions tirées de la pratique sur les playes d'armes à feu* (Paris, 1737). Le Dran's (1685-1770) treatise went through several French editions and appeared in translations into German, Spanish, and English (as *A Treatise, or Reflections, drawn from Practice on Gunshot Wounds*; 1743). Le Dran's father, Henri (1656-1728) was also a noted surgeon, one of the few of his generation to receive a liberal university education. Henri François (1685-1770) served for many years as chief surgeon at Charité hospital. The courses on anatomy that he taught there were highly popular, Haller being among those who studied under him. Le Dran incorporated careful anatomical observation with humoral pathology. Toby Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the 18th Century* [*Contributions in Medical History*, no. 6] (London and Westport, Conn.: Greenwood Press, 1980), pp. 56, 103-05, 180-81.

<sup>873</sup> Francesco Plazzoni, *Traité de blesseures et playes faites par armes a feu, vulgairement dite playes d'arquebusades. Auquel sont amplement expliquées leur nature & curation, avec la maniere de corriger les accidens qui les accompagnent, le tout avec methode Corrigé & augmenté de plusieurs remedes pour la facilité des jeunes chirurgiens qui suivent les armées*, trans. Pierre Dailly (Paris, 1668). Plazzoni's treatise had originally been published in 1605 in Padua, under the title, *De vulneribus sclopetorum tractatus*. He also published an influential work on the organs of generation. Plazzoni was a professor of anatomy and surgery at Padua from 1619 until his death in 1622. *Biog. Lex.; Dictionnaire des sciences médicales*, VI, 442.

<sup>874</sup> François Desport, *Traité de plaies d'armes a feu* (Paris, 1749). François Fournier de Pescay, author of the entry on Desprot in *Biog. univ.*, characterizes him as "one of the greatest military surgeons" in French history and also has high praise for *Traité*. Desport (d. 1760) served as a surgeon-major in French military hospitals, 1734-38, and in 1738 was appointed surgeon in chief to the French Army in Corsica. In the latter position he played a major part in reforming the French military hospitals. The *Traité* was his only book, and he was well into middle age when he wrote it, but in civilian practice as in the military he seems to have enjoyed a good professional reputation, and he served as surgeon to the queen of France. Although he recommended, virtually as a matter of course, amputating limbs wounded by gunfire, his overall tendency was toward more moderate treatments and milder medicines. *Biog. Lex.; Biog. univ.*

F.

Ferrius (Alfonsus) de Sclopetorum Vulneribus[.] Rom. 1552. 4to.<sup>875</sup>

Finckenau (Jac) de Vulneribus Sclopetorum. Regiom: 1716. 4<sup>to</sup>.<sup>876</sup>

Fonseca (Ant) de Epidemia febrili grassante in exercitu Regis Catholici in inferiori Palatino[.] Anno 1620. & 1621. Mechlinae 1623. 4to.<sup>877</sup>

G:

Gehema (Jani Abrah: a) Medicus et Chirurgus Castrensis[.] Hamb: 1684. 12mo. Germaniae.<sup>878</sup>

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<sup>875</sup> Alfonso Ferri, *De sclopetorum sive archibusorum vulneribus*. Rome, 1552. Ferri (b. Faenza, c. 1500; d. 1575) was celebrated as a teacher of surgery in Naples and of anatomy in Rome and served for some years as first surgeon to Paul III. He also had extensive experience as a military surgeon, participating in a number of campaigns with Neapolitan and German armies. Malgaigne takes him to task for having endorsed the traditional view that gunshot wounds were venomous and for advocating the cautery, and he conjectures that Ferri was specifically intent on challenging Paré on these points. In apparent reference to *De sclopetorum* and to the "Alphonsinum," a device for extracting bullets, supposed to have been invented by Ferri, Malgaigne writes that Ferri "has been given a usurped reputation for one of the worst instruments and worst books that have ever cluttered the surgical arsenal and literature." However usurped it may have been, Ferri did have a high reputation and significant influence. He helped to popularize the bougie and also guaiacum, which he recommended not only for syphilis but for many other diseases. *Biog. Lex.; Biog. univ.*; Malgaigne, *Surgery and Ambroise Paré*, pp. 260-61, 353.

<sup>876</sup> Jakob Finckenau, *Sclopetorum vulnera, germ, die Schuss-Wunden, medice chirurgiceque pertractata* (Regiomonti [Koenigsberg], 1716). Finckenau (b. Marienburg, 1674; d. Koenigsburg, 1717) was appointed a regimental surgeon in 1706. He received his M.D. from Koenigsberg in 1710 and was appointed professor of medicine there in 1713. *Biog. Lex.*

<sup>877</sup> Antonius Fonseca, *de Epidemia febrili grassante in exercitu Regis Catholici in inferiori Palatinatu. Anno 1620 & 21 tractatus* (Mechlin, 1623). Fonseca (b. Lisbon) is known primarily through this work, which is a treatise on the epidemic that struck the Spanish forces in the Palatinate and his account of how he cured it. *Biog. Lex.; Biog. univ.* (under "Fonseca, Antoine da," 1517-88).

<sup>878</sup> Janus Abraham von Gehema, *Der wohlversuchte Feld-Medicus, anweisende die Missbrauche, welche bisshero bey Anstellung der Feld-Medicorum* (Rostock, 1689). Gehema (1645-1700) was the son of a Polish courtier. After the death of his father, he joined the Polish Army and went to serve in Holland, where he became a cavalry officer. While in

Idem -- Miles Agrotans. Ibid: 1690. Germaniae.<sup>879</sup>

Gersdorff (Hans Von) Chirurgia Castrensis Argent: 1527. 4<sup>to</sup>. Germaniae.<sup>880</sup>

Gendre (Ant) de febre Epidemica in Montis Albani obsidione grassata[.] Lugd. 1626. 8<sup>o</sup>.<sup>881</sup>

Geach (Francis) obs: on inflammations of the eyes, Ulcers, & Gunshot wounds. 1766. 1st.<sup>882</sup>

H:

Heisterus (Laur) de vulneribus Machinarum ignivomarum. Helmst: 1744.

4<sup>to</sup>.<sup>883</sup>

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service he developed an interest in science and entered Leiden, where he became a Cartesian. Later, under the influence of Cornelis Bontekoe (1647-85), he became a fervent spagyrist and iatrochemist. Gehema went on to serve as physician to the king of Poland. He was also for a time physician to the Danish Army in Holstein. *Biog. Lex.; Biog. univ.*

<sup>879</sup> Gehema, *Der krancke Soldat bittende dasz er hinfuhro besser moge conserviret, mitleidiger tractiret, und vorsichtiger curiret werden* ([Stettin:] Johann Adam Plener, 1690).

<sup>880</sup> Hans von Gersdorff, *Feldtbuch der Wundartzney* (Strassbourg, 1517). This work was one of the earliest treatises on surgery to be published in a European vernacular, and it proved to be very popular, going through numerous editions and several translations. Gersdorff (d. 1529), also known as Schylhans, was heavily influenced by the Arabs, but was also exceptionally original. His innovations in surgical equipment and procedures were lauded by Haller. *Biog. Lex.; Malgaigne, Surgery and Ambroise Paré*, pp. 207-09.

<sup>881</sup> Antonius Gendre, *De febre epidemica in Montis-Albani obsidione grassata, medica dissertatio* (Leiden: Antonii Chard, 1626). Gendre is quite obscure and his dissertation appears to be the only work that he published.

<sup>882</sup> Francis Geach, *Medical and Chirurgical Observations on Inflammations of the Eyes, on the Venereal Disease, on Ulcers and Gunshot Wounds* (London: B. Law, 1766). This brief work seems to have enjoyed some popularity and was translated into German. Geach (1724-98) received his M.D. from Aberdeen and served for many years as chief surgeon at the Naval hospital in Plymouth. He was a member of the Royal Society. Besides the work cited by Buchanan, Geach also published booklets dealing with the Devonshire Colic and with dysentery, and did extensive work on gallstones. After a brief meeting in 1785, Wesley described him as "a man of sense, and, it seems, of considerable learning." *Biog. Lex.; Lloyd and Coulter, Medicine and the Navy*, III, 266.

<sup>883</sup> Lorenz Heister (1683-1758) was a major figure in European medicine and surgery during the middle third of the 18<sup>th</sup> century. The son of an innkeeper, he attended several German

Hildanus (Fabr: Guil) de partu Caesareo et Vulnere Sclopeti. Oppenh: 1614.<sup>884</sup>

Idem. Cista Militaris[.] Basil: 1633. 8<sup>o</sup>.<sup>885</sup>

Idem, Nova Chirurgia Castrensis, et Armamentarium Castrense; in quo praecipuae de Gangraena et Sphacelo, de Vulneribus Sclopetorum, Angina et Dysenteria agitur. Basil: 1615. Germaniae.<sup>886</sup>

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universities and in 1706 went to Amsterdam to study anatomy and surgery. In 1707 he gained his first experience in military medicine, as a surgeon in the Dutch camp at Brabant, and after the campaign went to study under Boerhaave and Albinus at Leiden, where he received his doctorate in 1708. After spending 1709 serving as physician-general to the Dutch military hospital at Brabant, he accepted a professorship in anatomy and surgery at Altorf. In 1719 he accepted the position of professor of medicine at Helmstadt, and later professorships in surgery and botany, as well. He also was appointed physician to the duke of Brunswick, a position that he retained even when Peter the Great offered him a similar appointment at the Russian court. Heister wrote several major works on botany, showing himself in this field as a rival and critic of Linnaeus, but his most important writings were in surgery and anatomy. His *Compendium anatomicum* (1717) and *Chirurgie* (1718) were written in German and then translated into Latin, French, Italian, Dutch, and English (*A Compendium of Anatomy*, 1721; *A General System of Surgery*, 1743). Both superseded the previous literature and were highly influential. *Biog. Lex.*; *Biog. univ.*; Chalmers, *Biographical Dictionary*; Max Neuburger, "Some Relations between British and German Medicine in the First Half of the Eighteenth Century," *BHM*, 17 (1945), pp. 224-28.

<sup>884</sup> Wilhelm Fabricius Hildanus, *De vulnere quodam gravissimo & periculoso, ictu sclopeti inflictio observatio et curatio singularis* (Oppenheim: Hieronymi Galleri, 1614). Fabricius (1560-1634), known as "Hildanus" from Hilden, the Swiss town where he was born, was perhaps the most celebrated surgeon of the early 17<sup>th</sup> century. His treatise on gunshot wounds that Buchanan lists is not among his better-known works, though in *Biog. Lex.* it is praised as excellent. It does not appear to have been published in English translation. *Biog. Lex.*

<sup>885</sup> Wilhelm Fabricius Hildanus, *Cista militaris, h[oc] e[st] designatio praecipuorum medicamentorum instrumentorumque, quibus rationalem medicum, & cheirurgum castrensem, instructum esse convenit* (Basel, 1633). This work had earlier appeared in German, published with *New Feldt Artzny Buch* (n. 881). It was republished in Basel in 1634, in a collection of works entitled *Cheirurgia militaris*. It was later translated into English, under the title, *Cista militaris; or, A military chest, furnished either for sea, or land, with convenient medicines, and necessary instruments* (London: W. Godbid, 1674).

<sup>886</sup> Wilhelm Fabricius Hildanus, *New Feldt Artzny Buch von Kranckheiten und Schaden, so in Kriegen den Wundartzen gemeinlich furfallen* (Basel: Verlegung Ludwig König, 1615).

[in lighter ink]

Hoffmanni (Fred:) Diss: de Militum valetudine tuenda in Castris. Op. Med: Tom:3. p.296. Ed: Genev: -- fol. 6. Tom.<sup>887</sup>

I.

K:

Kupferschmidt (Jo) de morbis Praeliantium, quos in victoriosa Bernatum Expeditione bellica 1712 observare Cicuit. Basil. 1715. 4<sup>to</sup>.<sup>888</sup>

L:

Lebfelter (Jac) de Vulneribus, quae sclopetorum globulis inflicti solent, eorumque Curatione[.] Lips: 1596. 4<sup>to</sup>.<sup>889</sup>

M:

Maggius (Barthol) de vulnerum Sclopetorum et Bombardarum curatione. Bonon. 1552. 8<sup>o</sup>.<sup>890</sup>

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<sup>887</sup> “*Dissertatio medica de militum valetudine tuenda in castris*” (“Medical dissertation on looking after army health in camp”): Hoffmann, *Opera omnia physico-medica*, V, 296-303.

<sup>888</sup> Johannes Kupferschmidt, *Dissertatio chirurgico-medica de morbis praeliantium* was published with two other dissertations obtained at Basel: *Triga dissertationum medicarum* (Basel: E. and J. R. Thurnisiorum, 1715). After receiving his M.D. from Basel in 1715, Kupferschmidt (1691-1750) practiced in Basel, Burgsdorf, and finally Paris. His *Dissertatio* won high praise from Wilhelm Rüttimeyer, who made it the subject of his doctoral dissertation (Basel, 1918). *Biog. Lex.*

<sup>889</sup> Untraceable.

<sup>890</sup> Bartholomeo Maggi, *De vulnerum sclopetorum et bombardarum curatione* (Bologna, Bartholomeum Bonardum, 1552). While historians, including Malgaigne, long believed that Maggi was born in 1477, it appears that the year was 1516; Maggi died in 1552. In 1550, he and Giovanni Francesco Rota (n. 905) were called on by Paul III to consult after the pope’s nephew had received a gunshot wound. While Rota gave traditional advice, Maggi put

Idem, de Vulneribus Sclopetorum fol: in Gesneri Scriptoribus optimis chirurgicis. Figur. 1553.<sup>891</sup>  
Mindererus (Raymond) Medicina Militaris cum Notis Cardilucci. Norimb: 12. 1679. Germaniae.<sup>892</sup>  
Mye (Franc: Vander)de Officio Medici praesidii, et morbis ab urbe recuperata grassantibus Bredanis,  
erroribus variis Practicorum et medicamentis tempore obsidionis in praesidio pro Militibus  
praescriptis. Bredae: 1630. 4<sup>to</sup>.<sup>893</sup>

[*sharper quill* (difference slight)]

Moyle's Sea Surgeon. 1693. 8<sup>o</sup>.<sup>894</sup>

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forward views similar to Paré's. These views he later propounded in *De vulnere sclopetorum*. *Biog. Lex.*; Malgaigne, *Surgery and Ambroise Paré*, pp. 259-60.

<sup>891</sup> I cannot locate a record of this edition. Konrad Genser (1516-65) does appear to have published a collection entitled, *Chirurgia scriptores optimi quique veteres et recentiores*, and it was in turn coupled with several works of Paré and published as *Thesaurus chirurgiae, continens prestines-simorum autorum* (Frankfort, Nicolae Hoffmanni, 1610).

<sup>892</sup> Raymund Minderer, *Medicina militaris; das ist, Gemeine Handstucklein zur Kreigs-Artzney gehorig*. The version that Buchanan specifies was edited by Johannes Hiskias Cardilucius, and was published under the title, *Pharmaco-poliolum campestre et itinerarium oder Feld- und Reis-Apothekelein begreifend das vor diesem von Dr. Minderer. Medicina militaris*, which was first published in Augsburg in 1620, also appeared in an English translation, *Medicina militaris, or, A Body of Military Medicines Experimented*, first published in 1674 and again in 1686. Minderer (1570?-1621) obtained his doctorate from Ingolstadt in 1597, then practiced in Augsburg and served as physician to Emperor Matthias and to Maximilian, duke of Bavaria. His main legacy to medicine was Mindererus's Spirit, a compound of sal ammoniac and vinegar that remained a popular diaphoretic, diuretic, and astringent into the 18<sup>th</sup> century. *Biog. Lex.* (entries for Minderer and Cardilucius); Brookes, *General Dispensatory*, pp. 310-11.

<sup>893</sup> Frederik van der Mye, *De officio medici praesidii, et morbis ab urbe recuperata grassantibus Bredanis, erroribus variis practicorum et medicamentis tempore obsidionis in praesidio pro militibus necessariis* (Breda, 1630). Little is known of van der Mye, aside from the fact that he was born in Delft and practiced surgery in Breda during the siege of 1624-25 (the treatise that Buchanan notes deals with the pestilence that attacked the population within the city). After the surrender of Breda, van der Mye served the Spanish troops. He published several works 1624-33, one of which – not the one cited by Buchanan -- was republished as late as 1793. *Biog. Lex.*

<sup>894</sup> John Moyle, *Chirugus Marinus: Or, The Sea-Shirurgion. Being Instructions to Junior Chirurgic Practitioners, Who Design to Serve at Sea in This Employ* (London: E. Tracy,



La Medecine de l'armee. par M: de Meysery. Par. 1754. <3 vol. 12<sup>o</sup>>. <sup>895</sup>

[*title raised, to avoid following "N"*]

Monro (Donald) diseases in the British hospital. Lond 1764[.] 8<sup>o</sup>.<sup>896</sup>

N.

O.

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1693). Moyle appears to have served for many years as a naval surgeon, and by his own account he was present at "most of the sea fights that we have had with any nation in my time," but it was only after he was superannuated, in 1690, that he began to write. He eventually published four books on surgery and has been credited with authorship of an anonymous pamphlet, *The Present Ill State of the Practice of Physick in This Nation* (London, 1702). *The Sea-Chirurgion* was his most popular work, going through several editions. *DNB*.

<sup>895</sup> Guillaume Mahieu de Meyserey, *La medecine de l'armée, contenant des moyens aisés de préserver de maladies* (Paris: Chez la veuve Cavelier & fils, 1754), 3 vols. This work is occasionally cited in 18<sup>th</sup>-century works on military medicine, and Meyserey (d. c.1760) also published several brief treatises, one of which was republished as late as 1782. Nevertheless, he remains an obscure figure.

<sup>896</sup> Donald Monro, *An account of the diseases which were most frequent in the British military hospitals in Germany, from January 1761 to the return of the troops to England in March 1763. To which is added, An essay on the means of preserving the health of soldiers, and conducting military hospitals* (London: A. Millar, 1764). Monro later enlarged the "essay" in this work, using as the basis for *Observations on the means of preserving the health of soldiers; and of conducting military hospitals* (1780). The second son of Alexander Monro primus, Donald Monro (1727-1802) studied under his father, receiving his M.D. at Edinburgh in 1753. Monro appears to have been well respected in the profession, becoming a fellow of the RCPL by special grace in 1771 (licentiate, 1756) and subsequently serving four terms as censor. He was the Croonian lecturer in 1774-75 and delivered the Harveian oration in 1775. Except for the period 1760-63, when he served as army physician, Monro was physician to St. George's 1758-86. His treatise on dropsy, a two-volume study of English spas, and the three-volume *Treatise on Medical and Pharmaceutical Chymistry* enjoyed some influence, *Observations on the means of preserving the health of soldiers* was by far his most important work, being published in French and German editions. *DNB*.

P.

- Paracelsus (Th) *Traite des Arquebusades*. Lyon. 1581. 8<sup>o</sup>.<sup>897</sup>
- Pechlinus (Jo: Nic) *de vulneribus Sclopetorum*. Kiloni 4to. 1618.<sup>898</sup>
- Plazzonus (Franc) *de vulneribus Sclopetorum*. Ven. 1618. 4<sup>to</sup>.<sup>899</sup>
- Portius (Luc: Ant) *de Militis in Castris Sanitate tuenda[.]* Neap: 1728. 8<sup>o</sup>.<sup>900</sup>
- Pringle's *Observations on the Diseases of the Army*. Lond: 1752. 8<sup>o</sup>.<sup>901</sup>
- Purmannus (Math: Godofr) *de vulneribus Sclopetorum*. Franc: 1703. 8<sup>o</sup>. Germaniae.<sup>902</sup>

Q.

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- <sup>897</sup> Buchanan appears to refer to the treatise that appeared in *La grand chirurgie*, Claude Dariot's translation of Paracelsus's *Grosse Wundarzney*. The translation was first published in Lyon in 1589. Paracelsus was routinely savaged in 18th-century British medical literature, and his surgical writings had little if any influence.
- <sup>898</sup> Johann Nicolas Pechlin, *Disputatio medica inauguralis de vulneribus sclopetorum in genere* (Kiel, 1674). Pechlin (1646-1706) received his doctorate in Leiden, his birthplace, then was appointed professor of medicine at Kiel. In 1680 he became physician in ordinary to the Herzogs of Holstein, and spent his last years in Stockholm. He was quite prolific and was regarded as a major authority; Haller praised him highly. *Biog. Lex.*
- <sup>899</sup> cf. n. 871.
- <sup>900</sup> Lucantonio Porzio, *De militis in castris sanitate tuenda* (Naples: Felicis Mosca, 1728). This was the most influential work by Porzio (1639-1723), who was for 53 years a professor in Rome and Naples. Originally published in Vienna in 1685, Porzio's treatise went through several Latin editions and was translated into French (*La medicine militaire* [Paris: Chez Briasson, 1744]) and English (*The Soldier's Vade Mecum* [London: R. Dodsley, 1747]). *Biog. Lex.*
- <sup>901</sup> On Pringle and his treatise, note Irving, "A Concise View of the Progress of Military Medical Literature," pp. 285-89.
- <sup>902</sup> Matthäus Gottfried Purmann, *Funfftzig sonder- und wunderbahre Schusswinden Curen* (Frankfurt, 1703). This treatise on gunshot wounds was one of several popular and influential books written by Purmann (1648-1721) that drew on his observations during an extensive career as an army surgeon. *Biog. Lex.*

Quercetanus (Joseph) de vulneribus Sclopetorum[.] Lugd: 1576. 8<sup>o.903</sup>

R:

Ranby on Gunshot Wounds. Lond: 1743. 8<sup>o.904</sup>

Romanus (Franc) de militari Medicinae conditione[.] Neap.<sup>905</sup>

Rota (Jo: Franc) de Tormentiorum vulnerum natura et Conditione[.]

Bonon: 1555. 4to.<sup>906</sup>

Idem, de Sclopetorum vulneribus. Ven:1566. 8<sup>o.907</sup>

Roupe (Ludovic:) M. D: de morbis Navigantis. L.B. 1764. 8<sup>o.908</sup>

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<sup>903</sup> Josephus Quercetanus was the Latinized form of Joseph Duchesne; cf. n. 872. *De curandis vulneribus, quae sclopetorum & similium tormentorum ictibus acciderunt, liber. Ejusdem Antidotarium spagiricum adversus eosdem ictus* (Leiden, 1576).

<sup>904</sup> On Ranby and his work on gunshot wounds, see p. 269 and nn. 108, 417, 483, 615, 645, 647. Ranby and his treatise are discussed in Irving, "A Concise View of the Progress of Military Medical Literature," pp. 93-95; see also *DNB*. Le Fanu sees Ranby's treatise as not influential and representing no improvement over Le Dran's: "The Lost Half-Century in English Medicine," pp. 343-44. At least British among military surgeons, it was, in fact, quite influential, and it was often cited as an authority.

<sup>905</sup> Untraceable.

<sup>906</sup> Giovanni Francesco Rota, *De tormentariorum vulnerum natura et curatione liber* ([Venice:] Bononiae, 1555). Rota (d. 1558) was a professor of surgery at Bologna who disputed Maggi by holding to the traditional view that gunshot wounds were poisoned and had to be treated accordingly. Malgaigne, *Surgery and Ambroise Pare*, p. 259.

<sup>907</sup> *De Sclopettorum et tormentarium vulnerum natura, et curatione* (Venice: Bibliopolas Bononio, etc., 1566) incorporated four tracts on treating gunshot wounds: Rota's *De bellicorum tormentorum* (n. 906), Maggi's *De vulnerum* (n. 890), Ferri's *De sclopettorum* (n. 875), and Botallo's *De curandis vulneribus sclopetorum* (n. 865).

<sup>908</sup> Louis (Ludovicus) Roupe, *De morbis navigantium* (Leiden: T. Haak, 1764). This work, which is the revised version of Roupe's doctoral dissertation, appears to have attracted a significant audience. It was republished several times, including in an English translation, *Observations on Diseases Incidental to Seamen* (London, 1768). The author of the entry on Roupe in *Biog. Lex.* praises it highly. Nevertheless, Roupe (b. 1728) is rather obscure.

S.

Sartorius (Joh: Geo) de morbo militari, seu Castrensi, Bambergae. 1684. fol.<sup>909</sup>

Sancassani (Diomisii Andre) Chirurgie Castrensis. 8<sup>o</sup> Ven. 1708. Italiae.<sup>910</sup>

Schmidii (Andr. Chr.) Chirurgia Militaris Franc: 12to. 1664. Germaniae.<sup>911</sup>

Snebergerus (Ant) de bona militum valetudine conservanda Cracoviae 1564. 8<sup>o</sup>.<sup>912</sup>

T.

Tassins (Leonh) Chirurgie ou L'Art de querir les playes d'Arquebusades. Par: 1683. 8<sup>o</sup>.<sup>913</sup>

W.

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<sup>909</sup> Johann Georg Sartorius, *Ungarorum Modgier Avagy Betegseg, hoc est de Morbo Militari, seu Castrensi, Ungarico communi nomine dicto, [Greek] historico-physico-botanico-chymico-therapeutica* (Bambergae, 1684). Sartorius received his doctorate from Altdorf, then practiced in Bamberg until his death in 1696. *Biog. Lex.*

<sup>910</sup> The work that Buchanan is apparently referring to, *Il Chirone in Campo o siasi un vero, e sicuro modo di medicar li feriti nelle armate* (Venice: Girolamo Albrizzi, 1708), is Sancassani's translation of Augustin Belloste's highly popular *Le chirurgien d'hôpital*, which was first published in 1696. Belloste (1654-1730) was for some time chief surgeon of a French military hospital. *Biogr. med.; Biog. Lex.* (On both Belloste and Sancassani).

<sup>911</sup> Untraceable.

<sup>912</sup> Anton Schneeberger, *De bona militum valetudine conservanda liber, ex veteribus rerum bellicarum historiis.* (Cracow: Lazarus Andreae, 1564). This work appears to have been published in only one edition. Born in Zurich in 1530, Schneeberger received his doctorate from Montpellier, then practiced in Cracow, where he died in 1581.

<sup>913</sup> Léonard Tassin, *La chirurgie militaire; ou, L'art de guérir les playes d'arquebusades.* This brief treatise was first published in Nijmegen in 1673, then in Paris in 1688 (I find no reference to an edition in 1683), and in Lyon in 1696; it also appeared in a German version. At the time of his death in 1687, Tassin was surgeon-major in a French army hospital. *Biog. Lex.*

Willius (Joh: Valent) de morbis Castrensibus internis. Hafnie. 1676. 4<sup>to</sup>.<sup>914</sup>

Verbrugs (Jo:) Chirurgia terretris et Navalis. 8<sup>o</sup>. Amst. 1704. Belgiae.<sup>915</sup>

[*sharper quill*]

Van Swieten. Maladies de l'armee. Par. 8<sup>o</sup>. 1761.<sup>916</sup>

X

Y.

Z.

Zwingerus (Theodor) de morbis Praeliantium[.] Basil: 1715. 4to.<sup>917</sup>

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<sup>914</sup> Johann Valentin Wille, *Tractatus medicus de morbis castrensibus internis* (Hafnie: Matthiae Godicchenii. 1676). In 1739, this work was reprinted in a compendium that included Porzio's *De militis* (cf. n.900). Wille (1651-77) received his degree from Strassburg and then served as a surgeon in the Danish Army. *Biog. Lex.*

<sup>915</sup> Johannes Verbrugge, *Examen van land- en zee chirurgie*, was first published in 1686 [printer's preface dated 1696]; Amsterdam: Jan ten Hoorn). This treatise, which included a pharmacopoeia intended for army and naval surgeons, appears to have been widely read and influential. It was published, either alone or paired with other works on military medicine, in several 18<sup>th</sup>-century editions -- though I find no record of a 1704 printing -- and was distributed among surgeons of the Dutch East and West India Companies.

<sup>916</sup> Gerard Van Swieten, *Description abrégée des maladies qui regnent les plus communément dans les armées*, 2nd ed. (Paris, 1761). This popular work appeared in America as *The Diseases incident to Armies* and was widely used in the Continental Army.

<sup>917</sup> Theodor Zwinger (the Younger), *Triga dissertationum. I. De plantis nasturcinis. II. De epilepsia. III. De morbis proeliantium* (Basel, 1716). Zwinger (1658-1724) was professor of anatomy and of botany at Basel. Although he was responsible for publishing this compendium, the only dissertation that was relevant to Buchanan's list, *De morbis proeliantium*, was actually by Kupferschmidt (cf. n. 886). *Biog. Lex.*

[inserted sheets, #1]

[inserted sheets, #2]

[beginning of fragment] -ous in eating fruite especially such as are naturally dispos'd to this distemper; as also not to be affraid of catching the distemper vid: p. 60.<sup>918</sup> says the chief cause of it is within ourselves p.61.<sup>919</sup> but so subtile if it escapes our Senses, in the beginning theres something Acrid, caustic, & corrosive, which irritates the Stomach & Guts; after endeavouring to explain it in a more easie & plain manner, than has been customary with Physicians, & attempting to avoid cramp words, at last ends in saying it was of an Arsenick quality vid p.77, 81. his method of cure was universally the same in both Sexes, all Ages & constitutions, VIZ: beginning with a vomite of Ipecacoan, tho in many cases this was not absolutely necessary therefor gave the Rhabarb immede<a>tely & repeated it at any time of the desease. did not use it so much in powder as in tincture prepar'd according to Rofinus method. **Rx. Rhei oz.fs. Sal: tartar. dr.i. Aq. Cichor. Menth:** or any other distill'd water, oz.v or vi.<sup>920</sup> ordering a Spoonfull every four or Sixe hours according to the Constitution vid. 107. on this he depended & it seldom fail'd; if the flux continued cort: Simarube dr.ii. was

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<sup>918</sup> In the chapter to which Buchanan is referring here, Degner reviews various common opinions on what causes dysentery. He generally argues against the assertions, including (*Historia medica*, pp. 57-60) the one that fruit is to blame.

<sup>919</sup> Ibid., p. 61. In this and the references that follow (pp. 72, 77, 81), Buchanan's review of Degner's comments and his page references are accurate.

<sup>920</sup> "Take ½ oz. rhubarb, 1 dr. salt of tartar, mentholated chicory water, ..." This formula is adapted from Degner's less structured version: *ibid.*, 107. See entries for chicory, rhabarbarum, and *Sal tartari*, app. C-1. Rofinus (Rufus) of Ephesus, who lived about the time of Trajan and practiced in Alexandria, was by the 18th century most remembered for a pill that bore his name.

boyled in *S:q: Aq: ad oz.viii.*<sup>921</sup> drinking oz.i or ii. every 3 or 4 hours till well 115. if the disease withstood the above method, continuing from a lax habit of body, then he us'd gentle astringents viz: Cort: Cascarillae<sup>922</sup> & Suc: Catechu.<sup>923</sup> such as had violent griepings he gave sweet oyle as much as the Patient could take, dissolving Gum Arabic or Tragacanth in Decoct: Simarubae; giving clysters ex ol: Lin: which he prefers to all other oyles. Suspects Opiates saying they ought to be given with great caution. in case of Strangury a few drops Bals: Sulphur prov'd a cure. feverish complaints were taken off with gentle Diaphoreticks & Absorbents. theriac plaister or e crusta pan: alb<sup>924</sup>

[*an entire sheet is vertically crossed, including text from this point through the words, "nor do they knowe any"*]

Vino rubio & Nuce Moschata being applyed to the belly asswaged pains. recommends an antialcalescent Dyet viz. Barley, Rice, Panada &c with milk,<sup>925</sup> forbidding every thing that's acide or of bad digestion. Drink of the same natures sharpned with juice of Lemons which was very serviceable in this disease, as was also butter milk. recommends Rhenish & Mosell wines, claret not so proper. if it continued obstinate strengtheners must be used, for this purpose was his Tinct. tonica. ***Rx tinct. Antimon. cum Spt. C.C: praeparat. & tinct: Vitriol:***

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<sup>921</sup> “A quantity of water sufficient to leave, when boiled, 8 oz.[of decoction]”; drawn from Degner, *Historia medica*, p. 115. Pringle also made use of a decoction of simaruba, which according to Townsend served as a good tonic, diaphoretic, and diuretic: Townsend, *Elements of Therapeutics*, p. 278.

<sup>922</sup> On *cortex cascarillae*, see app. C-1.

<sup>923</sup> On catechu, see app. C-1.

<sup>924</sup> (Plaster of) crust of white bread. Degner, *Historia medica*, 138. See app. C-1 for gum Arabic, gum tragacanth, linseed oil, simaruba, and balsam of sulfur.

<sup>925</sup> *Ibid.*, pp. 138-41, 164.

*mart Ludovic aa p.q.*<sup>926</sup> care being taken sometime afterwards of a proper Regimen. having deliver'd his own method of cure, he then gives a large acct. of what methods are used by private families & Quacks, & his opinion of them amounting to 34.<sup>927</sup> afterwards treats of a preservative method to avoid this disease; saying that the same medecines wch cure a disease will likewise preserve us from it, if prudently manag'd, therefor a Spoonfull or two of the Rhabarb tincture should be taken every morning, or its powder, 1st giving the Ipecacoan if necessary. the Dyet of easie Digestion sharpen'd with Vinegar & juice of Lemons, to drink Rhenish or Mosell wine, a moderate use of fruit may be serviceable by keeping the body open p. 165. recommends cleanliness; necessary houses should be appointed purposely for the diseased, no communication to be kep't with them.<sup>928</sup> then mentions the vulgar method us'd to prevent it. afterwards has some particular observations & cautions on the method of treating this disease, saying that bleeding was seldome usefull rather prejudiciale; astringents seldom necessary; reckons Rhab: the universal remedy, honouring it with the title of Divine medecine<sup>929</sup> & should never be wasted, the whole is very distinct & told in a plain short manner with great appearance of truth, giving an instance or two of his general method of practice, had pag. 200 L.P: with a good Index. To this is added a very particular Case of the bad effects of Mercur: Sublim: corrosiv: applyed in a plaister to a small Tumor on the Thigh of a Lady aged fourty Seven years of a good constitution; guesses this might be three half Scruples in the whole, tho applyed at three different times,

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<sup>926</sup> "Take tincture of antimony [app. C-1, "antimonials"] with prepared spirit of hartshorn [app. p. B, "cornu cervi"], tincture of vitriol [app. C-1, "vitriol"], and *Martis Ludovicus*, small quantities of each." Recipe *ibid.*, p. 143. *Martis Ludovicus*, a chalybeate, was named after its developer, the German physician Daniel Ludwig (d. 1680). It was never official under that name in either London or Edinburgh.

<sup>927</sup> *Ibid.*, pp. 148-53.

<sup>928</sup> *Ibid.*, pp. 165-71.

<sup>929</sup> *Ibid.*, pp. 179-80.



occasion'd a very large [*crossed:* large] & thick Eschar, a violent Salivation & all the bad Symptoms that could possibly attend it, for wch it was no remedy, the very bones being affected with foetid ulcers. this was practic'd by an itinerant Quack, the case being so remarkable was laid befor the Magistrates. the Quack endeavour'd to vindicate himself wch he Supports with nine Arguments, the case is afterwards refer'd to the faculty of Physicians & You have their answer condemning the practice.<sup>930</sup> This is well told in a plain easie Style, as also his method of practice he attempted to save the Patient's life; in the Epistle to the Reader, he is very severe on all Quacks, to them he joins Camp-Surgeons, saying their Education is at first in the barbar's Shop, then learning to bleed & dress slight wounds, & from being attendants at chirurgical operations, become profess'd Surgeons & are appointed as such to some troop or Company, where they practice at [*crossed:* fraedom] random & learn a particular method. afterwards assume the name of Doctors[.]<sup>931</sup> this may probably be true in his Country, & is customary in Germany & the Low Countries, all Barbars practising Surgery, commonly illiterate, tho some are smatterers in Latin, entirely ignorant of Anatomy, few or none having ever seen a Desection, nor is the profession much esteem'd. they have hardly a book, nor do they knowe any. Our Regimtal Surgeons from the beginning are generally well educated; wheither they are to profess Physick or Surgery have the same education, first serving an apprenticeship are instructed in all the particular branches of medecine & Surgery by proper Professors, attending the Lectures two or three years; & for further improvement travele to forreing [*sic*] universities & attend hospitals, of wch Paris & Leiden have been the most remarkable; some go to Montpellier making the tour of Italy, afterwards many take to the army in order to pass some years, & there officiate as Physician, Surgeon & Apothecary; tho young Practitioners are sure of practice & may improve by

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<sup>930</sup> The case history, the arguments put before the faculty, and their response are all *ibid.*, pp. 234-59.

<sup>931</sup> Note esp. *ibid.*, pp. 205-06, 211-12, 215-16.

experience; supposing equal capacities the advantage most [*sic*] be very considerable.

The Author charges <us> with using dangerous & poyseous medecines, Such as Mercur: Sublim: corrosiv: & that without weight or measure, & says it's our common practice to give Arsenick inwardly in order to cure intermittent fevers.<sup>932</sup> I'm intimately acquainted with the greatest part of the Regimental Surgeons of our Army, & can positively affirm that no such medecines are used by them; We have a weekly Club w<h>ere all are welcome to come, the chief Subject of conversation relates to our own business; it being a standing rule with us, that if any thing remarkable happen'd during the last weeks practice, it's to be made publick for the good of the Society; by this means we know the practice of the whole army during the Campn, & in winter quarters that of the Garrison, where we have an opportunity of attending the hospital. All talk freely, nor can I perceive any reservedness or fondness for Secret medecines, or a private method of practice; some are regular bred Physicians. I take the practice of the whole to be fair & honest, free from the superfluity of pompous [*end of fragment*]

[*inside back cover, two columns of numbers; these refer to pp. in mss. with penciled notations, qq.v.*]

149 169

171 179

217 181

249 211

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<sup>932</sup> Ibid., pp. 213-15. Fowler used a solution of arsenic to treat ague: *Medical Reports of the Effects*, pp. 186, 189. In 1786, Fowler published *Medical Reports of the Effects of Arsenic*, and the solution (which bore his name) gained some notoriety. Nevertheless, at no time did arsenic play a significant role in professional medicine.

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**APPENDIX A:**  
**BUCHANAN'S SOURCES**

[Note: The "times cited" column enumerates Buchanan's citations (i.e., without quoted material) of particular works, while "times mentioned" enumerates references to writers, but not to specific publications. All entries on the recto (even-numbered) page of *RP*, as well as those apparently inserted on the verso page after it was initially written (interlinearly; marginally; squeezed it, generally in heavier ink) are counted in the "later additions" column, although arguably some may date from 1746 and reflect afterthought on the part of Buchanan.]

**1. Hippocrates (note: style of abbreviation is discussed in *RP*, n. 13):**

title	times quoted	times cited	times mentioned	references, 1746 draft	later insertions	notes
<i>Aer</i> ("Air, Places, Water")	2	1	0	3	0	
<i>Aff.</i> ("Affec- tions")	19	0	0	18	1	
<i>Aph.</i> ("Aphor- isms")	4	0	0	0	4	
<i>Art.</i> ("Joints")	7	0	0	0	7	
<i>Fist.</i> ("Fist- ulas")	2	0	0	0	2	

<i>Fract.</i> ("Fractures")	7	0	0	4	3	
<i>Int.</i> ("Internal Affections")	9	0	0	9	0	
<i>Morb.</i> ("Diseases")	11	0	0	11	0	
<i>Mul.</i> ("Diseases of Women")	1	0	0	1	0	
<i>Epid.</i> ("Epidemics")	5	0	0	0	5	
<i>Medic.</i> ("The Physician"/"In the Surgery")	4	0	0	4	0	
"Ulcers"	3	0	0	0	3	
"Regimen"	3	0	0	3	0	

**2. Other Classical sources, medical or scientific:**

author or title	times quoted	times cited	times mentioned	references, 1746 draft	later additions	notes
Celsus	3	1	0	0	4	
Dioscorides	0	1	0	1	0	paraphrase
Galen	0	0	1	1	0	mentioned in quotation from Diemerbroeck
Pliny the Elder	2	0	0	2	0	same passage twice

### 3. Classical sources, non-medical:

author or title	times quoted	times cited	times mentioned	references, 1746 draft	later additions	notes
Bible	3	0	0	1	2	
Caesar	2	0	0	2	0	
Catullus	3	0	0	1	2	one passage quoted twice
Cicero	3	0	0	1	2	
Claudian	1	0	0	0	1	
Horace	64	0	0	52	12	three works
Justin	1	0	0	0	1	

Juvenal	1	0	0	0	1	
Livy	4	0	0	1	3	
Lucan	1	0	0	0	1	
Lucretius	1	0	0	0	1	
Martial	3	0	0	0	3	
Ovid	65	0	0	52	13	eight works
Pliny the Younger	2	0	0	2	0	
Sallust	2	0	0	1	1	
Seneca	1	0	0	0	1	
Suetonius	1	0	0	0	1	
Tacitus	2	0	0	2	0	
Terence	2	0	0	1	1	
Valerius Maximus	1	0	0	1	0	
Vegetius	1	0	0	0	1	
Velleius Paterculus	2	0	0	0	2	
Virgil	9	0	0	2	7	
Vopiscus	1	0	0	1	0	
Xenophon	0	1	0	0	1	

**4. Modern sources, medical:**

author or title	times quoted	times cited	times mentioned	references, 1746 draft	later additions	notes
Abercromby	3	0	0	3	0	
Baglivi	3	0	0	0	3	
Boerhaave	0	0	1	1	0	
Castro	0	1	0	0	1	
Degner	0	2	0	0	2	continual reference in insert
Diemerbroeck	1	0	0	1	0	
Heister	0	4	0	0	4	
Hoffman	0	15	0	0	15	
Huxham	2	1	0	0	3	
Johnstone	0	1	0	0	1	
<i>Pharmacopoeia Londinensis</i>	0	1	0	0	1	
Le Pois/Piso	0	2	0	0	2	
Ramazzini	8	2	0	5	5	<i>L'art ... des princes</i> only cited
Ranby	0	1	0	0	1	
Russell	2	0	0	0	2	



Santorio/ Sanctorius	2	3	0	0	5	
Sydenham	0	0	2	2	0	
Tissot	0	3	0	0	3	
Tulp[is]	0	3	0	3	0	
Turner	0	1	0	0	1	
Weber[us]	0	1	0	0	1	
Whytt	0	1	0	0	1	
Young	0	2	0	0	2	

#### 5. Modern sources, non-medical:

author or title	times quoted	times cited	times mentioned	references, 1746 draft	later additions	notes
Aleyn	1	0	0	0	1	
<i>Biographia Britannica</i>	4	0	0	0	4	
George Buchanan	0	3	0	3	0	
Carte	1	0	0	0	1	
Cooper	1	0	0	0	1	
<i>L'eloge de l'yvresse</i>	0	1	0	1	0	
<i>Journal ... Campaign</i>	0	1	0	0	1	
Leland	1	0	0	0	1	

Montaigne	0	1	0	0	1	
Parker	0	1	0	0	1	
Pereira/ Pererius	1	0	0	0	1	
Rollin	10	0	0	4	6	
Salmon	1	0	0	0	1	
Secondat (Montes- quieu)	0	1	0	0	1	
Smollett	0	3	0	0	3	
Thomson	1	0	0	1	0	
Verulam (Bacon)	1	0	0	0	1	probably mis- ascribed
West	0	1	0	0	1	
no pro- venance	3	0	0	0	3	

## *APPENDIX B-1*

### *ADDITIONAL NOTES ON THERAPY FOR SELECT DISEASES*

Relevant views of authors who are cited by Buchanan are summarized in the footnotes, qq.v. In many cases, analyses of particular devices and drugs that he used are discussed there as well.

The entries in this appendix are intended to suggest only the outlines of therapy. Drugs alluded to here are discussed in the footnotes to “Regimental Practice” and in App. C-1.

Many major diseases, e.g. cancer, are not mentioned by Buchanan and are therefore not discussed in this appendix. Some diseases that Buchanan refers to are not included in the appendix because the footnotes to his text provide coverage that is sufficient to suggest common practice in 18<sup>th</sup>-century British medicine.

#### **Ague, Intermittent Fever:**

##### **Definition and symptoms:**

“Ague,” an old and rather broad term, was widely used in the 18<sup>th</sup> century, but in professional medicine it was progressively, though not entirely, replaced by “intermittent fever.” Cases of the fever were often referred to by the pattern of paroxysms: quotidian (a daily fit), tertian (every other day), quartan (every third day). Double tertians and double or triple quartans (fits on three consecutive days) were also recognized, as were other variants. References to the fever were often qualified by whether they occurred during the spring or fall. When they fell out of season, Sydenham advised that they be defined by whether spring or fall was closer. Quartans, he asserted, occurred only in the fall, quotidians in the spring. He speculated that autumnal agues may result from degeneration of the blood across the year, which made it susceptible to morbid impressions from epidemic air. Cullen placed intermittents as a section in the class *pyrexiae* (frequent pulse, cold shivering usually replaced by heat, accompanied by prostration, especially of the limbs), order *febres*, with *tertiana*, *quartana*, and *quotidiana* as distinct genuses.

**Indications and prognosis:**

Sydenham stressed the importance of pinpointing the form of ague and tailoring treatment to the type. Spring agues he saw as typically mild and short, generally not harmful to even weak and elderly patient. His concern was actually that they would be over-treated, for they might be prolonged into the fall by excessive venesection and purging, and at that point their nature might change for the worse. Autumnal agues, on the other hand, he considered more dangerous and long-lasting, especially if epidemic.

Autumnal quartan was generally considered to be the most dangerous form of ague, but the disease was not regarded as highly mortal, and because of this, it was common to treat other fevers by attempting to convert them into intermittents. Conversely, the greatest concern in treating ague was that if it were allowed to become prolonged or were otherwise mishandled, it might transmute into another, more dangerous, form of fever, especially some form of remittent or continued. Pearson doubted that continued fevers ever turned into remittents or intermittents, but he added, "It is certain that remittent and intermittent fevers readily change into one another." Liver damage or chronic diseases like dropsy were other perceived consequences in cases of ague that were allowed to linger; Sydenham saw dropsy as a particular problem for elderly patients. Grant regarded ague as not dangerous generally, but as a threat to the elderly, particularly since their cases were often protracted. Cleghorn advised that patient who has just suffered a fit not be allowed to exercise, because that might bring on an inflammation of the bowel and turn the intermittent into continual.

**Therapy -- Buchanan (pp. 25-43):**

Buchanan gave the patient an emetic, to shorten the paroxysm, and in many cases he bled in the early stages of the disease, apparently taking this course if the symptoms were "violent" (suggesting inflammation). He then administered bark; "it's needless to enquire for a more certaine remedy than the Simple Barke, if the disease once form into a regular Ague, I am certaine it will cure and never saw it faile." (p. 29).

## **Therapy -- Sydenham:**

The standard for treating ague was set by Sydenham. In particular, it was he -- supported most notably by Morton -- who promoted bark as a cure ("Antidote," in Morton's usage) for all forms of intermittent. Sydenham conceded that in the case of quartan the bark "oftener stops it than conquers it," but noted that no other remedy was even that successful. He also cautioned that bark not be given too early in ague because this might put a stop to the fermenting process that would ultimately result in despumation.(the cleansing of the blood). Once introduced, however, bark was to be given consistently, so a dose was not exhausted before the next was given.

Regarding spring agues, Sydenham observed, "I ever thought they were to be left to themselves, without doing any Thing, because I never knew any one destroy'd by them; and on the contrary, that those that endeavour'd to cure them, made them only more obstinate and lasting." If patients insisted on receiving treatment, Sydenham gave them vomits before each fit (often with diacodion as an anodyne). When it was infants or children who were victimized by spring or even autumnal tertians, he advised that the physician do nothing, for the body would cure itself through despumation (the cleansing of the blood), while strict regimen might actually make the disease more dangerous.

Sydenham considered diaphoretics useful in carrying off morbid humors, especially in spring quotidians (humors were thin in the spring, never so in the fall). Agues, he observed, might appear to be continual until they began to intermit, and the types of ague might shift. Sydenham regarded corrupted blood as the main cause of ague (errors in regard to the non-naturals [e.g., through excessive drinking] might also cause fever, in these cases but it soon passed, assuming that the patient observed moderation). For autumnal ague, which saw this corruption in its most extreme form, he asserted that cleansing the blood required 336 hours. He thought purging for fall agues to be dangerous, unless it was preceded by bleeding. In general, he advised against bloodletting and purgatives during the period of fermentation, for both weakened the blood. Similarly, he cautioned against using heating drugs early in the disease, asserting (with the authority of Galen) that they might cause the ague to double or become continual. He recommended sweating for fall tertians.

In treating elderly patients, the physician, according to Sydenham, might not be able to effect a cure, even with bark, but he was to “at least assist Nature, so that she may be able to perform her own Work; for certainly in weak bodies, unless the Fermentation be kept up by the help of Cordials and a strengthening Diet, as with Wormwood-wine, and the like, the Patient will be weaken’d, and troubled with uncertain and fruitless Fits, and the Disease will continue long.” Elderly patients who had completed despumatation were to be removed to a milder region.

### **Therapy – conspectus:**

By 1750 almost all regular British practitioners who discussed their practices in print relied heavily on bark. Furthermore, almost everyone followed the pattern set by Sydenham, of administering bark just after each paroxysm. There remained three points on which practice differed: whether to evacuate the patient before giving bark (as Buchanan did); whether to bleed him (which he did in some cases); how early in the disease to administer bark; and what dose of the drug was appropriate.

Pringle, on the authority of Lancisi and Mead, argued for both evacuation and bleeding well in advance of the bark, in order to counter inflammatory symptoms. Huxham initiated treatment with purging and vomiting; as an emetic, he strongly preferred ipecacuanha to warm water or to any oily medicine (alternatives that, he reported, were recommended by some practitioners). He contended that a mild discharge by stool helped to convert an irregular intermittent into a regular one. Huxham also advised bleeding, and he further recommended the use of mercurials, for they would promote freer circulation by breaking the lentor (thickness) of the blood. Cleghorn wrote that because of the many variables associated with ague (e.g., the symptoms, climate, and season), there could be no universal rule on whether to bleed, but he noted that he routinely did so early in the disease unless there was a strong contraindication. Brocklesby evacuated, chiefly by vomits, at the outset of treatment, but he was uncharacteristically slow to bleed, noting that he seldom bled in vernal cases, which were usually mild and passed quickly, though he did bleed for autumnal intermittents. It was only after evacuation and, where necessary, bleeding, that he administered bark, and he noted that if it was given too soon the

patient might develop headache or yellowness in the eyes. Monro employed bleeding and emetics in some cases, but asserted that they should be used only if the patient was strong, or to deal with certain complications, e.g. jaundice. Cullen recommended emetics (cold stage) or opiates (hot stage) as a means to “conduct” paroxysms in such a way as to resolve the fever; he advised bleeding, vomiting, and purging if inflammation was present. Brookes advised bleeding only if the weather was hot and the patient was young, plethoric, feverish, and delirious. Van Swieten emphasized the importance of preceding bark with evacuation, but a number of British writers, including Monro and Cleghorn, claimed that evacuation was unnecessary, though bark was sometimes administered in conjunction with purging salts or nitre. Manning wrote, "Physicians are now generally agreed that very little preparation of the body is requisite, previous to the administration of the bark in intermitting fevers. It is sufficient to cleanse the stomach and alimentary canal by an emetic or purge."

Although the use of bark became established during the first half of the century, authorities like Huxham argued that it should not be administered until coction was complete. Huxham also cautioned that bark by itself might not work and recommended assisting it with cinnabar, camphor, myrrh, stomachics, aromatics, and (on Cheyne's authority) chalybeates. Similarly, Grant asserted that if bark was given when the first signs of coction appeared, it might set back the process. Nevertheless, he was criticizing a practice that he took to be fashionable, and it does indeed appear that during the latter half of the century the tendency was to introduce bark as soon as possible. Empirically oriented writers, citing their own experience and observations, denounced the practice of waiting for coction; Rigby asserted, "the fact contradicts this, and proves the absurdity of the opposite practice, which delays to check the progress of the fever, under an idea that the doing it would (to use a favourite expression of some practitioners) lock up an imaginary something, which would be unfriendly to the constitution."

The quantity of bark administered during treatment tended to be considerable. Monro recommended that patients receive 1 oz.-10 dr. of bark during each intermission, then a large dose of bark daily for 6-8 weeks, in order to forestall a relapse. Moore likewise believed that bark tended to be underdosed. Cullen and Dickinson claimed that in order to be effective it was necessary to

administer at least 2 oz. per day.

Characteristically, Buchan called for a moderate regimen: mild vomit or purge, bleeding only when inflammatory symptoms (which, he claimed, seldom attended intermittents) were present; imbibing bitters, which would reduce the need for bark. He further asserted that English bitters might serve as well as bark, but added that since bark was inexpensive (though often adulterated) there was less need to search for them. For the patient who could not take powdered bark, he recommended infusions of it in white wine or decoction, or else salt of wormwood or snakeroot.

Writers on tropical medicine tended to emphasize bark and to urge restraint in the use of bloodletting. Lind argued that only the bark was necessary in treating intermittents (though evacuation prior to administering bark might be desirable). His view was criticized by Moseley, who warned that without preliminary purging and bleeding the bark would constrict the vessels and exacerbate inflammation. Nevertheless, it appears that Lind's approach became popular late in the century, at least as regarded bleeding. Like Lind, Rollo purged or vomited but did not bleed before administering bark. Hunter likewise opposed the employment of purgatives and emetics, noting that the other strategy was "to be considered as rather recurring to an old, than giving into a new practice." Hunter recommended 1-2 dr. in wine "or any other vehicle that was more agreeable to the sick," to be repeated every two hours, the frequency varying somewhat according to the urgency of the case and the patient's tolerance of bark. Like Monro, he recommended that recuperating patients continue to take bark, in order to prevent a relapse, but unlike him he advised continuance for only six days. Having found bark to be ineffective in some cases, Hunter suggested other remedies that he had tried with success: chamomile flowers, warm purgatives, and cold baths. He also asserted that mercurials enhanced the efficacy of bark, and that red bark was more potent than was the common variety. Drawing on his experience in the West Indies, Rollo asserted that as soon as the patient had been vomited or purged, he should be given massive doses of bark. He warned, "If the bark was not given ... in very large doses, we often found our fever assume a more dangerous form -- the remittent." Dancer approved of bleeding for vernal intermittents, but urged caution in letting blood for the autumnal variety. In some cases, he



observed, venesection might prevent the fever from becoming remittent, but he considered this benefit unusual. If blood was to be let, he thought it best to do so during the hot fit, when inflammatory symptoms were most pronounced. He approved of emetics, but only if they were used in doses that promoted only nausea, rather than vomiting, the objective being to provoke sweat and counter spasm. He warned against "vomiting a man to death." Accepting Cullen's assertion that the fever was caused by debility, he argued that the best time to administer bark was at the start of each paroxysm.

Bark came to dominate the treatment of intermittent to the point where authorities questioned whether other drugs were of any value in therapy. In 1773, an anonymous author observed, "antimonial medicines are in these cases ineffectual, or at least unnecessary, since we are provided with another almost infallible remedy." Despite the tendency to rely ever more heavily on bark, the therapy set out by most writers was nuanced and provided for the integrated use of various drugs. For example, Lind prescribed the use of opium during intermissions, in order to shorten the paroxysm, and MacBride followed him in this. Pearson also administered opium between fits, but did so to stimulate the patient's system. Sudorifics were also often administered during intermissions, for it was widely believed that if the patient was made to sweat subsequent paroxysms would be milder and shorter. While virtually all writers agreed that bark was useful in treating ague, MacBride contended that it often failed against quartans, because they were more deeply rooted than were quotidian or tertians; to resolve the problem, he advised that when treating a quartan the physician join bark to a deobstruant or an aperient.

### **Sources:**

John Allen, *Dr. Allen's Synopsis Medicinae: or, a Brief and General Collection of the Whole Practice of Physick*, new ed., rev. and enl. (London: J. Pemberton and W. Meadows, 1730), pp. 12-14; Brocklesby, *Oeconomical and Medical Observations*, pp. 250-65; Brookes, *General Practice of Physic*, I, 71-79; Buchan, *Domestic Medicine*, pp. 108-15; Cleghorn, *Observations on the Epidemical Diseases in Minorca* (1751 ed.), 170-207; *Considerations on the Use and Abuse of Antimonial Medicines in Fevers*, p. 4; Cullen, *First Lines of the Practice of Physic*, I, 173-77; Cullen, *Synopsis and*

*Nosology, being an Arrangement and Definition of Diseases* (Hartford: Nathaniel Patten, 1792), pp. 1-5; Dancer, *A Brief History of the Recent Expedition*, pp. 45-51; Dickinson, *An Inquiry into the Nature and Causes of Fever*, pp. 31, 103-12, 165-84; William Grant, *Observations on the Nature and Cure of Fevers*, 3rd ed. (London: T. Cadell, 1779), I, 38-39, 43-46; Healde, *New Pharmacopoeia*, p. 44; Hunter, *Observations on the Diseases*, pp. 208-12; Huxham, *Essay on Fevers*, pp. 12-14, 29, 35; Huxham, *Observations on the Air and Epidemic Diseases*, II, 11, 23-29, 55, 105; Lewis, *New Dispensatory*, pp. 178-80; Lind, *Essay on Diseases*, pp. 215-16, 342; MacBride, *Methodical Introduction to the Theory and Practice of Physic*, pp. 342-48; Manning, *Modern Improvements in the Practice of Physic*, pp. 6, 51-67; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 102-18; Moore, *Medical Sketches*, p. 257; Moseley, *Treatise on Tropical Diseases*, p. 163; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 105-32 (quotation p. 113); Pringle, *Observations on the Diseases*, pp. 206-07; Quincy/Hooper, *Quincy's Lexicon-Medicum* pp. 318-19 (“febrisa intermittens”); John Relph, *An Inquiry into the Medical Efficiency of a New Species of Peruvian Bark, Lately Imported into this Country under the Name of Yellow Bark; including Practical Observations respecting the Choice of Bark in General* (London: James Phillips [etc.], 1794), p. 97; Guenter B. Risse, *New Medical Challenges during the Scottish Enlightenment*, The Wellcome Series in the History of Medicine, (Amsterdam and New York: Rodopi, 2005), pp. 172-79; Rollo, *Observations on St. Lucia*, pp. 58-59, 72-73; Sydenham, *Whole Works*, pp. 35-52.

### Colic:

#### **Definition:**

“Colic” was a term often applied to a condition that had as its main symptom severe, extended abdominal pain. MacBride wrote, “Those internal pains which are felt in the abdomen, chiefly about the umbilical and hypochondriac regions, and which are usually accompanied with costiveness, are

termed in general *Colic*." Huxham complained of the vagueness of the usage: "Nothing certainly more mischievous ever crept into Medicine than imposing on Diseases general Names, and attempting to cure them by a Kind of general Medicines -- For instance, as Kinds of Pain in the Belly are called by the general Name Colic .... But it is the Duty of a prudent Physician to examine well into the Nature of the Cause, and then endeavour to remove it." Beyond abdominal pain, colic was widely associated with spasmodic constriction of the intestines. Several forms of the disease were recognized in the 18<sup>th</sup> century. Cullen placed colic in the class *neuroses* ("an injury of the sense and motion, without an Idiopathic Pyrexia or any local Affection") and order *spasmi*. He enumerated seven forms (Parr added an eighth), though for all he considered intestinal spasm to be the proximate cause.

Bilious colic, flatulent colic (tympanites), and hysterical colic were widely recognized forms of the disease. But the most dangerous variety, and the subject of the largest literature, was Devonshire colic, also called (generally so in the West Indies) "dry belly-ache," and known by many other names, as well, including "plumber's," "painter's" (both terms significant, because of the association of the occupations with lead), "cyder," and "nervous" colic. This was a variety particularly associated with the 18<sup>th</sup> century, and Baker credited Sir William Musgrave with having been the first to describe it, in 1703. In the influential paper that he read to the College of Physicians in 1767, Baker linked this form of colic to lead poisoning. The source of lead he found in cider, which had greatly increased in popularity in Devonshire during the century. The preparation process in that county, unlike in others, introduced lead both in the lining of the presses and in a bob that was suspended in the juice of unripe apples to prevent it from going sour.

### **Diagnosis and prognosis:**

Since any disease that was characterized by prolonged, severe abdominal pain was likely to be termed "colic," diagnosis was generally not regarded as difficult. Iliac passion, which was also characterized by abdominal pain and intestinal spasm, was considered by some writers to be a separate disease, though Cullen regarded it as a form of colic, distinguished only by the violence of its

symptoms.

Colic might be mild, especially when it occurred in infants or was the result of indigestion. Devonshire colic, however, might cause palsy, paralysis, contraction of the hands and feet, or death. Transmutation was also a perceived danger. Huxham believed that colic might change into peripneumonia, and Mead asserted that it could proceed to gout, as well as arise from it.

### **Therapy – Buchanan (pp. 233-39):**

Buchanan mainly deals with colics associated with retching, though he also notes the case (*RP*, p. 288) of a woman who was prone to hysterical colic. The section on colic in *RP* suggests that Buchanan had considerable experience in treating the disease. On the whole, he blames diet as the cause of colic: “drinking too freely of Cyder, sower milk, small sharp wines, or bad Beer ... eating unripe fruits, Grapes, old Cucumber: <Nutts> &c: of fat luscious eels taken out of slymie ditches, or fat wyld Dukes, or fresh fat pork.” In the case of gouty patients who develop colic, he cites “good living” as a cause. He therefore advocates the use of mild emetics to clear the stomach and purgatives in cases where attacks of colic are caused by overindulgence. In addition, he notes having given “large Doses” of opiates to procure sleep for the patient and to calm him (on the issue of opiates, cf. *RP*, n. 522). He does not mention having bled.

### **Therapy – conspectus:**

Sydenham treated bilious colic with anodynes (to quiet the bad humor that he thought to be causing it), followed by venesection and a gentle purgative. If the disease persisted, he prescribed further bloodletting and purgation, but he cautioned against these in cases of hysteric colic. Brookes endorsed his method, and also suggested that a warm bath might help to relax the bowel.

Huxham emphasized purgation, recommending calomel as a cathartic for cyder colic. Keeping the body open was, he believed, important in all forms of colic, for a mild diarrhea carried off the disease. He also thought emetics useful. While he believed that bleeding might be necessary in some

forms of the disease, he noted that in cyder colic the pulse tended to be weak and slow, militating against phlebotomy. To relieve pain, he promoted warm emollient baths. He also recommended exercise, especially horseback riding, for this would strengthen the constitution and promote perspiration, which would relieve the colic.

Among the most important reviews of colic was the one by Dr. John Hunter, in reference specifically to dry belly-ache, As Baker had done 20 years before in his treatise, Hunter asserted that lead poisoning was frequently the cause of the disease. To cure it quickly, before palsy set in, Hunter advised focusing on clearing out the system with purgatives. He considered pills composed of rhubarb and calomel to be the most effective, because other cathartics were often vomited up if the patient's stomach was upset, as it usually was. He noted, however, that the calomel might also raise a salivation, which was undersirable. Beyond the initial purgation, Hunter saw it as imperative to keep the body open, by purgative or enema. He reported that fomentations offered relief, but only briefly, and that blisters applied to the belly were more effective. To tone weak stomachs, he recommended gentian or other bitters. Only if the pulse was quick and the patient plethoric did he advise letting blood, and even then in small quantities (6-8 oz.). For the palsy that sometimes resulted from dry belly-ache, he advised hot bathing, preferably in a natural spring.

Cullen recommended the application of heat or blisters to the belly of the patient. While noting that many practitioners opposed prescribing opium, believing that inhibiting evacuation exacerbated the constriction of the intestine, he recommended it (to relieve the pain) when the patient was not severely constipated. He also advised the use of purgatives (he preferred crystals of tartar) or enemas, to clear the intestine of blockages or constrictions. In violent cases of colic, he suggested bleeding, both to arrest incipient inflammation and to relax spasm in the intestine.

Buchan considered flatulent colic to be a low disease and so counseled against bleeding and evacuations, but he believed nervous colic to be inflammatory, and in order to reduce the impetus of blood through the kidney he recommended bleeding and the avoidance of anything that might heat or stimulate the system. MacBride also bled for inflammatory colic, recommending that the bleeding be

as rigorous as the patient's constitution permitted. The author of *The London Practice of Physic* advised initiating treatment by letting blood -- repeating the procedure if the pulse allowed for it -- then administering vomits and cathartics. However, he advised against venesection for dry belly-ache, unless inflammation was present.

**Sources:** (Sir) George Baker, *An Essay, Concerning the Cause of the Endemial Colic of Devonshire, Which was read in the Theatre of the College of Physicians, in London, on the Twenty-ninth Day of June, 1767* (London: J. Hughs, 1767; repr. n.p., Delta Omega Soc., 1958), esp. pp. 4, 7, 11, 29-31; Brookes, *General Practice of Physic*, I, 11-12, 316-31; Buchan, *Domestic Medicine*, pp. 225-31; Cullen, *First Lines of the Practice of Physic*, III, 114-26; Cullen, *Synopsis and Nosology*, pp. 27, 32, 38-39; Hunter, *Observations on the Diseases of the Army in Jamaica*, pp. 243-74; Huxham, *Essay on Fevers*, p. 114; Huxham, *Observations on the Air and Epidemic Diseases*, pp. 5-13, 32-33, 36-52, 61-62, 84-87, 91, 179, 238, 268; *London Practice of Physic*, pp. 88-90, 255-57; David MacBride, *A Methodical Introduction to the Theory and Practice of Physic* (London: W. Strahan [etc.], 1772), pp. 518-22; Parr, *London Medical Dictionary*, I, 462-64; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 214-15; Sydenham, *Whole Works*, pp. 142-51.

### Dropsy:

#### **Definition and symptoms:**

Eighteenth-century medicine, like Greek medicine, distinguished several types of dropsy by the region affected; anasarca (oedema, general dropsy) was the designation if fluid collected not in a particular cavity but "in the cellular substance" (Bell). Cullen recognized five species of anasarca, differentiated by cause. He saw tympanites (swelling of the abdomen) as a separate genus, in a different section, *flatuosæ* instead of *aquoæ* or *hydropes*. In addition to anasarca, there were five genres that

Cullen classified as hydropic, but only ascites (abdominal swelling) was generally counted among the forms of dropsy.

Dropsy was seen as a transmuted form of a disease, such as ague (Sydenham) or autumnal fever (Pringle), or as a condition in itself, brought on by any of a range of possible causes. Immoderate drinking of liquor, errors in diet, a sedentary lifestyle, poor circulation, venery, prolonged exposure to a moist climate, suppression of evacuations (perhaps, as Buchan noted, following excessive ones), and excessive use of purgatives or prophylactic bloodletting were among the perceived causes most often cited. Duncan thought that age, constitution, and heredity were often the remote causes of anasarca, and that an obstruction of customary evacuations was the most frequent exciting cause. Sydenham saw weakness of blood as the general cause. Most writers saw dropsy as a disease of debility.

### **Diagnosis and prognosis:**

The distention of a region by fluid was the most obvious symptom of dropsy, but it was not the only one. Indeed, Sydenham enumerated difficulty in breathing and urination, accompanied by great thirst, as the primary symptoms.

Hydropic patients might on occasion recover spontaneously, as their systems absorbed excess fluid. Mead noted the case of an ascitical patient who recovered in this way after the removal of 20 pints of fluid through paracentesis failed to relieve his condition -- only to die after a quack gave him strong cathartics to prevent a relapse. Some writers (e.g., Buchan, van Swieten) were confident that dropsy could generally be cured. However, while writers tended to agree that the majority of cases of dropsy could be cured if they were handled correctly and the patients cooperated, most acknowledged that treatment often failed, especially if the constitution of the patient was weak or broken down. Cullen deemed "many cases of dropsy absolutely incurable." The high failure rate encouraged many sufferers to visit quacks, while regular practitioners often treated difficult cases empirically. Brocklesby wrote that when standard therapies did not cure, he was "never ... averse to the free, but cautiously directed trial of a variety of empirical remedies, in this disease; which, as medical history testifies, has

sometimes been cured by strange and unexpected methods."

#### **Therapy – Buchanan (pp. 149-57):**

Buchanan reports that he had limited experience in treating dropsy. In all probability, dropsical men in the Blues were sent on to the hospital for treatment. Buchanan appears to endorse hydragogue purgatives and diuretics, but sees tapping as a last resort. He also advocates lifestyle changes, e.g. exercise and abstention from spirits, for patients or for those prone to dropsy: The hospital remedies that he enumerates seem to have been cathartics; he does not mention the use of a diuretic, but his review is brief and sketchy, and he may not have been fully informed of the regimen. Like many contemporaries, Buchanan sees liver failure as a common cause of dropsy, and the observations in two of the three post mortems that he reports focus on the state of the liver.

#### **Therapy -- Sydenham:**

Sydenham advocated hydragogues, but cautioned that most of them were dangerous because they weakened the blood. He observed, however, that syrup of buckthorn did not weaken the blood and yet purged much water. He noted that lenitive cathartics boosted hydragogues and that *crocus metallorum* (app. B, under "antimonials") succeeded when other purgatives failed. While he recommended emetics or drugs that both purged and vomited, he emphasized cathartics. Only for patients who were too weak for purgatives did he advise diuretics -- women and children he saw to be in this category -- his favorite being burnt broom. At every stage of treatment, he saw it as important to strengthen the blood -- he recommended horseradish and wormwood -- and to avoid drugs or therapies that would weaken it.

#### **Therapy -- Monro:**

In his popular and influential treatise on dropsy, Monro specified three indications: (1) to remove the cause of the disease; (2) to evacuate excess fluid; (3) to prevent a return. If the condition



was the result of weak solids and thin fluids, he advised bracing the fibers though gentle exercise, nourishing food, stimulants (e.g., ginger, mint), bitter astringents like wormwood, foul-smelling gums like asafoetida, sharp salts like volatile hartshorn, and pungent alkalis and plants. He also thought that iron was a useful stimulant, but that powerful astringents like alum did not penetrate the capillaries sufficiently to help. To restore the fluids to their proper consistency, he advised promoting urination (through diet) and perspiration. For plethoric patients he recommended bleeding, as he did in cases where the blood was thick and sisy. If, however, the blood was putrescent, bark and other antiseptics were proper. To satisfy the second indication, Monro advised stimulating the absorbent vessels by administering emetics, but only in doses that encouraged nausea, rather than vomiting. Small doses, he observed, promoted perspiration, urine, and large stools, all of which were salutary. Hydragogues likewise expelled excess fluid and, noted Monro, also served to thin blood that was too thick. Among the more effective purgatives and cathartics he recommended scammony and calomel. Eccoprotics like prunes were, he believed, too weak to draw out and expel water. Monro seconded Mead's assertion that if the hydropic patient was very weak, violent purging was harmful and evacuated water was soon replaced. Removal by urination was, Monro asserted, preferable if sufficient, because it did not weaken the patient. Monro discussed a number of diuretic classes, finally endorsing lixivial salts (e.g., broom ashes), stimulating medicines like garlic, balsams, cantharides, certain mercurials, and several individual drugs. Nevertheless, he noted, diuretics often failed to stimulate adequate urination. While many practitioners sought to encourage urination by advising their patients to drink large volumes of liquid, Monro noted that this was dangerous if the body did not expel more than it consumed. Following on from Celsus, Monro strongly endorsed sweating as therapy, specifying as effective friction, exercise, steams, heavy clothing and bedclothes, and various medicines, including various antimonials and opiates. Salivation might, he advised, be a worthwhile recourse if all else failed, but it was risky because it weakened the patient and dissolved blood. Monro warned that massive evacuations of all kinds might weaken the lungs and other organs, so it was important for the physician to manage discharges by such practices as maintaining pressure on the hydropic region. While

bandaging was a common recourse to remove fluid, as well as to reduced the amount entering a cavity, Monro cautioned that the bandages not be made to tight as to inhibit circulation. Incising hydropic swellings, a method encouraged by Celsus, was, he noted, often practiced and was useful, but Monro seconded Hippocrates' observation that the wounds were slow to heal and added that if they were held open by such devices as peas, this might result in gangrene. As the patient recovered, the threat of relapse was, in Monro's estimation, greater than for almost any disease. Cold baths and corroborants should be used to brace the fibers, and the region earlier affected by dropsy should be regularly compressed and strengthened or destroyed if possible.

### **Therapy – conspectus:**

While many writers proposed general rules for treating dropsy, others were sensitive to particular forms and cases. The author of *London Practice of Physic* prescribed in part according to the perceived cause: "If a dropsy happens in consequence of an obstructed perspiration, or drinking large quantities of cold water, diaphoretics are very plainly indicated. -- If from hard drinking, exercise on horseback and a liberal use of wine under proper restrictions, however, may be recommended: if from a consumptive diathesis, diuretics and corroborants will be proper: if it happens after large hoemorrhages, or long continued fevers, purge sparingly."

Regardless of the type of dropsy or the cause ascribed, treatment tended to be aggressive and was aimed at removing excess fluid as quickly as possible. Mead reported the case of an anasarca patient who lost one or more gallons of water per day for ten consecutive days on her way to recovery.

Many writers throughout the 18<sup>th</sup> century followed Sydenham's lead in advocating hydragogues as the primary remedy. For robust patients, Wallis recommended purgatives, "which are known to evacuate in the greatest proportions the serous fluids"; he particularly advocated jalap mixed with nitre. Hunter, however, cautioned that because the constitution was reduced a strong cathartic could kill.

Squill and nitre were often cited as diuretics in the treatment of dropsy. Cream of tartar was promoted as both diuretic and purge. Lind's practice favored diuresis (he also used mercurials to

promote a gentle salivation), as did Van Swieten's. Withering helped to popularize the use of foxglove. Noting the popularity of this remedy, Wallis recommended it, but warned that to avoid sickening the patient it should be mixed with "absorbent powders." Hooper likewise encouraged the use of digitalis, while claiming that it failed more often than suggested in Withering's treatise. Townsend, drawing on Ferriar's observations, asserted that digitalis, while useful, was somewhat less effective than was cream of tartar in curing dropsy. Lettsom did not see digitalis effect a single cure. While Cullen thought that emetics promoted absorption and expulsion of fluids, he asserted that to be effective they needed to be powerful (he recommended antimonial forms) and frequently repeated. He therefore preferred purgatives and diuretics. While noting that earlier writers had recommended drastic purges, he reported that the consensus now favored milder ones like cream of tartar. He supported the use of diuretics, but noted that they often failed to operate, and that writers too often reported only their successful uses.

Some writers asserted that dropsy sufferers should reduce their fluid intake. Mead believed that patients could sometimes be cured merely by going without drink, relieving thirst by rinsing their mouths. Cullen took quite a different tack. Observing that many practitioners were reluctant to prescribe watery fluids, he advised fluids as diuretics and recommended them in large quantities, crediting "the ingenious and learned Dr. Milman" with having restored the practice.

Another remedy occasionally suggested was the promotion of sweat, usually by sudorifics or warm baths. Since dropsy was generally thought to be a low disease, bloodletting was not widely prescribed. Mead, however, recommended repeated bleeding for ascites, believing that it was often caused by inflammation and overheated viscera.

A common intention in therapy was to stimulate the depressed body of the hydropic. As in other diseases, expellant drugs were often intended to rouse the patient, as well as well as to clear his system. Frictions were often used. Boerhaave advocated tonics and cordials to invigorate the patient, as well as encouraging the standard evacuations. Duncan thought wine useful as a cordial; if malt liquor was used, he suggested porter. Sydenham emphasized also the need to build up weakened patients through exercise. Many writers recommended exercise. Duncan preferred horseback riding.

Mechanical means were often used. Cullen endorsed bandaging to promote absorption of excess fluid. Finally, there were incisions. It was common to make small incisions in the legs or elsewhere, in order to drain excess fluid; Bell and others, however, recommended making simple punctures with a lancet. Tapping (with a trochar) was generally used only as a last resort, though Mead saw it more positively, as an operation that might help and was seldom harmful. It was regarded as a risky operation, and was described by Heister and Sharp, among others. Alexander Monro *primus* designed a belt that continuously exerted pressure on the patient during the operation, maximizing the amount of fluid that was drained. Tapping was mainly used when the dropsy was localized and might be relieved if a particular cavity were drained. Boerhaave recommended paracentesis by caustics or punctures with a lancet. Cullen likewise advised the use of a number of small punctures un the affected region; he thought issues to be useful, but warned that places where they were applied might become gangrenous; he had the same reservations about blisters, though he saw them as occasionally useful, and about setons, which he did not recommend, though he noted that some writers did.. Cullen also advised changing habits, such as excessive drinking, that may have brought on dropsy, and thought that bandaging, friction, and exercise would assist recovery.

Upon recovery, advised Buchan, hydropics could reduce the likelihood of relapse by exercising, following a dry diet, and taking medicines that strengthened the solids (e.g., wine with steel or bark) and warm, aromatic bitters (e.g. canella alba, Virginia snakeroot, orange peel [note app. B on all]) infused in wine, and avoiding great evacuations. Townsend recommended an invigorating diet, including wine and meat, as well as the use of bitters and tonics, and, most important, regular exercise.

**Sources:**

NLM, MS B 332 ("Observations from Dr. Duncan's Lectures"), pp. 27, 30, 38, 41-44; William Alexander, *Experimental Essays on the Following Subjects: I. On the External Application of Antiseptics in Putrid Diseases. II. On the Doses and Effects of Medicines. III. On Diuretics and Sudorifics. To Which is Added, Observations of the External Use of Tincture of Cantharides*, 2nd ed.,

corr. (London: Edward and Charles Dilly, 1770), p. 211; Allen, *Synopsis Medicinae*, pp. 331-41; Bell, *System of Surgery*, II, 356; Brookes, *General Practice of Physic*, I, 301-09; Buchan, *Domestic Medicine*, pp. 113, 286-89; Buchan, *Observations concerning the Diet of the Common People*, pp. 10-11; Cullen, *First Lines of the Practice of Physic*, III, 281-94; Cullen, *Synopsis and Nosology*, pp. 48-52; Stephen Hales, *a Friendly Admonition to the Drinkers of Gin, Brandy, and Other Distilled Spiritous Liquors: With an Humble Representation of the Necessity of Restraining a Vice So Destructive of the Industry, Morals, Health, and Lives of the People*, 6th ed. (London, F. & C. Rivington, 1800), p. 4; James, *Medicinal Dictionary*, under “hydrops”; Lind, *Essay on Diseases*, p. 205; *London Practice of Physic*, pp. 186-92; Mead, *Medical Works*, pp. 388-96; Donald Monro, *An Essay on the Dropsy, and Its Different Species*, 3<sup>rd</sup> ed. (London: A. Millar et al., 1765), esp. pp. 9-87, 104-05, 117-20; Parr, *London Medical Dictionary*, I, 776 (“hydrops”); Percival, *Essays, Medical and Experimental*, p. 172; Pringle, *Observations on the Diseases of the Army*, p. 15; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 268-69; Robinson, *Essay on the Gout*, pp. 131-32; Sharp, *Treatise on the Operations of Surgery*, pp. ix, 56-63; Sydenham, *Whole Works*, pp. 51-52, 386-409; Townsend, *Elements of Therapeutics*, pp. 418-25; van Swieten, *Diseases incident to Armies*, pp. 58-64; Wallis, *Art of Preventing Diseases*, pp. 454-57.

### **Dysentery, Bloody flux:**

#### **Definition and symptoms:**

Cullen classed dysentery among the fevers (*pyrexia*), in the order *profluvia*. He recognized only one species, though the name could be qualified by the symptoms that were prominent in a given case (e.g., if worms were present in the stools, it might be called *dysentaria verminosa*). Other writers distinguished several kinds of dysentery, notably inflammatory, putrid, and malignant, but Parr maintained that these cases were defined by the fever, dysentery being only a complication. Dysentery

was seen by some 18<sup>th</sup>-century writers, notably Akenside, as being a form of rheumatism, this characterization recalling the claim by the Roman physician Cœlius Aurelianus. In the 18<sup>th</sup> century it was widely seen as contagious, though it was occasionally ascribed to eating fruit (cf. *RP*, n. 693) or, more commonly -- Pringle and Zimmerman held this view -- to a stoppage of perspiration occasioned by exposure to cool, wet conditions.

While commonly called “bloody flux,” in many cases blood was not visible in stool; the disease was then sometimes referred to as “white flux.” There was little disagreement on the major symptoms. Dysentery tended to begin with nausea and gripes, followed by purging and fever. As the disease progressed, patients might purge 100 times per day, their stools being thin and mainly mucus, though they might include membranes, pus, blood, bile, and bits of excrement. Round worms were present in the stool of many patients. If fever and inflammation were high at the outset, dysentery might cause death quickly. Fever generally passed after 8-12 days, but Monro reported that terminal cases were characterized by low malignant fever, as well as by black, fetid stools, lientery, hiccup, and stupor. Most epidemics of dysentery did not bring a high mortality rate, and patients tended to recover in 7-10 days, but cases could linger for several months and leave victims permanently weakened and subject to purging.

Since diarrhea was often misdiagnosed as dysentery, writers took pains to distinguish the two. They did so by noting that dysentery was more violent-- more blood in the stools; the constant venting of mucus, with little fecal material; more pain and tenesmus -- and that it was more likely to be epidemic. And while diarrhea was not always attended by fever, or when it was the fever tended to be mild and inflammatory, fever was a hallmark of dysentery, and Parr reported that the fever was usually of a putrid or nervous kind.

More than any other disease, dysentery was associated with the camp, and many of the most respected authorities wrote of it on the basis of their observations as army medical officers. Parr reported, “Navy and army surgeons assert that practitioners, in general, know little of dysentery.”

### **Indications and prognosis:**

It was widely accepted that while dysentery might initially appear as an acute disease, it could easily become chronic. Moreover, it might cause the intestines and bowel to mortify if not attended to promptly and effectively. Monro asserted, “There was no disorder we were more successful in the cure of, than recent fluxes; but after they had continued for weeks, and were become in a manner chronic, they often foiled all our endeavours, and a great number died.” Beyond the prospect that the bowels would degenerate, there was widespread concern that if effective treatment were delayed the patient would become too enervated to combat the disease. Dysentery was seldom left to nature, and indeed Parr observed, “nature alone contributes very little to its cure.” Nevertheless, therapy was conditioned by the belief that dysentery represented an attempt by the body to expel some virulent element, and that therefore purging was salutary and was generally to be assisted. Beyond this, writers stressed the importance of boosting the system of the patient.

**Therapy -- Buchanan (pp. 19-25, 279-93 [in both sections, comments on dysentery are interspersed with those on “grieps [*sic*] and purging,” which, as Buchanan implies, do not always denote the disease]):**

Buchanan prescribed extract of bark, to counter mortification of the bowel or a tendency toward putrescence. Beyond this, he notes only an emphasis on light diet, and that if patients complained of weight in their stomachs, he administered ipecacuanha. There may well have been more to his therapy than he mentions in his journal.

**Therapy – Monro:**

Monro stressed the importance of keeping the patient clean and in a well-aired ward. While noting that some writers claimed that venesection was unnecessary, he reported that autopsies of victims of chronic dysentery revealed widespread inflammation and he asserted that this demonstrated the need for bloodletting. Monro reported that he bled freely in the early phase of the disease when the pulse was

strong and sometimes even when it was low and quick (in which case, he noted, the pulse often became stronger), though if the patient was generally low and weak, and was not experiencing pain or fever, he bled little or not at all. While acknowledging that some contemporaries asserted that bleeding was unnecessary, Monro noted that Huxham, Hoffman, and Sydenham had advised it in the early stages, and he reported that he had enjoyed success when following the practice.

Monro observed that most dysenterics experienced nausea when first admitted to hospital, and that emetics not only eased their sickness and brought up bile, but provoked a sweat that was beneficial. It was Monro's practice to begin administering purgatives the second day and repeating them. Monro used drugs like ipecacuanha that could provoke both stool and vomit, but he found that these made the patients so sick that they refused them. Resinous purgatives he found too harsh.

Noting the concerns of Sydenham and Huxham that opiates inhibited purging and caused griping and fever, Monro seldom used them in the early stage, but "as there is no general rule in physic without exception," he sometimes gave an opiate to a patient who complained of griping and pain following a purge. After 12-14 days of illness, however, the regimen changed, as Monro began to dispense opium nightly to patients, to help them sleep, though he kept the doses small, so that they would not inhibit stool. He observed that some practitioners considered opium to be the most useful remedy for dysentery, while others regarded it as the most destructive.

For patients who suffered from griping and tenesmus, Monro recommended fomenting the abdomen with warm stupes and drinking freely warm barley or rice-water, or weak broth. He lauded a newly discovered remedy, emulsions of beeswax in warm liquors and noted favorably an infusion of camomile flowers that Pringle had recommended. For severe symptoms, he advised opiates or venesection. In general, Monro recommended a low diet, with *decoctum album* as the common drink. While noting that various writers claimed that fruit, especially peaches and grapes, was a good remedy, Monro added that he needed to test this assertion before endorsing it.

In stubborn cases of dysentery, Monro sought to restore the tone of the intestines by ordering a mild, nourishing diet, corroborating and gentle astringents, opiates, occasional mild purgatives. He



made use of a variety of medicines, including favorites of Pringle and other authorities, but found none that was helpful in all cases.

As regarded recuperating patients Monro cautioned, "Errors in diet and exposure to cold being the most frequent causes of relapses into this disorder." He recommended that recuperants be kept on a low diet and be given mild purgatives, astringents, corroborants. Occasional opiates he thought beneficial. Monro believed that the patient would profit from fresh air and from horseback riding.

### **Therapy -- Zimmerman:**

First appearing in translation in 1771, Zimmerman's treatise on dysentery won widespread praise in England. It was cited as an authority by Parr and Buchan, and it was the only work on dysentery that Hamilton recommended to regimental surgeons.

Siding emphatically with Tissot, Zimmerman rejected the claims put forward that various remedies were specific cures for dysentery. He emphasized the need for speed in treating the disease, asserting, "In no malady does nature sooner get the start of art than in this." His method of treatment was governed by a single precept: "The principal indication in each patient, was the quick evacuation of the corrupt bilious matter." Speed, however, did not justify rough treatment, for he also asserted that since the bowels of dysenterics tended to become inflamed, the practitioners should avoid whatever encouraged fever and inflammation. Zimmerman generally initiated treatment with gentle emetics -- he interpreted that fact that patients were often nauseated to reflect nature's attempt to expel morbid matter -- but he did not provoke vomits if inflammation or other symptoms militated against it. For emetic purposes, he preferred ipecacuanha. After emetics, Zimmerman administered purgatives, even if stools were bloody. He used gentle purgatives -- powerful ones, he noted, brought on colic -- and unlike Degner he favored acid salts, noting that acids resisted putrefaction. Although patients were often in pain, he seldom permitted anodynes before evacuation was complete. He did, however, attempt to soothe the bowels with soft, mucilaginous liquids. After total evacuation, he provided laudanum or chamomile tea. Throughout the treatment, the physician was to do what he could to keep the patient

in a positive frame of mind.

Unlike Degner, Zimmerman forbade flesh broths, fats, oils, butter, and eggs, since these promoted putrefaction. He also forbade carminatives like cummin. While "old women" advised against permitting patients to consume liquids, he allowed them barley water and rice gruel. Furthermore, following on the advice of Baglivi, Huxham, and Tissot, he advised that patients consume warm water -- he thought whey even better -- noting but not approving of Degner's record of drinking 102 pints in 40 hours while suffering from cholera morbus. Zimmerman disapproved of cold drinks, as well as of all food or drink that tended to bind (e.g. milk, cheese, pastries) or heat (spirits, wine, spices). Like many writers, Zimmerman rejected the notion that dysentery was caused by fruit; going further, he recommended that fruit be included in the diet of patients.

In the matter of venesection, Zimmerman noted that while Degner was generally opposed, other authorities, including, Sydenham, Huxham, and Monro, recommended bleeding early in the disease. He advised that it be omitted if the case of dysentery was accompanied only by bilious fever, but added, "there is likewise not the least reason to blame the physicians that make use of it in complicated cases."

While Zimmerman asserted that patients should freely vent, he reported that the communities that he served derided this advice. He in any case enjoined cleanliness. The rooms of patients were to be well aired, and the air was to be purified occasionally by pouring vinegar over a red-hot shovel. The excrement of patients was to be taken away and buried. Zimmerman condemned as "ignorance and folly" the traditional practice (which he believed was in decline) of attempting to restrain purging, as well as that (which, in his view, was observed by nine-tenths of practitioners) of administering astringents after evacuations.

For recuperants, Zimmerman prescribed a diet that included boiled fruit and lemon juice. He cautioned that patients who recovered should eat sparingly for a time, and take no meat. As preservatives against dysentery, he recommended that people not allow themselves to get overheated, especially in changeable fall weather. Their diet was to include much fruit and little meat.

### **Therapy -- conspectus:**

Sydenham began with a gentle emetic, followed by an enema. He recommended venesection only if the symptoms suggested it. Cleghorn's method was similar. He preferred ipecacuanha as both a purgative and an enema, though he also found vitrum antimonii ceratum to be useful.

MacBride recommended venesection if inflammatory symptoms were present, but not if the patient was weak, and he considered a repetition of bleeding to be unwise in most cases. He suggested ipecacuanha, but only as a purgative and cautioned that if it appeared to be provoking a vomit, the physician was to stop using it. Fruit he considered to be useful both in preventing and in treating dysentery.

The author of *London Practice of Physic* proposed somewhat more active therapy: "Bleeding will be very necessary in this case; then a vomit; which repeat occasionally, as the symptoms require the one or other" He believed that epidemic dysentery was generally cured by venesection and vomiting. Since, as he saw it, the disease arose from blocked perspiration, he also recommended purgatives that were diaphoretic. To treat the West Indian form of dysentery, he recommended nitrous medicines and antiphlogistic regimen.

Observing that in dysentery the colon had a tendency to constrict, Cullen cautioned against astringents. In cases where the disease was complicated by fever, he recommended venesection, but he added that the fever was often putrid, so the practitioner was to observe caution. If the fever was intermittent, it was to be treated in the way standard to that, with bark. Cullen noted that much opinion favored emetics like ipecacuanha and he did not oppose their use, but his therapy relied mainly on purgatives. He preferred oral laxatives to enemas. While not opposing entirely the use of opium to control gripes and pain, he was concerned that it might interrupt purgation, in turn permitting constriction of the colon. Instead of opium, he advised fomenting the patient's abdomen or applying blisters. As he noted, the major authorities who had extensive experience in treating dysentery relied principally on "purging assiduously employed."

Like Monro, Parr stressed the importance of keeping the patient clean. He cautioned against

bleeding in most cases, asserting that the disease was putrid in nature and that even inflammatory symptoms were often misleading. Emetics he regarded as valuable in removing spasm and encouraging sweat, but he advised that they be administered in doses that would merely nauseate. Parr regarded cathartics as “the most effectual remedies”; again, however, he advised using the milder ones, rather than strong purgatives like rhubarb. While cautioning against the use of strong sudorifics, Parr strongly endorsed moderate diaphoretics, regarding these as central to the treatment. He noted that astringents were widely used in treatment to reduce the discharge of blood and mucus, but he asserted that in general they were not suited to the disease, though cascarilla offered some advantage. To treat chronic dysentery, Parr advised a mild, nutritious diet, light bitters, and warm clothing. Purgatives he considered useful, but also opiates, to calm the bowel, and he recommended enemas of wax and soap (the latter to make the wax soluble in body fluids) to sheathe abraded intestines. He concluded that in these cases, “The patient must rest contented with infirm health during the remainder of his existence.”

Rollo did not condemn venesection, but the regimen that he recalled from the army hospitals in the West Indies did not include it. Rather, there was a stress on opium, which was used in large doses to promote large stools, nausea, and sweating. Hunter approved of a practice initiated by laxatives. He did not oppose the use of emetics, but thought purging to be more useful than vomiting. For pain in the bowels, he recommended warm fomentations and blisters. Hunter allowed for the use of opiates in some circumstances and noted that Sydenham and Pringle had both endorsed them, but he contended that they were unnecessary or undesirable in most cases. He disapproved of astringents, instead advising the continued application of purgatives -- or, when patients were weakened by chronic dysentery, laxatives -- for in his experience nine-tenths of dysentery cases were characterized not by laxity of the bowels, but rather by obstructions that inclined them to mortify (he discussed several dissections by way of proof). While conceding that many medical men recommended bleeding and that the inflamed condition of the bowels pointed to it, other symptoms discouraged it. In the end, he cited experience: "All that I have learned on the subject amounts to this, that in slighter cases, or when the disease is treated early, purgatives have proved so effectual, that I have never had recourse to bleeding;

and when the disease has been more violent, the strength of the patient has been so much reduced of a sudden, that I have not dared to make use of that evacuation."

While a number of writers stressed cleanliness in treating dysentery, Buchan was particularly vehement: "In all contagious diseases the danger is increased, and the infection spread, by the neglect of cleanliness; but in none more than this." Noting the low nature of the disease, he enjoined those who ministered to patients to do what they could to boost their spirits. Buchan recommended that patients be kept warm in a flannel waistcoat, so that they would sweat. Their diet was to be light, but was to include astringent broths. Buchan minimized the importance of drugs in treatment. He reported the case of a man who had contracted dysentery in America. It had lingered, despite his use of various medicines, and he returned to Britain to die. There, he had recovered, by following Buchan's advice "to leave off the use of drugs, and to trust entirely to a diet of milk and fruits, with gentle exercise."

There appears to have been less consensus on treating dysentery than on how best to treat most acute epidemic diseases. As was often the case, disputes about appropriate therapy grew from differences over the nature of the disease. Parr commented, "The cure of dysentery, as described by the earlier authors, is confused and contradictory. As an increased evacuation it has been treated by astringents; as a spasm, by opiates; and as an hæmorrhage, by sedatives." Nevertheless, at least among British writers who were widely cited, there was agreement on a number of points. Virtually all recommended the use of purgatives and emetics, while advocating that the latter be administered primarily to promote sweat, rather than vomiting. Writers generally allowed for bleeding if inflammatory symptoms were present, but most encouraged caution, and a significant minority considered venesection unwise.

**Sources:**

Buchan, *Domestic Medicine*, pp. 263-68; Cleghorn, *Observations on the Epidemical Diseases in Minorca* (1751 ed.), pp. 229-36; Cullen, *First Lines of the Practice of Physic*, II, 295-99; Cullen, *Synopsis and Nosology*, p. ; Grant, *Observations on the Nature and Cure of Fevers*, I, 300-05;

Hamilton, *Duties of a Regimental Surgeon Considered*, I, 319; Hunter, *Observations on the Diseases of the Army in Jamaica*, pp. 224-42; Huxham, *Essay on Fevers*, pp. 141, James, *Medicinal Dictionary*, "dysentery"; *London Practice of Physic*, pp. 28-31; MacBride, *Methodical Introduction*, pp. 463-68; Manning, *Modern Improvements in the Practice of Physic*, pp. 312-32; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 314-74; Parr, *London Medical Dictionary*, I, 583-87; Rollo, *Observations on St. Lucia*, pp. 80-82; Sydenham, *Whole Works*, pp. 116-26; John George Zimmerman, *A Treatise on the Dysentery: With a Description of the Epidemic Dysentery That prevailed in Switzerland in the Year 1765*, trans. C. R. Hopson, 2nd ed. (London: John and Francis Rivington, 1774), pp. 25-28, 36-56, 63-65, 87-97, 184-85, 215-26, 289-94.

### **Gout:**

#### **Definition, symptoms, and aetiology:**

Cullen placed gout in the order *phlegmasiæ* (fever, pain, inflammation, sily blood). He referred to it as *podagra*, and his description of the disease encapsulates what most writers saw as the chief symptoms of gout: "An hereditary Disease, arising without any evident external cause, but for the most part preceded [sic] by an unusual affection of the stomach, pyrexia, pain of the joint, for the most part of the great toe of the foot, but certainly infecting chiefly the wrists and ankles, returning by Intervals, and often attended with affections of the stomach and other internal parts." Cullen recognized four species of podagra: regular (violent inflammation and pain in the joints); atonic (the stomach or other internal organs primarily affected; relatively little joint pain); retrograde (joint pain suddenly receding, atony of the stomach or other organs coming on); and aberrant (inflammation of an internal organ recedes as joint pain intensifies). Most writers distinguished between regular gout, which was characterized by well-defined paroxysms and intermissions, and irregular, in which pain was chronic and the disease moved inward. Noting that irregular gout often succeeded the regular variety, they

tended to associate the former with old age and conjectured that the weakened constitution of elderly patients was unable to combat the disease by forcing it to the extremities. Irregular gout could, they explained, afflict younger patients if they had naturally weak constitutions or if they became broken down through debauchery. Sydenham saw gout in general as a disease of old men, though occurring occasionally in young men and in women.

There was intense debate on the causes of gout. Espousing a common view, Cadogan claimed that gout was a reflection of a strong constitution throwing harsh humors to the extremities. Cullen thought the disease marked attempts by the *vis medicatrix naturae* to counter debility in the extremities by an inflammatory affection. Some writers, like Gardiner, espoused the traditional belief that "Morbific Matter" was to blame, though Cullen and Jeans argued against this theory. Most writers also felt, however, that heredity played a part in causing gout. Neither of these assertions was new; Galen, too, had asserted that gout was in part caused by heredity. And, again like Galen, virtually everyone agreed that diet was significant as both cause and cure. Liger acknowledged heredity as a contributing factor, yet asserted, "The true and only cause of the gout [is] the use made of liquors and aliments, which contain too great an abundance of mucilage."

### **Indications and prognosis:**

So long as a case of gout was regular, it was not considered dangerous, only painful and inconvenient, and Gardiner noted that gouty patients often lived long, provided that their disease did not turn irregular or atonic. On the other hand, observed Berdoe, the process of curing gout might transform it into a more dangerous disease: "How absurd all attempts to cure a confirmed gout. Who indeed would wish for a cure, when the consequence might produce either a dropsy or consumption?" Erasmus Darwin suggested strategies for the duke of Devonshire to "acquire the Gout," in the hope that this would occasion a repulsion that would relieve the partial paralysis of the duke's facial muscles.

Writers on gout were virtually unanimous in claiming that there was no quick and easy cure for the disease. Many believed, indeed, that the disease could not be cured and concentrated on ways to

moderate the symptoms.

Beyond the issue of how to cure gout there was the issue of whether to cure it. Some writers questioned whether it should be ameliorated at all. MacBride wrote, “the pain in this disease is a consequence of the efforts of Nature to expel the morbid matter; and though it be a disagreeable remedy, yet the sharper it proves, the sooner the fit terminates, and the longer and more perfect is the intermission.” He observed that fits might for a time be stifled by drugs, but they would return in even more violent form. It was widely believed that gout served a positive function, as Gardiner maintained: “a regular fit of the gout should be considered as a salutary paroxysm, excited by certain laws in the system, to free the body of a morbid matter, which, if retained, would prove hurtful to the constitution.”

#### **Therapy – Buchanan (*pp. 157-65*):**

Buchanan reports only two remedies that he himself used: bleeding and purgation. He appears to endorse reforms in diet (emphasis on vegetables, limiting intake of strong liquor).

#### **Therapy -- Sydenham:**

Like Cadogan and Brown after him, Sydenham for many years suffered from gout, and the therapy that he came to advocate was based in part on what he found to be useful in his own case. Sydenham took the antecedent cause of the disease to be indigestion and geared therapy to countering this problem. In his view, only a permanent reform in diet and lifestyle could relieve gout. He strongly endorsed a milk diet, and asserted that if the patient abandoned it even after 20 years the disease would return. He also promoted horseback riding and other forms of exercise, especially in fresh country air. If the patient did not exercise, he added, his joints might lock. Finally, the patient was to maintain a tranquil outlook, since a perturbed mind inhibited digestion.

Sydenham argued that quick fixes were of little value. Bleeding for gout he considered unwise and cautioned that the patient were bled during an intermission, it might extend the fit. He asserted that emetics and cathartics returned to the blood peccant matter that nature had pushed to the extremities.



Sydenham predicted that eventually a specific for gout would be discovered, but while making some use of nostrums, particularly those that stimulated digestion or purified the blood, he asserted that the various “cures” that were then in fashion, were unable to provide more than temporary relief, if even that. He noted that a practice advocated by Hippocrates, that of burning moxa on the affected part, had recently come back into vogue, but he rejected the remedy, noting that it did nothing for indigestion and therefore did not counter the central cause of gout.

Sydenham’s regimen hinged on the patient’s willingness to desist from wine and in many cases beer. He observed, “tho’ the Proverb says, Drink Wine and have the Gout, and drink no Wine and have the Gout. Yet it is without Controversie, and confirmed by various Experiments of gouty People, that Wine *de facto* is injurious.” He allowed for Spanish wine if it was necessary to promote digestion -- French and Rhenish wine enraged the humors -- and conceded that patients with mild cases might drink small beer and diluted wine, “yet when the whole Substance of the Body is as it were degenerated into the Gout, he will be unable to conquer the Disease, who does not wholly abstain from any bsort of fermented Liquors, tho’ small and mild.”

### **Therapy – conspectus:**

In general, 18<sup>th</sup>-century British writers on gout echoed Sydenham’s main points in respect to treatment: that drugs were of little use in achieving a cure; that reforms in diet and lifestyle were essential; that in particular the patient needed to sharply curtail his consumption of wine. However, writers tended to be more moderate in their demands on the patient.

Cadogan, in the most popular work of the century, followed Sydenham in emphasizing exercise and mild diet as long-term solutions to gout. But while Sydenham claimed that victims of gout could recover and remain free of the disease only if they made permanent reforms, Cadogan thought that after a period of self-denial in food and drink brought the problem under control, they could return to their former patterns, although observing moderation. Asserting that wine was responsible for 9/10 of all gout, he advised patients to quit it quickly, but he allowed that they might replace it with porter or,

better, with small beer. As the disease subsided, the patient might consume a pint of wine once or twice per week, "for the sake of good humor and good company ... for I would not be such a churl as to forbid, or even damp, one of the greatest joys of human life." Like Sydenham, Cadogan stated that drugs could not cure gout, but he promoted laxatives for temporary relief, and he advised bleeding patients who were strong. Although Cadogan was actually more moderate in his recommendations regarding wine than was Sydenham, Falconer was critical: "The next material circumstance that he mentions, relative to our diet, is, his prohibition of wine. I have before declared my sentiments with regard to the propriety of the use of wine in our diet, moderatelyb taken; and, in the instance before use, I am well satisfied that something of this kind must be especially necessary."

Gardiner began his treatise on gout with the complaint, "from the time of Galen to this day, I cannot discover that any advancement has been made, either in our knowledge of this disease, or in the plan of cure." Nevertheless, neither the aetiology nor the cure that he outlined was original. He concluded, as Sydenham had, that poor digestion caused mainly by overindulgence was the cause, and found the cure in reversing the behavior that had brought on the disease. Gardiner observed, "it has been the uniform opinion of physicians ... that a full diet and sedentary life, are the remote causes of the acquired gout. It naturally follows, that temperance and exercise, the opposites of the remote causes, must be the most effectual means in the cure of this distemper.... I know no medicine that can produce the same effect, notwithstanding the impudent boastings of quacks to the contrary." While deprecating the inclusion of wine in diet, he allowed it as a cordial. Gardiner's regimen did not feature venesection, but he recommended leeches to alleviate pain.

It was general practice to keep the patient warm -- particularly his feet -- and to encourage sweat. Berdoe wrote, "A fit of the gout is best relieved by an abundant evacuation, either by the intestines, or by perspiration." Poultices and cataplasms were widely used, but Gardiner observed that since they could not be kept warm, socks and bootkins were preferable. He also advocated warm baths, but not cold ones.

Two French authorities on gout who were popular in Britain likewise saw abstinence as the key

to treating the disease. Liger advocated a light diet and the avoidance of malt beverages and cider (both of which he regarded as more dangerous than wine; MacBride supported him in this), spirits, and "spumous" wines like champagne. Jeans' advice on diet was typical: Gouty patients were to restrict themselves to plain, simple food, well chewed, consumed with table beer or water (Cullen was a strong advocate of water; noting that some complained that water made the stomach cold, Jeans recommended adding an aromatic like ginger); he was to abstain from meat once or twice per week; intake of wine and spirits was to be limited (Jeans favored French wines and warned against port, which he noted was favored on political grounds).

Robinson asserted that gout had become much more common in recent years and ascribed this to "the greater Advances we have made, in all the luxurious Arts of Life." He found the answer to gout in "Air, Diet, and Exercise, that those three grand, capital Restorers of Nature." He, too, advocated a light diet for sufferers. He deprecated madeira and mountain, "for these strong, heavy Wines, mightily abound with hot, fiery, fretting Salts, that are an Ingredient of the gouty Cause." Nevertheless, he thought whey with canary might be helpful, and, for elderly patients, or those with irregular fits, he recommended ½ pint rum in 1 quart Bristol Water, since this promoted perspiration.

Wallis, who himself suffered from gout, was typical in linking gout to overindulgence and in recommending a light diet, but he also noted with approval the common practice of taking wine during a fit, in order to drive gouty humors into the feet. Gregory advised that so long as the patient's constitution was strong and his fits were regular, he was to avoid occasional causes between fits (e.g., excessive drinking of fermented liquor) and during them to relieve without repelling, by using venesection, laxatives and diaphoretics that did not heat or stimulate, light diet and cool regimen, anodynes externally and -- during decline, with caution -- internally. When the constitution was weak and the fits irregular, the practitioners was to support the vis vitae, promote circulation, especially to the extremities, encourage perspiration and strengthen the stomach, while during the fit, he was to pursue a cordial regimen, showing regard for the state of the stomach and bowels, and to use such external applications as invited gout to the extremities.

Cullen rejected the common nostrums for gout, asserting that they were either ineffective or that they had dangerous side effects (e.g., causing paroxysm to retrocede, driving inflammation to a more vital part). While noting Sydenham's stricture against limiting the paroxysm, he argued, "acute pain presses for relief," and suggested venesection or the application of leeches to control pain and moderate the fit. For young people who had a hereditary disposition toward gout, he advised moderate diet and drinking, along with exercise, but cautioned that violent exercise was unwise and that diet should include meat and milk, since vegetables alone were too ascetic and not sufficiently nutritive. In the case of chronic sufferers, however, he thought that radical changes in diet or drinking habits, for they might promote atonic gout and older patients (like the elderly in general) required the stimulus provided by fermented liquors. He recommended chalybeates to strengthen the stomach and also thought bitters and bark useful, though he cautioned against prolonged use. Sweating and (for lingering stiffness and swelling) the stimulation of a flesh brush he considered beneficial. Cullen advised that giving opiates to control pain was appropriate in the case of chronic or elderly sufferers, but promoted paroxysms in patients who had only recently contracted the disease. Considering the dangers associated with most remedies, he commented, "the common practice of committing the person to patience and flannel alone is established on the best foundation."

While Buchanan made use of venesection in the treatment of gout, many authorities, most notably Sydenham, eschewed it. Nevertheless, a number of prominent writers, including Cadogan and Gardiner, already noted, as well as MacBride, approved of bleeding, especially if the patient appeared to be strong or if the gout was attended by symptoms that generally encouraged venesection, e.g. headache.

**Sources:**

Berdoe, *Essay on the Nature and Causes of the Gout*, pp. 27, 59; Buchan, *Domestic Medicine*, p.292; Cadogan, *Dissertation on the Gout*, pp. 63-72; Cullen, *First Lines of the Practice of Physic*, I, 347-67; Cullen, *Synopsis and Nosology*, pp. 16-17; Darwin to William Cavendish, duke of Devonshire, Derby,

20 Nov. 1783, *The Letters of Erasmus Darwin*, p. 131; William Falconer, *Observations on Dr. Cadogan's Dissertation on the Gout and all Chronic Diseases*, 2nd ed. (Bath, 1772), p. 112; Gardiner, *Inquiry into the Nature, Cause, and Cure of the Gout*, esp. pp. iii, 38-39, 67-71, 86-87, 98, 135-56, 192-99; Gregory, *Elements of the Practice of Physic* [*The Works of the Late John Gregory*, IV] (London: A. Strahan and T. Cadell; Edinburgh: W. Creech, 1788), pp. 243-48 (#'s 398-401); Jeans, *Treatise on the Gout*, pp. iii-iv, 45-47, 55-60; Liger, *Treatise on the Gout*, pp. 48-49, 208-09, 288-89; MacBride, *Methodical Introduction to the Theory and Practice of Physic*, pp. 487-95; Porter and Rousseau, *Gout: The Patrician Malady* (New Haven and London: Yale University Press, 1998), esp. chs. 4-7; Robinson, *Essay on the Gout*, pp. 142-49; Sydenham, *Whole Works*, pp. 217, 340-86; Wallis, *Art of Preventing Diseases*, pp. 373-76.

### **Inflammatory Fever:**

#### **Definition and symptoms:**

There was some debate during the 18th century whether inflammatory fever was a true disease or whether it was only a symptom triggered by local inflammation or by another disease. Most authorities, however, regarded it as primary. Cullen classified it among the continued fevers, in the genus *synocha*, meaning that in his estimation it tended toward typhus.

Inflammatory fever was usually associated with the spring, Monro observed that it tended to strike at the start of campaigns in a simple form, whereas at the close of the campaign or during the winter, when many men also fell ill, the fever was usually accompanied by pneumonia or other topical inflammations, or by rheumatic complaints.

#### **Diagnosis and prognosis:**

Writers generally cited two symptoms that in combination clearly indicated the presence of

inflammatory fever: sily blood (often buff-colored) and a strong, full, rapid pulse. Some referred to other symptoms as confirming the diagnosis, e.g. highly colored urine (although in small quantity). The onset of the disease was signalled by hot and cold fits, then pain throughout the body. If the disease struck in the fall or late summer, patients were likely to experience bilious symptoms, nausea, and diarrhea.

Most writers agreed that the simple form of the disease that was characteristic of the spring was readily curable. If not cured, however, by the end of summer the disease was likely to transmute to bilious remittent fever. If the sick remained long in a crowded hospital, inflammatory fever might become malignant. There was also a concern, expressed by Cullen and Grant among others, that if unchecked this fever or any inflammatory condition caused the formulation of pus in the blood vessels and turned the system toward putrescence.

**Therapy -- Buchanan (*pp.* 73-85):**

Buchanan initiated treatment by letting blood (1 lb., repeated if symptoms suggested this). He used emetics (particularly ipecacuanha or warm water), partly to clear the system but also to promote sweating, and often joined the emetics to opiates, both to boost the sudorific effect and to promote a good night's sleep. Buchanan also administered purgatives, which he found beneficial (he notes that others did not) even if the patient expelled only water. While wary of forcing sweats, he encouraged critical sweats the use of sponge baths and soaking the feet and hands. He allowed patients ample liquids, with the intention not only of relieving thirst but of cooling and diluting their systems; among the drinks he most favored were sherbet and other acidic beverages and nitrous drugs in liquid form, e.g. sal prunellae.

**Therapy -- Pringle:**

While many inflammatory fever was dealt with in many 18th-century British works, it was seldom the central topic. There were treatises devoted to yellow fever, smallpox, and other febrile

diseases, but not to this. The main reasons why inflammatory fever did not attract more scrutiny were that: (a) the disease itself was generally not regarded as dangerous, provided that it was not mishandled in such a way as to encourage it to transmute; and (b) that there was rather little controversy on what constituted proper treatment.

Pringle articulated standard therapy. He considered bleeding "the most indispensable remedy in the cure of all inflammatory diseases" and complained that "in general, young practitioners are apt to be too sparing in letting blood; and many lives are lost by deferring the operation for a few hours." His particular concern was that if inflammatory symptoms were not mitigated by bloodletting, a mild illness might transmute into a dangerous one. As general practice, he advocated an initial bleeding of 12-15 oz., followed by a series of smaller ones, as siziness and symptoms warranted. Besides venesection, Pringle recommended prompt administration of sudorifics, favoring a combination of theriaca, sal c.c., and vinegar whey. If treatment had been delayed and the fever was of two or three days standing, the physician was to bleed and then administer a cooling diaphoretic, such as a nitrous compound or spir. Mindereri (*RP*, n. 892). Pringle did not recommend vomits as a general course, although he observed that they might be useful early in the disease. He advised that laxatives or more generally enemas be used, but implied that this was not necessary unless the patient was costive.

Noting that inflammatory cases often moved into a second, low, stage, Pringle directed that as the pulse dropped and symptoms of a depressed system appeared, bloodletting should cease and be replaced by blistering and cordials. He prescribed particularly a compound spirit of camphor, observing that it not only boosted the system but served as a mild diaphoretic. Toward the crisis and when the disease was in decline, he recommended wine to boost the system. In cases where the patient was sinking badly, he added salt of hartshorn to the wine.

Pringle took a hard stand on opiates: "There is no caution more necessary to a young physician, than to abstain from all opiates throughout these fevers; however much the patients complain of pain or watchfulness." He did, however, allow for the use of diascordium to control a diarrhea that was not critical.

## **Therapy -- conspectus:**

The author of *Practice of the British and French Hospitals* neatly summarized the divergence in treating fevers that was common, though not standard, in 18th-century practice: "In inflammatory fevers, instead of epispastics, plentiful and repeated phlebotomy is necessary, a cooling antiphlogistic regimen ought to be observed, and laxative clysters should be frequently injected. On the contrary, in nervous low fevers, a liberal use of blisters is attended with the happiest success." Even more succinctly, Ball observed, "After bleeding and vomiting, proper dilution is absolutely necessary in all Fevers, especially in the ardent and inflammatory." Although the respective comments suggest controversy in the treatment of low fevers, as in fact there was, there was little difference of opinion on at least the broad outlines of how inflammatory fevers were to be treated.

A considerable majority of writers recommended that inflammatory fever be treated by the antiphlogistic method, as it was usually defined. The patient was to be bled freely at first and given saline drafts mixed with nitre or another cooling medicine. He was also encouraged to drink plentifully water and other beverages that would serve as diluents. If costive, he would be given mild purges or emollient laxative enemata. Typically, the cathartics given were of the refrigerant type, e.g. Glauber's and other purging salts. Blisters were commonly applied if the pulse sank, and the patient was then also given cordials, wine, and other standard remedies. In cases where the illness was associated with bilious symptoms, purgatives and emetics were given, and they often gave relief and mitigated the symptoms. Monro regarded it as better to moderate than to stop purging, through astringents, unless the situation was dangerous. He recommended pulvis antimonialis (11 parts calx antimonii to 1 part tartar emetic) was useful in small doses, after evacuation. James's Powder was frequently used in treatment.

Virtually no one questioned the need for bloodletting as a treatment for inflammatory fever. Its place was well established. As Manning noted, "Through all the fluctuations both of theory and practice, from the earliest ages of physic, bleeding has been considered as the principal remedy in the cure of inflammatory diseases." Rather, debate focused on the quantity of blood to be taken and on



whether bleeding should be repeated. In treating inflammatory fever, Manning believed that 12-16 oz. should be taken at the first or second bleeding, then smaller amounts. Observing the color and consistency of the blood would help to regulate subsequent bleedings. Dark, thick blood he took to indicate great inflammation and consequently suggested the need for more bleeding. The patient was to be bled lying down, to avoid fainting (Pringle also recommended this). Monro and Brocklesby likewise recommended that treatment be initiated with free bleeding, though the latter cautioned that if the patient was weak, or if the blood was putrescent, as it tended to be during the summer, that a less liberal amount should be taken. Characteristically, Huxham endorsed venesection, but he added, "little more seems necessary in the Cure of ardent inflammatory Fevers, than proper and well-timed Evacuations, and plentiful cooling Dilution, with a few nitrous Medicines, and the acid saponaceous Juices of Vegetables; for these not only tend to keep the Blood in a due Degree of Fluidity, but also to prevent its running into a putrid State. -- In giving these freely, we do but follow Nature (our best Guide) that earnestly demands them."

MacBride endorsed Huxham's advice to bleed as general practice in the early stages of fever, even in there were concern that the disease would prove to be pestilential. For inflammatory fevers, he recommended prompt bleeding, even in cases where the vessels were overwhelmed and this produced "a false appearance of weakness." He contended that in these fevers nature required bleeding, as was demonstrated by the spontaneous hemorrhages that eventuated when bloodletting was ignored. The amount of blood to be taken was to be determined by such factors as the age, constitution, and sex of the patient, as well as by climate (cooler climates usually called for larger bleedings). MacBride noted, however, that while the ancients had bled to fainting, "modern practitioners do not push this remedy quite so far." If the pulse remained hard and symptoms did not abate, the bleeding was to be repeated once or twice. MacBride recommended that antimonials be used to clear the patient's system upwards and downwards. He cautioned. However, that emetics could be dangerous if they were given before blood was taken, for if the vessels were distended the act of vomiting might cause a brain hemorrhage. MacBride advised that after the system was evacuated nausea be maintained, in order to promote

sweating; warm liquids and fomentations of the legs and thighs would further encourage sweat. Beverages were also intended to dilute and to keep the body open. While noting that niter and camphor were often incorporated into therapy for inflammatory fever, MacBride expressed reservations about both and felt that they must be administered in large doses to be effective.

Like virtually all contemporaries, Moore did not merely endorse venesection as a treatment for inflammatory fever, but emphasized its importance: "Nothing has been discovered since the earliest medical records, which so effectually gives relief in all diseases where the blood is too impetuously propelled, as diminishing its quantity." He advised, however, that the procedure not be repeated if the initial bleeding caused the pulse to weaken. While writing positively of saline cathartics, but also endorsed James's powder, because it both purged and sweated. Plentiful drinks, as well as washing the hands and face in tepid water, would also promote sweat. He further recommended shaving the patient's head and washing his scalp with vinegar. But while recognizing that warm baths were favored by some practitioners, because they were thought to relax the vessels, Moore argued against using them in this case, for they overstimulated and weakened patients and were furthermore uncomfortable. Like many contemporaries, Moore considered bark to be inflammatory and advised that it not be used whenever inflammation was present.

Some later writers expressed caution regarding bloodletting. The author of *The London Practice of Physic* complained that while Mead recommended bleeding early in the treatment of every fever, "instances daily occur where great mischief does arise from this practice." He allowed that venesection was necessary when the patient was young and plethoric, but recommended caution, especially in London, where inflammatory diseases were unusual. Townsend endorsed bloodletting, but also warned that if carried to excess it might weaken the patient and bring on such diseases as typhus and dropsy. Parr approved of free bleeding for young, strong patients, but cautioned that a fever that appeared to be inflammatory might in fact be raised by typhus, in which case the symptoms of depression, including a weak pulse, would soon appear. When the root cause was typhus, it was unwise to let blood. Following on from Millar, Reide claimed that inflammatory fever was very rare in England and that

bleeding often caused patients to sink. Nevertheless, in true cases of inflammatory fever, he recommended bleeding the patient several times in the first 3-4 days of illness. For his part, Brown, who regarded most diseases, including some with inflammatory symptoms, as asthenic and therefore unsuitable for treatment by bleeding, counted inflammatory fever as sthenic; for diseases in this class, he noted, “bleeding is the most powerful remedy of all others [and] should be freely used.”

Buchan's practice was somewhat different from that of most writers. Although he allowed for an initial bleeding (tailored to the violence of the symptoms and strength of the patient), he advised that the procedure should be repeated only if symptoms (rising heat, hard pulse) dictated this. He appears to have eschewed emetics, at least as a general course. The therapy that he prescribed was inspired by his belief (a common one) that the disease was caused by inhibited perspiration or by overheating, especially of plethoric young people. He therefore recommended diluent, cooling drinks (e.g. tea, orange whey, barley water) and laxative fruits. The patient's room was to be cool (though care was to be taken that he not catch cold) and refreshing – sprinkling the walls with vinegar, lemon juice, or rose water was advisable -- and he was to sit up in bed if possible, to relieve the pressure of blood on the brain. For patients who were hot and thirsty, he advised a pectoral decoction (pearl barley, liquorice root, raisins, and figs boiled in water). If there were dangerous symptoms (languor, stupefaction, spasms, difficulty in breathing, sinking pulse), poultices and blistering plasters might help, and the patient was to be given cordials.

Although Pringle generally opposed the use of opiates in treating inflammatory fever, the practice, which Buchanan followed, was endorsed by various writers. Opiates were generally endorsed to control diarrhea, Pringle himself endorsing this usage. In addition, Parr noted, “Opiates are often necessary when violent irritation and restlessness prevent sleep.”

**Sources:**

Ball, *Modern Practice of Physic*, p. 12; Barker, *Essay on the Agreement*, pp. 270-74; Brocklesby, *Oeconomical and Medical Observations*, pp. 147-48; [John Brown,] *The Elements of Medicine; or, a*

*Translation of the Elementa Medicinae Brunonis*, new ed. (Philadelphia: T. Dobson, 1790), pp. 90, 183-84; Buchan, *Domestic Medicine*, pp. 115-19; Cullen, *First Lines of the Practice of Physic*, I, 189-90; Cullen, *Synopsis and Nosology*, p. 6; Grant, *Observations on the Nature and Cure of Fevers*, I, 33-34, 104-05; Huxham, *Essay on Fevers*, pp. 6-9; James, *Medicinal Dictionary*, "inflammatio"; *London Practice of Physic*, p. 2; MacBride, *Methodical Introduction*, pp. 267-68, 274, 310-16; Manning, *Modern Improvements in the Practice of Physic*, pp. 1-6; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 8-11; Moore, *Medical Sketches*, pp. 168-83, 207; Parr, *London Medical Dictionary*, I, 810-11; *Practice of the British and French Hospitals*, p. 69 ("a blistering plaister"); Pringle, *Observations on the Diseases*, pp.129-36; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 182 ("cathartics"), 269 ("diluents"), 287-88 ("emetics"), 317 ("febris continua"), 406-07 ("inflammation"); Reide, *View of the Diseases*, pp. 72, 75; Rowley, *Medical Advice, for the Use of the Army and Navy*, p. 5; Saunders, *Elements of Physic*, pp. 17, 21; Townsend, *Elements of Therapeutics*, pp. 70, 74.

### **Influenza, catarrhal fever:**

#### **Definition:**

The word "influenza" was introduced into English in --- to designate a form of catarrh, while the latter term comprehended a number of diseases, not all febrile, that were characterized by prolonged coughing and congestion. Huxham and Mead popularized the new word, and by 1750 it was widely used by professionals. Nevertheless, several terms were used synonymously, including catarrhal fever and rheumatic fever. Cullen included influenza in the class of fevers (*pyrexiae*) and order *profluvia*. He recognized two forms of catarrh, one caused by cold, the other by contagion, but he did not distinguish between them in terms of therapy. Influenza was generally thought of as a wintertime disease that was epidemic and febrile in nature. Grant distinguished between catarrh of autumn and that

of spring. He regarded the former as more complex, in that it combined the biliousness characteristic of the autumnal diseases with the inflammatory nature of spring fevers. Nevertheless, he believed that all catarrhs should be treated the same.

### **Diagnosis and prognosis:**

Writers who wrote specifically of influenza noted as prominent early symptoms cold shivers -- succeeded by acute fever as the disease progressed -- cough, difficulty in breathing, aches in the breast, head, and limbs, and, usually, profuse sweats. As Monro noted, these symptoms mimicked remittent fever or ague, making misdiagnosis a problem. Cullen cautioned that practitioners were apt to confuse catarrh with phthisis and discussed how they might distinguish mucus expectorated in catarrh, from pus, expelled in phthisis. According to Monro, some patients were loose, but most were costive. Their urine was often highly colored. They suffered coughing fits, often followed by retching, and produced progressively more phlegm. Violent symptoms lasted for 4-6 days.

It was generally agreed that influenza or catarrhal fever was not itself dangerous, except to young, elderly, or frail victims. The threat was rather that the disease would transmute if left untreated or if incompetently handled. According to Manning, "The catarrhus fever is excited by a morbid lentor of the fluids, superadded to an inflammatory disposition ... under the various forms of a cough, rheumatism, erysipelas, and dysentery. By indiscreet management these complaints are frequently interchanged, varying with the part on which the fluxion is determined." Monro asserted that if the disease was neglected, tubercles or suppurations might eventuate. Van Swieten and Huxham also warned of phthisis, while Reide wrote that inflammatory fever -- Hamilton asserted the same of intermittent fever -- was a danger when catarrh was not treated promptly and aggressively. Cullen acknowledged the widespread belief that catarrh could advance into phthisis, but he asserted that this was uncommon, though it might occur. To avoid a repetition of catarrh in succeeding winters, Grant recommended that those who had once had the disease winter in the West Indies, for the warmth there prevented catarrhal attacks.

### **Therapy -- Buchanan:**

Buchanan reports (*RP*, p. 113) that in early 1743 "many men, some Officers & Servants complained of colds, stiches about the breast cough, violent headach, eyes bloodshot, pulse quick." The symptoms noted would certainly have suggested that the disease was inflammatory in nature, and it was treated accordingly. Buchanan's therapy for what he calls "pleuretick fevers" may be inferred from his comment (*ibid.*) that the disease "required large bleeding & gentle purging." He also recommends a pectoral and a febrifuge, as well as supporting sweats by patients who naturally tend toward them.

### **Therapy -- Sydenham and Monro:**

Sydenham treated winter fevers (Huxham identified his usage with catarrhal fever) with venesection and purging. For epidemic diseases generally, he advised that bleeding precede purgation, because the blood was in turmoil and tended to cause or exacerbate fever. He noted that many practitioners purged first or did not bleed at all and claimed that their ignorant practice was responsible for many deaths, especially among children. A number of prominent writers endorsed the use of bloodletting and purgation in the treatment of influenza. For severe catarrh, such as he encountered in epidemic form at Bremen in 1762, Monro recommended plentiful bleeding (10-12 oz.) and mild cooling medicines. When symptoms persisted, he applied a blister to the patient's back, and normally this reduced fever and aided breathing. Costiveness he considered a common problem and not surprisingly he treated it with purgatives. When coughs were mild, he observed, warm drinks and mild pectorals might remove them. Steams of water and opium were useful even in some old cases.

### **Therapy -- conspectus:**

Despite Sydenham's strong endorsement of bloodletting, a number of 18th-century writers asserted that influenza patients should be bled little if at all. Reide reported that he had earlier used standard antiphlogistic treatments on diseases that originated during the winter or early spring, deeming

them inflammatory. In about 1785, however, he had changed his practice, removing only a few ounces of blood and relying heavily on blisters. The success rate with this new therapy, he asserted, was much improved. In the particular case of catarrhal fever, he eschewed venesection, and treated in accordance with the outstanding symptoms. If the patient was costive, he was given a mild purgative; if nauseated, a gentle emetic. An oily emulsion was given regularly to check the violence of the cough and to soothe the trachea. Patients drank plentifully of diluents like barley water and infusion of linseed. At night they were given a draught of gum guaiacum; a few drops of tincture of opium sometimes being added to the draught. After two or three days, bark was given in decoction to complete the cure. Given Reide's general disapproval of bloodletting, his opposition in this case is not surprising. However, Huxham, who on the whole endorsed venesection, asserted that influenza should in general not be treated with heavy bleeding, although some cases called for it. Similarly, Brookes, who tended to include bloodletting in treatment, recommended therapy in this case that omitted it. Hamilton, whose work on influenza represented his most original contribution to medical practice, recommended a therapy that included opium, but no bleeding or blister. Not only did he not bleed for influenza, but he reported that he had not "heard of any cases so treated in a circuit of between twenty and thirty miles of this place [i.e. Luton]." Grant, however, believed that bleeding was generally appropriate for catarrh, at least in the early stages (he asserted that this was true of all fevers). He allowed that patients who contracted the disease (or any bilious fever) during the early fall, when the weather was warm, required only one bleeding, perhaps none, but added that as the weather cooled required more blood to be taken and more often, until symptoms of inflammation ceased. Beyond venesection, he stressed the importance of diluent drinks, to relieve the lentor of the blood, evacuations, and tonic remedies. Brookes approved of bloodletting early in the disease, especially if the patient was plethoric, and added that it was appropriate if the practitioner sensed that a critical hemorrhage was being obstructed. Cullen advised that moderate cases could be treated by light diet and avoidance of cold. However, when the disease was more intense and inflammation was apparent, he recommended bloodletting (in amounts determined by the violence of symptoms), as well as emetics, to clear mucus and to effect a

determination of fluids to the surface. Blistering the thorax and controlling cough by demulcents might also be necessary.

Writers tended to agree that influenza, and indeed catarrh generally, was caused by the suppression of perspiration, and on this assumption explained why epidemics tended to occur during winter or when the weather suddenly changed from warm to cold (Parr claimed that miasmata was at least as common a cause). Sweats were regarded as beneficial to influenza sufferers, but Manning and others cautioned that they not be forced, though mild sudorifics, pediluvia, and other moderate means of promoting sweat might be used. There was little if any opposition to using purgatives in treating influenza (at least if they were mild). The use of gentle emetics was widely approved, but Parr expressed concern that vomiting might debilitate, and he recommended that emetics be administered with opiates to moderate their effects; this was indeed a common practice.

Clearly, there were strong differences of opinion on how influenza should be treated. The decisive issue was whether it was inflammatory in nature. Most writers agreed that individual cases might be attended by inflammation and that in these case bleeding and other antiphlogistic practices were advisable. But it appears that during the last third of the 18th century there was an increasing tendency to see influenza as a disease defined by debility, rather than by inflammation.

**Sources:**

Brookes, *General Practice of Physic*, I, 79-83; Cullen, *First Lines*, I, 166-68, 178-79, and II, 279, 284-86; Grant, *Observations on the Nature and Cure of Fevers*, I, 119-48, 185-86, 186n, 355, and II, 37-41; Hamilton, *Duties of a Regimental Surgeon*, II, 344-56; Huxham, *Essay on Fevers*, pp. 11, 119; Huxham, *Observations on the Air and Epidemic Diseases*, pp. 4, 127-28, 144-47, 154, 163-66, 180-88, 272-73; Manning, *Modern Practice of Physic*, pp. 7-9; Monro, *Observations on the Means*, II, 28, 47-54; Parr, *London Medical Dictionary*, I, 370-74; Reide, *View of the Diseases*, pp. 68, 249; Sydenham, *Whole Works*, pp. 234-36; van Swieten, *Diseases incident to Armies*, p. 14.



## **Jaundice:**

### **Definition and symptoms:**

Jaundice, or icterus, was recognized as both a disease and a symptom. Cullen placed it in the class *cachexiae* (wasting diseases) and order *impetigines*, denoting a “depraved habit.” Five species were recognized, but only one, *icterus calculosis*, was considered dangerous, while the others were regarded as temporary conditions. The cause of jaundice was widely held to be the absorption of bile into the blood, as calculi or tumors obstructed the biliary ducts. Melancholic and sedentary people were thought to be particularly susceptible, with women being somewhat more likely than men to fall victim. Hales and others blamed the disease on habitual consumption of spirits. Early symptoms of jaundice were fever and nausea, accompanied by deep-colored urine. Yellowness appeared in the skin and eyes in 2-3 days. Monro observed that most patients were constipated, though some had diarrhea, and that the blood tended to be dissolved, encouraging severe nosebleed.

### **Indications and prognosis:**

The main indication was to clear the ducts by inducing vomiting and purging. If the jaundice was attended by inflammation, this was to be handled by bleeding and other standard means.

Prognosis depended on what was causing the jaundice. Monro reported that patients with simple jaundice usually recovered, but that they generally died if their jaundice was accompanied by dropsy. In cases where the disease was caused by tumors “compressing the biliary duct,” it could seldom be cured, according to Cullen. Parr noted that jaundice was “often a mark of a constitution wholly destroyed,” as by a scirrous liver, and that in such cases the prognosis was bleak.

### **Therapy – Buchanan (pp. 133-37):**

Buchanan reports that jaundice was a common problem in garrison, “probably from too gross feeding & little exercise.” To treat it, “bleeding, vomiting, purging are necessary.” Buchanan gives no

indication of how much blood he typically took. Nor does he state which drugs he himself prescribed, though he notes, "pil: cocc: with calomel much in use." Aside from a decoction of artichoke leaves, which was a popular remedy that "some esteemed a specific in this disorder" -- but he never used -- the drugs that he notes all seem to have been intended as purgatives or stomachics.

### **Therapy -- Monro:**

Monro suggested a regimen similar to Buchanan's: immediate bleeding, if the jaundice was attended by fever or pain, as it usually was; enemas (most patients were constipated); and emetics (which, he reported, were generally regarded as the best cure). For patients suffering from stomach pains he ordered emollient enemas or had flannels dipped in warm emollient decoctions applied to the abdomen.

### **Therapy – conspectus:**

Sydenham noted that jaundice often succeeded choleric and advised that a rhubarb purge tended to be effective in such cases; if the jaundice was not linked to choleric, a cholagogue might work, or chalybeate waters, as from Tonbridge. Willis likewise recommended chalybeate waters, as well as emetics.

It appears that the use of emetics was widespread, if not standard. According to Cullen, "There is no means of pushing forward a biliary concretion that is more probable than the action of vomiting." Parr noted that some individuals expressed concern that the practice caused inflammation, but he asserted that he had never observed this and that if inflammation did arise it could be handled by large bleeding. While endorsing emetics, Cullen questioned the efficacy of purgatives and advised that they might be harmful if used excessively. He did, however, note that their use was "usual in the jaundice," as they, like emetics, were thought to excite action in the biliary ducts that expelled concretions. Cullen also recommended opium, in the belief that this would prevent spasmodic contractions in the hepatic system.

Eighteenth-century writers differed on whether to bleed in all cases of jaundice. Like Buchanan,

Hoffmann advocated bleeding at the start of treatment, believing that a redundancy of blood promoted the disease by preventing the liver from functioning properly. Similarly, the author of *The London Practice of Physic* advised initiating treatment with bleeding, especially if the practitioner believed that the liver had caused the disease. Brocklesby did not include venesection in the therapy that he recommended, but rather prescribed diuretics and laxatives, to assist the body in eliminating excess bile. Mead and a number of other writers recommended venesection when there were inflammatory signs. Beyond this circumstance, they did not suggest it, but few if any rejected it. Buchan advised it if the patient was in pain. Wallis saw bleeding as perhaps worthwhile, though he did not stress or require it.

A number of writers stressed moderate therapy. Van Sweitan, who linked the condition to autumnal fever and to a poor diet (especially meats that were difficult to digest), recommended soap pills and a decoction that included dandelions. Only when jaundice was persistent did he advise calomel and other purgatives and emetics. He also administered soap to compensate for the loss of bile, since like most contemporaries he regarded that substance as saponaceous. Mead likewise advocated the use of saponaceous medicines in cases where jaundice was joined to costiveness. The treatment for jaundice outlined by Buchanan is somewhat more aggressive than Wallis's, for the latter focused on diluents and diuretics (dandelion tea, saponaceous pills, saline mixture). Buchan's treatment consisted mainly of Castile soap or other mild purgatives; he discounted such traditional remedies as lice and millipedes. In army hospitals, according to the author of *Practice*, an infusion of millipedes in wine was in fact used against jaundice, apparently as a diuretic (another remedy was, as well), but with one exception all other drugs recommended in treating the disease were saponaceous.

Since some cases of jaundice were linked to a sedentary lifestyle, Duncan and other writers considered exercise to be very important in treating the disease. Abstemiousness was also encouraged.

**Sources:**

NLM, MS B 332 ("Observations from Dr. Duncan's Lectures"), p. 79; Allen, *Synopsis Medicinæ*, pp. 354-59; Brocklesby, *Oeconomical and Medical Observations*, pp. 265-72; Buchan, *Domestic Medicine*,

pp. 283-85; Cullen, *First Lines of the Practice of Physic*, I, 378-85; Cullen, *Synopsis and Nosology*, p. ; Hales, *Friendly Admonition*, p. 4; Huxham, *Observations on the Air and Epidemic Diseases*, pp. 172-74; James, *Medicinal Dictionary*, under "icterus"; *London Practice of Physic*, pp. 216-17; Mead, *Medical Works*, pp. 397-99; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 130-41; Parr, *London Medical Dictionary*, I, 788-89 ("icterus"); *Practice of the British and French Hospitals*, pp. 36 ("anodyne balsam"), 49-50 ("electuary in a jaundice"), 57 ("a soap clyster"), 65 ("pills for an asthma and the jaundice"), 66 ("diuretic pills"), 73-74 ("wine of millipedes"); van Swieten, *Diseases incident to Armies*, pp. 56-58; Wallis, *Art of Preventing Diseases*, pp. 451-54.

**Malignant, slow, jail or hospital fever, typhus:**

**Definition:**

Even by 18<sup>th</sup>-century standards, the terminology for this disease was very loose. It was often the fact that a fever was protracted, rather than any particular symptoms, that led to its designation as "slow." Slow fevers typically were continued or remittent, but their symptoms were less intense than in the more acute forms. They might well, however, be just as mortal, and indeed the high mortality associated with slow fever caused it to be widely referred to as "malignant." It was sometimes called "low," because the victims were characteristically dejected and their systems appeared depressed. MacBride noted that this disease, which he referred to as "putrid continued fever," was often confused with nervous fever, another murky entity, and he himself saw catarrhal fever to be a variety of putrid continued. Pringle coined two names for this disease. After amalgamating the names of "jail" and "hospital" fever, two diseases that he saw as one, and providing the name "jail or hospital fever" -- which would have much currency during the latter half of the century -- he later referred to it as "typhos" (Greek for smoke) to denote the stupor that was a leading symptom of the disease [note: Hippocrates had enumerated five types of a disease condition that he called "typhos"; this was, however,

not the same as the modern disease]. Cullen popularized the term typhus, using it as the name for the genus (order pyrexia, class febres, section continua). He further distinguished two species of typhus: *typhus petechiales* (usually, but not always, characterized by petechiae), which was further refined into mild or malignant forms; and *typhus icterodes*, or yellow fever.

Typhus was generally considered to be contagious (in most or all cases) and putrid. Few would have disagreed with Buchan's assertion that "This fever is occasioned by an unwholesome, putrid, or stagnating air.... A close constitution of the air with long rainy or foggy weather, likewise occasions putrid fevers. Hence they often succeed inundations in low and marshy countries."

### **Indications and prognosis:**

Writers commonly emphasized the importance of boosting the patient's system, while doing as little as possible that might weaken it, especially in the later stages, when the symptoms of depression were most apparent. Typhus was regarded as one of the most dangerous diseases. Writers seldom expressed confidence in the ability of the physician to cure it. Rather, they suggested ways to moderate the symptoms, implicitly looking to nature to effect a cure.

### **Therapy -- Buchanan (pp. 61, 293-99):**

Buchanan appears to discuss two outbreaks, one of "lingring fever" and a second of "a Slowe fever." In the first case, he provides no insight into either his own method of treatment or that used by others. In the second (which may not have been typhus), he notes that he used tonics (asafetida or bark in wine) and eschewed bleeding.

### **Therapy – Pringle and Huxham:**

As late as 1780, Manning was citing "the accurate and judicious" Pringle as the standard authority on the diagnosis and treatment of jail or hospital fever. Sims specified Pringle and Huxham as "the writers most in practice followed." Pringle recommended, first, that the sickroom be purified

by steams of vinegar or by freshening or heating the air. The patient was then to be vomited (both to clear foulness and to promote diaphoresis) and encouraged to sweat by the application of warm vinegar and water to his hands and feet. If the patient's pulse was strong he might be bled, but only in moderate quantity and seldom more than once. Vomits were likewise to be used with caution, and Pringle recommended saline drafts rather than strong emetics. Blisters he judged from experience to be useless. In the third stage of the disease, which was characterized by weak pulse, stupor or delirium, and often petechiae, he used common stimulants like bark and snakeroot, along with cordials. Attendant symptoms, such as diarrhea, were treated separately.

Huxham's therapy for what he generally called "malignant" or "putrid" fever generally paralleled Pringle's. Although generally a strong advocate of bloodletting, he urged practitioners to use caution in this disease, especially if they believed the case to be contagious. He allowed for an initial bleeding, but noted that even this might cause the pulse to drop precipitously, and he warned that a second bleeding might well be "pernicious," even if symptoms appeared to encourage it. Huxham strongly opposed the application of blisters early in the disease, criticizing practitioners who regarded them as "the only *Anchor of Hope* in such dangerous Cases." In his view, blisters in the first stage of the disease taxed a system that was already overstimulated, as was manifest in the fever. But if in the later stages the patient became comatose or his system was otherwise depressed, blisters were, in Huxham's view, appropriate. He likewise recommended wine or cider to boost the patient's system. Huxham condemned the use of drastic cathartics in treating malignant fever. On the other hand, he approved of the use of mild purgatives or emetics, for as he (like most writers) perceived it, the system of the fever patient was clogged by putrid bile, which needed to be cleared. He believed that stools were sometimes critical in malignant fevers, but that "breathing sweats" ("moderate, warm, and equally diffused over the whole Body") were always salutary and a sure sign of recovery. He opposed raising sweats early in the fever or using hot medicines to provoke them, and he recommended that practitioners quell excessive sweating by administering wine. But he advocated the use of moderate diaphoretics in the critical stage, as nature was trying to throw off the disease with a breathing sweat.

### **Therapy -- conspectus:**

Most writers during the latter half of the 18th century endorsed Pringle's therapy, though differing with him on some points. Brocklesby, who particularly cited Huxham, entirely rejected venesection. He believed that blisters would be helpful if circumstances permitted, but he noted that petechial patients were "already so parched and dried up, the blisters, if they rise, rob the blood of its thinner parts, which are absolutely necessary to separate and carry off the febrile matter." Dickinson strongly advocated the use of stimulants, especially during the hot stage, and argued against those who claimed stimulants caused delirium or inflammation. Even more strongly than Pringle, Sims denounced the use of blisters in treating the disease (though noting that they were often given credit for cures). He criticized Huxham for using diaphoretics and argued against the use of venesection. He credited Pringle for departing from Huxham in not using purgatives at all and not prescribing emetics in the advanced stages (though he believed that even in the early phases they should be used little). Brookes, noting that this was a desperate disease, recommended bold experimentation with antimonials, including *crocus metallorum*, intending these to serve as powerful emetics.

The mode of treatment outlined by Monro included numerous qualifiers, for as he explained the disease varied in malignancy, and so did the constitution of patients. For the early stages, when the patient was likely to be strong, he recommended a cooling regimen, including bloodletting and evacuations. Once this aspect of therapy was complete, the patient was to spend one or two days on limited medication, receiving saline drafts plus *pulvis contrayerva* or some other mild medicine that would combat the poison in his system. In later stages, or when the patient appeared weak or sunk, bleeding and purging became inadvisable, except when occasioned by symptoms. Instead the practitioner was to rely on items that might stimulate: acids (fruit, lemon juice, vegetable acids, and *spiritus vitrioli*), bark, wine, and cordials. When a fever appeared to be malignant, the patient was to be laid in an open place, kept clean, and put on a low diet, being given as much barley- or rice-water

as he wanted. To combat putrefaction of the blood, "vegetable antiseptic substances" and ripe fruit were to be given to patients. Probably the most controversial aspect of the treatment advised by Monro -- certainly, the one that he felt most obliged to defend -- was bleeding. As usual, he cited authorities in his defense, including John Hume (1706-72), a naval surgeon, who had at first avoided bloodletting in putrid cases, fearing that it would cause patients to sink, and later had begun to use it, to good effect (on Hume, note Lloyd and Coulter, *Medicine and the Navy*, III, pp. 101-03, 106, 341). Monro also felt a need to defend use of the other main element in antiphlogistic therapy, massive evacuation. Both emetics and laxatives were necessary, he asserted, for the stomach and bowels of victims were always filled with bilious or other corrupted humors, which constantly poisoned the body. Not only did he advise an initial evacuation during the early stage of illness, but he felt that the treatment should be repeated if the patient was nauseated, costive, or diarrhetic. For those who were "ruffled" by this treatment, he recommended that a gentle opiate be given in the evening. While Anton de Haen (1704?-76), the Dutch medical writer, had criticized both Pringle and Huxham for giving cordials and wines in low fever, recommending instead the bark, Monro defended their practice as necessary to keep up the patient's strength. Nevertheless, he favored de Haen when it came to using bark. Indeed, by his own estimation he used it in large quantities (4-12 dr./day) and found it to be very effective. Before giving bark, he advised, patients were to be bled and purged. Just as he followed de Haen on some points, not on others, so did he Huxham, whose work he greatly admired. Nevertheless, while Huxham condemned the use of volatile alkaline salts in fevers -- because they heated the blood, promoting its putrefaction -- Monro endorsed them, "for we have no remedy which gives such a sudden and brisk stimulus to the fibres as they do." The salts, he claimed, often revived patients in a low or fainting state, and, when associated with the free use of wine and acescent beverages, corrected "alcaline acrimony in the blood." Nevertheless, he added, the use of salts was to be discontinued as early into therapy as possible, since, as Huxham argued, they dissolved the blood.

Buchan recommended a therapy intended "to assist Nature in expelling the cause of the disease, by gently promoting perspiration and the other evacuations." Although he allowed for moderate



venesection in some cases, he mainly advised a course of bark, fruit, and acid drinks like orange juice. MacBride emphatically endorsed bark, asserting that it purified the blood of typhus patients and also braced the vessels, preventing hemorrhage.

In the wake of epidemics of typhus in 1779 and 1781, James Hamilton observed that purgatives, given early in the course of the disease, forestalled dangerous symptoms and cut short the disease. He noted further that while earlier he had followed common practice in administering antimonials, these had been effective only when they purged and he had switched to purgatives of other types, especially calomel and jalap, which did not debilitate the patient by promoting sweat or vomit.

Drawing his insight from Grant, Moore advised the following regimen for a patient diagnosed as suffering from "putrid fever": bleed first; vomit when morbid matter was turgid in the stomach; purge, and afterwards keep the body open; sweating before coction was hurtful, and should be curbed by mineral acids; the sick were not to remain in bed, until after coction; they were to avoid animal food until the disease abated, but ripe fruit and acids were beneficial; opiates, alexipharmics, and blisters were not to be prescribed until the pulse subsided; after coction, moderate spontaneous sweats were valuable, and bark was beneficial, especially if the pulse was low; for obstinate headache, bleeding (by cupping, if the pulse is small) provided greater relief than did camphor.

To treat the bilious fevers characteristic of the West Indies, Grainger recommended strong vomits (he specified t. emetic) and acidulated purgatives. He cautioned against large bleedings; if used at all, venesection was to be restricted to the early stage and only a small amount was to be drawn. He also advised that sweats be mild; if, however, incautious sweating drove bile into the blood, it would have to be sweated out. If the fever were malignant (as signified by the dissolved and putrid blood), it would be necessary to use a strong sudorific (musk, camphor, castor), then blister. If the lungs were involved, cupping was called for, even when the pulse was weak.

Francis Geach (as reported by Stephen Hammick) treated "typhus" (low, nervous, contagious, or putrid fever) by first clearing the patient's system with ipecacuanha assisted by chamomile tea, followed several hours after vomiting ceased with rhubarb or jalap, accompanied by calomel, by way

of a purge, then after they had operated by a bolus whose active ingredients were calomel and powdered antimony. In Hammick's estimation, "the whole dependance for a cure may be chiefly perceived to be entrusted to the calomel and antimony." Hammick claimed that the treatment was highly successful and that Geach's plan was used successfully to combat a typhus outbreak on the H.M.S. *Squirrel*. Cullen and Leigh endorsed the use of opium for typhus -- early, as a stimulant, and later, when remission had begun, as a sedative.

### **Sources:**

Brocklesby, *Oeconomical and Medical Observations*, pp. 200-30 (quotation p. 213); Brookes, *General Practice of Physic*, I, 98-114; Buchan, *Domestic Medicine*, pp. 146-53; Cullen, *Synopsis and Nosology*, p. 6; Dickinson, *Inquiry into Fever*, pp. 80, 112-18; James Grainger, *An Essay on the More Common West-India Diseases; and the Remedies which that Country itself produces, To which are added, Some Hints on the Management, &c. of Negroes* (London: T. Becket and P. A. De Hondt, 1764), pp. 24-26; Hammick, "Summary of the late Dr. GEACH'S practice in low fever," *Contributions to Physical and Medical Knowledge, Principally from the West of England*, ed. Thomas Beddoes (Bristol: Biggs & Cotter, 1799), pp. 377-87; Huxham, *Essay on Fevers*, pp. 6, 11-14, 58-65; Huxham, *Observations on the Air and Epidemic Diseases*, II, 68, 208-13; James, *Medicinal Dictionary*, under "petechialis febris," "typhos"; Leigh, *An Experimental Inquiry into The Properties of Opium*, pp. 133-34; MacBride, *Methodical Introduction to the Theory and Practice of Physic*, pp. 318-33; Moore, *Modern Practice of Physic*, pp. 24-25; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, pp. 238-68; Manning, *Modern Improvements in the Practice of Physic*, pp. 29-50; Pringle, *Observations on the Diseases*, pp. 243-301; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 827-28; Guenter B. Risse, "'Typhus' Fever in Eighteenth-Century Hospitals: New Approaches to Medical Treatment," *BHM*, 59 (1985), pp. 176-77, 180, 186-95 George G. Sigmond, *Mercury, Blue Pill, and Calomel; Their Use and Abuse* (London: Henry Renshaw, 1840), pp. 61-63; James Sims, *Observations on Epidemic Disorders, with Remarks on Nervous and Malignant Fevers* (London: J. Johnson and G. Robinson,

1773), pp. 238, 264-68..

### **Pleurisy:**

#### **Definition and symptoms:**

Pleurisy was generally associated with fall and winter, and especially with cold, wet weather. There was some debate over whether pleurisy and peripneumony (so-called if the inflammation involved the lungs as well as the pleura) were the same disease. Monro, citing post mortems as evidence, asserted that the two were distinct, and he, Pringle, and many other writers viewed peripneumony as being much more dangerous, especially when neglected. The two diseases were, in Pringle's estimation, "the most frequent forms of our inflammatory fever." Writers tended to assign the same causes to pleurisy and peripneumony, and to recommend the same course of treatment.

Although in Sydenham's time there seems to have been some debate over whether pleurisy was inflammatory in nature (see below), he helped to establish a consensus that it was. Cullen classified pleurisy as a species in the order *phlegmasiæ* (fever, inflammation, topical pain), genus *parotidæa* (swollen parotids and maxillaries, low fever). He further resolved it into four varieties: simple; complicated with fever or catarrh; symptomatic; or false. A hard pulse, a sharp pain in one side, most prominent when the victim breathed, and a persistent cough, at first dry, then productive of sputum that was often bloody -- these were the most prominent symptoms as he saw them.

#### **Prognosis and considerations in treatment:**

Pleurisy was generally regarded as less dangerous than peripneumony, and neither disease was considered a major killer. Sydenham wrote that pleurisy was dangerous, but added that if properly treated it could easily be cured. It was widely asserted, by Huxham among others, that pleurisy could easily give way to peripneumony.

Although during the 18th century the treatment of pleurisy was fairly standard (see below), this was true only of the simple form of the disease. Sydenham observed that if pleurisy appeared as a symptom to some other fever, therapy should be determined by that disease. Similarly, Gregory observed that if pleurisy (or peripneumony, which called for the same treatment) was complicated by putrid fever, venesection was unwise.

**Therapy -- Buchanan (pp. 102-11):**

Buchanan does not refer to "pleurisy" *per se*, but rather to several outbreaks of "pleuretick fever." He notes that the epidemic that took place in the spring of 1743 was equated with catarrhal fever, and his therapy in this case is discussed under "influenza." The outbreak of December 1742 may have been pleurisy, and Pringle defines it as such. During this outbreak, Buchanan's practice focused on venesection, almost to fainting. He also prescribed pectorals and expectorants and applied blisters to patients who suffered from stitches.

**Therapy -- Sydenham:**

Sydenham's method of treating pleurisy established the norm for British practice. Perhaps the most significant feature was the strong stand that he took in favor of bleeding. He reported, "it is commonly said, that a *Pleurisie* is sometimes malignant, and that it will not bear Bleeding, at least not so often as this Disease commonly requires." Sydenham, however, saw the disease as inflammatory, and indeed argued that the patient might suffocate from the force of the inflammation if he was not bled, for without the procedure he would have difficulty coughing and even breathing. While Sydenham expressed regret that he could not devise that did not require such loss of blood, he added, "I never could find any equal to the Practice above mentioned, by the help whereof, notwithstanding the dreadful Prognostication of *Hippocrates* concerning a dry *Pleurisie*, I free the Patient from the violence of the Disease by Bleeding, and so cure him, not waiting for Expectoration." He initiated treatment of pleurisy by removing 10 oz blood from the arm on the affected side; then ordered a potion of red poppies, sal

prunellae, and syrup of violets; then an emulsion that included sweet almonds, poppies, and sugar candy; and finally a pectoral. The bloodletting was repeated each of the next four days, unless the patient recovered quickly. Sydenham asserted that while curing pleurisy was mainly dependent on repeated bleeding, ignorant practitioners caused many deaths by pricking tendons during the procedure, and he recommended a cataplasm to use in such cases. Aside from venesection, there was little that Sydenham prescribed. He occasionally made use of an enema of milk and sugar. For diet, he recommended barley broths and ptisans with forbidding all flesh or flesh broths.

### **Therapy – Monro:**

Monro recommended that pleurisy be treated antiphlogistically, with plentiful bleeding, to cease only when pain in the patient's side decreased or he grew faint (he advised the same treatment for peripneumony, but felt that it was ineffective in advanced cases). He admonished practitioners not to eschew venesection if the patient exhibited a low oppressive pulse, asserting that it would rise during the procedure, but he implied that a strong pulse called for more aggressive bleeding. While noting that many practitioners (including Pringle) criticized bleeding, especially if it was not initiated before the fourth day of illness, Monro defended the procedure even in those circumstances. Aside from bleeding, the most common device to ease the pain was to foment the patient's sides with flannels dipped in emollient decoctions and rubbed with volatile liniments. To combat congestion, Monro recommended expectorants, and he strongly advocated the use of an inhaler that John Mudge introduced during the 1770's. Patients were encouraged to freely drink warm diluting liquors, such as barley-water and pectoral decoctions, and to take saline or other cooling medicines -- combined with sperma ceti or other pectoral, if they were suffering from a tickling cough. If costive, they were given salts or laxative clysters. For continuing symptoms, cupping, gentle opiates at night (especially when there was a cough), and decoctions of sarsaparilla with antinomial wine were commonly prescribed. Sometimes a "kindly moisture" appeared, providing relief. If not, it was encouraged by mild warm liquors. Expectoration of yellowish mucus was also encouraged, by the use of pectorals. Natural purgings were

allowed, except when dangerous. Monro urged that if an inflammation on the patient's side came to suppuration, it be opened, claiming that if this were procedure were followed regularly, many pleuretic patients would recover, who instead were turning consumptive and dying.

### **Therapy -- conspectus:**

The fact that pleurisy was generally seen as inflammatory pointed to a course of treatment that typically involved three elements: bleeding; amelioration of stitches, usually with a blister; and promotion of expectoration. Bleeding was, as van Swieten put it, "the first and chief remedy." Boerhaave recommended bleeding through "a large Orifice," and repeating it until signs of inflammation passed. Even Buchan, who so often eschewed venesection, prescribed it in this case and indeed believed that in some cases pleurisy arose when individuals who were regularly bled as part of their prophylactic regimen neglected it. Pringle advised against bleeding scorbutic patients, or those who were spitting blood, but in general he argued for free bleeding, claiming that this plus a blister could often cure. Gregory recommended venesection, along with warm bathing, laxatives, diaphoretics, and blisters (to counter dermination to the lungs); and various expectorants and antitussives, including opiates. Tissot likewise emphasized the importance of bleeding. The quantities of blood being taken may have increased over time. Manning thought the quantity suggested by Sydenham was too small. Huxham emphasized bleeding and blistering, and Brocklesby endorsed his therapy, noting that he might bleed 10-12 times, particularly early in the disease. Wallis advised an initial bloodletting of 14-16 oz. for young, strong patients, with repetition if symptoms returned, unless the patient became too weak to endure further bleeding. Cleghorn (whose view was strongly endorsed by Rush) claimed that patients who were not sufficiently bled often died. Like Monro, Huxham advocated bleeding even if the pulse weakened, claiming that this was a misleading symptom and that it would strengthen as the drawing continued. Van Swieten, however, advised that bleeding be stopped if the pulse sank. Most authorities recommended that bleeding be continued only so long as there were stitches, but that it be resumed if pain returned. A few writers, like Huxham, also recommended opium to relieve the pain.

To treat the stitch, blisters and warm fomentations were typically used. Van Swieten, like Monro, warned of the importance of draining any abscess that might form. Although most authorities thought bleeding and blistering to be necessary in the early stages of pleurisy, "a free and copious expectoration" was, in the words of Manning, "the natural crisis of the disease." To promote the process, pectorals were administered, as were diluting drinks like whey or ptisans. If expectoration declined before the disease was cured, Pringle recommended a large dose of *oxymel scilliticum*. Huxham, however, regarded expectoration as unnecessary in the cure of pleurisy, though essential in treating peripneumony. To complete the job of evacuation, patients were often given laxatives, though Manning cautioned that if purgation extended to diarrhea, expectoration might be suppressed. For costive patients Buchan recommended an enema of barley water and marshmallows, advising that it would not only empty the bowels, but "make a derivation from the breast." He was also partial to seneka root, an import from America, which he regarded as "almost a specific in the pleurisy.... As this medicine promotes perspiration and urine, and likewise keeps the belly easy, it bids fair to answering many of the intentions of cure in a pleurisy, or any other inflammation of the breast." Noting that violent symptoms (convulsions, difficulty in breathing, irregular pulse) caused some attendants to use strong stimulants and to bleed extensively, he suggested that these symptoms reflected nature's attempt to combat the disease, and should therefore be encouraged by such remedies as diluting drinks. Mason recommended bark, but only after the fever and pain were gone.

**Sources:**

Allen, *Synopsis Medicinae*, pp. 106-16; Baglivi, *The Practice of Physick*, II, 430-31; Brocklesby, *Oeconomical and Medical Observations*, pp. 154-66; Brookes, *General Practice of Physic*, I, 188-93; Buchan, *Domestic Medicine*, p. 121-25; Cleghorn, *Observations on the Epidemical Diseases in Minorca* (1809 ed., annot. Rush), pp. 164-68, 168n; Cullen, *Synopsis and Nosology*, pp. 6, 10, 11; Gregory, *Elements of the Practice of Physic*, pp. 202-03 (#'s 325-26); Huxham, *Essay on Fevers*, pp. 74-78, 219-20; Huxham, *Observations on the Air and Epidemic Diseases*, II, 124-36; James, *Medicinal*

*Dictionary*, under “peripneumony vera”; Manning, *Modern Improvements in the Practice of Physic*, pp. 298-307; Mason, *Nature of an Intermitting Fever*, p. 115; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 17-28; Pringle, *Observations on the Diseases*, pp. 142-48; Sydenham, *Whole Works*, pp. 173-80, 190-97; Tissot, *Advice to the People*, p. 56 (cf. pp. 40-41); van Swieten, *Diseases incident to Armies*, pp. 19-27; Wallis, *Art of Preventing Diseases*, pp. 324-25.

### Quinsy:

#### **Definition:**

Quinsy was, like colic, a broad term that covered several diseases. Soreness and swelling in the throat were the unifying symptoms. Mead complained that contemporaries did not sufficiently distinguish among different forms of quinsy, and that for this reason they often treated it unwisely. Cullen regarded quinsy as symptomatic, rather than idiopathic, and placed it in the order *phlegmasiae*, as the genus *cynanche* (fever in some but not all cases; throat tight and difficulty in swallowing and breathing; tending toward typhus). Like Mead and others, he recognized three species of the disease: *cynanche tonsillaris*, in which the tonsils were particularly affected; *cynanche maligna*, in which the tonsils and fauces were affected, whitish mucus and ulceration were common, and the victim developed a typhus fever; and *cynanche trachealis*, which was characterized by a difficulty in breathing and swallowing, as well as a typhus fever. Some writers, like Brookes, equated malignant quinsy with putrid sore throat -- which was perhaps most often scarlet fever or diphtheria -- while others (e.g. Theobald) classified the latter as a separate disease. Regardless of form, and despite the perceived linkage to typhus, quinsy was regarded as inflammatory, and treatment was predicated on this. Sydenham observed that it generally victimized plethoric young men, often redheads. Putrid sore throat, however, was often seen as a disease of children. Fothergill noted that they often died of it, though adults seldom did.



**Concerns in therapy:**

Putrid sore throat was seen as a very dangerous disease. Rowley estimated that 70-80% of sufferers died in Continental hospitals, where they were treated with traditional methods, though he claimed that his own therapy reduced mortality to less than 8%. Tonsillar quinsy was not generally regarded as dangerous.

**Therapy – Buchanan (pp. 121-25):**

Buchanan bled patients suffering from quinsy. He cleared their salivary glands with a sialogogue and sometimes applied leeches or blisters to the patient's throat. He does not appear to have regarded this as a dangerous disease, It appears that the symptoms that he detected suggested to him that it was inflammatory, rather than putrid, and he does not indicate that patients had difficulty breathing. He notes, "Quinsies were frequent but not dangerous."

**Therapy -- Sydenham and Fothergill:**

Sydenham initiated treatment by bleeding plentifully, first in the arm, then from a vein under the tongue. He next had the affected parts touched with honey of roses sharpened by spirit of sulfur, and then the patient was given a gargle. In cases where symptoms persisted, Sydenham bled the patient again the following morning. Costive patients were given lenitive purgatives and when this caused symptoms to intensify (in Sydenham's experience, rare), they were to be bled again, then blistered on the neck and be given an enema. The patient's diet was to consist of oatmeal or barley broth or ptisan, roasted apples, and small beer. As much as possible, the patient was to stay up, for the warmth of bed exacerbated fever and symptoms. In cases where the quinsy was merely a symptom of fever, however, Sydenham advised that it be cured by the method appropriate to that disease.

The form of quinsy -- or the separate disease entity -- known as putrid sore throat was often treated very differently. Perhaps the most respected source in this case was Fothergill, who strongly cautioned against venesection, particularly if repeated, as well as purgatives (even mild ones) or nitrous,

cooling medicines. To clear the patient's system, he advised green tea or a small dose of ipecacuanha.. He relied on aromatics and blisters to relieve faintness. For the sloughs and mortification that were often life threatening, he recommended antiseptics and aromatic gargles.

### **Therapy – conspectus:**

Like other inflammatory diseases, simple quinsy was in large part treated by venesection. Boerhaave recommended plentiful bleeding, to be repeated if the inflammation persisted; he also advised purges, a light diet, and vapors or steams. Tissot advised four or five bleedings within a few hours of initiating treatment. Allen promoted spitting drugs, and also advised that while most authors (Sydenham among them) favored bleeding for quinsy under the tongue or in the jugular, he preferred the foot, since revulsion was greater. Mead recommended bleeding, scarifying or incising the affected parts, and combatting the fever with contrayerva and niter. Withering, as reported by Manning recommended vomits and gargles, but while noting that venesection might be needed in some cases, he observed that he had never needed to resort to it himself.

Malignant quinsy, on the other hand, was dealt with in almost the opposite fashion, as Fothergill advised. Johnstone recommended bark to counter the putrescence. Late in the century, Rowley attacked the medical establishment, including even Sydenham (for the "absurdities" in his practice), for the methods that they used in treating "putrid-tending" diseases in general and putrid sore throat in particular. He wrote somewhat more favorably of de Haen, Storck, Cullen, Home, and Gregory, though even they, he asserted, clung to foolish traditions. At Mary-le-Bone Infirmary, where he served as physician, the method that was observed in treating patients with putrid sore throat was: (1) to bathe them in warm water; (2) to provide them with clean garments and a newly changed bed; (3) to keep windows and doors in their rooms open, to insure fresh air, while also purifying the air with fumigants of herbs and vinegar; (4) to keep them on a light diet (small quantities of rice and wine, e.g.; no meat or flesh broth); (5) to provide vitolic acid, diluted and sweetened, or tincture of roses as common drink, supplemented by mild drinks e.g. acidulated balm tea, barley water; (6) to administer antiseptic purges

with bark, in order to cleanse the system and end excessive purging; (7) to cleanse the mouth with a borax solution, rubbing it on affected areas if necessary. While relying heavily on acids (especially vitriolic acid) and bark, Rowley condemned the use of venesection, saline remedies (e.g. Glauber's salt) and sweats. He allowed that blisters were appropriate in some cases, but not often. Rowley used a similar method to treat confluent smallpox. He concluded, "Whatever *strengthens* and invigorates the system, should be adopted; whatever *weakens* or enervates, should be excluded."

**Sources:**

Allen, *Synopsis Medicinae*, pp. 99-105; Brookes, *General Practice of Physic*, I, 170-85; Buchan, *Domestic Medicine*, pp. 200-08; Cullen, *Synopsis and Nosology*, p. 9; Huxham, *Essay on Fevers*, p. 124; Huxham, *Observations on the Air and Epidemic Diseases*, II, 34; Manning, *Modern Improvements in the Practice of Physic*, pp. 226-52; Mead, *Medical Works*, pp. 374-76; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 298-313; William Rowley, *The Causes of the Great Number of Deaths amongst Adults and Children, in Putrid, Scarlet Fevers, and Ulcerated Sore Throats Explained; With More Successful Modes of Treating Those Alarming Disorders; as Practice at the St. Mary-le-Bone Infirmary* (London: E. Newberry, [1793]), pp. xiii, xiv, 4, 8-14, 17, 19-30, 35-37, 40-41, 47; Sydenham, *Whole Works*, pp. 109, 209-12; Theobald, *Every Man His Own Physician*, pp. 30, 35; Tissot, *Advice to the People in General*, p. 61.

**Remittent Fever:**

[note: this entry focuses on remittent as it occurred in Europe, rather than the yellow fever of the West Indies; however, some overlap is unavoidable, since writers of the period, including some who practiced in the Indies, did not in all cases distinguish yellow fever from other forms of remittent]

**Definition and symptoms:**

A number of medical authorities during the 18th century, Cullen among them, divided fevers into only two categories, continued and intermittent. Fevers that seemed to moderate at times, but were not characterized by full intermissions and did not remit in a patterned way, were generally classified as continued, though a few writers (e.g. Lettsom) placed them with the intermittents.

During the latter half of the 18<sup>th</sup> century, remittent fever was the subject of a considerable literature, but this was because West Indian yellow fever was generally included in the category. Remittent was commonly associated with excess or corrupted bile and was in fact often called "bilious fever." Hunter, Monro, and many other writers counted hospital fever as a remittent form.

**Indications and prognosis:**

Because of its inherent instability, remittent fever could transmute to hospital fever if the patient were in a crowded facility. But it might also change into ague (usually tertian, observed Monro). Pearson, Dancer, and other writers noted that the symptoms of remittent fever were similar to those of intermittent, and hypothesized that therapy that was effective in treating the latter would be so for the former.

The autumnal form of remittent, which was often bilious, was considered highly dangerous (and may have been the form that Buchanan observed). Monro catalogued its early symptoms as nausea, the vomiting of yellow bile, and sily blood. As the disease progressed, remissions became distinct, but paroxysms were violent, being characterized by high fever and often delirium. The urine was usually highly colored. Some patients were costive, while others purged uncontrollably. As in other fevers, patients often passed or vomited round worms. Sometimes patients became temporarily deaf at the height of their illness -- usually a favorable sign, in Monro's opinion. Owing to "redundancy and absorption of bile," most patients turned yellow, a symptom common to many fevers, but this faded as the fever departed. The duration of the disease was irregular, and in Monro's experience no regular crisis was noticeable. When the disease was most likely to prove mortal, remissions were scarcely

perceptible, the tongue became parched; and the patient suffered from violent purging, delirium, twitching of tendons, and hiccup.

**Therapy – Buchanan (pp. 62-64):**

Buchanan refers to the one form of remittent that he reviews as “yellow fever.” Of the tactics that he may have used to combat it, he mentions only purgation. However, he notes, without apparent criticism, that other medical officers made use of venesection, emetics (but antemetics when vomiting was excessive), diaphoretics, fomentations, cordials, and blisters.— in other words, a wide range of treatments, some of which (venesection) were especially used in inflammatory conditions, others (cordials, blisters) in low fevers. This scattergun approach suggests that neither he nor other practitioners whose therapy he reports had a fixed sense of how to proceed. Rather, they knew only that the disease was highly mortal and they were experimenting in hopes of finding an effective treatment.

**Therapy -- Monro:**

Monro, who had seen a number of cases that he diagnosed as autumnal remittent while the army was at winter quarters in Paderborn in 1761, recommended free bleeding (less advisable in warm climates, unless inflammatory symptoms were present), hoping thereby to promote an intermission. He advised clearing the patient’s system with a vomit, followed by a cathartic, but he also cautioned that excessive purging might cause the patient to sink. A diaphoretic followed the purgative (Monro provided a formula for an antimonial preparation that he had often seen to serve both purposes). After the patient’s body was clear, he was given bark. Monro observed that during the remittent outbreak of 1761, the bark had little effect, and diaphoretics were more helpful, while during a second, in 1762, the fevers resolved into agues, which were successfully treated with bark. He added, however, that even if bark was not necessary to cure the disease, it was useful in that it invigorated the patient. Monro concludes his discussion with advice on how to treat particular symptoms that often attend remittent fever: for headache and fever, apply a blister to the patient’s back and give him cooling diluting drinks;

for pain in the bowels, laxatives followed by opiates; for excessive looseness, a chalk julep, plus an opiate at bedtime. Hiccup often presaged death, but it might be relieved by various opiates (e.g., *tinctura thebaica*) and by blistering. For burning or painful urination he recommended drafts of gum arabic and dulcified spirit of nitre, plus oily drafts; sometimes opiates, fomentations, and enemas might be needed, as well. When persistent, deafness -- not as common, in Monro's experience, as in malignant fever -- were relieved by blisters on the ears and neck. Restlessness and sleeplessness might be remedied by wine, as might giddiness or dim sight (in the latter case, bark, blisters, or a laxative might also be useful). Saline drafts relieved the pains that many patients suffered -- or the problem could be handled by the same therapy as rheumatism -- and they were also effective in the rare cases when yellowness persisted.

### **Therapy – conspectus:**

Most writers on West Indian practice disapproved of the use of bloodletting and emetics in the treatment of yellow fever and other remittents that were characteristic of the tropics. However, McLean, who saw yellow fever as simply a regular remittent, followed Jackson in supporting venesection, noting that many victims, especially men 15-30, were plethoric.

A common strategy, cited by Gregory, Buchan, Rollo, and many others, was to promote a significant remission, or if possible a full intermission, then give large doses of bark. Rollo reported that he had found nauseating doses of tartar emetic to be most useful for this. Even when the remission was slight, he noted, a large dose of bark might promote an intermission. Hunter initiated treatment with purgatives and noted that after purging the patient often experienced a remission, at which point the bark could be administered. Since it was widely believed that remittent fever was a variant of intermittent, bark would cure it, as it did the latter. Morton was among the early advocates of this treatment, though he reported that for "spurious" remittents (which mimicked nervous, inflammatory, and spasmodic fevers and were characterized by large evacuations) the dosage needed to be higher than for intermittents or simple remittents, since the disease was more powerful, and that the cure might be

more protracted. Lettsom, however, took a more aggressive stance regarding the use of bark. His method, which according to him he had developed after he had tried standard methods and had seen them fail, began with antimonial evacuants, but only if the patients bowels and stomach were full. But the core element was bark (which, he noted, might also serve as a laxative): "Immediately after the evacuations we design have been produced, I commence the exhibition of bark, without waiting for remissions or intermissions; a sedulous attention to which, and to crises in fevers, I presume has destroyed more than famine." Millar used the same strategy in treating remittent: "Bleeding and all profuse evacuations are to be avoided. The bowels are to be cleared, the bark is to be given, and a quart of porter in twenty-four hours, with the usual sick diet."

While most, though not all, writers cautioned against provoking vomiting in victims of West Indian yellow fever, there was more acceptance of the practice in the case of remittent fevers as they appeared in Europe. Moore approved of using emetics, especially if the patient was nauseated. Pringle asserted that it was emetics that produced the most copious evacuations of bile that did the most to cure remittent (and intermittent) fevers, and McClurg endorsed his statement.

On the issue of venesection, there was considerable debate. Like Monro, Pringle routinely bled at the outset, observing that most remittents were inflammatory in the early stages, and it appears that this practice and rationale were both common in Britain. Lettsom, however, advised against letting blood for remittent, putrid, or nervous fevers (or generally in conditions characterized by debility, low pulse, or dejection). MacBride regarded bleeding as harmful, and although he allowed that symptoms might point to it in some cases, he urged caution even then. Buchan approved it only if inflammatory symptoms were present, but he added that they rarely were. He noted that many practitioners misinterpreted the rigid vessels characteristic of the disease with plethora, and so bled mistakenly. Lempriere, who strongly recommended that practitioners consider their patient's habit and temperament when prescribing for remittent, advised bleeding individuals who were sanguine and obese, though not those of mediate habits. Dancer asserted that in its early stages the nature of fever was indeterminate, and that bloodletting might sometimes prevent a fever from becoming remittent or even change it into

a regular intermittent, but that it was not such an antiphlogistic remedy was usually inappropriate in hot countries, since diseases that called for it were rare in that region.

In Rollo's view, when uncontrolled vomiting appeared late in disease, it was always a danger sign. When it appeared early, it could usually be successfully treated by encouraging vomits with chamomile tea, or small doses of antimonial or ipecac. If costiveness attended, clysters were used to procure a stool. When nausea continued or appeared later in the course of disease, and especially if it was associated with pain in the stomach or liver, a blister applied to the entire epigastric region usually brought good results. Rollo recommended that the blister be accompanied by saline drafts, "in the act of effervescence; ... a solution of an alkali, followed by some diluted vegetable acid." He also reported having seen some good coming from small doses of opium, followed by abstention from liquids. In cases where bark caused vomiting, an opiate, given in solid form before the next dose usually forestalled a recurrence. Vomiting was often encouraged before an opiate was given. Rollo urged that when fevers were accompanied by an irritated stomach, ipecacuanha and antinomials were to be administered with caution. A traditional strategy, rejected by Boerhaave, was to treat vomiting with vomiting. To control vomiting, effervescent drinks were thought effective: Riverius recommended mixing lemon juice into an alkaline draft; similarly, Mead advised lemon juice and salt of wormwood (Buchan and Wesley preferred salt of tartar) mixed in mint water. Other common antiemetics included mint, vitriol, chalybeates, or bitters, all of which were thought to tone and strengthen the stomach. Buchan advised musk, castor, and aromatic medicines. Bryce resorted to a purgative, calomel, though this tactic does not appear to have been common. Emetics were sometimes prescribed, as were opiates. External applications (cataplasms, fomentations) and stomach rubs were also used.

A number of writers promoted the use of stimulants and cordials, generally wine, to boost the patient's spirits and system. Rollo wrote, "We are convinced many, by a proper use of [wine], have escaped death." But he also cautioned, "we are aware, that it has been imprudently used by a too early exhibition, and by being given in too great quantity."



**Sources:**

Allen, *Synopsis Medicinae*, p. 20; Boerhaave, *Boerhaave's Aphorisms*, p. 164 (aphorism #659); Brookes, *General Dispensatory*, pp. 171 ("tinctura menthae"), 383; James Bryce, *An Account of the Yellow Fever: With a Successful Method of Cure* (Edinburgh: W. Creech [etc.], 1796), pp. 75-76; Buchan, *Domestic Medicine*, pp. 143, 159-60, 242; Cullen, *Synopsis and Nosology*, p. ; Dancer, *Brief History of the Recent Expedition*, p. 46; Grainger, *Essay on the More Common West-India Diseases*, pp. 24-25, 39; Hunter, *Observations on the Diseases of the Army in Jamaica*, pp.106-30; Lempriere, II, 163, 168; Lettsom, *Reflections on the General Treatment and Cure of Fevers*, p. 4; Lettsom, *Medical Memoirs of the General Dispensatory in London*, pp. 11-20; MacBride, *Methodical Introduction to the Theory and Practice of Physic*, pp. 354-61; McClurg, *Experiments upon the Human Bile*, p. 126; McLean, *Enquiry into the Nature, and Causes of the Great Mortality*, pp. 37, 71-73, 135-37; John Millar, *Observations on the Management of the Prevailing Diseases in Great Britain, Particularly in the Army and Navy; Together with a Review of that of Other Countries, and Arithmetical Calculations of the Comparative Success of Different Methods of Cure* (London: J. Millar, 1779), p. 283; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 248-50, and II, 67-98; Moore, pp. 199-200; Pearson, *Outlines of Lectures*, I, 132-35; Rollo, *Observations on St. Lucia*, pp. 74-87; Theobald, *Every Man His Own Physician*, p. 37; Theobald, *Medulla medicinae*, pp. 18-19, 49-50; Wesley, *Primitive Physic*, p. 166.

**Rheumatism:****Definition and symptoms:**

Cullen placed the genus *rheumatismus* in the order *phlegmasiae* (diseases characterized by fever, inflammation, and topical pain), and distinguished species by the seat of the pain. He considered rheumatism to be either idiopathic (a disease in itself) or symptomatic. Rheumatism could be either acute or chronic. Sydenham recognized a third form, which was characterized by shifting centers of

pain and struck him as having symptoms similar to scurvy (a disease that, in his estimation, was rare, most reported cases being in fact misdiagnosed rheumatism). This form he denominated "scorbutical rheumatism." Rheumatism could arise at any time, though it was particularly associated with the spring or fall, and it was regarded as primarily a problem of colder climates. Sydenham characterized it as inflammatory, noting that the appearance of the blood in this case was the same as in pleurisy, which no one doubted was inflammatory in nature. During the 18<sup>th</sup> century, as well, rheumatism was generally considered inflammatory. Most authors agreed that acute rheumatism arose when a body that was warm was suddenly chilled, blocking perspiration. This accounted for the fact that it tended to come at the change of seasons. The first apparent symptom was chills, followed by pain in the joints. Victims of rheumatism quickly developed fever, and during the course of the disease it characteristically rose toward evening. Early in the disease patients often sweated, but this perspiration was generally regarded as neither critical nor salutary.

The center of pain might shift during the course of the disease, but as Cullen and Parr noted, it was usually not in the extremities, which distinguished rheumatism from gout. Furthermore, observed Parr, the two diseases were distinguished: (a) by the fact that rheumatism, unlike gout, tended to have an apparent cause; (b) that it struck suddenly, while gout was preceded by languor and other signs; (c) that rheumatism afflicted primarily the strong and active, gout, the elderly; (d) that while a remittent fever attended gout, it was less distinct in rheumatism. Parr conceded that the symptoms were sometimes confusing and that the two diseases might coexist, but he added, "more often the mixture of the diseases is supposed to exist by those to whom discrimination is an inconvenient task."

### **Indications and prognosis:**

Just as there were authors who questioned the desirability of curing gout, so there were those who doubted that it was wise to attempt to cure rheumatism. By the same token, writers like Stevenson imagined that other potentially dangerous diseases might, if left alone or treated by moderate means, evolve into rheumatism or gout, as nature fixed the dangerous humors in the extremities. Sydenham

warned that if incorrectly treated acute rheumatism could recur or reappear in chronic form. Often misdiagnosed as scurvy, which is much less common than many believe (scorbutic symptoms may actually come from [or be incipient to] gout, dropsy, etc.).

**Therapy – Buchanan (pp. 299-305):**

Buchanan believed that rheumatism was caused by exposure to cold; he therefore excused rheumatic troopers from duty that exposed them to cold weather. He initiated treatment of the disease by bleeding patients, he encouraged them to sweat by administering diaphoretics, by keeping them warm with flannel clothing and, if possible, by sending them to quarters that were warmed by ovens. He advocated a whey diet, probably for its laxative value, and he made extensive use of opium (definitely as a soporific, apparently as an analgesic and diaphoretic). In his journal, Buchanan endorses (but may not have used) the application of leeches to swelled joints. He notes reports that rheumatic patients and officers who were suffering from swelled joints benefited by bathing in and drinking the warm, purgative waters at Weisbaden.

**Therapy -- Sydenham:**

Sydenham treated rheumatism primarily letting blood, working also to cool and temper the blood by drugs and by diet. His reliance on venesection was not initially welcomed, and in a letter written in 1679 Robert Brady, a professor at Cambridge, inquired of him, "I desire to know, whether it may not be as certainly cured some other way, as by that cruel and severe way of Bleeding." Nevertheless, Sydenham did not moderate his method. As he reported it, he initiated treatment by taking 10 oz. of blood, then gave a julep that was intended to cool the blood and to thicken it. The following day, he bled the same amount, repeating this one or two days later, if the patient was strong enough. If, prior to coming under his care, the patient had been subjected to a hot regimen and heating medicines, Sydenham sometimes found an extended program of venesection to be necessary, but generally he saw a need for no more than 4 bleedings. In cases of chronic rheumatism, Sydenham made

less use of venesection, but advised a bleeding every few weeks, to carry off morbid matter. The form of rheumatism that he called "scorbutic" could, he asserted, easily be cured by an antiscorbutic electuary that he had developed.

Although later practice gave a significant role to sweating and purgation in treating rheumatism, Sydenham did not. He administered a milk-sugar enema to some patients on days when they were not bled, and eight days after the last bleeding he gave a mild purgative. Sydenham did not use anodynes to relieve rheumatic pain, since he was fearful that they would fix the disease, making it more difficult to cure by bleeding. Instead, to control pain he used poultices or cabbage leaves. He did make use of an opiate, diacodium, but this was for recuperating patients, and rather than being given for pain, it was "to restrain the fury of the blood, for otherwise a Relapse may happen."

### **Therapy – conspectus:**

Late in the century, Latham wrote that in treating rheumatism, "bleeding, purging, and sweating are, as it were, the three great cardinal pivots on which both the ancient and modern practice seems to turn," and a review of representative authorities seems to confirm this. Obstructed circulation and perspiration was widely regarded as the proximate causes of the disease, and this suggested the therapy. Following on from Sydenham, Huxham and other writers found venesection to provide rather limited benefit in treating chronic rheumatism, but almost everyone recommended it in the acute form.

Pringle followed Sydenham in bleeding from the outset. He also favored a low diet and the use of enemas or mild laxatives for costiveness. If the lungs were affected, he blistered. He used as many as 12 leeches at a time, focusing on the center of pain (Whytt bled frequently, applying numerous leeches to the affected joints of his patients). In acute cases, Pringle at first tried to force a sweat, but he later decided against this. For chronic cases, he followed Sydenham, ordering daily bleeding (8 oz.) until siziness ended. He kept the body open with draughts of gum guaiacum (a favorite of his) and prescribed spir. hartshorn to stimulate the patient, giving bark also after night sweats. Pringle sometimes used external applications in acute cases, but felt they often aggravated symptoms. Sydenham had

warned against using opiates, "as fixing the disease," so Pringle did not use them while he was in the army, but he did so later, for nocturnal pains.

Monro recommended that rheumatism be treated as an inflammatory fever, with free bleeding, so long as the blood was sisy and the pulse strong. If pain persisted, saline drafts and nitre (which Brocklesby also endorsed) were to be given by day. Monro advised against diaphoretics while fever and pain persisted, for they might exacerbate them, but when these symptoms had abated he suggested frequent use of them. Free perspiration often, he claimed, cured rheumatism. A cold bath might reduce pain, but if the patient was still feverish this might make things worse. If blisters and volatile liniments were used too soon, warned Monro, they could cause pain and inflammation. Monro felt mercury to be useful, especially if venereal disease was a complication. Bark, he advised, sometimes reduced pain after a fever, and restored strength.

Fothergill and Saunders also advocated the use of bark.. Brocklesby distinguished sharply between acute and chronic rheumatism. The former, which he considered inflammatory, he primarily treated with bleeding and sudorifics, especially nitre. The latter, "cold" type, he treated mainly with sudorifics, including his nostrum of ipecacuanha and opium; this he followed up with bark, to brace the fibers.

Reide believed that rheumatism combined inflammatory and putrid symptoms, and in consequence even he, who bled cautiously, recommended bleeding (and antimonials) during the inflammatory stage, bleeding repeatedly until the blood, which at first had a buff crust, resumed its normal appearance. He also found guaiacum to be useful. Blisters and strong volatile liniments he found to be valuable, the latter particularly when augmented by tincture of cantharides, recommended by Millar. Nitre and bark served well in some cases, he observed. Spirits of turpentine, applied internally and externally, served well in chronic cases. He also reported that both cold and warm bathing brought relief.

Tissot recommended treating acute rheumatism by bleeding, diluting drinks, laxative diet, and enemata. If pain continued and was severe, he advised warm baths. He cautioned against opiates,

asserting that they obstructed treatment. For chronic rheumatism, which he associated primarily with old age, he recommended bleeding as well, but also sudorifics. Noting that it was common in such cases to rub the affected area with brandy, he warned that this might repel the harmful humors from the surface toward vital organs. Rather than endanger elderly patients through over-medication, he recommended "sometimes to leave a sufferable and inveterate Pain to itself."

Some writers were more cautious in recommending venesection. MacBride conceded that rheumatism was inflammatory and advised letting blood in recent cases if the patient was strong. However, the practitioner was not to bleed if the pulse was weak or if there was no fever. MacBride was not generally averse to venesection. Those who were not surprisingly advised against it in this case. Buchan accepted the common characterization of rheumatism as inflammatory, but recommended treating it mainly with stimulating medicines and bitters. Grainger asserted that in the West Indies it was unwise to either bleed or purge for rheumatism. Stevenson claimed that acute rheumatism was "hastening into kindly maturation," so bleeding was very "injudicious."

During the late 18th century some practitioners recommended radically new therapies. Dawson recommended a course focused on large doses of guaiacum. The application of electricity to rheumatic joints was also tried. Fowler argued that bloodletting was overrated by many authorities, that it was more useful in acute than in chronic rheumatism and was mainly of value if it were done at the critical moment. He found instead that sudorifics were most useful in treating rheumatism, notably t. of guaiacum, which had the extra benefit of being a gentle purge. Dover's Powder he valued as a sudorific, an anodyne, and an astringent. Warm baths were likewise sudorific, but he deemed them too debilitating. Leeches he found to be a useful local remedy, and likewise blistering plasters. He felt that opium might be useful, but mainly as a soporific. Latham argued that bloodletting, evacuation, and sweating were relied on excessively, and that though they might be useful, they should be used with caution. This recommendation was linked to an alternative conception of the disease, for he asserted that rheumatism was not, as was generally believed, inflammatory in nature. He advised against using astringents at the onset of the disease, believing that the vessels were already too constricted, but he

added that such drugs might be useful after the initial pain had subsided, especially for their tonic qualities. However, he criticized what he saw as the excessive use of stimulants in acute rheumatism – for the patient might naturally be strong and overstimulated – and instead endorsed the use of sedatives (while he used opium, he was also much impressed by camphor).

**Sources:**

Brocklesby, *Oeconomical and Medical Observations*, pp. 111-37; Brookes, *General Practice of Physic*, II, 10-17; Buchan, *Domestic Medicine*, pp. 295-98; Cullen, *First Lines of the Practice of Physic*, II, 296-301; Cullen, *Synopsis and Nosology*, pp. 6, 15; Fowler, *Medical Reports of the Effects of Blood-letting, Sudorifics, and Blistering, in the Cure of the Acute and Chronic Rheumatism*, passim, esp. pp. 277-87; Grainger, *An Essay on the More Common West-India Diseases*, p. 45; Huxham, *Observations on the Air and Epidemic Diseases*, pp. 262-65; James, *Medical Dictionary*, under "rheumatism"; Latham, *On Rheumatism, and Gout*, pp. 32-49 (quotation p. 44); *London Practice of Physic*, pp. 70-73; MacBride, *Methodical Introduction to the Theory and Practice of Physic*, pp. 498-500; Manning, *Modern Improvements in the Practice of Physic*, pp. 202-08; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 55-66; Parr, *London Medical Dictionary*, I, 188 ("arthritis"), and II, 284-88; Pringle, *Observations on the Diseases*, pp. 150-58; Reide, *View of the Diseases*, pp. 76-79; Stevenson, *Considerations on the Dangerous Effects of Promiscuous Blood-letting*, pp. 34-35, 254n; van Sweitan, *Diseases incident to Armies*, pp. 39-43; Sydenham, *Whole Works*, pp. 109, 200-05, 216; Theobald, *Every Man His Own Physician*, p. 30; Tissot, *Advice to the People*, pp. 88-96; Townsend, *Elements of Therapeutics*, p. 167; Walker, *Treatise on Nervous Diseases*, pp. 179-81; Wallis, *Art of Preventing Diseases*, p. 368.

**Scurvy:**

**Definition and symptoms:**

The clinical signs of scurvy were vivid. Most writers noted it as a disease that came on gradually, with initial symptoms of debility, lethargy, and dejection. Later, the face became sallow and bloated, the gums spongy, teeth loose, breath offensive, livid spots on the body, some hemorrhaging of old wounds, severe wandering pains, skin dry, urine small in quantity, pulse small, frequent, and later intermittent. In the last stage, joints swelled, tendons became rigid and contracted, hemorrhaging became widespread, and diarrhea or dysentery often intervened. When it was not relieved, the disease often concluded in death.

There was, nevertheless, significant disagreement on how many forms of scurvy existed. Cullen placed *scorbutus* as a genus under the order *impetigines* (diseases that affected the outer parts of the body, especially the skin). By degree and symptoms, he specified eight varieties. MacBride observed that even medical men tended to apply the term "scurvy" to "almost all the different kinds of cutaneous foulness" and criticized this broad usage.

Regarding the causes and essential nature of scurvy, there was significant disagreement. Scurvy was generally understood to be putrid in nature. Manning wrote, "The proximate cause of this disease is found to be a putrid disposition of the fluids, occasioned by corrupted aliments, the long continued use of salt provisions, and the breathing of foul air." Milman asserted that the putridity of scurvy was seated not in the blood, as was widely believed, but rather in the solids, and he laid the disease to circumstances common at sea: "this disease is brought on by the moisture &c. on board ship, and an indigestible diet." Trotter postulated that scurvy was caused by a lack of oxygen in the blood, and Beddoes strongly endorsed his assertion. Bruce believed that pestilence, dysentery, scurvy, and various camp diseases were all "the same misery" and were caused by obstructed perspiration. Like other diseases that involved the skin, scurvy was sometimes laid to dirtiness, perhaps compounded by indolence. But during the 18th century, most authorities found diet to be both the cause and the cure.

**Indications and prognosis:**



Ironically, scurvy had traditionally been seen as a very difficult disease to cure, and it was recognized that in circumstances where men were prohibited from receiving appropriate treatment for an extended period, as was the case during Anson's circumnavigation voyage of 1740-44, mortality rates could be extremely high. Nevertheless, during the 18th century there was a general sense that effective antiscorbutics did exist, and the only problem lay in identifying which were best and which among the better options would remain potent longest during circumstances of extended removal from fresh fruits and vegetables.

**Therapy – Buchanan (*pp. 197-201*):**

The remedies that he himself prescribed are mainly mercurials. He initiated treatment with them. "at first I use mercurial purgatives, rubbing the Spots with Ungt. Mercur: putting them under a course of Aethiop: Mineral." He closes his section on scurvy by reporting, "when Scorbuticke juices become disagreeable to the Stomach, (for few can bear them a long time), I then Substitute Aq: Benedict &: pil: mercurial: nostr." Buchanan's reliance on mercurials may suggest that he treated scurvy as if it was primarily a cutaneous disorder. However, the second quotation suggests that he prescribed "Scorbuticke juices," and he notes with apparent approval the mixtures of juices drunk and vegetables consumed by two scorbutic officers in the Blues. He also endorses the juice of water parsnips, a folk remedy, and scorbutic whey.

**Therapy -- Monro:**

The model that ultimately came to dominate both the treatment and the prevention of scurvy was Lind's. However, for the purposes of this work the model provided by Monro is more useful. Monro believed that scurvy was caused by a diet that stressed salt provisions, while failing to provide fresh vegetables and "good, generous, fermented liquors." Following on from this premise, he advised that in areas where scurvy was a problem it was essential to drink good beer, cider, or wine, and diet should be light, including fresh meat, roots and greens, and mild acid or acescent liquors (lemonade, small beer,

cider, wine mixed with water, or weak punch). Spirits were to his mind generally undesirable, although he did recommend a small amount mixed in water, with lemons, oranges, cream of tartar, or tamarinds. For the most part, he saw diet as the key to cure as well, recommending acid or acescent fruits, such as lemons, oranges, apples, pears, currants, and grapes, as well as antiscorbutic plants and their juices, particularly sorrel, succory, endive, watercress, and scurvy grass. So successful was diet in the treatment of scurvy that Monro commented, "often the most inveterate scurvies are cured by the use of greens and fruit, without the assistance of other remedies."

### **Therapy – conspectus:**

In citing a number of remedies for scurvy, Monro was following common practice. Saunders recommended purgatives, fresh vegetables, sauerkraut, dried fruits, "wine and other antiseptics," as well as cleanliness, exercise, and bark, and, for particular symptoms, "opiates, spirituous and aromatic fomentations." Citrus fruits were usually included in lists of antiscorbutics. Allen wrote, "The Juice of Lemons and Oranges, are Antiscorbuticks never enough to be recommended." Piso noted that Indian physicians treated many malignant diseases with lemons, and Martin Lister wrote, "I have never observed in my whole Practice so many happy effects by any one simple Medicine as by Lemons." It was widely believed that scurvy was linked to diet and that dietary adjustments could cure it. The standard course of treatment, both popular and professional, lay in providing the sufferer with fresh vegetables and fruits (including, but not only, lemons and oranges). Sauerkraut was likewise deemed an effective antiscorbutic. MacBride observed that malt wort produced a clear liquor similar to vegetable juices that were known to cure scurvy, and inferred that it would do so as well, while providing an advantage over other vegetables and fruits, in that it was less perishable. Bell also endorsed malt. Manning noted that during Cook's circumnavigation, scurvy had been prevented by "sound or fresh provisions, the free use of acids, and keeping the apartments of the ship as much as possible clean and dry."

Reide blamed scurvy primarily on the lack of vegetables and fresh meat in regular diet -- rations

of salt meat were used by many to explain the prevalence of the disease among soldiers and sailors -- and consequently provided these to his scorbutic patients. Likewise, Wallis advised that scorbutic patients consume fresh fruits and vegetables, especially ascecent kinds (oranges were on the list), though he warned that patients not be allowed to gorge themselves from the start, lest they develop dysentery. Cleanliness, good air and exercise were also seen as useful in treating scurvy. Toward the close of the century, Trotter and Beddoes asserted that scurvy was caused by a lack of oxygen in the blood, and the latter claimed that any of a number of dietary items, including all vegetables (his preference was for acid varieties) as well as raw fresh meat, contained the oxygen that would counter this disease. Beddoes speculated that the salting of meat reduced the amount of loose oxygen in the flesh, increasing the risk of scurvy. Trotter claimed that contemporaries like Lind and Blane misunderstood the cause of scurvy, but he strongly endorsed lemons and other acid fruits as remedies, because they were especially rich in oxygen. Bell considered malt beverages to be effective preservatives against scurvy.

Since scurvy was marked by debility, a number of writers, Dickinson among them, argued that tonics, notably bark, as well as wine and other stimulants, were most important in treating it. Milman explained the usefulness of lemons and oranges were useful not because of any specific quality but because they were stimulant, diuretic, and diaphoretic. Cullen, however, rejected the value of tonics and claimed that bark served no useful purpose. Mercury he regarded as harmful.

Because scurvy was generally regarded as a putrid or low disease, venesection was usually not included in the treatment. Lind wrote, "It is to be observed, that this disease, especially when advanced, by no means bears bleeding; even although the most acute pains upon the membranes, a high degree of fever, and dangerous haemorrhages, would seem to indicate it. The patient generally dies soon after the operation."

A number of writers emphasized the importance of keeping the scorbutic patient in a positive frame of mind. In the words of Wallis, "Hope, in all diseases of debility, is to be reckoned among the first of efficacious remedies. It quickens the circulation and invigorates the system in the same

proportion as fear enervates and sinks the pulse. In scurvy, more especially, it is found, that whatever inspires confidence and hope tends to expedite the cure."

Lind's treatise was certainly influential, but it was more cited than read; in 1768, an Edinburgh lecturer, perhaps Gregory, told his students that it was the most systematic work on scurvy, then recommended treating the disease with a milk and vegetable diet and with fresh air. Furthermore, while Lind is remembered for his experiments on scorbutic sailors and his subsequent conclusion that oranges and lemons were the most effective of the antiscorbutics that he used at that time -- and, of course, because his observations would do much to influence practice in the British Navy and on merchant ships in the future, saving many lives -- he in fact endorsed many traditional antiscorbutics, as Milman noted. He furthermore advocated cleanliness and exercise for sailors on ship as ways to prevent scurvy. His advice on hygiene had a significant impact on Cook, despite the fact that the latter came to discount the effectiveness of citrus rob as an antiscorbutic.

#### **Sources:**

NLM, MS B 357 ("Relect Edinburgh 1768" on spine); Allen, *Synopsis Medicinae*, pp. 365-78; Thomas Beddoes, *Observations on the Nature and Cure of Calculus, Sea Scurvy, Consumption, Catarrh, and Fever: Together with Conjectures upon Several Other Subjects of Physiology and Pathology* (Philadelphia: T. Dobson, 1797), pp. 44-47, 52-60, 83-84; Bell, *An Inquiry into the Causes*, pp. 59-60; Boog Watson, "Thomas Robertson," pp. 138-39; Brookes, *General Practice of Physic*, I, 283-95; extract of letter from Brown to John Hope, 14 Sept. 1776, *Medical Commentaries*, IV (1776), p. 237; Buchan, *Domestic Medicine*, pp. 299-302; Cullen, *First Lines of the Practice of Physic*, II, 373; Cullen, *Synopsis and Nosology*, p. 55; Francis E. Cuppage, *James Cook and the Conquest of Scurvy*, *Contributions in Medical Studies*, 40 (Westport, CT, and London: Greenwood Press, 1994), pp. 19-21, 23-31, 68-71, 91-92, 104; Dickinson, *An Inquiry into the Nature and Causes of Fever*, pp. 154-60; Huxham, *Essay on Fevers*, p. 137-39; William Jervey, *Practical Thoughts on the Prevention and Cure of the Scurvy, Especially in the British Navy* (London: J. Nourse [etc.], 1769), pp. 12-13; Lind, *Treatise of the Scurvy*,

pp. 179-95; David MacBride, *An Historical Account of a New Method of Treating the Scurvy at Sea: Containing Ten Cases, Which shew that this destructive DISEASE, may be easily and effectually CURED, without the Aid of fresh Vegetable Diet* (London: A. Millar and T. Cadell, 1767), pp. 2-3, 60-61; MacBride, *Methodical Introduction to the Theory and Practice of Physic*, pp. 615-23, 639-59; Manning, *Modern Improvements in the Practice of Physic*, pp. 405-06; Mead, *Medical Works*, pp. 137-39; Francis Milman, *An Enquiry Into the Source from whence the Symptoms of the Scurvy and of Putrid Fevers, Arise; And into the Seat which those Affections occupy in the Animal Oeconomy: With a View of ascertaining a more just Idea of Putrid Diseases Than has generally been formed of them* (London: J. Dodsley, 1782), pp. xi-xiii, 166-70, 190-206, 228-29; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 33-38, and II, 181-95; Parr, *London Medical Dictionary*, II, 325-29; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 728; Reide, *A View of the Diseases of the Army*, pp. 80, 83; William Saunders, *Elements of Physic: For the Use of Gentlemen Who Attend Lectures on that Subject* ([London], 1790), p. 94; Thomas Trotter, *Observations on the Scurvy: With a Review of the Opinions lately Advanced on that Disease and a New Theory Defended*, 2nd. ed. (London: T. Longman, 1792), pp. 114-16, 133-48; van Swieten, *Diseases incident to Armies*, pp. 138-39; Wallis, *Art of Preventing Diseases*, pp. 466-69.

### **Smallpox:**

#### **Definition and symptoms:**

Buchan wrote of smallpox, "This disease is so general, that very few escape it at one time of life or another. It is the most contagious malady in these parts; and has, for many years, proved the scourge of Europe." Cullen referred to smallpox as *variola*, which he defined as a contagious continued fever characterized by vomiting and, between the third and fifth day, the eruption of pustules. He distinguished two species: *discreta* (distinct, round, turgid pustules; fever quickly subsides after

eruption); and *confluens* (pustles irregularly shaped, numerous, flaccid, flat, confluent; fever remains after eruption). It was uniformly agreed that confluent smallpox was far more dangerous than was distinct and that the threat of death was greatest late in the disease, when a secondary fever often appeared. Confluent was also seen to cause far more pitting.

Smallpox was generally considered a putrid disease. However, some writers (e.g., Wallis) believed that it was usually inflammatory, at least in its early stages. The lack of consensus on whether smallpox was putrid or inflammatory had a significant impact on therapy.

### **Indications and prognosis:**

Sydenham regarded smallpox as difficult to understand and to cure, “and I dare boldly affirm, that his Reputation will be often questioned, who frequently applies himself to the Cure for it; for not only the Vulgar are ready to say, they are Physick’d to Death, but Physicians themselves basely take occasion from hence to calumniate, and easily wheedle the Ignorant into an ill Opinion, that by this means they may gain the more Esteem, and raise themselves by ruining others”

The mortality rate associated with smallpox increased markedly in Britain during the 17<sup>th</sup> century, suggesting the arrival of the confluent (*variola major*) strain, either as a mutation from distinct (*variola minor*) or as an import. In 1722 William Wagstaffe wrote, “we have the sort [of smallpox] in which a nurse cannot kill, and another in which even a physician can never cure.”

Cullen observed that even after “violent” smallpox was cured, it often left behind acrid matter that produced inflammation or morbidity.

### **Therapy -- Buchanan (pp. 45-61):**

Buchanan does not detail his method, but he mentions that he treated patients “after Sydenham’s manner,” except that he tried to procure a stool every other day, preferably by laxative fruits or drinks, though with an enema if necessary. He endorses the “cool method.”

### **Therapy -- Sydenham:**

The regimen recommended by Sydenham had great impact, yet much of his advice was general. He asserted that there were two indications: to preserve ebullition (the separation of inflammatory particles in the blood, a process taking 3-4 days); to keep up the pustules. He advised that the patient not be confined to bed before the 4<sup>th</sup> day or if possible not until eruption was complete (4-6 days) and not be given any medicine to promote the eruption of pustules (if they did not appear, or if the disease appeared to be striking inward, he might be given a cordial). While he regarded distinct smallpox as seldom dangerous, for the confluent he advised small beer to keep up salivation. He thought that this symptom, common in adult victims, might be nature's way of evacuating morbid matter, since the pustules were not sufficiently developed to be equal to the task. If the saliva became viscid, he advised a gargle. If a putrid secondary fever developed, he advised that it be treated as such, rather than as smallpox, and recommended taking 10-12 oz. of blood, to be repeated if necessary, along with anodynes and, when necessary, cathartics.

What was most prominent in the treatment was its moderation, which bordered on passivity. Even beyond criticizing the use of heating medicines and (with some exceptions) cordials, Sydenham condemned what he saw as a tendency to over-medicate patients. He observed that wealthy victims of confluent were more likely to die than were poor patients, because the former were given more drugs. Particularly during the phase prior to eruption, Sydenham advised that medical intervention be minimal. Nevertheless, he observed, "that happy, or lamentable end of the Disease, chiefly, if not wholly, depends on the Management of the Patient at the beginning."

### **Therapy -- conspectus:**

The two primary elements in Sydenham's regimen, the cool method and venesection, became commonplace in 18<sup>th</sup>-century medicine. Most authorities endorsed the cool method without reservation (cf. *RP*, n. 85). Huxham, however, was ambivalent. He believed that Sydenham's practice was proper in some cases, but that the hot regimen, which he associated with Morton, was appropriate in others.

When the patient was exposed to cool, dry air, he noted, the blood tended to become more dense, increasing the need for bleeding. Warm medicines, e.g. myrrh, musk, and camphor, were useful when eruptions were flaccid. Monro endorsed the cool method, but noted that some practitioners were exposing patients to cold weather, a practice that he regarded as unwise.

Therapy for smallpox hinged on whether the disease appeared to be confluent or distinct. Even before the pustules appeared, practice tended to be far more aggressive if symptoms suggested a confluent case. In distinct cases, medical intervention was often minimal, reflecting Parr's observation, "It is scarcely a disease."

Morton recommended bloodletting, along with opiates, vesicatories, and alexipharmics, if it were necessary to restrain violent symptoms. In the second stage, when pustules formed, and the third, when they matured and filled with pus, he considered no treatment necessary, though he might administer an opiate to relieve pain and promote rest. In the 4<sup>th</sup>, or declining, stage, the pustules scabbed over; hardly anyone with benign pox died before this stage. If there was hemorrhaging, he cautioned against venesection, while recommending vesicatories and cordials to raise the spirits.

Huxham strongly advocated letting blood in the early stages of smallpox and admonished young physicians, who might otherwise be reluctant, to do it even if the patient appeared dejected or lethargic. For patients who were weak or delicate, however, Huxham advised wine or other stimulating drinks, rather than bleeding. Eruptions were often retarded in such patients, he observed. To remedy this, he recommended vomiting by gentle emetics, then applying cataplasms to the feet; however, he advised against vomits in the first stages of the disease. Huxham also recommended moderate doses of opiates, both to calm the patient and to promote eruption. He advised blisters to evacuate morbid matter, and diuretics, especially if salivation was impeded.

During the first half of the 18th century, purgatives came to be more widely used in the treatment of smallpox. The key to this development was the publication, in 1719 (in Latin; 1747, in translation) of a letter from Freind to Mead, in which the writer advocated administering purgatives during the secondary fever in confluent. Mead then incorporated cathartics into his method. Huxham



(whose method in treating smallpox was endorsed by Wesley) also stressed cleaning the system downwards, recommending laxatives even for patients whose pox was attended by diarrhea. Laxatives, usually mild ones, were often recommended in distinct as well as confluent smallpox.

Brocklesby outlined therapy similar to Huxham's. Like him, he recommended bleeding, but allowed that it might be omitted if the patient was not feverish. If Brocklesby's method was unusual in any respect, it was that in the days before eruption he tried to control fever with large draughts of niter in barley water. In confluent cases, he recommended bark, but without much hope.

Monro also advocated bleeding, as well as evacuations and a cooling regimen. He expressed doubts about the efficacy of mercurial purges, which some authorities believed superior, and further argued that purgatives should not be given while pustules were full, for in such circumstances they might cause breathing difficulties. (While downgrading the value of mercurials in treatment, he did contend that mercurial physics might be of some value, in that they would help clear the foul bowels and worms that often attended smallpox.) In the case of malignant or confluent pox, however, he recommended acids, bark (usually by enema), cordials, and wine -- a regimen characteristic of diseases considered putrid. He advised that all pox patients be cooled. Bleeding, where appropriate, would cool, as would purging and adjusting their physical circumstances (opening windows, sending them on walks). If the patient was too frail to stand the cold, he was to consume warm mild liquors. Monro asserted that opiates and blisters were generally useless.

Leigh endorsed opium in treating smallpox, asserting that it promoted suppuration. He credited Sydenham with being the first to recognize the value of opiates in this therapy.

The symptoms of smallpox suggested venesection to some writers, abstaining from it to others, and uncertainty to many. Wallis cautioned that while smallpox was usually inflammatory in nature, prompting venesection, it sometimes was accompanied by symptoms associated with nervous or putrid fever or with dysentery, all of which suggested that bleeding would be detrimental, and that instead the patient needed stimulation. Recommended bleeding adult patients, but not children who were suffering convulsions before breaking out. Cullen took a cautious position, advising that venesection might be

appropriate in a patient who was plethoric and whose symptoms were violent.

Authors who were generally cool to bleeding tended to be so in this case. Nevertheless, Buchan did advise it for secondary fever, in a quantity fixed by the patient's age and strength, if the symptoms and heat suggested inflammation and the pulse was quick and strong. He recommended that the pustules be opened at this time, since he believed that the fever was caused by reabsorption of matter; while noting that many practitioners were reluctant to do this to children, not wishing to inflict unnecessary pain, he asserted that the procedure was not painful (Monro noted that practitioners in the East Indies opened pustules, with success; there was apparently opposition to doing this in Britain). If the patient developed putrid symptoms, he was to be given bark (to promote laudable pus) and acids. If his extremities became cold, cordials and blisters were to be used.

Reide did not incorporate venesection into his regimen. He first isolated smallpox patients in a cool facility. Believing smallpox to be a remittent fever, he relied heavily on bark, though he began with a cathartic and at bedtime, an anodyne draught of guaiacum (augmented with magnesia if the patient was costive). Elixir of vitriol was given regularly until the decline of the disease. Blisters he rejected, however, feeling that they only increased the patients' distress.

### **Sources:**

Allen, *Synopsis Medicinae*, pp. 54-68; Brocklesby, *Oeconomical and Medical Observations*, pp. 231-50; Buchan, *Domestic Medicine*, pp. 161-72; Ann G. Carmichael and Arthur M. Silverstein, "Smallpox in Europe before the Seventeenth Century: Virulent Killer or Benign Disease?," *JHMAS*, 42 (1987), p. 149; Cullen, *First Lines of the Practice of Physic*, II, 15-45; Cullen, *Synopsis and Nosology*, pp. 17-18; Huxham, *Essay on Fevers*, pp. 28-29, 67-80; James, *Medicinal Dictionary*, under "variola"; Leigh, *Experimental Inquiry into The Properties of Opium*, p. 135; Lettsom, *Medical Memoirs of the General Dispensary in London*, pp. 205, 215, 239-40; Manning, *Modern Improvements in the Practice of Physic*, pp. 78-93; Mead, *Medical Works*, pp. 239-60; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 165-76, 273-78; Parr, *London Medicinal Dictionary*, pp. 469-74;

Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 840-42 ("variolus"); Reide, *A View of the Diseases*, pp. 272-75; Sydenham, *Whole Works*, pp. 78-104, 282-84, Theobald, *Every Man His Own Physician*, p. 33; Townsend, *Elements of Therapeutics*, pp. 121-22; Wallis, *Art of Preventing Diseases*, pp. 265-75; Wesley, *Primitive Physic*, pp. 143-44.

### **Tetanus:**

#### **Definition and symptoms:**

The extreme symptoms made tetanus, or lockjaw as it was commonly known, easy to diagnose. Cullen characterized it as "a spastic rigidity of almost the whole Body" and placed it in the order *spasmi* (diseases marked by irregular muscle action). Tetanus was generally held to arise from wounds, though some writers recognized exposure to cold as a cause. The aetiology, however, was seen as being of little consequence once the disease hit. While any practitioner might see a case, it was probably military surgeons who had the greatest experience in dealing with the disease, and many of the 18th-century commentaries on it come from them. Tetanus was a great danger to troops who had been wounded or had undergone surgery. Ranby recalled the case of a patient who died four or five days after being wounded, "his jaw being fixed by a convulsive attack, and his countenance greatly distorted," and noted that he had seen several similar cases. Tetanus was regarded as a particular danger in warm climates. Of nineteen patients who underwent amputation in the naval facility in Barbados in early 1780, nine died of it. Lind recommended that men who underwent amputation in hot climates be promptly transported to cooler regions or be immersed in cold baths.

#### **Indications and prognosis:**

For the most part, therapy was aimed at relaxing the muscles, though some practitioners tried to boost the patient's system. Regardless of the therapy, however, the prognosis was considered bleak.

George Brown, apothecary to the general hospital in North America, reported in 1776 that while the British had been besieged in Boston several men had contracted tetanus from wounds or amputations, and all had died, despite the administration of such remedies as opium, musk, ether, and blisters.

### **Buchanan reference:**

Buchanan refers to only one case of lockjaw (p. 192), and it was not one that he tended. He does not indicate how he would have treated the disease.

### **Therapy -- conspectus:**

Lockjaw was generally combated with large doses of opium, sometimes mixed with musk, a common muscle relaxant. Rush, however, condemned the use of opium, instead recommending bark and wine. Grainger advised opium, adding, "it is astonishing what quantities of it may be swallowed without either procuring sleep, or affecting the brain." He noted, however, that this and other remedies often failed, and that "even with the speediest help the physician is often miserably disappointed in his expectations." Even Leigh, generally a strong advocate of opium, asserted, on the basis of his own observations and John Hunter's, that the drug provided virtually no benefit to sufferers of lockjaw.

Anodyne embrocations baths were also included in the treatment. Cochrane reported that he had successfully treated an East Indian boy for lockjaw by repeated cold baths and laudanum. Monro, on the other hand, recommended warm baths and producing a salivation with mercurial ointment. Moseley reported, "I have lost many patients in the **Locked-Jaw** after amputations," and noted that he had saved none, although he believed that he had prevented the onset by giving bark after every operation, along with bleeding and purging. The general failure of all remedies, including opium, had, he claimed caused practitioners in the warm climates to resort to desperate treatments, including massive doses of drugs. Hunter reported a successful use of a mustard electuary, adding, "although little can be inferred therefrom, it may deserve to be noticed in a complaint, where our knowledge is so limited."

**Sources:**

Extract of letter from Brown to John Hope, 14 Sept. 1776, *Medical Commentaries*, IV (1776), pp. 238-39; "Observations on the Use of Cold Bathing in the Cure of Tetanus, communicated in a Letter from Mr Thomas Cochrane Surgeon at Nevis, to Mr John Balfour Surgeon in Edinburgh," *Medical Commentaries*, III (1775), pp. 183-87; William Chalian, "An Essay on the History of Lockjaw" *BHM*, 8 (1940), p. 199; Cullen, *Synopsis and Nosology*, p. 32; Grainger, *Essay on the More Common West-India Diseases*, pp. 34-36; Hunter, *Observations on the Diseases of the Army in Jamaica*, pp. 143-44; Leigh, *Experimental Inquiry into The Properties of Opium*, pp. 139-41; Lind, *Essay on Diseases*, pp. 198-200; James, *A Medicinal Dictionary*, under "tetanus"; Lloyd and Coulter, *Medicine and the Navy*, III, 135; Manning, *Modern Improvements in the Practice of Physic*, p. 391; Moseley, *Treatise on Tropical Diseases*, pp. 484, 490; Ranby, *Method of Treating Gun-Shot Wounds*, pp. 80-81; Townsend, *Elements of Therapeutics*, pp. 256-57; Wallis, *Art of Preventing Diseases*, p. 414.

**Venereal disease:**

[Note: this entry is generally about syphilis and gonorrhoea. Other venereal conditions that are mentioned by Buchanan (phimosis, paraphimosis, buboes, chancre, and chordee) are discussed in the footnotes in *RP*, esp. nn. 375, 389-94, 404.]

**Definition:**

Cullen included the venereal diseases under the class *impigines* (cf. entry for scurvy) [go on, pp. 72-3]. During the 18th century, syphilis was known by a number of names, including "lues veneris" and "confirmed pox" (usage of the traditional "French pox" seems to have declined). The term "syphilis" entered English as the title of Turner's widely read treatise, first published in 1717, and it was popularized by Cullen, although like many contemporaries he used the word interchangeably with

"venereal disease" (cf. *RP*, p. 169).

### **Indications and prognosis:**

Most writers saw gonorrhea as resulting from a combination of weakness and irritation in the genital region. Curing it therefore required: (a) strengthening and tightening the body, by astringents or other means; and (b) cooling the patient, so as to quiet the irritation. Manipulation of the system was less important in the case of syphilis, since it was seen as being susceptible to a cure by a specific -- mercury. Many, though not all, authorities believed that mercurials were also effective against gonorrhea (Cullen and Hunter were among those who doubted this), but it was widely argued that they were unnecessary.

Writers on venereal disease were virtually unanimous in claiming that, if the disease was properly treated, it could be cured. Swediaur bemoaned the fact that many sufferers, especially women -- who, he asserted, were more easily infected and less tolerant of mercury than were men -- lived in despair, wrongly believing that medical treatment could do nothing for them. As usual, writers tended to emphasize the importance of early treatment. Hooper wrote, "If the disorder is recent, and the constitution not impaired by other diseases, a perfect cure may easily be effected." He added, however, that if the case were of long duration, the patient might be too weak to stand the amount of mercury that would be needed to cure it. As regarded gonorrhea, writers tended to assert that only moderate therapy was needed to effect a cure. Cullen reported that often the disease terminated spontaneously, and while he appears to have preferred that the disease be treated, he did not believe that this was necessary in all cases.

That apparent "cures" of syphilis might merely reflect the fact that the disease had entered a dormant phase was recognized by many authorities. In 1743 Pringle wrote to a friend concerning a mutual acquaintance: "I am persuaded that some time or other his pox will get the better of him, for it is always lurking about his bones & breaking out in the least cold. I am much of the System of the Montpeliers [see below] that the Lues Venerea will <lye quiet> 20 years & then kill the person." But

Pringle's concern for his acquaintance appears to reflect a concern that the cure that he received was insufficient and that a more rigorous method would have indeed rooted it out.

**Therapy -- Buchanan (pp. 169-97):**

In the case of gonorrhoea, Buchanan writes, "I commonly begin with calomel purges & continue till the running grow thick & white." He used diuretics and laxatives to keep the body open, as well as various remedies that were intended to soothe the urinary tract. For recuperating patients, he recommended cold baths, probably to strengthen the body and tighten the fibers. Buchanan does not refer to his own method of treating syphilis, and it may be that men of his regiment who were diagnosed with the disease were routinely sent to the hospital, although he notes of the standard method (p. 192), "Some years ago this was looked on as the utmost danger & of the greatest consequence & called the Grand Cure, always under the care of Physicians of the greatest experience, now mostly under the Surgeones or their Mates & seldom attended with bad consequence." At the hospital, according to Buchanan, patients who required fluxing were kept warm and a salivation was raised by repeated inunction of an ointment of mercury and lard. If there was difficulty in raising or maintaining sufficient salivation, mercurial vomits were used. Affected regions were rubbed daily with mercurial ointment. After the salivation phase of treatment was completed, the patients were put on a course of wood decoction, guaiacum, and mercurial pills. In Buchanan's experience, the hospital method "seldom faile[d] of a cure." Buchanan reports that the disease was sometimes eliminated by urine and sweats, as well as by spitting. He notes, however, apparently in reference to a course of full salivation, that the men who had undergone the treatment were emaciated by its completion and some remained "walking Skeletons for life." Of his own practice, he notes only procuring limited salivation (a "walking sale") for troops with venereal eruptions.

**Therapy -- syphilis -- Monro:**

The treatment for syphilis was straightforward compared to those for most other major illnesses.

"Where there are evident symptoms of a confirmed pox," wrote Monro, "the only method of cure that has hitherto been found effectual, is to throw in such a quantity of mercury, either by the mouth or by unction, as will bring on more or less of a salivation, and to keep that up until most of the venereal symptoms disappear." Monro recommended that before administering mercury the practitioner take some blood, especially if the patient were plethoric, "to prevent any bad effects from the circulation being quickened by the mercury." Preparatory treatment also included warm baths, to aid perspiration, and the administration of a gentle physic. After the patient was prepared, calomel or a mixture of mercury and honey was given orally, or mercuric unctions were to be applied to the thighs. In either case, this treatment was to continue until the onset of bad breath and sore gums. Salivation would soon commence. If it became excessive, the administration of mercury was to be temporarily discontinued. Otherwise, the patient was to receive regular treatments with mercury, and they were to continue for eight to ten days. Monro discussed various alternative treatments, particularly the Montpellier method, which involved a regimen of warm baths, followed by mercurial inunction that lasted for a number of weeks. He noted the use of several medicines, perhaps the most celebrated of them being Keyser's Pills. The pills were, by royal order, used generally in French military hospitals, and consisted of mercury, purified and calcined, in vinegar, with manna. Monro claimed that the salts then in use were mostly mercury dissolved in marine acid, hence dangerous, so seldom used by cautious practitioners.

### **Therapy -- gonorrhoea -- Hunter:**

Reviewing the common modes of treating gonorrhoea, Hunter noted that evacuants (mainly purgatives and diuretics) and astringents were widely used, but that there was considerable variety in the particular drugs used, adding (of evacuants), "every practitioner supposes that he is in possession of the best." Mercurial evacuants were used by some, avoided by others. Hunter himself doubted that mercury was specific for gonorrhoea, noting that even patients under a mercurial course for lues sometimes contracted it. Nitre was popular, because in addition to encouraging urine it was thought to wash out the venereal poison and to fight inflammation (Hunter doubted that it possessed either



virtue. Noting a case in which gonorrhoea was reportedly cured by a calomel purge, Hunter ascribed the success of the treatment not to specific action, "but by a kind of derivation, that is, an irritation, produced in one part, curing one that subsisted in another." He warned that purges might weaken the patient and asserted that any evacuations, including those by saliva and sweat, were equally effective, "But humours having been considered as the universal cause of every disease, especially those in which pus was formed or a discharge produced, and purging having been supposed to be the cure for humours, purgatives were of course made use of in this disease; and as the patients have always been cured, the practice became generally established." Instead of diuretic drugs, Hunter advised water or tea. Astringents, according to Hunter, were criticized by those who thought that reducing discharges held in the disease, which might then convert to syphilis, but he suggested that an astringent specific to the genital region, like a balsam, might, when coupled with other medicines, reduce irritation as well as discharge. The presumed success of gonorrhoea treatments allowed for a variety of theory and practice, as Hunter acknowledged: "Under these different modes of treatment the patients always get well, and the cures are ascribed by each practitioner to his own method of treatment."

### **Therapy -- conspectus:**

Like Monro, most major writers on syphilis boosted mercurials. While noting claims to the contrary, Sydenham wrote, "I think no Instance can be produced where this Disease was eradicated any other way than by Salivation with Mercury." Astruc deprecated writers like Abercromby who proposed regimens that did not incorporate mercury, and while he conceded that massive salivation was not always necessary to a cure, he advocated it in most cases. The last third of the century saw a move away from requiring salivation.

Sydenham treated gonorrhoea primarily with purgatives. Most writers followed him in prescribing treatments that were rather mild. Some degree of bloodletting, especially at the outset, was common advice -- by Monro and the author of *London Practice*, for example -- but venesection was not a focus in treatment, as it was for many other diseases. Cullen did not mention it in his therapy, and

indeed, as has been noted, he did not believe that medical intervention was always needed. Patients could generally recover, he wrote, "by avoiding exercise, by using a low and cool diet, by abstaining entirely from fermented and spirituous liquors, and by taking plentifully of mild diluent drinks."

Although writers on venereal disease believed that syphilis and gonorrhea could generally be cured, they noted that it was tedious. Buchan cautioned that virulent gonorrhea could not be cured both speedily and well. He recommended 5-6 injections per day with an astringent solution of sugar of lead in rose water. Beyond that, he recommended diuretics and purgatives, as well as baths and fomentations. He cautioned against trying stop the running prematurely, for this might cause the disease to become more deeply rooted. Although he allowed some role to mercurials in the treatment, this was mainly if the gleans proved stubborn. In general, however, he advised that astringents would tighten the body sufficiently to end discharges. He also made use of venesection, both for gonorrhea and for the swelled testicles and buboes that sometimes accompanied it. For syphilis, he saw mercury, and that alone, as a certain cure.

The key debate in the treatment of syphilis was not over the use of mercury but whether it was necessary to bring the patient to salivation in order to effect a cure. Prior to 1750, practically all writers who advocated mercury claimed that the patient had to salivate to be cured. A turning-point came in 1767, with the publication in English of a treatise by the Austrian physician, Joseph Jakob Edler von Plenck. Building on Astruc and Van Swieten, von Plenck argued that mercury was effective against venereal disease because it killed the virus. He recounted the health risks and mental anguish associated with a full mercurial course -- five or six weeks of almost constant salivation, severe weight loss, fear of suffocation -- and argued that salivation was unnecessary to the process, since mercury and the virus could be more easily eliminated through sweat, stool, and urine. He also recommended mixing mercury with gum Arabic, which his experiments had shown was closest in nature to the human mucus that mercury tended naturally to join. This gummy mercurial allowed the patient to consume large doses of mercury, with little risk of a salivation.

Even after the publication of Plenck's treatise, many older writers, like Monro, continued to

advocate salivation. Parr advised that salivation might be dispensed with, but only if it appeared that the mercury that had been introduced into the patient's system was being eliminated through sweat and urine. If need be, he advised, salivation might be promoted by rubbing calomel of the patient's gums. But younger practitioners tended to move away from it. MacBride was both a strong advocate of mercury and an opponent of salivation. He observed, "It is sufficiently well known, that mercury is the chief, and indeed the only thing on which we can depend for a cure, whether it be introduced through the pores of the skin in the form of ointments, plasters, washes, or fumigations, or whether it be given by the mouth, disguised in a hundred different shapes of pills, troches, powders, or solutions." He added, however, "Formerly it was held as a rule, that a salivation ought to be raised, and a general discharge excited, but this is now found to be unnecessary; for, as mercury acts by some specific power in subduing and correcting the venereal virus, all that is required, is to throw in a sufficient quantity of the medicine for this purpose; and if it can be diverted from the salivary glands, so much the better, since the inconveniencies attending a spitting are such as we should always wish to avoid." Swediaur also claimed that patients could be cured without salivation. At the same time, he recognized that many patients believed that in order to be cured they had to salivate, and he urged practitioners not to give in to their demands: "I am of opinion, that no person of integrity, who practises medicine, should ever comply with the prejudices of his patients when they may be hurtful to them, or when he knows that by a contrary method he is able to cure them with greater certainty and safety." Patients, he noted, were attracted to the use of salivation because it promised a speedy cure, and he conceded that this was so, but asserted that the cure without salivation was much safer.

Dr. John Hunter found venereal disease to be less common but cases of it to be more virulent and more difficult to cure than in Europe. He reported that Europeans in the Indies were sensitive to mercurials, so they began to salivate before they had received the desirable quantity of mercury. To prevent premature salivation, he used bark, opium, and an astringent gargle.

**Sources:**

Pringle to Mitchell, [Brussels,] 20 Dec. 1743, BL, Add. 6861, f. 207; Astruc, *Treatise of the Venereal Disease*, II, 415-16; Buchan, *Domestic Medicine*, pp. 365-82; Cullen, *First Lines of the Practice of Physic*, III, 344-62; Cullen, *Synopsis and Nosology*, pp. 73-74; James, *A Medicinal Dictionary*, under “valeriana”; Leonard J. Goldwater, *Mercury: A History of Quicksilver* (Baltimore: York Press, 1972), ch. 15; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 62; Hunter, *Observations on the Diseases of the Army in Jamaica*, pp. 284-87; Hunter, *Treatise on Venereal Disease*, pp. 67-69; James, *A Medicinal Dictionary*, under "gonorrhoea," "lues veneris"; *London Practice of Physic*, pp. 101-02, 108-09; MacBride, *Methodical Introduction to the Theory and Practice of Physic*, pp. 627-34; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 144-45, 214-54; Parr, *London Medical Dictionary*, I, 711-15, 882-87; Joseph James Plenck, *A New and Easy Method of Giving Mercury, to Those Affected with the Venereal Disease.: To Which is Annexed a New Theory of the Action of the Metal on the Salivary Glands*, trans. William Saunders (London: E. and C. Dilly, 1767), pp. 39-41; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 457 ("lues venerea"), 789-94; Swediaur, *Practical Observations on Venereal Complaints*, Sydenham, *Whole Works*, pp. 245-65.

## *APPENDIX B-2*

### *ADDITIONAL NOTES ON SURGICAL OPERATIONS*

As in App. B-1, the entries here are intended only to supplement the footnotes that appear in *RP*. They are likewise intended to place Buchanan's practice in context. However, the Buchanan journal deals mainly with medical practice. Buchanan refers to a rather small range of surgical operations and provides notes on his practice for only four -- slightly, in the case of amputations, and in somewhat greater detail on how he treated dislocations, fractures, and gunshot wounds.

#### *Amputation:*

Latta wrote of amputation: "As this operation is one of the most important, as well as the most common in surgery, the attention of practitioners have been drawn towards it more than any other; and hence we may justly conclude that it is in a state as much improved, or perhaps more so, than perhaps any of them." Prior to the 17<sup>th</sup> century, amputation above the knee was very rare, somewhat limiting the problem of bleeding, since it could be contained by cautery or ligation. The massive bleeding associated with thigh amputation could not, however, be controlled by these means. Another problem with ligation as practiced by Paré was that the crow's bill, an instrument that he used to draw out vessels for ligation, sometimes damaged them. But these problems were largely surmounted by the development of the garrote during the 1670's and the introduction by Jean Louis Petit, in 1718, of the screw tourniquet.

The triumph of ligation over cautery in the 17th century and the popularization of the screw tourniquet made the operation far safer. Latta asserted that "according to the methods now discovered, not one in thirty will be in any danger from this operation" and reported that he had performed more than 50 amputations and not only had all patients survived but no cure had taken more than a month and every stump had been perfect. Ring wrote in 1798: "It is well known that surgery is greatly improved

of late years." The greatest recent innovation, he claimed, was "that of healing by the first intention in the greater operations [cf. n. 610], and particularly in the flap operation for the leg; an improvement which preserves the use of the joint of the knee."

In amputation, it was regarded as important to leave enough skin and muscle as was necessary to cover the bone and heal over it. Alanson appears to have felt that army and navy surgeons were especially negligent in leaving behind a sufficiently large flap of skin and reported that he had heard of instances where they had left the bone protruding. Alanson's technique was in fact controversial. Bell was critical because of the difficulty and because it left a hollow of flesh that could retain matter. The use of a flap, he claimed, was first recommended about 100 years before by a British surgeon named Loudham – Alanson also credited Loudham – and had been adopted by many Continental and some British surgeons (James credited Celsus with making use of a flap). It was not used more widely because of the problem with flap hemorrhaging, not adhering uniformly over the stump, though O'Halloran's methods answer these concerns. A flap was often desirable, but not always necessary.

John Carrick Moore observed, "The strongest objection made to the ingenious manner of amputating limbs, invented by Mr. Allanson of Liverpool, is, that it takes up longer time than the common method, and of course keeps the patient longer in torment." Moore, who had developed a nerve clamp, added that he hoped his invention would remedy the problem inherent in Alanson's method. To further reduce pain, Bromfield recommended that, instead of sewing, the severed vessels be pulled forward with a tenaculum, then tied with a flat ligature, to prevent slipping. He cautioned against the use of agaric or other styptics and against binding nerves with vessels, two practices that he regarded as being unnecessarily painful.

Bilguer claimed amputation was seldom necessary. Bell felt that he went too far, and his plan resulted in unnecessary pain and danger for the patient. Bell felt that the amputation should take place when contusion or laceration of muscle tissue was very extensive, when the bones of a joint were splintered, or when a large bone is shattered throughout its length and surrounding tissue is extensively lacerated. He, too, felt, however, that except in these cases efforts should be made to save the limb.

In the case of a battlefield wound, in which there was a compound fracture of the humerus or thigh, or when both bones of the forearm or leg were broken, the surgeon should amputate, because of the danger of the wound and because no "attention [could] be give to lessen it," though in civilian practice he might attempt to save the limb. Noting that Bilguer reported such limbs being saved, he noted, "like every prejudiced inquirer, he states it partially," and argued that not even a few cases like this negated the rule. Sharp probably set the standard of practice, emphasizing the importance of stopping mortification. Gunshot wounds and compound fractures (cf. n. 510), he asserted, demanded immediate amputation.

### **Sources:**

Edward Alanson, *Practical Observations on Amputation, and the After-Treatment: to Which is Added, An Account of the Amputation above the Ankle with a Flap: The whole illustrated by Cases*. 2nd ed., enl. (London: Joseph Johnson, 1782), pp. x, xix, 6; Bell, *System of Surgery*, III, 365-69, and IV, 165-66, 277-83, 288-90; Bromfield, *Chirurgical Operations and Cases*, I, 158-65; James, *Medicinal Dictionary*, under "amputation" and "styptica"; Latta, *Practical System of Surgery* (Edinburgh: G. Mudie & Son [etc.], 1795), III, 586-87, 591; James Carrick Moore, *A Method of Preventing or Diminishing Pain in Several Operations of Surgery* (London: T. Cadell, 1784), p. 41; John Ring, *Reflections on the Surgeons' Bill* (London, 1798), p. 45; Sharp, *Treatise on the Operations of Surgery*, pp. 214-22; Wangensteen and Wangensteen, *Rise of Surgery*, pp. 18-34.

### **Fractures:**

A common problem in the treatment of fractured limbs, particularly legs, was that they healed crooked. Bell himself was rather fatalistic about this, commenting that although either the surgeon or the patient might be to blame for badly healed bones, location and nature were more often responsible. Bromfield asserted that while a limb that had suffered a compound fracture might heal crooked or short,

"any natural leg is better than a wooden one." In 1800, Charles James Napier, then a staff officer of 17, suffered a compound fracture of his right leg. Although the doctors saved the leg, when healed it "flew off in a huff, at a tangent." The doctors offered to break it again or otherwise straighten it, and after some uncertainty Napier agreed. "Be quick, quoth I as they entered, make the most of my courage while it lasts. It took all that day, and part of the next to bend the leg with bandages, which were tied to a wooden bar, and tightened every hour day and night; I fainted several times." Nevertheless, by this means the leg was straightened.

Compound fractures of the limbs were often followed by prompt amputation. One that challenged this convention was Benjamin Gooch, who advocated saving the limb by removing only splintered bone. To demonstrate the success of his method, Gooch published a letter that Charles Hall, surgeon to the 14th Foot, had sent him from Halifax in June 1768. Hall related that when a soldier had suffered a compound leg fracture, he had sawn off 2-3" of fractured tibia, then dressed the limb according to Gooch's method: "the whole limb was wrapped up in a poultice, extended upon a pillow, using the tailed bandage and a stiff paper case, with the assistance also of junks, in order to keep it straight and more steady. By the common treatment of the wound it was perfectly cicatrized in three months, and now, about five months since the accident, the callus is perfectly ossified, the man in good health, the limb useful and well shaped, and but very little shorter than the other." Hall noted, "granulations appeared like flesh in the intermediate space, gradually becoming bone as you have observed." He concluded, "I am persuaded was this rational practice general, few limbs would require amputation on account of splintered bones; and happy would it be indeed, did this method prevail universally in the army and navy." Gooch recalled a similar case and maintained that he had never had to amputate for compound fracture.

**Sources:**

Bell, *System of Surgery*, IV, 115-16; Bromfield, *Chirurgical Observations and Cases*, I, 44; Gooch, *The Chirurgical Works of Benjamin Gooch*, "new" ed., (London: J. Johnson, 1792), III, 101-04; Napier, *The*



*Life and Opinions of General Sir Charles James Napier, G.C.B.*, ed. (Sir) W. Napier (London: John Murray, 1857), I, 14-15.

### **Gunshot Wounds:**

Ranby asserted that it was often necessary to enlarge a wound in extracting the ball. If the ball had gone through, both orifices were to be dilated, but only if safe. The surgeon was to minimize probing, since it might cause further damage. If possible, he was to use his finger as a probe. If the ball was near an orifice, it was to be removed immediately. If it could be seen or felt, though not near an orifice, his advice was to cut; "But, when it is sunk deep, and lies absolutely beyond the reach of the finger, I could never bring myself to thrust a pair of long forceps the Lord knows where, with scarce any probability of success." Ranby advised against the use of a metal probe, with or without teeth, since it could do great damage, especially if it hit a blood vessel or membrane, as it usually would, and might further cause inflammation. He noted that deeply imbedded balls often, over time, worked themselves to the surface, and cited several cases in point. Ranby pointed out that if a ball ruptured a major vessel, it must be closed with a needle; otherwise, however, bleeding was good. He emphasized the need for speed, arguing that rapid treatment was much more humane than transporting badly wounded men. He likewise recognized the need for aftercare, noting that wounded arteries often reopened, especially when slough separated.

Sharp likewise counseled against probing, unless the ball was easy to remove, and he took a strong position against tenting. Heister believed that gunshot wounds should be dilated quickly, before they contracted and made cleaning difficult. All splinters of bone were to be removed, as were musket balls and other foreign objects. The dilated wound was then allowed to bleed, expelling grumous blood that might otherwise putrefy. He recommended probing wounds with the fingers, using instruments only where necessary. Once the wound was free of foreign matter, his practice was to smear it with a

digestive made from turpentine and egg yolk, then to pack it with lint.

Hunter, however, argued for less intrusive therapy. He reported, "It has been hitherto recommended, and universally practised by almost every surgeon, to open immediately upon their being received, or as soon as possible, the external orifice of all gun-shot wounds made by musket-balls." However, while he noted that such practice might be necessary in some cases, he argued against opening, and against tenting, on the proposition that wounds should not be enlarged. He further maintained that, apart from compound wounds, "very few wounds of any kind require surgical treatment," and he noted the cases of several British and French soldiers who had been wounded at Belleisle and had healed well, despite receiving little professional attention. He also advised against searching for the musket ball and noted that most surgeons had in fact abandoned the practice, realizing that the balls did no additional harm if left alone. Reporting that it was standard to bleed for gunshot wounds, but he advised that this was desirable only in cases where it would be done in other wounds (i.e., where the patient was of strong and full habit, and inflammation and symptomatic fever were likely).

Bell echoed Hunter when he advised that enlarging the orifice was seldom necessary, and might cause harm. In other major respects, however, the therapy that he outlined recalled Randy's. The surgeon was to let blood, to lessen the risk of gangrene and inflammation, then remove bullet, unless it was lodged in a bone. He was to cover the wound with a pledget of wax and oil, and with poultice of bread and milk (not the stimulating dressings that according to him were often used); lead dressings, such as wax ointment impregnated with *saccharum saturni* (a favorite of Bell's), were preferable in some cases. Bell advised changing the poultice often, to encourage suppuration and minimize the threat of gangrene. If there was too copious a discharge and inflammatory symptoms had ceased, the patient was to receive bark. Opium might be used to treat pain and irritation. Surgeons were to be wary of bleeding, especially a large artery, but if there was throbbing in wounded part, they were, he suggested, to forestall hemorrhage by bleeding.

**Sources:**

Bell, *System of Surgery*, III, 354-65; Heister, *Medical, Chirurgical, and Anatomical Observations*, obs. 51 (pp. 58-59); Hunter, *Treatise on Blood*, pp. 246-62, 282-88; Ranby, *Method of Treating Gun-Shot Wounds*, pp. 5-33; Sharp, *Treatise on the Operations*, xii-xiii.

**Lithotomy:**

For centuries, the standard procedure for removing bladder stones was similar to the one described by Celsus, which, because of the limited tools employed, was commonly called "the operation by the Lesser Apparatus." In this operation, the surgeon put his finger in the patient's anus, fixed the stone against the peritoneum, then cut a semilunar incision from the anus to a point over the stone, and popped it out. This operation (sometimes called "on the gripe") was endorsed during the 18th century by several authorities, notably Heister, but Bell criticized it on several grounds: that despite the claims by proponents, the urethra and other ducts were cut (Bell determined this by operating on corpses); during the operation, urine was forced into the body; the operation was suitable only on infants.

In the period 1500-20, Johannes de Romanis and his student, Marianus, developed a procedure known as the *Methodus Mariana*, "Lithotomy by the Greater Apparatus," or the "High Operation." In this operation, forceps and other instruments were inserted through the incision to remove the stone. Bell regarded this procedure as an improvement, although in 1727 a French writer claimed that only 5-6 of every 20 patients survived, and that even they were often left incontinent or with other complications.

A major shift in procedure occurred when the "Lateral Operation" was developed. This operation was generally credited to an itinerant lithotomist, "Frere Jacques" (Jacques de Beaulieu), who reputedly introduced it in Paris in 1697, but lost so many patients that he was disgraced. During the first half of the 18th century, however, the operation was refined and popularized by Rau and Cheselden.

In Cheselden's final version, the operation consisted of introducing a curved bistoury above the prostate, then pulling it toward him, cutting the prostate on the way. Contemporaries reported that he usually performed the entire operation in less than 30 seconds. Even as refined, however, the operation continued to be attended by significant mortality, especially when carried out by less competent surgeons. The invention of the cutting gorget by Sir Caesar Hawkins made the operation, according to Chevalier, safer and less painful.

**Sources:**

Bell, *A System of Surgery*, I, 325-43; Thomas Chevalier, *Observations in Defence of a Bill Lately Brought into Parliament, for Erecting the Corporation of Surgeons of London into a College; and for Granting and Confirming to Such College Certain Rights and Privileges: Including a Sketch of the History of Surgery in England*. (London: J. Johnson and J. Debrett, 1797), p. 57n; Heister, *Medical, Chirurgical, and Anatomical Observations*, obs. 26 (pp. 30-33); James, *Medicinal Dictionary*, under "lithotomia"; Wangensteen and Wangensteen, *Rise of Surgery*, pp. 69-76.

## ***APPENDIX C-1: SIMPLES AND COMPOUND DRUGS REFERRED TO BY BUCHANAN***

In this appendix, I will be making reference to two groups of sources that are intended to roughly index popular usage of particular medicinals during the period 1650-1730 and the frequency with which they were ordered or dispatched for use of the army when it served abroad during the 18<sup>th</sup> century. Information in these categories of sources will for the most part not be separately cited in the sources that conclude each entry, though the results of the searches will be reported in the entries themselves. I will, however, give specific references for quotations. These categories are the following:

### A. Drugs used by the British Army when serving abroad

#### 1. The "Dispensatory"

"A Dispensatory for the Army Hospitals"; a general list of drugs for hospital stock, probably prepared winter 1746-47 [for shorthand purposes, I will refer to this as the dispensatory of 1746]

**Source:** Royal Archives, Windsor Castle, Cumberland Papers, Box 2.26, pp. 1-3

#### 2. The following will be referred to as "comparator lists"

Contents of two chests for regimental surgeons; 1703, Portuguese expedition: headed, "An Invoice of Druggs Medecines & Utensills for a Regiment of Foot"; dated at the Sick and Wounded Office, 28 Sept. 1703

**Source:** BL, Add. 38,710, ff. 74-75 (War Office correspondence, June-Dec. 1703)

"Invoice of Medicines & Instruments for a pair of Regimental Chests for 1747"

**Source:** Royal Archives, Windsor Castle, Cumberland Papers, Box 2.26, pp. 10-

11

"Invoice of Medicines &c. for the Expedition to Portugal, April 3d. 1762"

**Source:** WO 4/68/240

"Invoice of Medicines &ca:": dated Coxima Camp, July 15, 1762; endorsed, "We whose Names are underwritten do certify the above Invoice of Medecines and Materials to be wanted for the Service of the British Hospital, with the Expedition under the Command of The Earl of Albemarle. [names listed, but not autographs, suggesting this document is a copy] Clifton Wintringham [,] Rd: Huck Physician[,] Hugh Alexander Kennedy[,] Danl: Mandeville[,] Pat: Fergus Apoth:": Townshend directed Garnier to fill the order, War Office, Sept. 11, 1762.

**Sources:** WO 4/70/100, 101.

"Invoice of Medicines, Instruments &c for His Majesty's Hospitals in North America for the Year 1763"; order for these items submitted by John Adair and Robert Bass, New York, Sept. 21, 1762, and was sent on, with authorization to fill, by Townshend to Garnier, War Office, Oct. 28, 1762.

**Sources:** WO 4/70/261, 262.

"A List of Medicines wanted for the Use of the Army in the Island of Martinico and its dependences"

**Source:** WO 4/71/60.

"Invoice of Medicines Instruments & Materials for the use of his Majesty's Forces under Lieutenant General Sir William Howe For the year 1778"

**Source:** Clements, Germain Papers.

"Invoice of Medicines Instruments & Materials for the use of his Majesty's Hospitals in Canada for the year 1778"

**Source:** Clements, Germain Papers

"The Dispensatory," 1797

**Source:** *Regulation for Improving the Situation of Regimental Surgeons and Mates, and for the Better Management of the Sick, in Regimental Hospitals* (Dublin, 1797), pp. 12-14.

"Invoice of a Full Regimental Chest of Medicine, &c. May 1, 1797"

**Source:** *Ibid.*, pp. 15-17.

B. Drugs used in popular medicine, c. 1650-c.1780

The "Welcome Sample" will be my shorthand designator for a set of manuscripts from the Wellcome Historical Library. David Cowan kindly sent me these materials on microfilm. Most of the manuscripts can be dated only approximately, by the hand in which they are written. They provide a rough index to popular medicine, but particularly to elite usage, and many recipes are associated with notables (e.g., "The Lady Hewitts Cordiall Water"; "My Lady Marlborough Plague Water").

The Cowan microfilm provides designators for the manuscripts that were superseded when S. A. J. Moorat, keeper of western manuscripts at the Wellcome Institute, renumbered the

collection during the 1960s. Moorat's new numbers, but not the ones on the Cowan microfilm, are provided in his *Catalogue of Western Manuscripts on Medicine and Science in the Wellcome Historical Medical Library*, II (mss. written after 1650), (London: The Wellcome Institute of the History of Medicine, 1973), 2 parts. Christopher Hilton, senior archivist at the Wellcome Library, has been kind enough to try to reconcile Moorat's numbering with that in the microfilms and has succeeded as regards about half of the manuscripts in question. If I succeed in reconciling the remainder, and I will post this information on the Web.

The manuscripts that I have referred to in preparing this appendix are the following. Those items marked with an asterisk (\*) are designated by numbers that have not been reconciled with Moorat's numbering, and the descriptions given are mine; otherwise, the catalogue numbers come from Moorat, and the notes are based on his.

Ms. 76\*: recipes, late 17<sup>th</sup>/early 18<sup>th</sup> centuries

Ms. 142: recipes, purportedly translated from French; c. 1660

Ms. 397\*: recipes, 17<sup>th</sup> century

Ms. 655\* recipes, 17<sup>th</sup> c.

Ms. 674\*. recipes, 18<sup>th</sup> c.; some dated, the latest being 1773

Ms. 1071: select recipes of Lady Barrett, c.1700 (Moorat, *Manuscripts on Medicine*, II, part 1, 75)

Ms. 1162\*: recipes, early 18<sup>th</sup> c.

Ms. 1330\*: recipes, late 17<sup>th</sup> c.

Ms. 1417\*: recipes, late 17<sup>th</sup> c.

Ms. 1445\*: recipes, late 17<sup>th</sup>/early 18<sup>th</sup> c.

Ms. 1590\*: recipes, 17<sup>th</sup> century

Ms. 1710: recipes, apparently recorded by W. Coleman, 1657 (Moorat, *Manuscripts on Medicine*, II, part 1, 238)



- Ms. 1859\*: recipes, 17<sup>th</sup> c., including some in French, some in Latin; many hands.
- Ms. 1981\*: recipes, late 17<sup>th</sup>/early 18<sup>th</sup> c.
- Ms. 2030\*: recipes, 17<sup>th</sup> c.; ms. endorsed, perhaps prepared, by "W.H."
- Ms. 2040\*: recipes, 17<sup>th</sup> c.
- Ms. 2088: alphabetical list of diseases and their remedies, 17<sup>th</sup> c.; inscribed Dr. [William] Deed[e]s, 1688, on front page (Moorat, *Manuscripts on Medicine*, II, part 1, 323)
- Ms. 3614: a version of "Tippermalloch's Receipts," an early-18<sup>th</sup>-century work authored by John Moncrieff of Tippermalloch; this work was published in 1712; the Wellcome ms. dates from c. 1725 (Moorat, *Manuscripts on Medicine*, II, part 1, 741)
- Ms. 4048: a collection of more than 600 recipes, in two parts, dated 1670 (Moorat, *Manuscripts on Medicine*, II, part 2, 867)
- Ms. 4051: recipes, most prob. late 17<sup>th</sup> (accounts that are included are dated 1695-96), but one dated 1438; culled from various sources (Moorat, *Manuscripts on Medicine*, II, part 2, 868)
- Ms. 4054: recipes (many are for cookery, though only medicinal recipes are included in my sample), c. 1690-1710 (Moorat, *Manuscripts on Medicine*, II, part 2, 869)
- Ms. 4055: recipes, early 18<sup>th</sup> c. (Moorat, *Manuscripts on Medicine*, II, part 2, 869)
- Ms. 4056: recipes, c.1720 (Moorat, *Manuscripts on Medicine*, II, part 1, 869)
- Ms. 4382: Sir Charles Scarborough (1616-1694); case histories and recipes, 1678-94 (Moorat, *Manuscripts on Medicine*, II, part 2, 954)
- Ms. 4887: recipes; ms. endorsed, perhaps in part prepared, by James Tyrrell (1642-1718); several hands; late 17<sup>th</sup> c. (Moorat, *Manuscripts on Medicine*, II, part 2, 1071)

### ***Absinthium* (wormwood)**

Three different species of wormwood were official in the mid-18th century, but the type that Buchanan probably used was *absinthii vulgaris*, or common wormwood (*L. Artemisia absinthium*). Another species widely used medicinally was sea wormwood, which grew in British salt marshes. In the 1746 edition of *Pharm. Lond.*, one of the varieties, Roman wormwood, was dropped, a decision that upset Hill and Alston, who regarded the former as at least as good as other varieties and readily available.

The juice extracted from the leaves of wormwood had been valued as an astringent, bitter, tonic, purge, and diuretic since the time of Galen and Dioscorides. In the 18th century it was used to treat many illnesses, among them ague, jaundice, dropsy, and diarrhea. A number of authorities of the period praised it, including Boerhaave, Haller, and Alston, but Cullen believed the claims made for it to be exaggerated. Some writers claimed that it overtaxed the nervous system of patients, and Simon Pauli warned that prolonged use of this and other bitters could cause consumption. Quincy claimed that it harmed the vision of many patients, by drying up the "animal juices" needed by their optic nerves.

#### *Conserva absinthii:*

London directions for preparing medicinal conserves were standard. The active ingredient was pulverized, then beaten with three times its weight of double-refined sugar. In 1746, the College ordered that the conserve be made with sea wormwood. Hill regarded conserve of wormwood (he preferred the Roman variety) as "a very good stomachic ... so pleasant that it may be eaten in any Quantity."

*Absinthii vulgaris* is listed in the "Dispensatory" of 1746, but not in any comparator list. It appears, however, that at least until the 1770's wormwood played a prominent role in army medicine, and in *Practice of the British and French Hospitals* it is noted as an ingredient (in several cases, the main one) in seven compound drugs. Nevertheless, in professional practice, the offensive odor and

taste of wormwood juice caused its popularity to decline in Britain during the latter half of the century, and by 1800 it was mainly used as a tonic, or externally as an antiseptic or in discutient fomentations. On the other hand, salt of wormwood, which was prepared by heating ash in order to extract the oil, then boiling, filtering, and evaporating the remainder, seems to have retained a fair degree of popularity, especially as an antiemetic. During the 17<sup>th</sup> and early 18<sup>th</sup> centuries, wormwood and its simple preparations were hugely popular, being included in 326 recipes in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 67-72; Brookes, *General Dispensatory*, pp. 1, 231; Buchan, *Domestic Medicine*, p. 112; Cullen, *Treatise of the Materia Medica*, II, 55-56; Hill, *History of the Materia Medica*, pp. 353-54; James, *Medicinal Dictionary*, under "absinthum"; Kirkland, *Inquiry into the Present State of Medical Surgery*, I, 227; Richard le Strange, *A History of Herbal Plants* (New York: Arco Publishing Co., Inc., 1977), pp. 34-39; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 82-83; Mead, *Medical Works*, pp. 243, 383; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 22; *Practice of the British and French Hospitals*, pp. 42-43 ("an anti-splenetic diet-drink with steel"), 44 ("A decoction against vomiting and fevers; cf. *RP*, n. 119), 46-47 ("a chalybeate electuary"), 55 ("a saline draught"), 58 ("a bitter infusion"), 58 ("a bitter infusion with steel"), 64 ("a saline mixture"cf. *RP*, n. 119), Robert White, *Analysis of the New London Pharmacopoeia: Explaining the Nature, Principles, Elective Attractions, Qualities, Uses, and Doses of the various Preparations and Compositions contained therein; and particularly calculated for the Use of the Junior Students* (Newmarket: T. Cadell, 1792), p. 34; William Woodville, *Medical Botany: Containing Systematic and General Descriptions, with Plates, of all the Medicinal Plants, Indigenous and Exotic, comprehended in the Catalogues of the Materia Medica, as Published by the Royal Colleges on Physicians of London and Edinburgh: Accompanied with a Circumstantial Detail of Their Medicinal Effects, and of the Diseases in which They have been Most Successfully Employed* (London: James Phillips, 1790-94), II, 328-30.

### ***Acetum/vinegar***

*Acetum distillatum*, the official form, was prepared by boiling wine that had undergone a second fermentation, discarding the first and last distillates. Vinegar had played a significant role in ancient medicine, with Dioscorides and Galen both finding it useful in a number of ways. Among other qualities, the Greeks esteemed vinegar as an anti-putrefacient, and this, reinforced by the 18th-century interest in "antiseptics," helps to account for its widespread use against diseases that were regarded as putrid.

Boerhaave recommended vinegar as a reliable sudorific and diluent, to use in treating bilious fevers, pestilence, and malignant distempers. Pringle considered it a fine preservative that kept the blood pure, as well as an excellent coolant in inflammatory fevers (cf. *RP*, p. 85). Lewis was another strong advocate, especially of wine vinegar: "Vinegar is a medicine of excellent use in all kinds of inflammatory and putrid disorders, either internal or external." It was also highly regarded as a stomachic, and its stimulating qualities encouraged its use against vomiting and putrid diseases like scurvy. Vinegar was not only used to treat diseases but to ward them off, especially putrid forms. It was sprinkled on bedding in sickrooms and was used to wash down the walls. It was used to cleanse joul air and water. Vinegar was also widely used in external applications, notably as a resolvent (cf. *RP*, pp. 209, 211) and astringent (cf. *RP*, p. 123). It was applied to burns and scalds, and was included in cataplasms for sprains and lotions for inflammations. It was used to cleanse wounds. Outwardly as well as inwardly, vinegar was often intended to stimulate. But beyond specific applications, vinegar was regarded by many as a panacea and in consequence was broadly applied. Vinegar was a common gargle for sore throat. Like many other acids, it was used as an antiscorbutic, and it was sometimes recommended (by Buchan, among others) to treat the bite of a mad dog. Leigh claimed that it corrected opium, and it was also used to relieve drunkenness. Wesley recommended sniffing it to counter lethargy and cure lunacy, while Heister advised that surgeons should keep it handy to revive patients who fainted while letting blood. Latta thought it a useful dentifrice. Shaw, who was slow to commend drugs, wrote that vinegar did "a thousand things, both as a medicine and a menstruum," that other acids did not. Vinegar was also included as an active ingredient in a vast range of preparations. The author

of Considerations on ... Antimonial Medicines in Fevers commented, "The best common drink in fevers, whether inflammatory or putrid, is whey made with vinegar, which, if no more vinegar be used than is necessary to turn the milk, is perfectly sweet and palatable" (cf. *RP*, interleaf #2, pp. 297-98). Mixed with water, vinegar was valued as a thirst quencher. Furthermore, along with water and wine, it was one of the three primary menstrua used in medicine. Virtually all 18th-century authors valued vinegar, but some also advised caution in using it. Hooper asserted that excessive use could weaken the stomach and perhaps cause tuberculosis. Cadogan claimed that vinegar encouraged overeating. Brookes wrote that it was harmful to children, the elderly, hysterical or hypochondriac individuals, and generally to those who were phlegmatic, with languid circulation and lax vessels.

Acetum distillatum is included in the "Dispensatory" and in six comparators, but in fact vinegar was ubiquitous in the British Army, and it was used not only in medical practice but by the soldiers. No item was more often cited in reference to the health of armies. Vinegar had been used by soldiers to ward off disease as early as the Roman period; indeed, de Saxe credited the health of Roman soldiers to their use of vinegar and criticized contemporary officers for not encouraging its consumption by troops. Jervy observed, "Water acidulated with vinegar, we know was the drink of the Roman armies; they in this manner correcting its bad quality, and preventing putrid disorders." Pringle also saw it as useful in preventing diseases and recommended providing it to the troops in any form in which they would consume it. It was indeed a standard ration in the British army. Vinegar was likewise a staple of popular medicine. It is included in 491 of the preparations in the Wellcome sample.

**Sources:** James Anderson, *A Few Facts and Observations on the Yellow Fever of the West Indies: By Which It is Shewn, That There have Existed Two Species of Fever in the West-India Islands* (Edinburgh: William Mudie [etc.], 1798), pp. 26, 33; Beddoes, *Observations on the Nature and Cure of Calculus*, p. 249; Brocklesby, *Oeconomical and Medical Observations*, p. 59; Brookes, *General Dispensatory*, p. 3; extract of letter from George Brown to John Hope, Sept. 14, 1776, *Medical Commentaries*, 2 (1774), p. 237; Bruce, *Inquiry concerning the Cause of the Pestilence*, p. 111; Buchan, *Domestic Medicine*, pp. 80, 118, 119, 149, 151, 152, 165, 187n, 208n, 264, 334-35, 347, Cadogan, *Dissertation*

on the Gout, p. 36; Cheyne, *An Essay of Health*, pp. 58-59; *Considerations on the Use and Abuse of Antimonial Medicines in Fevers, and Other Disorders* (London: John Murray, 1773), p. 45; Cullen, *Treatise of the Materia Medica*, I, 308, and II, 392; Culpeper, *Pharmacopoeia Londinensis*, pp. 21, 111; Hamilton, *Duties of a Regimental Surgeon Considered*, II, 20, Healde, *New Pharmacopoeia*, p. 7; Heister, *General System of Surgery*, I, 295; Huxham, *Essay on Fevers*, pp. 81-82, 107, 138; Huxham, *Observations on the Air and Epidemic Diseases*, II, 177-78; James, *Medicinal Dictionary*, under "acetum"; William Jervey, *Practical Thoughts on the Prevention and Cure of the Scurvy* (London, 1769), p. 45; Latta, *Practical System of Surgery*, II, 402; Leigh, *An Experimental Inquiry into The Properties of Opium*, pp. 118-19; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 83-84, 336-37; Mead, *Medical Works*, p. 212; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 19, 32, 35, 37, 69, 96, 100, 102, 121, 127, 142, and II, 141, 187; Parr, *Medicinal Dictionary*, II, under "obecitas"; Pearson, *Outlines of Lectures*, I, 18; *Practice of the British and French Hospitals*, pp. 42 ("a mustard-seed cataplasm"), 57-58 ("a gargle"); 58 ("a bitter infusion with steel"), 60 ("a diaphoretic julap"), 69 ("blistering plaister"), 72-73 ("Mindererus' spirit"); Pringle, *Observations on the Diseases*, pp. 113-14; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 8-9; Rowley, *Medical Advice, for the use of the Army and Navy*, p. 5; *The Dispensatory of the Royal College of Physicians in Edinburgh*, trans. and annot. Peter Shaw (London: William and John Innys, 1727), p. 67n; Tissot, *Advice to the People in General*, pp. 22n, 31, 127; Van Swieten, *Diseases incident to Armies*, pp. 8, 91; Wesley, *Primitive Physic*, pp. 112, 114, 137, 146, 149.

*Aethiopsis mineralis*; see under mercurials

### **Almonds:**

Almonds were especially associated with the Barbary coast, though they were also cultivated in southern Europe. Dioscorides did not note almonds, but Pliny did. Two varieties, the bitter and the sweet, were official in the 18th century. Sweet almonds were sometimes eaten to relieve heartburn.

Oil was pressed from both varieties, though some authorities regarded the oil of bitter almonds as more resolvent, therefore preferable for external use. Oil of almonds was given inwardly for a host of reasons, among them being: to relieve heartburn, inflammation, hot urine, coughs, and gripes; as a diuretic and laxative. In an enema, the oil was used to lubricate the intestines and to promote "the ejection of indurate feces" (Lewis). Oil of almonds was often administered externally, especially to relieve rigidity in limbs, for it was considered anodyne and emollient.

Sweet almonds (*amygdalae dulces*), but not the bitter variety, are listed in the "Dispensatory" of 1746 and in four later comparator lists. Almond oil does not appear in the Dispensatory, but the oil of sweet almonds is included in two later comparators. Almonds or their oil appear in 154 recipes in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 249-52; Brookes, *General Dispensatory*, pp. 7, 348; Hill, *History of the Materia Medica*, pp. 479-81; James, *Medicinal Dictionary*, under "amygdalae"; Lewis, *New Dispensatory*, pp. 78, 255, 513; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 93-94, 303; *Practice of the British and French Hospitals*, pp. 56 ("the Arabic emulsion," "a chalk emulsion"), 61-62 ("an emollient linctus"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 44-45, 446; Salmon, *New London Dispensatory*, p. 128; Woodville, *Medical Botany*, II, 230-32.

### **Aloes:**

Aloes was being used medicinally by the time of Celsus, the standard medicinal variety long being associated with Socotra (*Aloe socotrina*); a New World variety, *Aloe Barbadosensis* (*Aloe perfoliata*), became official in 1788; Cullen thought them equally useful. Considered by some a powerful cathartic, particularly of use in treating indolent patients, aloes was also prescribed as an anthelmintic. But it was also valued as a, and consequently a stomachic. Aloes often provoked nausea, and Lewis warned that large doses (such as the Ancients used) could cause anal bleeding. By the 18th century, it was used more often through the medium of preparations or compound medicines than it was in substance, though Cullen preferred administering it alone. Some aloetic preparations were regarded

as mild, suitable for easing a costive patient back to regularity, and Cullen asserted that in small doses aloes was a gentle purgative, though he disputed Lewis's claim that it lingered in the system to maintain regularity. Aloes also had important external applications as a vulnerary

Aloes is listed in the "Dispensary" and four comparators, and it is a major ingredient in two drugs that were used in army hospitals to stimulate weak or hypochondriac patients. There are 65 recipes in the Wellcome sample that include aloes.

**Sources:** Brookes, *General Dispensatory*, p. 6; Buchan, *Domestic Medicine*, p. 284n; Cullen, *Treatise of the Materia Medica*, II, 353-57; Hill, *History of the Materia Medica*, pp. 772-76; Huxham, *Essay on Fevers*, p. 25; James, *Medicinal Dictionary*, under "aloe"; Lewis, *New Dispensatory*, pp. 72-74; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 88-90; *Practice of the British and French Hospitals*, pp. 65 ("cachectic pills"), 67 (guaiacum pills"), 68 ("Rufus' pills"), 74 ("Sir Hans Sloane's unguent for the eyes"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 182 (under "cathartics"); Rollo, *Observations on St. Lucia*, p. 92; Woodville, *Medical Botany*, II, 556-62.

### **Alum:**

Alum (*alumen*; renamed *Argilla vitriolata* in the 1788 *Pharm. Lond.*) was prepared by calcining "certain minerals" (Lewis), exposing them to air, then boiling in water. It was mainly valued as an astringent, and its common uses reflected this. Internally, it was used in small doses as a corroborant, and in larger ones to control hemorrhaging and looseness; Cullen nevertheless expressed surprise that it was not used more often to curb diarrhea. It was sometimes recommended to treat uterine and menstrual problems. Mead thought it useful in treating the frequent urination associated with diabetes, but Cullen doubted this. Heated and dissolved in vinegar, alum was turned into crystals prescribed in intermittents (cf. *RP*, p. 37). It was gargled for sore throats -- Wesley also recommended it to fasten loose teeth -- and was among the most common astringents used in treating gleans. Externally, it was employed in treating scorbutic gums and eye irritations (Cullen recommended it against ophthalmia), and it was the prime ingredient in some astringent or repellent lotions and collyria. It was used to clean



ulcers and wounds and, concentrated by burning, to consume proud flesh. Both internally and externally, aluminous compounds were valued as styptics; they were often used to treat bloody smallpox. Although Lewis warned that large doses of alum caused nausea and constipation, it remained popular in the 18th century, as it had been since the time of Hippocrates (in Ancient medicine, however, it had been used externally almost exclusively). It was also the main active ingredient in a number of preparations. Nevertheless, many patients had difficulty swallowing alum. Buchan recommended tincture of roses (q.v.) to remedy this problem.

*Aqua aluminosa* (in 1788 *Pharm. Lond.*, named *aqua aluminis composita* [Compound Alum Water])

Alum Water was prepared (London recipe, 1721) by boiling white vitriol (later known as vitriolated zinc) and rock alum in rose water and plantain water; in 1746, the RCPL, working from Bate's recipe, substituted simple water. Edinburgh substituted corrosive sublimated mercury for the white vitriol, which, in the opinion of Brookes, made the resultant water stronger and less safe, while Lewis thought the Edinburgh formula "injudicious" and claimed the product was little used. Brookes considered the water to be useful for washing ulcers, wounds, and fistulas, and thought it capable of healing outbreaks caused by such agents as ringworm. It was sometimes given in injections, as for fluor albus, and was applied as a collyrium. This water is not listed in the "Dispensatory" of 1746, but alum, which is included, could have been used in the simple preparation.

Alum is listed in the "Dispensatory" of 1746 and, in some form, on seven of the comparator lists, though never in great quantities. Alum is included in two recipes in *Practice*, including a bolus (bark was also an ingredient) that, according to the author, "infallibly cures the most obstinate agues"; cf. *RP*, p. 37. Alum is included in only six recipes in the Wellcome sample, suggesting that it was not widely used in popular medicine during the period 1600-1740.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 193-96; Brookes, *General Dispensatory*, pp. 7, 155-56; Buchan, *Domestic Medicine*, pp. 244, 374; Cullen, *A Treatise of the Materia Medica*, II, 11-13; Culpeper, *Pharmacopoeia Londinensis*, p. 21; Healde, *New Pharmacopoeia*, pp. 7, 84; Hill, *History of the Materia Medica*, p. 113; Hunter, *Treatise on the Venereal Disease*, pp. 75, 94; Lewis, *New Dispensatory*, p. 489; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 91; Mead, *Medical Works*, p. 245; Parr, *London Medical Dictionary*, I, 84 (alumen), Pearson, *Outlines of Lectures on the Practice of Physic*, I, 124; Henry Pemberton, *The Dispensatory of the Royal College of Physicians, London, Translated into English with Remarks, &c.*, 2nd ed. (London: T. Longman and J. Nourse, 1748), p. 342; *Practice of the British and French Hospitals*, pp. 37 ("an aluminous bolus"), 69 ("styptic pills"); Quincy, *Dispensatory*, pp. 16-17; Quincy, *Lexicon Physico-Medicum* (1719), p. 32; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 8-9, 37-38, 558; Salmon, *New London Dispensatory*, pp. 362-63; Sharp, *A Treatise on the Operations of Surgery*, xxxiv; Shaw, *Dispensatory of Edinburgh*, p. 67n; Theobald, *Every Man His Own Physician*, p. 36; Townsend, *Elements of Therapeutics*, p. 85; Wesley, *Primitive Physic*, p. 156.

### **Angelica:**

Although angelica was grown in England and was native to Scandinavia, the Spanish variety appears to have been most favored in British practice. The powdered leaves of *angelica sativa* (garden angelica; *L. Angelica archangelica*) were mainly used, but the stalk, roots, and seeds were also official. While some writers believed that angelica was known to Dioscorides, it seems not to have been used in ancient medicine. Indeed, it came into use later than most herbal remedies and is not known to have been exploited medicinally in England prior to the 16th century. It acquired its common name and its mystique from the fact that it commonly bloomed on St. Michael's day. With the endorsement of Gerard, angelica soon came to be relied on to prevent or cure plague. Other advocates promoted it as a carminative, sudorific, stomachic, and emmenagogue. It was especially esteemed as an alexipharmic, and came to be known as *princeps alexipharmicorum*.

By the mid-18th century, however, the medicinal role of angelica was in decline. In 1746, London dropped it from a number of recipes. Brookes described the roots as "moderately warm and aromatic," the seeds and leaves still less so, and while he noted that the leaves were included in some official distilled waters, he observed that they served only as flavoring. Lewis lauded angelica as "one of the most elegant aromatics of European growth," but added that it was "little regarded in the present practice. The root, which is the most efficacious part, is rarely met with in prescription, and does not enter into any officinal composition." Cullen thought angelica to be carminative, but added, "that it has any peculiar virtues with respect to any particular disease, I cannot perceive." Woodville wrote that although it was aromatic and carminative, "as many other simples surpass it in these qualities, it is seldom employed in the present practice."

Neither the leaves nor any other part of the plant is listed in the "Dispensatory" of 1746 or in any comparator list, but angelica grew widely and would have been readily available to Buchanan. Angelica is included in 91 recipes or lists in the Wellcome sample, only a moderate number when compared to traditional herbal remedies like sage, q.v.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 365-68; Brookes, *General Dispensatory*, p. 8; Cullen, *Treatise of the Materia Medica*, II, 108; Healde, *New Pharmacopoeia*, p. 8; Hill, *History of the Materia Medica*, pp. 603-04; le Strange, *History of Herbal Plants*, pp. 23-25; Lewis, *New Dispensatory*, p. 94; Parr, *London Dictionary*, I, 116; Pemberton, *Dispensatory*, p. 130; Quincy, *Dispensatory*, p. 287; Woodville, *Medical Botany*, I, 138-40.

### ***Anisum*/aniseed:**

The seed of anise (*L. Pimpinella anisum*) was one of the four warm seeds of Greek medicine, and 18th-century medical authorities tended to regard it as the most effectual. It grew widely in the Mediterranean, some writers, including Lewis, expressing a preference for the Spanish variety.

Aniseed was considered to be anodyne, diaphoretic, and diuretic, and was most often used as a carminative and stomachic, or to treat diarrhea. It was also administered with purgatives, as a

corrective. In Lewis's estimation, its principal use was "in cold flatulent disorders, where tenacious phlegm abounds, and in the gripes to which young children are subject." It was chewed to promote saliva and in gargles to dissolve viscid mucus in the throat. Some writers boosted it as an expectorant, though Cullen detected no effect in this regard. According to Withering, it was sometimes applied to relieve toothache and freckles. Van Helmont referred to aniseed as *intestinorum solamen* ("comfort of the intestines"). Hoffmann also endorsed it enthusiastically, and it may indeed have been more popular in Germany (where it was also prescribed against asthma and dropsy) than in Britain. Aniseed seems to have retained widespread popularity in 18th-century medical practice, but because of its strong flavor it was dropped from a number of official compositions, a development regretted by Hill.

Aniseed is listed in the "Dispensatory" of 1746. The essential oil of aniseed is included in two recipes in *Practice*, but in neither case does it appear to have been of major importance as an active ingredient. Aniseed and its simple preparations are mentioned as remedies or included in recipes in 275 instances in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 325-26; Brookes, *General Dispensatory*, p. 8; Cullen, *Treatise of the Materia Medica*, II, 105; Healde, *New Pharmacopoeia*, p. 8; Hill, *History of the Materia Medica*, pp. 514-16; James, *Medicinal Dictionary*, entry for "anisi"; Lewis, *New Dispensatory*, p. 81; Lewis/Rotheram, *New Dispensatory*, p. 96; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 8; *Practice of the British and French Hospitals*, pp. 55 ("asthmatic elixir"), 65 ("cachectic pills"); Salmon, *New London Dispensatory*, p. 143; Withering, *Botanical Arrangement*, I, 315; Woodville, *Medical Botany*, III, 490-92.

### **ANTIMONIALS:**

The antimony that was used in British medicine was often mined in Germany, Hungary, or France; there were British mines, but their product was considered less suitable for medicinal purposes, having a high lead content. It was generally in sulfurized form that antimony was used medicinally; the regulus, or pure metal, was specified in some recipes, but not in any medicine known to have been used

in the 18th-century army. *Antimonium crudum praeparatio* (crude antimony finely ground and washed; renamed *antimonium sulphuratum* in 1788 *Pharm. Lond.*) was the simplest form of antimony that was used in medicine. It was generally believed that the use of antimony as a medicine dated from the time of the Greeks, but Alston believed that it was uncertain whether the "*stimmi*" of ancient usage was in fact antimony; he believed that medicinal use of the metal, at least for the purposes common in the 18th century, dated from the Middle Ages. Paracelsus helped to popularize antimony, though for years many authorities regarded it as dangerous. Antimony was valued as a deobstruent and stimulant, and was sometimes administered to treat rheumatism and skin diseases. In some forms it was also strongly emetic and purgative, and the latter virtue encouraged several authorities to use it in treating dysentery. But its main use was as a diaphoretic.

*Crocus metallorum* ("Liver of Antimony"; renamed *crocus antimonii* in 1746 *Pharm. Lond.*):

"Crocus" was a name given to several calcined metallic preparations that were deep yellow or red, resembling saffron). *Crocus metallorum* was prepared by mixing, then melting in a crucible, antimony and saltpeter (sea salt was included in the *Pharm. Lond.* of 1788). The objective was to free the regulus of antimony -- "a Medicine of the greatest Power of any known Substance whatever" (Brookes) -- from the restraining influence of sulfur. According to Lewis, "The pure metal operates in a very minute dose, with extreme vehemence, as a purgative and emetic; when combined with sulfur, as in the crude mineral, its power is restrained." Salmon described the crocus as "a Violent Medicament being both Cathartick and Emetick," but nevertheless recommended its use in the treatment of many diseases and conditions. Brookes, however, warned that even in a normal dose, it produced violent action, "greatly disordering the Constitution." By the mid-18th century it was mainly used on human patients to combat mania, but as the example from Buchanan shows (*RP*, pp. 251-53) it was mainly given to horses, serving

as an alterative, a cathartic (and anthelmintic), and a diaphoretic.

James's Fever Powders:

This was not an official drug, but rather the most famous and perhaps the most controversial nostrum of the 18th century. Introduced by Robert James in the early 1740's, the powder quickly became a popular febrifuge. In Nov. 1746, James patented it, and, as a condition for supplying it to the navy, in Feb. 1747 he disclosed what he claimed was the recipe. On oath, he stated to the Patent Office that the drug was prepared by: calcining antimony in an earthen vessel, meanwhile adding a sufficient quantity of an animal oil and salt, dephlegmating; boiling the antimony in melted niter and separating the powder by dissolving the mixture in water; making an amalgam of quicksilver and equal parts regulus of antimony and silver, plus a fair proportion of sal ammoniac; distilling the mercury off into a retort (repeating this operation nine or ten times), dissolving it in spirits of niter and distilling to dryness; calcining the caput mortuum until it became golden; finally, burning spirits of wine upon it and keeping it for use. The recipe was widely criticized, one writer characterizing it as "the invention of some ignorant old woman," and several individuals published what they claimed were the recipes for the "real" James's Powder, accusing James of having fabricated the formula that he sold to the government. James later discontinued the use of mercury, which considerably altered the composition of his powder. In any case, the drug as sold was, like other antimonials, diaphoretic in small doses and purgative or emetic in larger ones. The powder was touted as a febrifuge, but Monro claimed that its main use was as a cathartic (cf. *RP*, interleaf, pp. 297-98), and that James had confided to him that he himself used it as such, relying on bark to cure fever. Although the drug was subjected to as much vituperation, many critics either resented James's success or wished to promote their own nostrums in its stead.

*Tartarum emeticum*::

Emetic tartar (renamed *antimonium tartarissatum* in 1788 ed. of *Pharm. Lond.*) was prepared by boiling crystals of tartar (see under "tartar") with crocus of antimony (q.v.), then filtering through paper, evaporating, and letting stand to form crystals. Lewis preferred the Edinburgh recipe, which substituted glass of antimony (q.v.) for crocus, arguing that this created an emetic that was more predictable in operation. Pearson credited the German physician and chemist Adrian von Mynsicht (d. 1683) with introducing this drug. Emetic tartar, which was generally classed with the antimonials, was valued in part because it was so easy to administer, being readily soluble in water, and because it was regarded as a sure and fairly safe emetic, one that Lewis saw as "the most useful of all the antimonial preparations." But it was not generally seen as being as mild as ipecacuanha; Quincy warned against prescribing it to children or to patients who were debilitated. He also denounced the practice of increasing, as much as four times, the proportion of crocus. Even when the recipe was followed, emetic tartar was, in his opinion, "a rough Medicine at best, and chiefly used in Practice amongst Surgeons, and those who have learned a rough Treatment of their Patients on board our Ships." As a vomit, the recommended dose was 3-7 gr. Like other emetics, this was sometimes given in large doses to treat mania, though Ferriar reported that only one of six patients who received it improved. Healde endorsed the French practice of *Emetique en Lavage* (administering a full dose, diluted, in small portions until vomiting occurred). Alston believed emetic tartar to be "the most common antimonial vomit" and Healde reported, "It is a medicine, which, from its safety, convenience of exhibition, and little taste, is in general used as an alterant and emetic." During the latter half of the 18th century, this was one of the most praised emetics. Lettsom saw it as the best drug for both producing and maintaining nausea. MacBride considered it the best antimonial vomit, and Manning wrote, "Antimonial medicines, particularly emetic tartar, constitute

one of the greatest improvements in the modern *Materia Medica*." It was widely used in the army and figured prominently in the practice of Monro, Hamilton, and Rollo. Lind considered it on a par with James's powder as a febrifuge, while Cullen advised that it could serve as a substitute for the latter, especially when administered in nauseating doses, because it would circulate to the surface of the patient's body and relieve the spasm that was the proximate cause of his fever. On the basis of his observations at a hospital, Moore asserted that emetic tartar provided its greatest benefit as a purge and emetic, while James's powder served best as a sudorific

*Tinctura antimonii* (Tincture of Antimony; sometimes called *T. antimonii Huxhami*)

Prepared (London recipe, 1721) by melting, then powdering, a mixture of crude antimony, salts of tartar, and nitre, then adding spirit of wine. Quincy recommended that it be made in small quantities, since if left long it lost its color (which reduced its appeal) and perhaps its virtues. Brookes considered it diaphoretic, sometimes mildly purgative or diuretic. Lewis reported that it was endorsed as a deobstruent, diuretic, and purifier of the blood. It was thought to purify blood, absorb acids, and remove obstructions. It was generally used to treat hypochondria, hysteria, itch, and scurvy, and was sometimes recommended for malignant fever. This tincture appears not to have been as popular as were other antimonials, and it was dropped from the *Pharm. Lond.* in 1788.

*Vinum emeticum*:

Emetic wine (renamed *vinum antimoniale* [antimonial wine] in 1746 *Pharm. Lond.*) was official only in *Pharm. Edin.*, which prescribed that it be prepared by stirring, without heat, *crocus metallorum* (see under "antimonials") into mountain wine, then pouring off the wine after settling and filtering it through paper. This process required



a number of days; in 1788, London specified twelve. Lewis regarded this as preferable to other antimonials, in that the antimony was premixed, making operation more predictable (though he regarded the acidity of the wine as a variable). In small doses emetic wine was used as an alterative and diaphoretic; in larger doses, it served as a diuretic and cathartic; but in large doses, it was a violent emetic, and it was mainly used this way, often for maniacal and apoplectic cases. Some authorities valued it for other purposes. Huxham esteemed it as a general deobstruant and detergent, and thought it useful in treating intermittents, rheumatism, and many chronic diseases. This appears to have been quite a popular preparation, in part because it was seen as reliable, in part because it was inexpensive. Hooper reported that it was "the common emetic for children." Emetic wine was just one representative of a fairly large and important class, the medicated wines (to lower the cost for poor patients, ale was often substituted for wine).

*Vitrum ceratum antimonii* (cerated glass of antimony):

Prepared in a multi-step process: first, glass of antimony (which was also the basis of Ward's Drop and Pill; cf. n. 331) was made by calcining powdered antimony, then melting the resultant powder; for cerated glass, the "glass" was added to melted yellow beeswax, and after cooling the mixture was powdered. During the early 18th century this drug remained a nostrum, and it was only in 1736 that George Younge, a surgeon-apothecary, revealed the recipe (*Edinburgh Medical Essays*, V); for this, Younge received an M.D. from St. Andrews. Pringle lauded the drug in a note that was printed in the 1742 edition of *Edinburgh Medical Essays*, and its widespread use by British Army medical personnel during the 1740's may well reflect his influence. In *Observations*, Pringle continued to endorse the drug, stating that it was the most effective vomit and purge available to treat the flux, being superior even to ipecacuanha.

But he added that its operation was rough and that he therefore reserved it for obstinate cases, preferring milder remedies otherwise. He further reported that while early in his camp practice he had used the cerate regularly, after regimental surgeons refused to use it because of its roughness he had turned to ipecac, with or without tartar emetic, with opiates at night. During the Seven Years' War Monro had a similar experience, in that he used the glass but found it too rough and left off. Moseley, an advocate, believed that careless usage had brought it into disrepute. He noted that "The timid might well refrain from using it; for it sometimes surprised them with the most violent and unlooked-for effects." One problem may have been the uncertainty of dosage; Moseley recommended 2-20 gr., "according to the age and strength of the patient." He added, however, that the cerated glass often caused violent, unexpected results. Citing Pringle as his authority, Brookes reported that the glass was "a Specific and certain Cure for Loosenesses and the Bloody-Flux." Beyond its specific quality, it was promoted by advocates as a diaphoretic, an emetic, and a purgative. Younge observed that while it usually purged and sometimes vomited, he had known it to cure without causing any evacuation. Lewis, however, was more reserved, accounting the drug only a strong purge, with emetic qualities; in moderate doses, "it operates mildly both upwards and downwards, and sometimes proves sudorific." According to Hooper, its diaphoretic virtue made it especially useful against dysentery that arose from checked perspiration. Brookes deemed it too strong for internal use by itself, but he believed that mixing it with waxes or resins made it sufficiently mild. He also recommended administering it in conserve of roses. Zimmerman reported favorably the observation of a German physician that the harshness of vit. ant. cer. could be obtunded by marshmallow root. Nevertheless, he concluded that it was "at all times a dangerous remedy in ignorant hands, and not always adviseable in the most judicious." Given the widespread concerns, it is not surprising that this drug lost favor with the medical profession, as did

many antimonials, and Lewis reported that it was "much less used than formerly." The often violent reaction to it was not the only problem. MacBride wrote, "The vitrum antimonii ceratum, which was once so highly extolled, appears to have gone out of use on account of the extreme uncertainty of its operation, which it must be confessed, is the fault of all antimonial preparations." He added, however, that it was worth using if all else failed. In 1776, Brown reported that during a recent epidemic of dysentery among the troops in America it had been administered widely and with some success, but that tartar emetic had matched its good effects and had proven more dependable. While vit. cerat. antim. was recognized as an official composition by Edinburgh, it was not by London, though the RCPL did include *antimonium vitrificatum* (simply burnt antimony) in the *Pharm. Lond.* of 1788.

*Antimonium crudum praeparatio* appears in the "Dispensatory" of 1746 and in three comparators. *Vit. cerat. antim.* is not listed in the "Dispensatory" of 1746 -- perhaps a reflection of its failure in the recent tests -- but it does appear in three later comparators. *Crocus metallorum* is on three comparators, James's Powder on four, and *tinc. antim. Huxhami* on one, *vin. antim.* on two. In all, 16 antimonials are included in at least one list, emetic tartar being listed in all (though generally in quantities in the small-to-moderate range). Although antimonials are to be found on every list, including the 1703 comparator, the class is considerably more prevalent in the later lists, those prepared in 1778 and 1797. This reflects the progressive rise of the class during the course of the 18<sup>th</sup> century. Antimony and its preparations are mentioned as remedies or in recipes 17 times in the Wellcome sample, the small number reflecting both the fact that most of the recipes are 17<sup>th</sup> century and the fact that antimonials and spagyrics in general were not used nearly as much in popular medicine as they were by professionals.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 292-313, 324-26; Brookes, *General Dispensatory*, pp. 8-9, 139-40, 161-62, 182-83, 327, 332-33; extract of letter from Brown to John Hope, 14 Sept.

1776, *Medical Commentaries*, IV (1776), pp. 236-37; J. Crellin, "Dr James's Fever Powder," *Transactions of the British Society for the History of Pharmacy*, I (1974), pp. 136-43; *Considerations on the Use and Abuse of Antimonial Medicines*, pp. 34-35; Culpeper, *Pharmacopoeia Londinensis*, pp. 110-11; *DNB* (entry for James); John Ferriar and W[illiam] Simmons, *Medical Histories and Reflections* (Warrington: W. Eyres; London: T. Cadell, 1792-98), I, 172-74; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 195, 201, 209-11; Healde, *New Pharmacopoeia*, pp. 8, 148, 152-53; Heysham, *Observations On the Bills of Mortality, In Carlisle, for the Year 1779*, p. 6; Hill, *History of the Materia Medica*, pp. 63-69; Huxham, *Essay on Fevers*, 121; Huxham, *Observations on the Air and Epidemic Diseases*, pp. 169-71; James, *Medicinal Dictionary*, under "antimony," "crocus"; Lettsom, *Medical Memoirs*, pp. 39-40; Lewis, *New Dispensatory*, pp. 81-82, 352-53, 355-56, 404-05, 425; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 96-98, 377-78, 381-82, 384, 468-70; Lind, *Essay on Diseases*, p. 183; MacBride, *A Methodical Introduction to the Theory and Practice of Physic*, pp. 275, 468; Manning, *Modern Practice of Physic*, p. 427; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 55, 59, 341, 343, and II, 11-16, 59; Moore, *Medical Sketches*, p. 16; Moseley, *Treatise on Tropical Diseases*, pp. 244-45; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 38; Pringle, *Observations on the Diseases*, pp. 232-34; Quincy, *Dispensatory*, pp. 244, 248; Quincy, *Pharmacopoeia Officinalis & Extemporanea: Or, a Complete English Dispensatory, in Two Parts, Theoretic and Practical*, 15<sup>th</sup> ed., enl. and corr. (London: T. Longman, 1782), II, 337; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 56, 242, 780 (under "sulphuretum stibii nativum"), 855, 857-58; Rollo, *Observations on the Diseases*, pp. 71, 75, 80; Salmon, *New London Dispensatory*, pp. 333-34; Zimmerman, *Treatise on the Dysentery*, pp. 83-87, 280-86.

### **Apple:**

Garden apples and thornapples were used to prepare ointments and balsams to relieve the pain associated with inflammations, burns and scalds (Salmon: "they ease pain in a moment"), and to promote healing (cf. "pomatum"). Their cider was especially valued as an extract, and so they were

often used rotten. According to Brookes, they were most useful when eaten, though he added, "roasted they are sometimes applied as Cataplasms in Inflammations of the Eyes" (cf. *RP*, p. 211). Despite his observation, by the mid-18th century the medicinal value of apples was being deprecated, and London dropped the garden apple from its list of the *materia medica* in 1746.

Apples are not mentioned in any of the army lists, but of course they were perishable and readily available where the forces traveled, so they could simply have been purchased locally. Given the paucity of references in military medical literature, however, it does not appear that the apple played even a moderate role in army practice. Furthermore, apples (fruit, buds, juice) are included as remedies or listed in recipes only 42 times in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 65; Quincy, *Dispensatory*, p. 332; Salmon, *New London Dispensatory*, p. 137.

*Aqua aluminosa*; see under "alum"

*Argentum vivum*; another name for mercury, q.v.

### **Artichoke:**

The artichoke (*L. Cynara scolymus*) grew mainly in southern Europe, but by the 18<sup>th</sup> century it was grown in British gardens, mainly for food. Medicinally, the roots were used to treat gonorrhea, while the buds were eaten to promote urine and lust. According to Healde, the juice expressed from its leaves was sometimes mixed with white wine and given to as a diuretic to patients who were hydropic or jaundiced (cf. *RP*, p. 133). In large doses, Healde reported, the juice was a strong purgative.

The artichoke is not mentioned in any of the army lists and probably played an insignificant role in military practice. It is noted only once in the Wellcome sample -- in a list of remedies "to do with privy member, to straighten and narrow."

**Sources:** Wellcome, ms. 126, p. 143; Healde, *New Pharmacopoeia*, pp. 19-20; James, *Medicinal*

*Dictionary*, under “cynara”; Lewis, *New Dispensatory*, p. 16; Parr, *London Dictionary*, I, 439 (under “cinara”); Quincy, *Dispensatory*, p. 301; Salmon, *New London Dispensatory*, pp. 6, 46.

### **Asafetida:**

Asafetida, whose odor brought it the popular name of "Devil's Dung," was generally extracted from the root of hing or hingis (*L. Ferula foetida*) and was imported from Persia, although late in the 18th century the tree began to be cultivated in England. This gum was primarily a legacy of Arab medicine; authorities differed on whether it was known to the Greeks, though Celsus recommended it as a stimulant in intermittents.

The popularity of asafetida appears to have been fairly high in 18th-century England, and Woodville referred to the gum as "a medicine in very general use," though only forty years before Hill had written, "its unpleasant Smell has in a great Degree banished it from extemporaneous Practice in Physic," adding, however, that it was often included in pills and compositions; in 1719, Quincy had observed, "its extreme Offensiveness occasions it to be but seldom used." Asafetida was widely regarded as a powerful diaphoretic, thought to force "malignant Humours from the Centre to the Circumference" (Brookes), so it was used against malignant fevers, measles and smallpox. Such authorities as Cullen lauded asafetida as an expectorant, and because of this it was commonly used against asthma and other pectoral problems. But "its chief use," in Woodville's estimation, was as an antispasmodic and nervine, used to combat paralysis, epilepsy, palsy, and various nervous disorders (cf. *RP*, p. 295).

Asafetida is listed in the "Dispensatory" of 1746 and in four comparators and is included in two nervine pills in *Practice*. Pringle considered it effective in boosting the weak pulse of typhus patients. Its use in army practice was probably in the low to moderate range. Asafetida is mentioned only three times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 438-40; Brookes, *General Dispensatory*, p. 11; Cullen, *Treatise of the Materia Medica*, II, 251-52; Hill, *History of the Materia Medica*, pp. 753-57;

James, *Medicinal Dictionary*, under "silphium"; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 17; *Practice of the British and French Hospitals*, pp. 67 ("gum pills"), 68 ("nervous pills"); Pringle, *Observations on the Diseases*, p. 278; Quincy, *Lexicon Physico-Medicum*, p. 31; Salmon, *New London Dispensatory*, p. 156; Woodville, *Medical Botany*, I, 22-26.

***Auxungia porcina*/(lard):**

Owing to its consistency and smoothness, lard was easily the most common vehicle for ointments (cf. *RP*, pp. 19, 315). It was also used to give proper consistency to many official plasters and liniments. While during the 17th century, many fats were included in the materia medica, the *Pharm. Lond.* of 1746 recognized only lard. Although not administered internally, lard was often applied as an emollient, to relax body parts and to soften and lubricate the skin. It was widely considered to be anodyne.

*Auxungia porcina* is listed in the "Dispensatory" and in three comparators, but it would have been widely available abroad, and in fact it was one of the essentials for army practice. Lard is included in only 27 recipes in the Wellcome sample; it might be noted, however, that most medicinal items for which recipes are provided are intended for internal use.

**Sources:** Brookes, *General Dispensatory*, pp. 11-12; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 252, 273.

***Balsam of copaiva:***

Balsam of copaiva (*L. Copaifera officinalis*), a resinous juice imported from the West Indies and Brazil, was valued as a diuretic and a vulnerary. According to Hill, it had an astringency unique among liquid resins. The presumed astringency accords with its widespread use in the treatment of dysentery, though conversely it was sometimes prescribed as a laxative. Some writers promoted it as a pectoral, and Pringle considered it to be effective in quieting the coughs of hectic fever. It was often used by itself or in compounds in treating gonorrhoea and various disorders of the kidney and bladder (notably,

gravel); its popularity in this regard declined during the late 18th century, as critics like Rotheram and Woodville warned that it tended to overheat patients (Lewis considered this a danger common to all resins) and Cullen reported that he had found it to be both ineffective and irritating when applied to the treatment of gleans. Nevertheless, by his reckoning this was the most common application of the balsam, and it was likewise valued both for stimulating urine and for shielding its acrimony. Hill praised it highly as a treatment for gonorrhoea, yet even he wrote that it should be used mainly after the virulence of the gonorrhoea had abated (cf. *RP*, n. 378). Besides its value to internal medicine, this balsam also had important external applications, being used to consolidate wounds and ulcers. It was also applied to relieve hemorrhoids and to counter the weakness associated with gout.

Balsam of copaiva is noted in the "Dispensatory" of 1746 and on eight comparator lists (more than any other balsam). It is mentioned only once in the Wellcome sample, but this may reflect its comparatively late entry into British medicine, the sample being geared to traditional remedies.

**Sources:** Brookes, *General Dispensatory*, p. 12; Cullen, *A Treatise of the Materia Medica*, II, 128-29; Hill, *History of the Materia Medica*, pp.704-05; James, *Medicinal Dictionary*, under "balsamum" and "copaiba"; Lewis, *New Dispensatory*, pp. 91-92; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 108-09; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 363; *Practice of the British and French Hospitals*, p. 48 ("an electuary for the gonorrhoea after the inflammation"); Pringle, *Observations on the Diseases*, p. 162; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 97; Woodville, *Medical Botany*, III, 373-75.

### ***Balsamum Locatelli:***

Named for its creator, the iatrochemist Luigi Locatelli (d. c.1637), this balsam was composed of (London recipe, 1721) olive oil, Venice turpentine, canary red Saunders (for color; James criticized its inclusion), and melted yellow wax. The balsam was often applied externally, to cleanse wounds and ulcers or to encourage granulation. Administered internally, it was likewise used to heal ulcers, and was further prescribed to relieve gravel, difficulty in urination, and violent coughs, as well as to treat



(Brookes's words) "inward Decays." Quincy noted that although the balsam was a rather new drug, "It is used however very much in present practice, both for Internal and External Use." Lewis regarded it as valuable in treating abraded intestines. It is listed in the "Dispensatory" of 1746, but in only one comparator. Its popularity may have declined later in the century, however, for it was dropped from the 1788 ed. of *Pharm. Lond.*

Locatelli's Balsam is listed in the "Dispensatory" of 1746, but in only one comparator. It is mentioned 16 times in the Wellcome sample.

**Sources:** *Biographisches Lexikon*, III, 814; Brookes, *General Dispensatory*, pp. 262, 335; James, *Medicinal Dictionary*, under "balsamum"; Lewis, *New Dispensatory*, pp. 478-79; *Practice of the British and French Hospitals*, pp. 46 ("a balsamic electuary"), 53 ("an aromatic anodyne draught"); Quincy, *Dispensatory*, pp. 169-70.

*Balsamum sulphurous anisatum*; see under "sulfur"

*Balsamum traumaticum*:

"Vulnerary balsam" was composed (London, 1746) of benjamin, storax, balsam of Tolu (Edinburgh instead specified balsam of Peru), and Socotrine aloes (q.v) digested in rectified spirits. Benjamin, the resin of *Styrax benzoin*; was valued as an aromatic, a pectoral, and (externally applied) a vulnerary. Storax Calamite (L. *Styrax officinale*), sometimes called Cane Storax because it had earlier been imported in reeds, was a resin brought in from Syria and the East Indies, and was a traditional pectoral and anodyne. Hooper wrote of storax, "In the present practice it is almost totally disregarded, notwithstanding it is an efficacious remedy in nervous diseases" Balsam of Tolu was the resinous juice of L. *Myroxylon toluiferum*. It was sometimes given inwardly as a pectoral and outwardly as a vulnerary.

Bal. traum. is listed in the "Dispensatory" of 1746 and in five comparators.

**Sources:** Brookes, *General Dispensatory*, pp. 12-13, 117-18, 163-64, 336; Healde, *New*

*Pharmacopoeia*, pp. 299-300; Lewis, *New Dispensatory*, p. 510; Parr, *London Medical Dictionary*, II, 393-94, under "styrax"; Pemberton, *Dispensatory*, pp. 364-65; Quincy, *Dispensatory*, p. 177; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 98, 773.

### **Basilicon:**

"Basilicon" was most routinely used as the shortened form of *unguentum basilicum flavum* ("Yellow Basilicum Ointment" or "Royal Ointment"; in 1788 *Pharm. Lond.*, this was renamed *ung. resinae flavae*, "Ointment of Yellow Resin"). It was prepared by melting together equal quantities of yellow resin, Burgundy pitch, and olive oil, then adding a small amount of common turpentine (recipe in *Pharm. Lond.* of 1746). A variant, black basilicon, omitted turpentine.

Basilicon was commonly used in dressings, for digesting (cf. *RP*, p. 253), cleansing, and incarnating wounds and ulcers. Cole wrote of it, "by its sovereign Vertues has merited the kingship amongst ointments." The popularity and reliance that his comment suggests appear to have weakened the 18<sup>th</sup> century, as basilicon became the target of considerable criticism. Its healing powers were compared unfavorably to those of *linimentum Arcaei*, q.v. Kirkland complained that the turpentine in yellow basilicon often irritated ulcers; he favored the black variety, but noted that it was seldom used.

Criticism like his may have been responsible for the decision by Edinburgh to reduce the amount of turpentine in its recipe, and in 1788 London chose to omit turpentine entirely. The reaction against turpentine, as well as against resins, did not wholly please Kirkland either, since he feared that eliminating these items would leave dressings inert (he also favored pitch). Rotheram was critical in another way, commenting that neither basilicon nor similar preparations were necessary in dressings, for nature itself encouraged suppuration, even without the application of an ointment. It may be that by mid-century basilicon was less popular in Britain than it was elsewhere. According to Harrison, a harsh critic of practice in France, French surgeons relied on it alone as a digestive.

Basilicon is not listed in the "Dispensatory" of 1746, and it is included in only one comparator list. It was, however, quite similar in composition and purpose to "the common digestive" noted in

*Practice*. Basilicon is mentioned twice in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 204-05; Brookes, *General Dispensatory*, p. 342; Buchan, *Domestic Medicine*, pp. 378, 428; Culpeper, *Pharmacopoeia Londinensis*, p. 185; E. R., *The Experienc'd Farrier*, p. 115; John Harrison, *A Short Comparative View of the Practice of Surgery in the French Hospitals: With Some Remarks on the Study of Anatomy and Midwifery. The Whole Endeavouring to prove, That the Advantages to Students, in these Professions, are greater in London, than at Paris* (London: Jacob Robinson, 1750), p. 15; James, *Medicinal Dictionary*, under "basilicum"; Kirkland, *An Inquiry into the Present State of Medical Surgery*, I, 29-32; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 572; *Practice in the British and French Hospitals*, p. 74.

### **Bay:**

The bay tree (*L. Laurus nobilis*) was native to southern Europe, but was a common garden plant in Britain. Medicinal use of the bay dated back to the Greeks, and indeed the tree had been sacred to Apollo. According to Salmon, bay leaves were sometimes applied in a poultice, to counter irritation, bee-stings, cholic, and bladder pains. He also considered them useful as a stomachic and antiemetic. Brookes mentions only their value as a stomachic. The leaves yielded an essential oil, which was administered in enemas or drunk as tea. The berries of the bay were official in the 18th century, and the wood and roots were occasionally used medicinally as well. Bayberries, and especially their expressed oil, were in fact the most important medicinal product of the tree. The oil was considered emollient, anodyne, and resolvent and was generally given in enemas or outwardly in fomentations. Lewis among others esteemed it warming and carminative. An official electuary was named for the berries. Among many miscellaneous uses, bayberries were prescribed as a diuretic, diaphoretic, and emmenagogue. They were prescribed to treat conditions as disparate as malignant fever and palsy. Nevertheless, references to bay in 18th-century British medical literature are scarce, suggesting that bay became less prominent in professional practice, though it may have retained a high position in popular medicine. Even at mid-century, Hill observed, "The Berries have been greatly esteem'd in Medicine,

but they are at present somewhat less used than they have been.” Woodville later reported, “this dignified plant is now rarely employed, except in the way of enema , or as an external application.” He still saw some virtue in the berries, but echoed Bergius’s warning that they were abortifacient.

No bay product is mentioned in *Practice*, the "Dispensatory," or any comparator list. Bay products, mainly leaves and berries, are noted 102 times in the Wellcome sample, suggesting moderate popular usage.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 262-63; Brookes, *General Dispensatory*, pp. 58, 255; Healde, *New Pharmacopoeia*, p. 37; Hill, *History of the Materia Medica*, pp. 485-86; Lewis, *New Dispensatory*, pp. 249-50; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 3; Parr, *London Dictionary*, I, 862 (under “laurus,” subheading “laurus vulgaris”); Quincy, *Dispensatory*, p. 319; Salmon, *New London Dispensatory*, pp. 22, 70; Woodville, *Medical Botany*, I, 94-96.

### **Becabunga:**

Becabunga (*anagallis aquatica* [L. *Veronica beccabunga*], brooklime; the leaves) was regarded by Salmon as a specific against scurvy, dropsy, and jaundice. He also praised it as a diuretic and emmenagogue, and for being, in external application, discussive and vulnerary. Brookes supported most of these claims. In Alston's opinion, it was "an antiseptic subastringent vulnerary herb; and commended internally chiefly in the scurvy, internal ulcers, and obstructions of the viscera; and externally as a discutient and detergent." Hill reported that in treating scurvy it was most often prescribed in the form of expressed juice, either alone or blended with other "Spring Juices," like watercress, and it was often consumed in salads for the same purpose. Lewis cited its reputation for attenuating viscous humors without pungency and noted that this made it useful in treating hot scurvy, where acrid antiscorbutics would be improper. He added, "In this disease, and where the animal juices are disposed to a putrid alcallescent state, it may be given along with the sorrels, orange juice, or other vegetable acids; or employed for abating the acrimony of scurvy grasses and nasturtia." It appears,

however, that it had a reputation for exciting nausea and vomiting. Becabunga does not seem to have been widely prescribed in professional medicine at any point during the 18th century, and its nauseating quality may have contributed to an apparent decline in use toward the close. So may a sense that it was inefficacious. Cullen doubted that it had value as an antiscorbutic. Parr advised that if used it should be given in large doses, "as its powers are very inconsiderable."

While becabunga, like other highly perishable vegetables, is not included in any army list, it grew rather widely in Europe and a variant grew in America, so it was available. It seems, however, to have been little used in army medicine. Brown reported that when nauseated scorbutic troops in Boston in 1776 were offered the juice, they refused it. Brooklime is mentioned 31 times in the Wellcome sample, usually in association with antiscorbutics but sometimes with pectorals or with remedies to cleanse the blood.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 80-82; Brookes, *General Dispensatory*, p. 13; extract of letter from Brown to John Hope, 14 Sept. 1776, *Medical Commentaries*, IV (1776), p. 238; Healde, *New Pharmacopoeia*, p. 14; Hill, *History of the Materia Medica*, pp. 385-86; Lewis, *New Dispensatory*, p. 93; Mead, *Medical Works*, p. 335; Parr, *London Medical Dictionary*, I, 239; Pemberton, *Dispensatory*, p. 214; Quincy, *Dispensatory*, p. 291; Salmon, *New London Dispensatory*, p. 31.

### **Bilberry:**

Known by a number of names, including "blae berry" (a Highlands usage) and black whortleberry, the bilberry (*L. Vaccinium myrtillus*) was not listed among the materia medica by either London or Edinburgh. Nevertheless, it held a modest place in British popular medicine, especially in Scotland. Salmon saw the juice as effective as an antemetic, coolant, and thirst-quencher. He also noted that it was binding and stopped flux; indeed, the primary application of the berry appears to have been in relieving diarrhea and dysentery (cf. *RP*, p. 285). Bilberries or their juice were sometimes given to cool fever patients. In Scandinavia, they were valued as an antiscorbutic. But generally, and notably

so in Britain, bilberries were mainly an article of diet, and as James observed, they were found “but seldom in the Shops.”

Bilberries are not included in any army list and although they might have been acquired locally it is doubtful that they played more than a marginal role in army practice. In the Wellcome sample, there are two references to “myrtle berries.”

**Sources:** James; *Medicinal Dictionary*, under “vitis”; Salmon, *New London Dispensatory*, p. 112 (under “vaccinia”).

**Box:**

Box (*L. Buxus sempervirens*) grew abundantly in England, especially in the southeast. The extract and the oil of boxwood were esteemed by some to be excellent anthelmintics, and the leaves, powdered or in infusions, were also used to destroy worms. The oil was occasionally boosted as a narcotic and sudorific, and Withering reported that it was often and successfully used to relieve piles and toothache. Box leaves were given to horses as a laxative and to treat bots. After 1750, however, a number of authorities began to question the value of box. Lewis noted claims that, as a sudorific, the decoction of boxwood was even better than guaiacum, but commented only that while it was possibly efficacious, it was certainly nauseating. According to Brookes, some writers thought the leaves and wood similar to guaiacum, but he added that experiments demonstrated that it contained "no active Matter of the resinous Kind." Though the wood and leaves of the tree were official in both British pharmacopoeias for most of the century, London dropped them from the materia medica in 1788. References to box are scarce in 18th-century medical literature, suggesting that it was little used in professional practice, and it may be that it was administered more to horses than to humans.

Box products are not mentioned in any army list and played at most a small part in military practice. Nor does it appear that box was much used in popular medicine, except on horses and cattle. It is mentioned only three times in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 15; Healde, *New Pharmacopoeia*, p. 50; James, *Medicinal*

*Dictionary*, "buxus"; Lewis, *New Dispensatory*, pp. 100, 193; Parr, *London Medical Dictionary*, I, 295 (under "buxus"); Quincy, *Dispensatory*, pp. 295, 336; Salmon, *New London Dispensatory*, pp. 24, 39; Withering, *Botanical Arrangement*, II, 1069.

Brandy; see under "wines and spirits"

Buckthorn; see *syrupus de rhamno*

Butter; see under "milk"

### **Calamine:**

There was some debate over whether the ancients used calamine medicinally. Although it was widely mined in Germany, Hill regarded the calamine from the Mendip Hills as "some of the finest in the World." It was prepared for medicinal use by calcining and levigating; in this form, it was known as "prepared calamine stone" (*lapis calaminaris*). It was most often used against burns, but Hill claimed that it had a tendency to "wound and vellicate the excoriated Parts, and often bring on fatal Consequences." James Adair (d. 1802) recommended calamine as a corroborant (i.e., a tonic or strengthener) for cachectic patients who had been weakened by diarrhea.

#### *Ceratum lapis calaminaris:*

Cerate of Calamine Stone (also called *ceratum epuloticum*, "cicatrizing cerate"; in 1788 RCPL renamed it *ceratum lapidis calaminaris*, calamine cerate) was prepared by melting together olive oil or butter and white or yellow beeswax, then stirring in prepared calamine. It was valued as dessicative and epulotic (i.e. encouraging the formation of skin over a wound), and was widely used to heal skin ulcers, open sores, and excoriation. Its many advocates included Lewis and Turner (after whom it was sometimes called "Turner's Cerate").

Under one or another of its official names, the cerate is listed in the "Dispensatory" of 1746 and in eight comparators. The only other preparation of calamine to appear in the lists is lapis calaminaris, which is mentioned in two comparators. There are 29 references to either calamine or lapis calaminaris in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 333-35; Brookes, *General Dispensatory*, p. 356; Grainger, *Essay on the More Common West-India Diseases*, pp. 65-66; Healde, *New Pharmacopoeia*, p. 309; Hill, *History of the Materia Medica*, p. 81; James, *Medicinal Dictionary*, "calamina"; Lewis, *New Dispensatory*, p. 514; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 580; Parr, *The London Medical Dictionary*, I, 303 ("calamina"); Quincy, *Dispensatory*, pp. 205-06; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 137 (under "calamine"), 187.

Calomel; see under "mercurials"

### **Camphor:**

Camphor (*camphora*) was a gum, though some 18th-century authorities considered it a resin, others a salt. While the camphor tree (*L. Cinnamomum camphora*) was first cultivated in England in the early 18th century, the gum remained exclusively an import, and was brought in by the Dutch, mainly from Borneo, Sumatra, and Japan. According to Black, the Bornean product was so esteemed that Chinese merchants purchased it at £35 per lb. Unknown to the Greeks (not to be confused with the camphora of Ancient writers), camphor was a legacy of Arab medicine.

The many advocates of camphor, including Hoffmann and Lind, considered it anti-inflammatory, cooling, discutient (i.e. able to repel or resolve tumors), anodyne, attenuating, antispasmodic, soporific, diuretic, and diaphoretic. In large doses, it might be applied as a cathartic or emetic, although these do not appear to have been primary purposes. Camphor was thought to resist malignant humors and putrefaction – Pringle considered it the most powerful antiseptic – and so was used against putrid fevers and other malignant diseases. Fordyce, however, reported that while it was



often used to treat continued fevers, it was ineffective. Camphor was valued in treating gonorrhoea, as well as ulcers of the kidney and bladder and uterine and menstrual problems. Authorities debated whether camphor was a stimulant or a sedative, but a series of experiments that Alexander conducted on himself convinced him and much of the medical community that it was in fact sedative and cooling (though conversely, Alexander also found that it sometimes heated and could cause giddiness and convulsions). As a sedative (it was also considered narcotic), camphor was used to treat depression, as well as mania. Ferriar, however, reported that when he had administered it to "furious" patients, they had not improved. Camphor was also used to stimulate, however; Rollo recommended it to rouse comatose patients. Anderson and others boosted it as a treatment for symptomatic hiccough. It was often administered with mercurials, for it was thought to moderate them. The vapor of camphorated vinegar was used to treat malignant fevers. Externally, camphor was applied to treat palsy, epilepsy, spasms, gout, chordee, swollen testicles, inflammations -- including such inflammatory diseases as rheumatism -- erysipelas, burns, and tumors, and it was thought to prevent gangrene and putrefaction. Fumes from camphor were also thought to be beneficial. The vapor of camphorated vinegar was used to treat malignant fevers. While authorities tended to deprecate the popular reliance on amulets to ward off disease, several writers, including Lind, endorsed the practice of wearing camphor bags around the neck. Practitioners were encouraged (by Monro, among others) to dip lint in camphorated spirits, then insert it in their nostrils, to ward off illness when attending patients. Besides its widespread use as a simple, camphor was included in many compound drugs.

Camphor is included in the "Dispensatory" of 1746 and in eight comparator lists. Army hospitals combined it with opium and other ingredients in an anodyne balsam and an asthmatic elixir, and it was used in several other compounds, as well. Camphor is included in 100 recipes or lists of remedies in the Wellcome sample.

**Sources:** NLM, HMD Mss, MS B 362 ("Materia Medica by Dr Fordyce No. 4."), p. 71; Alexander, *Experimental Essays*, pp. 127-48, esp. pp. 145-47; Alston, *Lectures on the Materia Medica*, II, 405-08; Anderson, *A Few Facts and Observations*, p. 39; William Black, *An Historical Sketch of Medicine:*

*From their Origin to the Present Time; and of the Principal Authors, Discoveries, Improvements, Imperfections and Errors* (London: J. Johnson, 1782), pp. 213-14; Brookes, *General Dispensatory*, p. 16; John Ferriar and W[illiam] Simmons, *Medical Histories and Reflections* (Warrington: W. Eyres; London: T. Cadell, 1792-98), I, 174-75; Cullen, *First Lines of the Practice of Physic*, I, 361; Healde, *New Pharmacopoeia*, p. 15; Hill, *History of the Materia Medica*, pp. 726-29; Hunter, *A Treatise on the Venereal Disease*, pp. 82, 85; Huxham, *Observations on the Air and Epidemic Diseases*, I, 76, and II, 74, 120, 209; James, *Medicinal Dictionary*, under "camphora"; Lewis, *New Dispensatory*, pp. 103-04, 272; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp.123-24; McClurg, *Experiments upon the Human Bile*, pp. 116-17; Mead, *Medical Works*, p. 353; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 142, 259, and II, 15, 16-17, 238-39; Parr, *The London Medical Dictionary*, I, 102 ("amuleta"); *Practice of the British and French Hospitals*, pp. 36 ("anodyne balsam"), 38 ("camphire bolus"), 55 ("asthmatic elixir"), 68 ("nervous pills"; "resinous pills"), 70 ("alexipharmic powder"); Pringle, *Observations on the Diseases*, pp. 135, 276, 325-26; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 50 (under :antiseptics", "antispasmodics"),160; Rollo, *Observations on the Diseases*, pp. 86, 87; Salmon, *New London Dispensatory*, p. 627; Shaw, *Dispensatory of Edinburgh*, p. 7n; Townsend, *Elements of Therapeutics*, pp. 28, 113; Turton, *A Medical Glossary*, p. 153; White, *Analysis of the New London Pharmacopoeia*, p. 34; Woodville, *Medical Botany*, III, 419-33.

### **Cantharides:**

Cantharides were popularly called "Spanish Flies," but they were actually beetles, and they were imported to England from Italy as well as from Spain. The remedy was of major importance in 18<sup>th</sup>-century practice. Applied externally, it was used to raise blisters. Given internally, it served as a powerful diuretic, sometimes used to treat dropsy and ischuria. Conversely, however, Hunter believed that in some cases it was effective against gleet. Mead thought cantharides effective against the bite of a mad dog and against leprosy. The simple was used in various drugs that were intended to remove

paralysis or more generally to stimulate. Cantharides was considered so stimulating as to be dangerous, so it was sometimes joined with camphor when administered orally. Buchan cautioned that it could cause cholic and that it dissolved the blood, promoting hemorrhage (he did, however, endorse Alexander's finding that external applications could relieve rheumatism). Even when used externally, cantharides was regarded as harsh. Alexander wrote that few simples were used more than cantharides and few were more powerful, but added, "few carry greater terror to the patients, and hardly any, more reluctantly complied with."

Cantharides or powdered cantharides are included in the "Dispensatory" and seven comparator lists. Two official preparations, *Emplastrum vesicatorium* (Blistering Plaster; in 1788 *Pharm. Lond.*, renamed *emp. cantharidis*) and *Tinctura cantharidum*, are also listed, and the former in particular appears to have been widely used. Indeed, cantharides and its main preparations were staples of military medicine, as they were in civilian practice. On the other hand, cantharides/Spanish flies are mentioned only twice in the Wellcome sample, perhaps reflecting popular distaste for this potent drug, at least as regards its internal applications.

**Sources:** Alexander, *Experimental Essays*, pp. 220, 237; Brookes, *General Dispensatory*, pp. 17, 164, 352; Buchan, *Domestic Medicine*, pp. 228, 251, 297; Cullen, *Treatise of the Materia Medica*, II, 380-82; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 192; Hunter, *Treatise on the Venereal Disease*, p. 93; Huxham, *Essay on Fevers*, p. 161; James, *Medicinal Dictionary*, under "cantharides"; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 126-27, 479-80, 557-58; Mead, *Medical Works*, pp. 34, 65-66; Parr, *London Medical Dictionary*, I, 336-38; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 11; *Practice of the British and French Hospitals*, pp. 69 ("blistering plaister"), 73 ("anti-paralytic tincture"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 163-64., 289-90; Reide, *View of the Diseases of the Army*, pp. 78-79.

### **Catechu:**

Though popularly -- and, for much of the century, officially -- known as *terra japonica* (Japan

Earth), catechu was neither an earth nor from Japan, but rather an inspissated juice imported from the East Indies and India. Black catechu or cutch, extracted from the heartwood of *L. Acacia catechu*, was sometimes used in British medicine, but pale catechu (gambir), which came from the leaves and twigs of *L. Uncaria gambier*, was generally preferred.

The extract of catechu was most often used in medicine, but Parr regarded the simple infusion as equally efficacious. Catechu was accounted a mild astringent, and as such it was often used to treat menorrhagia, hemorrhages, and laxness of the viscera, looseness, and dysentery (cf. *RP*, Degner fragment). It was also prescribed for diabetes, which was associated with copious urination. It was sometimes used as a pectoral and a stomachic. An advantage Lewis noted was that it tasted better than similar substances and left a sweetish taste. It was applied to mouth sores, to heal them, and was used externally in solution or in various ointments. It was included in several official preparations, including a popular tincture.

Terra japonica is included in the “Dispensatory” and in one comparator list. Neither catechu nor any of its preparations figures significantly in army medical literature, though Hamilton does recommend an electuary of it as a treatment for diarrhea. Catechu is not mentioned in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 480-83; Brookes, *General Dispensatory*, p. 122; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 193, 198; Healde, *New Pharmacopoeia*, p. 17; Hill, *History of the Materia Medica*, pp. 784-88; James, *Medicinal Dictionary*, under “terra japonica”; Lewis, *New Dispensatory*, p. 141; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 134; Parr, *London Medical Dictionary*, II, 418 (under “terra”); *Practice of the British and French Hospitals*, pp. 66 (“dysenteric pills”), 70 (“astringent powder”); Quincy, *Dispensatory*, p. 355; Quincy/Hooper, *Quincy's Lexicom-Medicum*, pp. 181, 808; Woodville, *Medical Botany*, II, 183-86.

### ***Cera alba, cera flava:***

White beeswax, which was prepared by successively melting and straining yellow beeswax --

though the latter would also whiten if left in the sun -- was widely used to provide the desired consistency and cohesion to plasters (in some cases, to moderate adhesiveness), ointments, bougies, and cerates. It was routinely used to coat ligatures. Yellow wax, although less pure, was in general similarly used; however, recipes often specified one variety. Although mainly associated with external applications, beeswax was sometimes given internally, especially to sheathe and heal intestines abraded by flux and to relieve griping and tenesmus.. Much beeswax was imported.

Yellow wax is included in the "Dispensatory" of 1746 and in four comparator lists, but white wax is not (although some preparations that contain it are). White wax, if needed, was probably prepared from it by army medical officers, or else was purchased locally. The Wellcome sample includes 289 references to beeswax (yellow wax, white wax) or simply wax, the latter in most cases probably implying beeswax.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 490-91, 518-19; Brookes, *General Dispensatory*, p. 22; Buchan, *Domestic Medicine*, 214n; Hill, *History of the Materia Medica*, pp. 884-85; Hunter, *A Treatise on the Venereal Disease*, p. 126; Lewis/Rotheram, *New Dispensatory*, p. 135; Huxham, *Observations on the Air and Epidemic Diseases*, I, 76, and II, 74, 120, 209; James, *Medicinal Dictionary*, under "camphora"; Lewis, *New Dispensatory*, pp. 103-04, 272; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp.25, 123-24; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 350n; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 185, 441 (under "ligature").

### **CHALYBEATES:**

Although *chalybis* was technically steel, and iron *martis* or *ferrum* (by the late 18th century, *ferrum* would become standard in British pharmacopoeias, with attendant changes in names of many ferrous compound medicines), in general usage the term referred to iron or steel. Both forms of the metal were used medicinally, but in 18th-century British practice, iron was greatly preferred, because it dissolved more easily in acids, was softer, and rusted more and faster. Indeed, in James's view, steel was "of no further Use in Medicine, than as it affords Chirurgical Instruments." Iron was thought to

stimulate the pulse, secretions (including urine and sweat), menstruation, and color. All ferrous preparations were considered both astringent and aperient, differing only in degree. They were used mainly in cases of weakness or relaxation. They were also thought to play a role in the production of good blood. Lewis warned against using them when the patient's circulation was quick and thought them useless if his digestive system was too alkaline; in general, however, he was partial to these compounds and wrote, "Iron is the only metal which seems naturally friendly to the animal body." Along with mercury, opium, and Peruvian bark, iron was listed among the "Herculean" drugs, but it was certainly the least important of the four, and it appears to have lost favor across the 18th century.

*Vitriolum martis* (vitriol of iron; sometimes called *sal martis* or *sal chalybs*, "salt of steel")

Prepared (London recipe, 1721) by combining iron filings (copperas was sometimes substituted; Lewis was concerned that all copper be removed in the process) with oil of vitriol (see under "vitriol") and proof spirits (see under "wine"). In 1746 London altered the recipe: iron filings and oil of vitriol were poured into water, and after effervescence ceased the mixture was filtered, evaporated, and set aside to shoot crystals. Boerhaave recommended *sal martis* for daily use. It was valued as an astringent and a gentle laxative (in large doses, emetic), anthelmintic, and emmenagogue, and was incorporated into the treatment of (Brookes's words) "various Diseases ... very different from each other." Like other chalybeates, it was thought to tone the fibers. According to Lewis, "The salt of steel is one of the most efficacious preparations of this metal." James, an advocate of chalybeate medicines, nevertheless warned against using vitriol of iron in patients who were bilious and hot; in this, he cited Hoffmann's observations.

Iron seems not to have played a major role in army medicine. Chalybeates are seldom mentioned in military medical literature. *Chalybis praeparata* (a powder made from iron or steel shavings or rust, moistened with vinegar) is included in the "Dispensatory" and, under a slightly

different name, in one later comparator. Vitriolum martis is not included in the "Dispensatory," but it is listed (under different names) in three later comparators. Iron appears as an ingredient in a recipe or in a list of remedies six times in the Wellcome sample. Steel appears 27 times.

**Sources:** Astruc, *Diseases of Women*, I, 112-13; Brookes, *General Dispensatory*, pp. 22-23, 315-16; Buchan, *Domestic Medicine*, p. 139n; Culpeper, *Pharmacopoeia Londinensis*, p. 209; Healde, *New Pharmacopoeia*, pp. 14, 26, 41; James, *A Medicinal Dictionary*, under "chalybs" and "mars"; Lewis, *New Dispensatory*, pp. 93, 165, 189, 321; Pemberton, *Dispensatory*, p. 214; Quincy, *Dispensatory*, pp. 267-68; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 158-59; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 418; Salmon, *New London Dispensatory*, pp. 31, 95; Walker, *Treatise on Nervous Diseases*, pp. 179-80.

### **Chamomile:**

Few simples had a longer history than chamomile (*L. Anthemis nobilis*), which had been widely used by the Greeks and by the Egyptians before them, and in Anglo-Saxon England was regarded as one of the nine sacred herbs. Unlike most herbals it retained great popularity in the 18th century, not only with the general public but among professionals. Chamomile grew very widely in Britain.

Chamomile flowers, which were often taken in the form of tea, had over the centuries become staples of both professional and popular medicine, acquiring a huge range of applications. The flowers and herb of chamomile were accounted carminative, aperient, diuretic, discutient, and emollient. Salmon considered an oil derived from the chamomile flowers (infused in olive oil) effective in soothing bruises and aches, and chamomile was widely regarded as anodyne. They were used against flatulent colic, for promoting uterine purgations, in spasmodic pains and childbirth. They were frequently used in discutient and antileptic fomentations and in emollient glysters. James asserted, "No Simple in the **Materia Medica** is possess'd of a Quality more friendly and beneficial to the Intestines than Chamomile-flowers." A watery infusion of the flowers, taken tepid, was often used to promote the operation of emetics. Perhaps the most common use was as a febrifuge, a purpose suggested by

authorities from Dioscorides to Boerhaave. James described chamomile as "the common Febrifuge of the **Scotch** and **Irish**." Admirers during the 18th century accounted chamomile hepatic, nervine, aperient, emollient, discutient, and anodyne. Withering indeed reported that fomentations of it relieved pain, and tied this to the antispasmodic quality of chamomile. It was widely used as a carminative, stomachic, aromatic, diuretic, and -- although Astruc doubted its efficacy -- an emmenagogue. Many standard authorities, including Dioscorides, Riverius, and Boerhaave, prescribed it against intermittents.

Chamomile flowers are noted in the "Dispensatory" of 1746 and in all comparator lists. The oil or some part of the plant is mentioned 200 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 108-11; Jean Astruc, *A Treatise on the Diseases of Women; In Which it is Attempted to Join a Just Theory to the Most Safe and Approved Practice: With a Chronological Catalogue of the Physicians, who have written on these Diseases* (London: J. Nourse, 1762), I, 107; Healde, *New Pharmacopoeia*, p. 17; James, *Medicinal Dictionary*, under "chamaemelum"; le Strange, *History of Herbal Plants*, pp. 25-26; Lewis, *New Dispensatory*, p. 113; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 137; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 22; *Practice of the British and French Hospitals*, p. 57 ("a turpentine clyster"); Quincy, *Dispensatory*, p. 300; Salmon, *New London Dispensatory*, pp. 44-45, 126; Thomas Short, *Medicina Britannica: Or a Treatise on such Physical Plants, as are Generally to be found in the Fields or Gardens in Great-Britain*, reprint of 3rd (London) ed. (Philadelphia, B. Franklin, 1751); # 41; Withering, *Botanical Arrangement*, II, 936.

### **Cherries:**

Two types of cherry, the tart red and sweet black, were used medicinally. Both were listed among the materia medica in the 1721 ed. of *Pharm. Lond.* but were dropped in 1746, although temporarily remaining official in Edinburgh. Black cherries were valued by some as a cephalic, so useful against palsies and convulsions. Their juice, thickened, was, in Salmon's words, "one of the greatest and most wonderful balsams in nature." Boerhaave considered cherries to be aperient and



useful for opening viscera and thinning viscid fluids, while Lewis proclaimed them a good cooler, so useful in treating fevers and bilious distempers (Cullen saw this as a general quality in summer fruits). Black cherry water was made from the stones. Mead warned that while the water was often given to young children to remedy convulsions, it actually caused them. Buchan reported that cherries turned rancid in the stomach and could cause cholera morbus.

By the mid-18th century, the medical profession had little use for the cherry, and it was not included in any compound medicines in either British pharmacopoeia, in any army list, or in *Practice*. Cherries or their water or wine are mentioned 61 times in the Wellcome sample, and indeed to the extent that the cherry was used medicinally at all by 1800 it was in popular medicine.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 273-76; Buchan, *Domestic Medicine*, p. 235; Cullen, *Treatise of the Materia Medica*, I, 177; Lewis, *New Dispensatory*, p. 112; Mead, *Medical Works*, p. 99; *Practice of the British and French Hospitals*, p. 49 ("an electuary against the gravel and stone"); Quincy, *Dispensatory*, p. 299; Salmon, *New London Dispensatory*, pp. 44, 130.

### **Chicory:**

Also called "garden succory," chicory (L. *Cichorium intybus*) had been exploited medicinally for centuries, and its seeds were among the four lesser cold seeds of classical medicine. Its roots, and occasionally its flowers and stalk, were also sometimes used. Advocates thought it a useful aperient and diuretic, and recommended it for jaundice. It was a traditional antiscorbutic. Nevertheless, it played very little part in 18<sup>th</sup>-century British medicine, and its last official preparation, syrup of chicory with rhubarb, was dropped by London in 1746.

Chicory is not mentioned in any of the army lists. However, the plant or its simple preparations appear in 86 lists or recipes in the Wellcome sample, suggesting a fair degree of popular usage, at least into the 18<sup>th</sup> century.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 412-13; James, *Medicinal Dictionary*, "cichorium"; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 185.

Cinnabar: see under "mercurials"

### **Cinnamon:**

A staple of Greek medicine, where it served many purposes, cinnamon continued to have a great reputation in the 18th century. Cinnamon bark was imported from the East Indies, the Ceylonese variety being perhaps the type most esteemed by medical authorities. Lewis was concerned by what he saw as a widespread practice of shopkeepers to sell cassia in place of cinnamon or to blend the two. Purchasing bark rather than powder may have reduced the likelihood of fraud. Although use of products of the cinnamon tree (*L. Laurus cinnamomum*) in British medicine was largely confined to the bark, Parr promoted the oils derived from the root, leaves, and fruit.

Cinnamon was valued as an astringent, and was as such employed to combat flux or to strengthen the viscera. It was perhaps the most used aromatic, in consequence being blended into many common preparations to make them palatable or to impart an attractive scent (or mask a disagreeable one). It was sometimes applied externally, as an anodyne or sedative. On occasion, it was prescribed as an antiscorbutic, though this application faded during the century. Cinnamon water was frequently mixed into compound medicines or used to administer drugs. The essential oil was likewise popular. It was usually prepared by the Dutch, and because of its high price other oils were often fraudulently substituted for it in the shops. Since the oil was regarded as very hot and pungent, although pleasant tasting, it was usually administered orally in diluted form, often accompanied by sugar, and James cautioned against using it on patients who were already overheated. European and British authorities promoted it for a variety of purposes, but most applications involved stimulation. Boerhaave, for one, considered it the best medicine for restoring strength to patients weakened by disease. Lewis wrote, "In cold languid cases, and debilities of the nervous system, it is one of the most immediate cordials and restoratives." Cinnamon oil was valued as a stomachic. Conversely, however, it was sometimes intended to soothe and calm; in this connection, it was used to treat such problems as dysentery, catarrh, and hiccough. While most often given internally, it was sometimes rubbed on to combat mortification

or otherwise to stimulate or restore weakened or cold extremities.

Cinnamon bark is listed in the "Dispensatory" and five comparators. Cinnamon water (with brandy) and oil are also mentioned in several lists, and cinnamon was included in many compound medicines that were widely used in the army. Cinnamon, its oil and water appear in 14 recipes in *Practice*, the most of any flavoring or aromatic. They appear 54 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 1-8; Brookes, *General Dispensatory*, pp. 145, 148; Cullen, *A Treatise of the Materia Medica*, II, 137; Hill, *History of the Materia Medica*, pp.663-67; James, *Medicinal Dictionary*, under "cinnamomum"; Lewis, *New Dispensatory*, pp.382-83; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 144-45, 321-22, 326; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 186n; Moore, *Medical Sketches*, p. 267; Parr, *London Medicinal Dictionary*, I, 440-41; *Practice of the British and French Hospitals*, pp. 43 ("white drink"), 53 ("anodyne draught), 54 ("Peruvian bark draught"), 55 ("saline draught"), 59 ("compound infusion of roses"), 60 ("chalk julap," "musk julap"), 62 ("asthmatic mixture," "astringent mixture," "a more powerful astringent mixture"), 64 ("the scillitic mixture"), 66 ("pills for a catarrh"; "dysenteric pills"), 70 ("astringent powder"); Quincy, *Dispensatory*, p. 359; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 569; Wesley, *Primitive Physic*, p. 105.

## **COLOCYNTH:**

Colocynth (coloquintida, "bitter apple"); the dried fruit of *Citrullus colocynthis*, was used as a purgative by Hippocrates. It was imported from Turkey, the Levant, and North Africa. Salmon regarded it as a violent purgative. Alston went even further, warning that it was "a very violent, irritating, and dangerous cathartic, apt to bring on superpurgations and other bad symptoms." Hill considered it "the most powerfull known Hydragogue." Because of the violence of its action, it was seldom prescribed alone, but only in compound drugs -- *pil. cocc.* (see next) being the most common -- that were milder. It was sometimes given in enemas, especially to children.

*Pilulae cocciae minores:*

The Lesser Pill Cocciae, in the 1721 London recipe, which was based on Rhazes' formula, was composed of aloes, colocynth, scammony, oil of cloves, and syrup of buckthorn. The ingredients (qqv.) were all intended to purge, except for the oil of cloves, which was supposed to warm the patient. In 1746, the pill was renamed *pilulae ex colocynthide cum aloe* and the proportion of colocynth was cut in half, a move intended to restore Galen's recipe. As James notes, nauseating items such as aloes and colocynth were often administered in the form of pills. The lesser pill cocciae was similar to an older drug, pil. ex duobus ("pill of two things"), which included colocynth and scammony as the active ingredients and of which Culpeper wrote, "This Pill was I suppose contrived to accommodate those that cannot be persuaded to take above one or two pills at a time, and therefore they were made so strong that one Pill in some Bodies and two in most will work handsomely." Theobald recommended that 1-2 gr. of opium be mixed into the pill, to moderate its effect. The lesser pill cocciae was dropped from the 1788 ed. of *Pharm. Lond.* The Edinburgh recipe included vitriolated tartar.

The "Dispensatory" provides a recipe for *pilulae ex colocynthide cum aloe* or *cocciae minores* that differs slightly from the official versions. Pil. ex Colo. c. aloe is listed in the "Dispensatory" of 1746 and in four later comparators. Colocynth is mentioned only twice in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 278-81; Brookes, *General Dispensatory*, pp. 27, 246-47; Culpeper, *Pharmacopoeia Londinensis*, p. 157; Healde, *New Pharmacopoeia*, p. 21; Hill, *History of the Materia Medica*, pp. 449-52; James, *A Medicinal Dictionary*, under "colocynthis" and "pilula"; Lewis, *New Dispensatory*, pp. 117, 469; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 8; Pemberton, *Dispensatory*, pp. 102-03, 324-25; Quincy, *Dispensatory*, pp. 124-25, 302; Salmon, *New London Dispensatory*, pp. 47-48, 131, 683; Theobald, *Medulla medicinae*, p. 55; Woodville, *Medical Botany*, III, 476-78.

## CONTRAYERVA:

Sir Francis Drake was credited with having introduced contrayerva to England, in about 1581 -- hence, the popular name, "drakena." The root was generally imported from Peru and the Spanish West Indies, though the substitution of other roots seems to have been a common problem. It was widely thought to be alexipharmic, antiseptic, and diaphoretic, and useful to strengthen the stomach, promote digestion, dispel wind, and correct loose constitution in malignant fevers. In the view of Lewis, "Contrayerva is one of the mildest of those substances called alexipharmics," and so might be given in large doses. Contrayerva was a primary ingredient in at least 4 drugs noted in *Practice*, all of them diaphoretic. Contrayerva had its advocates, notably Pringle and Huxham, who used it in treating putrid and nervous fevers. It was especially valued in cases where the patient's pulse was low and his spirits were sinking. Mead and Buchan thought it useful in treating quinsy. Cullen recommended a decoction of contrayerva and bark as a gargle for ulcerous sore throat. He also regarded contrayerva as a useful stimulant and tonic, especially appropriate in fevers of debility, but considered wine and bark better. It appears that the use of contrayerva declined during the late 18th century.

### *Lapis contrayervae:*

This "stone" was a ball of *pulvis contrayervae compositus* (Compound Powder of Contrayerva), which was prepared by mixing and powdering contrayerva root and crabs' claws (London recipe, 1746; Edin. version included Virginian Snakeroot and saffron). The stone or powder was often used to administer contrayerva. According to Parr, it was usually given in the decline of ardent fevers, but throughout the course of low and nervous ones.

*Pulvis contrayervae compositus* is listed in the "Dispensatory" of 1746 and in most later comparator lists. The root is included only on one comparator list. Contrayerva is referred to only once in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, pp. 27, 239-40; Buchan, *Domestic Medicine*, 144n, 208n;

Cullen, *A Treatise of the Materia Medica*, II, 293, 391; James, *Medicinal Dictionary*, under "contrayerva"; Lewis/Rotheram, *New Dispensatory*, pp. 148, 524; Mead, *Medical Works*, p. 376; Parr, *The London Medical Dictionary*, I, 485; *Practice of the British and French Hospitals*, pp. 37 ("alexipharmic bolus"), 38 ("contrayerva bolus"), 47 ("diaphoretic electuary"), 55 ("sudorific draught"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 232-33; Woodville, *Medical Botany*, I, 140-42.

### ***CORNU CERVI:***

Hartshorn had been used medicinally for centuries. The hartshorn of the shops was in fact prepared from the horns, antlers, or bones (and perhaps urine) of various animals. Burnt hartshorn was perhaps most commonly used as a stimulant in cases of continued fever or "low" diseases. It was also widely regarded as absorbent and astringent, two qualities that suggested another frequent application, against looseness. Hartshorn also had its critics, however. Lewis asserted that the medicinal value of hartshorn was exaggerated by the superstitious belief that harts lived to a great age and their parts could communicate life or vigor. White wrote that the horns had no special virtues, that on distillation they yielded only the same principles that other animal substances did, and that burning (which was traditionally believed to liberate medicinal properties) destroyed even these qualities.

#### *Decoctum album:*

"The white drink" was sometimes just burnt hartshorn in water, although both the London and Edinburgh recipes included gum Arabic, and Edinburgh also included cinnamon and sugar. A decoction was prepared by boiling substances in water (usually, for a prolonged period), the intention being to extract medically useful elements that were soluble only in this medium. Lewis observed that the gum was included in decoctum album in order to suspend the hartshorn, but doubted its value and recommended that starch be included. While not endorsing the decoction, he noted that it was the "common drink in acute diseases attended with a looseness, and where acrimonious humours abound in the prima viae."

*Sal cornu cervi volatile*

Volatile Salt of Hartshorn was listed in the *Pharm. Edin.*, but London included only Salt of Hartshorn. The volatile salt was prepared through a two-step process. First, fragments of hartshorn (or bones or horns of other animals) were heated over a high flame until they separated out into an oil, a spirit, and a salt. The salt was then sublimed with fine chalk and finally with rectified spirit of wine. Brookes regarded it as "a most penetrating medicine ... alexipharmic, cephalic, diuretic, uterine, and antiseptic." Lewis esteemed it "a quick and powerful stimulant." It was often used to treat nervous conditions and lethargy, and was given to fever patients when their spirits sank. It was applied as a smelling salt in syncope.

*Spiritus cornu cervi:*

Spirit of Hartshorn (also known as *liquor volatilis cornu cervi*) was prepared in the same process as the volatile salt (see preceding), then distilled. Since the process of preparation was involved, apothecaries usually bought these items from manufacturers, instead of preparing them themselves. The spirit was thought to have the same virtues as the salt and was similarly applied. Wesley recommended it for a running nose or sore throat, and it was often given in cases of debility, dyspepsia, and flatulence. Huxham asserted that it dissolved the blood and promoted hemorrhaging.

*Sal cornu cervi volatile* is listed in the "Dispensatory" and in six comparators. The spirit is included in all lists. Burnt hartshorn (*cornu cervi calcinatio*, often abbreviated "c.c.c.") is on three comparators, and additional quantities may have been purchased locally. Raspings of hartshorn (*rasurae cornu cervi*) is on one comparator. Decoctum album is not listed, but this is because it would have been prepared as needed by army medical officers; a recipe for it is in *Practice*. Hartshorn and its products are mentioned 98 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 382-84; Brookes, *General Dispensatory*, pp. 28, 140, 306-07; Buchan, *Domestic Medicine*, pp. 123n, 144-45, 186; Cullen, *Treatise of the Materia Medica*, I, 30, and II, 286; Dickinson, *An Inquiry into the Nature and Causes of Fever*, p. 104; Healde, *New Pharmacopoeia*, pp. 8, 199; Hill, *History of the Materia Medica*, pp. 740-42; Huxham, *Essay on Fevers*, pp. 96; 152; Lewis, *New Dispensatory*, p. 389; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 98, 232, 244-45, 352-56; Pemberton, *Dispensatory*, p. 247; *Practice of the British and French Hospitals*, pp. 38 ("a bolus for bloody flux"), 43 ("the white drink"), 55 ("a sudorific draught"), 56 ("an oily emulsion"), 60 ("a volatile julap"), 72-73 ("Mindererus' Spirit"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 167 (under "carbonas ammoniae"), 237-38 (under "cornu ustum"), 451, 678; Salmon, *New London Dispensatory*, p. 156; Theobald, *Every Man His Own Physician*, pp. 25, 52; Tissot, *Advice to the People*, p. 168; Wallis, *Art of Preventing Diseases*, p. 389; Wesley, *Primitive Physic*, pp. 134, 145; White, *Analysis of the New London Pharmacopoeia*, p. 30.

### ***Cortex Cascariillae:***

Also known as *eleutheriae cortex*, because it was imported from Elatheria in the Bahamas, cascarilla (L. *Croton eleuteria*) was introduced into Europe in the 1690's. It became very popular in Germany, where it was widely preferred to bark for intermittents, since it was less astringent. The French Academy endorsed it as a treatment for dysentery, noting that unlike ipecacuanha, which (the academy asserted) weakened the stomach, it enhanced strength and appetite. It appears to have been less popular in Britain, although Lewis, noting the endorsements of Continental authorities, commented, "it deserves to be more regarded than it is at present." Years later, Rotheram echoed this sentiment. Cullen, however, found cascarilla to have little effect and suggested that the great claims made for it had been prompted by hostility to bark.

Cascarilla is included in only two comparator lists, and it does not appear to have played a significant role in army practice. It is not mentioned in the Wellcome sample, but since it was so late in coming to Britain it was likely to be omitted from a collection of recipes that stressed traditional



ingredients.

**Sources:** Brookes, *General Dispensatory*, p. 32; Cullen, *A Treatise of the Materia Medica*, II, 59; Healde, *New Pharmacopoeia*, p. 16; le Strange, *History of Herbal Plants*, pp. 93-94; Lewis, *New Dispensatory*, pp. 125-26; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 131-32; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 176; Woodville, *Medical Botany*, I, 116-19.

*Crocus metallorum*; see under "antimonials"

### **CORTEX PERUVIANUS/PERUVIAN BARK:**

Despite the popularity of opium, mercury, and antimony, the medicine most praised by eighteenth-century authorities was cinchona -- Peruvian bark, usually known simply as "the bark." Imported from Peru and Ecuador, this was also known as gray bark. Red and yellow bark, which were introduced into British practice late in the 18th century, were products of the West Indies. John Ranby, who did much to introduce it into the treatment of gunshot wounds, regarded it as "a medicine, which no human eloquence can deck with panegyric, proportionable to it's virtues. Of such incomparable benefit it is to mankind!" Such acclaim had been long in coming, however. When first brought to England in 1658, the early seventeenth century, cinchona was known as "Jesuits' Bark," and the association with Jesuits served to promote hostility in England, notably among fervent Protestants like Harvey. Willis used bark in 1659, then wrote against it. Bark did not fit well with Galenic theory. In further explaining early opposition, Black noted that when first sold in England bark had often been adulterated by vendors, and had therefore not been effective, and that prior to the 18th century, it had not been given in sufficient doses. Talbot championed it and eventually won Sydenham over. Sydenham endorsed the bark in the first (1666) edition of his *Methodus curandi febres*. Following his lead, the medical community became progressively more enthusiastic, and Morton referred to bark as the "Herculean antidote" of both intermittent and remittent fevers. Also significant, and widely followed, was Sydenham's recommendation that bark be administered between, rather than during,

aguish paroxysms (cf. entry for ague, app. B-1). As the popularity of bark grew, so did consumption, and during the 1790's, England imported 634,783 pounds of it in one five-year span. As early as the 1730's, French naturalists established that there were several species of bark, and by the close of the century, as many as eleven varieties were being used medically. Most importantly, to the original Peruvian (gray) bark were added red bark, popularized by William Saunders and Edward Rigby in the 1780's, and yellow bark, which John Relph brought to the attention of the profession in a 1794 treatise. Many writers, including Relph, found red bark to be superior to gray, but Hunter, who used it in remittent cases in the West Indies, saw it as less effective and more nauseating than common bark.

During the eighteenth century, applications of the bark multiplied, to the point where it was not only used but relied on for more purposes than any other drug. Initially, it had mainly been employed to treat agues. That application was extended to other fevers. While some writers, e.g. Mead and Dickinson, believed that bark was not effective against any fever but ague, the tendency was to rely on it in treating many fevers. In the words of Buchan, "we have reason to believe that the bark is a very universal febrifuge." Home believed that bark was effective in treating all diseases that recurred periodically. Bark was easily the most important drug in Millar's therapeutics. Through the course of the century, it came to be relied on for progressively more medicinal benefits. It was regarded as the preeminent bitter and astringent and ranked among the leading cordials, tonics, and stomachics. It was highly valued as an antiseptic, and was sometimes used as a purgative. George Fordyce asserted that bark reduced irritability, strengthened the system, and was the "most powerfull Remedy yet discovered" to counter mortification and gangrene. Mason not only lauded bark as febrifuge, astringent, and styptic -- virtues generally accepted -- but also as balsamic and cordial. Owing to the range of its perceived benefits, it not surprisingly was employed against a host of illnesses. It was often used to treat smallpox and other diseases that were considered putrid in nature. Simon Mason sought to explain its success against smallpox: "by its Cordial, Styptic Quality, it fortifies the Blood against the Attacks of the morbid Matter, assists the Vessels, enlivens, and gives new Spirits to depress'd Nature, and enables her to overcome her Enemy." And bark was taken not only to treat fever, but to prevent it. Under

Lind's influence, cinchona was introduced into the navy as a prophylactic in 1771, and although the usage became general only after 1833 it had strong advocates among medical officers. In November 1803, John Snipe, physician to the fleet, informed Nelson, "The duties of wooding and watering are in all climates more or less unwholesome, but by allowing the men so employed a potion of spirits strongly impregnated with Peruvian Bark or Spices will in great degree tend to preserve them from the impure air of woods and marshes."

Bark was the medicine used most quickly in many situations. It was also a drug of last resort, when other remedies had failed. On 15 September 1778 Thomas Hughes, a British lieutenant serving in America, was seized with a violent headache, which a doctor ascribed to sunstroke. On the 19th Hughes noted in his journal, "Every thing tried for my relief. The doctor has rub'd my temples till they are sore. I have snuff'd up strong waters till I have excoriated the inside of my nose -- but all in vain. The doctor now says that nothing but patience will get the better of my disorder." But on the 21st Hughes reported, "The doctor has at last found me some relief -- by prescribing bark," and four days later he wrote, "From a constant taking of bark, I am now able to sit up and the pains are going off."

Some writers were concerned by the surging popularity of bark. Sir William Fordyce wrote: "It is a fact well known, that there never has been any medicine in such general use, or which has been applied to such a variety of purposes, as the Peruvian Bark.... Every year has brought to light new powers in this medicine: but it is equally true, that every day evinces the abuse of those powers; for, like a two-edged sword, it cut on both sides; and we cannot but regret, that it should be so wantonly employed by so many unskilful hands." Critics likewise claimed that treatment with bark brought on jaundice and scurvy, and although such assertions had tended to come well before 1750, even late in the century defenders of the drug thought it necessary to dispute them.

Bark was not without critics, especially on the Continent. Stahl asserted that it was not an effective febrifuge, even for intermittent, and that it caused dropsy. Jackson asserted that French and German practitioners felt more negative about the bark than did the British. Many British writers, however, expressed concerns or reservations regarding its use. It was widely held that bark blocked the

viscera or that it caused liver damage and resultant diseases like dropsy or jaundice. There was constant debate over which symptoms precluded its use, or whether it should be administered before coction (cf. entry on ague, app. B-1). Saunders advised that bark not be employed in continued fevers. George Fordyce cautioned that if languor, nausea, and debility had already set in, bark was inappropriate for fever patients, and instead relaxants should be given. Even Mason, a strong advocate of bark, cautioned that because of its astringent nature it should be administered only after the matter in minute vessels was removed through evacuations, or it would "offend them" A number of authorities also warned that it was inflammatory and advised that it not be used when inflammation was present. Still more widespread was the concern that it was less effective than advocates suggested. Particularly to medical officers serving in the West Indies, who daily saw men die from yellow fever, even after having taken massive doses of bark, it appeared that the medicine was undependable. Stevenson complained that the curative powers of bark had been exaggerated by empirics. Finally, there was the problem of adulteration. Jackson wrote in the 1790's that bark had been more potent decades before than it was in his day, and he explained, "It is probable that much of the bark, which is now imported into England, is either in some shape adulterated, or naturally inferior in quality to what it had been in former times." At best, there were problems of varying quality and adulteration. The difficulty was relieved only in 1820, when two French chemists extracted quinine from cinchona bark. It is possible that the combination of concerns over quality, coupled with complaints that bark was ineffective or, on the other hand, that it was sometimes harmful, may have reduced reliance on it late in the century. Rigby observed that the popularity of common bark had been "very much diminished" in recent years, though this was probably an exaggeration.

Although several preparations of the bark were available, it was generally used in powdered form, and Lewis considered this the best, in that its components were "in the most effectual proportion." The main caveat in using it was that it often choked or nauseated patients. To make it more palatable, bark was often mixed with sugar (*saccharum*, q.v.), and Robertson tried fermenting it with berm or baking it into loaves of bread. Rigby claimed that even children could swallow red bark without

difficulty. William Babington developed a spirituous extract of yellow bark that, according to Relph, was well tolerated even by patients with weak stomachs, yet was "a convenient and efficacious form, as containing all the medical powers of the bark in the most concentrated state."

*Extractum corticis Peruviani Extractum corticis Peruviani*

Extract of Peruvian Bark; often distinguished by *durum* (hard) or *molle* (soft) was prepared by boiling powdered bark successively with several potsful of water, until the resultant liquor was transparent when cold. All liquors were then blended and evaporated. The soft extract was to have the consistency of a mass of pills, while the hard one was to be suitable for powdering. A variant, *extractum corticis peruviani cum resina* (Extract of Peruvian Bark with Resin), was made with rectified spirit of wine instead of water; it was regarded by Lewis as "the best form of extract that can be obtained from this valuable drug"; it, too, was sometimes simply called *extractum corticis Peruviani*. Pemberton's committee asserted that the extract prepared with spirits and containing resin was bad tasting, which defeated its purpose.

*Extractum corticis Peruviani* is not listed in the "Dispensatory" of 1746, but is included in almost all later comparator lists. *Cortex Peruvianus* is listed in the "Dispensatory" and in all comparators. In some cases, several different forms (e.g., powdered, coarsely ground) are called for, as well as various preparations. The quantities of bark specified are usually very large. There are only four clear references to Peruvian bark in the Wellcome sample, plus a fifth to "bark," not further specified. The paucity of references reflects in part the fact that most of the manuscripts date from the 17th or early 18th centuries, but it is probable that throughout the latter century bark was used more in professional than in popular medicine. Because of its potency and the perceived danger of misusing it, even writers who addressed a general audience on medical matters were sometimes hesitant to advocate it. Wesley expressly omitted most recipes that included it or the other "Herculean" drugs (mercury, opium, or steel; he also omitted antimonials). Buchan, however, advocated bark for many

diseases and conditions, seeing it as useful for every purpose from curing fever to promoting the production of "laudable pus." Even he, however, cautioned against prolonged prophylactic use, observing that bark promoted gravel and stone.

**Sources:** NLM, HMD Mss, MS B 362: "Materia Medica by Dr Fordyce No. 4," pp. 39-41, 49; Black, *Historical Sketch of Medicine*, p. 211; Brookes, *General Dispensatory*, pp. 88-90, 227; Buchan, *Domestic Medicine*, pp. 111-15, 137, 145, 150-52, 160, 168, 184, 208, 215, 247, 256, 262, 288-89, 304, 317, 330n, 331, 374; Cullen, *A Treatise of the Materia Medica*, II, 59-77; Dickinson, *An Inquiry into the Nature and Causes of Fever*, pp. 108-12, 167, 173; (Sir) William Fordyce, *A New Inquiry into the Causes, Symptoms, and Cure, of Putrid and Inflammatory Fevers*, 2nd ed., (London: T. Cadell [etc.], 1774), pp. 114-15; French, *Robert Whytt, The Soul, and Medicine*, p. 49; A. W. Haggis, "Fundamental Errors in the Early History of Cinchona," *BHM*, 10 (1941), 419-20; Healde, *New Pharmacopoeia*, pp. 95-97; Home, *Medical Facts and Experiments*, p. 149; Thomas Hughes, *A Journal by Thos. Hughes for His Amusement, & Designed only for His Perusal by the Time He Attains the Age of 50 if He Lives so Long (1778-1789)*, ed. R. W. David (Cambridge: Cambridge Univ. Press, 1947), pp. 40-41; Hunter, *Observations on the Diseases of the Army in Jamaica*, pp. 152-53; Jackson, *Treatise on the Fevers of Jamaica*, p. 207; James, *Medicinal Dictionary*, "quinquina"; le Strange, *History of Herbal Plants*, pp. 82-84; Lewis, *New Dispensatory*, pp. 211-12; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 139-42, 144, 227, 296; Maehle, *Drugs on Trial*, ch. 4; Mason, *Nature of an Intermitting Fever*, pp. 101, 140-43; Mead, *Medical Works*, p. 355; Millar, *Observations on the Management*, pp. 167-76; Neuburger, "Some Relations between British and German Medicine," pp. 222-24; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 39, 52, 167, 171-73; Pemberton, *Dispensatory*, pp. 50-51, 163-65; *Practice of the British and French Hospitals*, pp. 45 ("decoction of the bark"), 50 ("electuary of the Peruvian bark"), 55 ("Peruvian bark draught"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 202-04; Ranby, *Method of Treating Gun-Shot Wounds*, pp. 36; Relph, *Inquiry into the Medical Efficiency of a New Species of Peruvian Bark*, pp. 2n, 5, 34-44, 59-63, 133-41; Edward Rigby, *An Essay on the Use of the Red Peruvian Bark in the Cure of Intermitents* (London: Joseph Johnson, 1783), pp. 13, 37;

Robert Robertson, *Directions for Administering Peruvian Bark* (London, 1799), pp. 6-14; Saunders, *Elements of Physic*, p. 21; Dale C. Smith, "Quinine and Fever: The Development of the Effective Dosage," *JHM*, 31 (1976), p. 349; Stevenson, *Considerations on the Dangerous Effects of Promiscuous Blood-letting*, pp. 211-21; Walker, *Treatise on Nervous Diseases*, p. 179n; Wesley, *Primitive Physic*, pp. xxii, 139; Woodville, *Medical Botany*, III, 546-56.

### **Cummin:**

The cummin seed (*L. Cuminum cyminum*), much of which was imported from Malta – though it also grew in English gardens – was one of the four greater warm seeds of Galenic medicine. Valued as cephalic, pectoral, carminative, stomachic, and deobstruent, cummin was occasionally used to treat flatulent choleric, tympany, and vertigo. It was seldom given alone, and its internal use may have been inhibited by a flavor that many found unpleasant. Its extract was sometimes used, but it was nauseating. If applied externally, cummin had the power, according to Salmon, to discuss swellings in joints or genitals. Cummin was also included in several official plasters and cataplasms that, when applied to the abdomen in conditions like flatulent choleric, were supposed to relieve pain and flatulence. Nevertheless, Lewis wrote that cummin was "not very often made use of," and Parr, despite his sense of the value of some applications, had the same impression in the early 19th century.

Neither cummin nor its extract is mentioned in the "Dispensatory," any comparator list, or *Practice*. However, it is referred to 76 times in the Wellcome sample, suggesting that, at least into the 18th century, it retained a significant standing in popular medicine.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 350-51; Brookes, *General Dispensatory*, p. 29; Buchan, *Domestic Medicine*, p.228n; Cullen, *A Treatise of the Materia Medica*, II, 107, 180; Healde, *New Pharmacopoeia*, p. 23; Hill, *History of the Materia Medica*, pp. 517-18; Lewis, *New Dispensatory*, p. 122; Parr, *The London Medical Dictionary*, I, 521-22; Salmon, *New London Dispensatory*, pp. 145-46; Woodville, *Medical Botany*, III, 520-21.

## **Currants:**

For most of the century, only one variety of currant, the red (*Ribes rubrum*), was included in the official materia medica, but in 1788 London added the black (*Ribes nigrum*). Currants were valued by some as a pectoral, as well as a laxative. Brookes asserted that they were cooling and antiseptic, so that "like the other Summer-Fruits, when ripe, [they] are useful in inflammatory, bilious, and putrid Fevers." Currant jelly and syrup were often included in gargles for quinsy and other throat problems (cf. *RP*, p. 59). Withering likewise reported that currant rob was "much used in sore throats, but chiefly in those of the inflammatory kind.... An infusion of the young roots is useful in fevers of the eruptive kind." He added, however, that the taste of currants was unpalatable to many, and it appears that their place in professional medicine declined during the century. Lewis observed that their rob, which had formerly been kept in shops, no longer was and that "at present, they are rather looked upon as a dietetic than a medicinal article."

Neither currants nor their medicinal products appear in the "Dispensatory" or on any comparator list, nor is any mentioned in *Practice*. Currants would have been available to the army locally, but in all likelihood the reason why they were omitted from orders for medical supplies was that they were little used medicinally. There are 43 references to currants in the Wellcome sample, suggesting a moderate role in traditional popular medicine.

**Sources:** Brookes, *General Dispensatory*, p. 98; Buchan, *Domestic Medicine*, p. 202; Healde, *New Pharmacopoeia*, p. 48; Hill, *History of the Materia Medica*, pp.512-13; Huxham, *An Essay on Fevers*, p. 154; Lewis, *New Dispensatory*, p. 191; Quincy, *Dispensatory*, p. 335; Salmon, *New London Dispensatory*, pp. 131-32; Withering, *Botanical Arrangement*, I, 243.

*Decoctum album*; see under *cornu cervi*

*Decoctum nitrosum*; see under nitre



### ***Decoctum pectorale:***

The Pectoral Decoction was prepared (London recipe, 1721) by boiling raisins, dactyls, figs, barley, then adding licorice root, leaves of maidenhair, ground ivy, scabius, and coltsfoot, and finally straining out the liquor. According to Quincy, the ivy had been substituted for hyssop, which had appeared in earlier recipes, because the latter irritated hectic patients, who were among the major consumers of the drug. The 1746 recipe included only barley, raisins, figs, and licorice in water. Pemberton observed that its predecessor had been "compounded of many very disagreeable ingredients, as appeared by examining each separately." The ingredients remained the same in the 1788 London recipe, though the name was changed to *Decoctum hordei compositum* (compound decoction of barley). Lewis considered the decoction a good pectoral and "very agreeable to the palate." Brookes esteemed it not only as a pectoral, but in treating the gravel and smallpox.

The official *decoctum pectorale* is not included in any of the army lists. Many variants and nostrums presumably took its place.

**Sources:** Brookes, *General Dispensatory*, pp. 199-200; Healde, *New Pharmacopoeia*, p. 203; Lewis, *New Dispensatory*, pp. 392-93; Pemberton, *Dispensatory*, pp. 248-49; Quincy, *Dispensatory*, p. 31; Salmon, *New London Dispensatory*, p. 578; Theobald, *Medulla medicinae*, pp. 44-45.

Diachylon; see *emplastrum diachylon cum gummi*

Diacodion; see *syrupus e meconio*

Diagrydium; see under "scammony"

### ***Diapente:***

Diapente ("the composition of five simples") was dropped from the *Pharm. Lond.* in 1721, though it remained in the *Pharm. Edin.* It was prepared (London, 1677) by powdering and mixing equal

quantities of gentian (q.v.), *aristolochia rotunda* (Round Birthwort; known since the time of Dioscorides, Galen, and Pliny; imported from Germany, France, and Italy; birthwort used to promote lochia after birth, though also an abortifacient; all types very bitter, and few remedies containing them were still widely used in the 18th century), bayberries (q.v.), myrrh (q.v.), and ivory shavings. Diapente was an ancient remedy, dating back to Vegetius, but as its early removal from *Pharm. Lond.* suggests, it had virtually no role in 18th-century medical practice. Nevertheless, it held a high place in the treatment of horses. E.R. wrote of diapente, "it Cureth whatsoever Diseases the Body of an Horse may be inwardly inclined to." More than a century later, Parr wrote, "It is now only used by farriers."

There are no references to diapente in any of the army lists or in the Wellcome sample.

**Sources:** E. R., *The Experienc'd Farrier*, p. 79; Parr, *The London Medical Dictionary*, I, 552; Shaw, *Dispensatory of Edinburgh*, pp. 136-37.

### ***Diascordium:***

Diascordium was an electuary that was credited to Fracastorius (d. 1553) and was originally intended as an antipestilential. Recipes for it became progressively more complex during the 16th and 17th centuries. The version included in the *Pharm. Lond.* of 1721 included 19 ingredients. The RCPL committee that reviewed the college recipes was, however, sharply critical and complained of the inclusion of many new ingredients over the years. The 1746 edition provided a simplified electuary, now named *Electuarium e scordio*, which was simply a combination of scordium (water germander [*L. Teucrium scordium*], the leaves) with opium, boiled in three times its weight of syrup of white poppies (poppy heads boiled in water, then strained). It was a rather mild opiate, and even after Edinburgh increased the opium in its recipe Leigh complained that the proportion of the drug was rather small. Diascordium, either by itself or in more complex medicines, usually was usually intended as a sedative/soporific or an astringent. One of its most common applications was in treating dysentery and diarrhea, for it was used both to calm and to tone the bowel. Monro used it so, but cautioned that using it or other opiates in the first stage would inhibit purging that was therapeutic and bring on gripes and

fever. Scordium itself, which had earlier been valued by some as an alexipharmic and diuretic, among other things, remained official, but seems to have been used mainly in popular medicine. Of the electuary, Lewis wrote, "It is a moderately warm, glutinous astringent and opiate; and in this light only, is considered by the present practice." It was dropped from the 1788 edition of *Pharm. Lond.*

Diascordium appears to have been widely used in army medical practice during the first half of the 18th century. While not appearing in the "Dispensatory," it is included in the 1703 and 1747 lists of drugs to be included in the surgeons' medical chest. However, it is noted in only one later comparator list, and it appears that its overall popularity declined later in the century. Diascordium is mentioned 19 times in the Wellcome sample and scordium only twice. In both cases, though especially the latter, these references are fewer than might be anticipated.

**Sources:** Brookes, *General Dispensatory*, pp. 238, 257; Culpeper, *Pharmacopoeia Londinensis*, p. 145; Healde, *New Pharmacopoeia*, p. 53; James, *Medicinal Dictionary*, under "scordium"; Leigh, *Experimental Inquiry*, pp. 80-81; Lewis, *New Dispensatory*, p. 478; Pemberton, *Dispensatory*, pp. 97-99, 333; *Practice of the British and French Hospitals*, pp. 51 ("electuary for a looseness"; "restringent electuary"), 62 ("an astringent mixture"); Mead, *Medical Works*, p. 380; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 289, 310, 348, 351, 358; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 30; Quincy, *Dispensatory*, p. 99; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 728-29 (under "scordium"); Salmon, *New London Dispensatory*, p. 658; Woodville, *Medical Botany*, I, 156-57.

### **Dung (*stercora*) and urine:**

Cowdung and its "perfume" (distillate) were valued as anodynes. Alston wrote, "An infusion of Sheep's-dung is given in the Small pox" (cf. *RP*, p. 62), but provided no explanation and may not have been aware of any. Traditionally, women drank bovine urine "cow tea" each May to clear their complexions. Like dung, urine was often applied to soothe and to relieve aches and pains (cf. *RP*, pp. 211, 256). Animal dung and urine were included in a number of remedies proposed by Hippocrates,

Dioscorides, and Galen.

Horsedung, but not cowdung, remained in the materia medica enumerated in the *Pharm. Lond.* of 1721. The 1677 ed. of *Pharm. Lond.* listed 12 types of dung and four of urine among the materia medica, but the 1721 ed. removed all the urine and left only five stercora, all of which were cut in 1746. The 1744 *Pharm. Edin.* retained seven stercora and only one type of urine, the human. By this time, excrements were almost entirely gone from professional medicine. As was reported by Lewis, "These fulsome medicines, which nothing but the most fantastic visionaries could have introduced, are now expunged from practice." Alston considered it "as little necessary as pleasant to rake into dunghills in quest of medicines."

There are 137 references to dung as a remedy in the Wellcome sample and 50 to urine.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 550-54; Lewis, *New Dispensatory*, p. 212; Quincy, *Dispensatory*, p. 353; Salmon, *New London Dispensatory*, pp. 199-200.

Eggyolk; see *vitellum ovi*

## **ELDER:**

Although the dwarf elder (*L. Sambucus ebulus*) was sometimes used in medicine, its effects were more drastic than were those of the common elder (*L. Sambucus nigra*), and consequently the latter species was generally preferred. From the Anglo-Saxon period on, the common elder held a reputation as a virtual panacea, prompting Evelyn to write, "If the medicinal properties of its leaves, bark and berries were fully known, I cannot tell what our countryman could ail for which he might not fetch a remedy from every hedge, either for sickness or wound."

According to Salmon, "the green leaves [of elder], stamped and applyed with Bulls tallow or goose grease ... discuss swellings, heal scalds and burns ... and glew ulcers." The flowers, he asserted, also discussed. Sydenham reported that a decoction of the inner bark was sufficiently emetic and cathartic to be of use in treating anasarca. Withering asserted that its inner green bark was useful as an

acid purgative and, in smaller doses, as a diuretic, therefore helpful in treating dropsy and glandular obstructions. The leaves, he reported, were also purgative, but more nauseous, and their ointments were cooling. Decoctions of elder flowers, he noted, were said to encourage expectoration in pleurisies, while fresh flowers were laxative and were applied in fomentations to ease pain and inflammation.

The various parts of elder were included in many official compound medicines during the 17th and 18th centuries. However, after 1750 the reputation of elder declined markedly, and its products were either dropped from the compounds or the preparations themselves were abandoned. Cullen observed, “the flowers and berries of the elder have been commended for many virtues, and I will not deny that they have some; but I can say, that in a hundred instances of their employment I could never discover their power and efficacy to be considerable, or indeed to deserve any attention.”

Elderberries:

Elderberries (*sambuci baccae*) had been used medicinally by the Greeks and Romans and were widely used in 18th-century British medicine, both popular and professional, although their reputation within the profession declined markedly after mid-century. Advocates (including Withering) regarded them as diaphoretic, diuretic, hydragogue, and purgative, and they were used in many preparations, both internally and externally, to treat problems as various as gout, dropsy, fever, and burns. Elderberry rob, often diluted with water and taken at bedtime, was among the most common cold remedies and was also considered valuable as a gentle laxative and diaphoretic.

Elderberry rob and the official ointment *unguentum sambucinum* (cf. *RP*, n. 83) are included in the "Dispensatory," but not in any comparator list, and there are no references to any product of the elder in *Practice*. Elderberries would have been widely available for local purchase, but there are virtually no references to them or to other elder products in writings on military medicine, so it is unlikely that they were much used, especially after 1750. Products of elder are mentioned in the

Wellcome sample 147 times.

**Sources:** Brookes, *General Dispensatory*, pp. 105-06, 225, 346; Cullen, *A Treatise of the Materia Medica*, II, 361; Culpeper, *Pharmacopoeia Londinensis*, p. 130; Healde, *New Pharmacopoeia*, p. 304; James, *Medicinal Dictionary*, "sambucus"; le Strange, *History of Herbal Plants*, pp. 221-24; Lewis, *New Dispensatory*, pp. 146-47, 509-10; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 234, 287, 572; Pemberton, *Dispensatory*, p. 364; Quincy, *Dispensatory*, p. 191; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 712-13, 831; Salmon, *New London Dispensatory*, pp. 98, 126, 223; Short, *Medicina Britannica*, #97; Sydenham, *Whole Works*, p. 400; Theobald, *Every Man His Own Physician*, p. 59; Tissot, *Advice to the People in General*, p. 25; Townsend, *Elements of Therapeutics*, p. 420; Wesley, *Primitive Physic*, p. 99; Withering, *Botanical Arrangement*, I, 320; Woodville, *Medical Botany*, II, 219-21.

### ***Electuarium lenitivum:***

Lenitive Electuary (*electuarium lenitivum*; renamed *electuarium e senna* in 1788) was a mild laxative, often used to treat costiveness and a range of conditions that were treated with gentle evacuation. As the name suggests, it was regarded as soothing, and also as cooling. The recipe in the 1721 edition of *Pharm. Lond.* included 16 ingredients, and Quincy noted with approval that with minor exceptions it reproduced the recipe of 1618. Edinburgh's version was intended only for enemas, and Shaw criticized the London composition. In the 1746 ed. of *Pharm. Lond.*, however, the ingredients included only dried figs, senna leaves, prunes, cassia, pulps of tamarinds, and licorice, in a sugar base; of the new recipe, which was maintained in 1788, Pemberton commented, "In this composition many trifling ingredients, with which it was before charged, are now omitted." During the 18th century, most electuaries – medical confections that could be licked up -- declined in reputation within the medical profession, and many were dropped from the British pharmacopoeias, partly because they were subsumed by the categories of conserves and confections, partly because they were mostly old, and rather than reform the recipes the medical profession chose to replace them. Lenitive electuary retained

a good reputation, however, being used not only orally but as the active component of "the common clyster" of army hospitals.

Lenitive electuary is included in the "Dispensatory" and in eight comparator lists.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 97, 529-31; Brookes, *General Dispensatory*, pp. 259, 325; Buchan, *Domestic Medicine*, pp. 262, 369n; Culpeper, *Pharmacopoeia Londinensis*, p. 150; Healde, *New Pharmacopoeia*, pp. 173-74, 279-80; James, *A Medicinal Dictionary*, under "electuarium" "sialogoga"; Lewis, *New Dispensatory*, pp. 341-42, 476-77; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 408-10 (under "electuarium sennae"); Pemberton, *Dispensatory*, pp. 63-64, 226, 331-32; *Practice of the British and French Hospitals*, pp. 47 ("an electuary for a virulent gonorrhoea"), 48 ("an electuary for the gonorrhoea after the inflammation," "an electuary for the piles"), 50 ("a nephritic electuary"), 57 ("the common clyster"); Quincy, *Dispensatory*, pp. 115-16, 263-64; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 284, 383 (under "hydrargyrus vitriolatus"); Shaw, *Dispensatory of Edinburgh*, pp. 147n, 256n; Theobald, *Every Man His Own Physician*, p. 10.

### ***Elixir salutis:***

The official name of *elixir salutis* ("Elixir of Health") was changed to *tinctura senae* ("Tincture of Senna") by the RCPL in its 1746 pharmacopoeia. The recipe in the 1721 ed. of *Pharm. Lond.* included senna leaves, guaiacum chips, elecampane, aniseed, caraway, coriander, and licorice, and raisins, steeped in French brandy. Pemberton's committee observed that this recipe was patterned on Bate's, and that the reasoning behind his formula was "not easy to guess." This attitude resulted in a much different recipe in 1746: leaves of senna, raisins (stoned), caraway seeds, and lesser cardamom seeds (husked) digested without heat in proof spirit. The new recipe appears to have boosted the purgative quality of the elixir, for while Quincy had recommended it primarily as a carminative and had noted that preparers who wished to use it as a cathartic had often included laxatives such as rhubarb, it was in later years regarded as powerfully cathartic (as well as carminative and aperient, in smaller doses) and was often used on patients habituated to spirits. It was also relied on to relieve flatulence

and colics, even when other remedies had failed. Its pleasant flavor -- which, according to Pemberton, would have been repellant, save for the cardamom -- added to its popularity, and it was used to cut the taste of such remedies as castor oil. Cullen, however, strongly criticized the recipe, claiming that the tincture could not succeed as a purgative, unless the dose was so large that it exceeded the quantity of spirits that should be given to a patient.

Elixir salutis appears to have been widely used in the army, at least after the revisions of 1746. As tinctura senae, it is listed in the "Dispensatory" and seven later comparators.

**Sources:** Brookes, *General Dispensatory*, pp. 177-78; Cullen, *A Treatise of the Materia Medica*, II, 363; Healde, *New Pharmacopoeia*, pp. 236-37; Lewis, *New Dispensatory*, p. 422; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 493; Pemberton, *Dispensatory*, pp. 82-83, 278; *Practice of the British and French Hospitals*, p. 63 ("a purging mixture"); Quincy, *Dispensatory*, p. 24; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 816.

*Elixir vitrioli*; see under "vitriol"

### ***Emplastrum defensivum:***

Only Edinburgh had a "defensive plaster" so called. According to Quincy, it was typically applied around wounds and ulcers, to prevent inflammation, "which it is supposed to effect, by somewhat constringing the vessels, and thus preventing the afflux of humors to the part." The 1722 ed. of *Pharm Edin.* provided a complex recipe: the expressed juices of 8 flowers and plants boiled with olive oil, lard, red lead, and litharge of gold (so-called for its color; see under "plumbic preparations"), then dissolved in yellow wax and white resin, after which olibanum, Venice turpentine, and 7 additional items in powder were to be mixed in and the plaster prepared. Shaw observed that preparation was more difficult than was necessary and could be simplified if the items that were included as juice were used in powdered form. His criticism was mild, however, and he added, "as it stands, 'tis certainly a good composition, for the end proposed to be to be answered by it." This recipe was replaced in the



1744 ed. by one that called simply for boiling litharge and olive oil almost to the consistency of a plaster, then adding yellow beeswax, olibanum, Venice turpentine, and colcothar of vitriol.

Emplastrum defensivum does not appear in any of the army lists. There are very few references to it in works on contemporary practice.

**Sources:** Brookes, *General Dispensatory*, p. 352; Quincy, *Pharmacopoeia Officinalis*, II, 493-94; Shaw, *Dispensatory of Edinburgh*, pp. 199-200, 199n.

### ***Emplastrum diachylon cum gummi:***

*Emplastrum diachylon cum gummi*, the plaster specified by Buchanan, was official under that name only in the *Pharm. Edin.*; its London equivalent was called *diachylon magnum cum gummis* (1721; *emp. commune cum gummi* 1746; *emp. lithargyri cum gummi*, 1788). The 1721 London recipe, little changed from 1677, specified 19 ingredients, including litharge of gold and oil of sheep's feet; Edinburgh included only 7 ingredients, litharge of gold among them. Pemberton's committee dismissed the London recipe as being "above measure absurd," noting that it included three oils and six mucilages "without any sensible addition to the efficacy of the medicine." The revised recipe, which was carried on in 1788, was far simpler. The revised plaster with gums was based on "The Common Plaster," which was prepared by boiling together olive oil, litharge (calx of lead, usually with a small admixture of copper; mostly imported from Scandinavia and Sweden; considered drying, abstergent, and slightly astringent, so good for cleansing foul ulcers), and water. The gums were added by sprinkling frankincense into a mix of strained and melted galbanum (a resinous gum, imported from Turkey, known to Dioscorides; used in many remedies, inwardly & outwardly, mainly as a pectoral, emmenagogue, and antihysterical) and common turpentine, the whole then being mixed with melted diachylon. Lewis reported that the London and Edinburgh plasters with gums were mainly "used as digestives and suppuratives; particularly in abscesses, after a part of the matter has been matured and discharged, for suppurating or discussing the remaining hard part." He believed that the value of plasters generally was overrated, and regarding these plasters he observed that some preparers were

adding substances to make them sticky, and thereby making them prone to be irritating and rancid.

Diachylon with gums is not listed in the "Dispensatory," but simple diachylon (as *emp. commune*) is, as well as in seven later comparator lists.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 110, and II. 440-43; Brookes, *General Dispensatory*, 351; Culpeper, *Pharmacopoeia Londinensis*, pp. 198-99; Healde, *New Pharmacopoeia*, pp. 291-93; Hill, *History of the Materia Medica*, pp. 21-22, 751-53; Lewis, *New Dispensatory*, pp. 497-98; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 556-57, 559-60; Pemberton, *Dispensatory*, pp. 354-55; *Practice of the British and French Hospitals*, pp. 69, 70; Quincy, *Dispensatory*, pp. 214-16; Salmon, *New London Dispensatory*, pp. 783-84 (*diachylon magnum cum gummi*); Shaw, *Dispensatory of Edinburgh*, pp. 200-01.

### **Fenugreek:**

Most fenugreek (*Trigonella Foenum graecum*) was imported from Germany, though it grew widely in Europe. The juice of fenugreek was used as a purgative (cf. *RP*, p. 253), as Hippocrates had prescribed, and was also thought anodyne. Much more important in 18th-century medicine was the mucilage derived from its seed, which was regarded as emollient, discutient, and anodyne. It was believed to heal bowels corroded by flux, and was often introduced by clyster (never orally). From his own observation, Salmon endorsed the assertion that fenugreek mucilage cured gonorrhoea. It was also used in cataplasms and fomentations, to ripen, digest, or soothe tumors and to ease pain. Nevertheless, the overall use of fenugreek in 18th-century professional practice was never significant and appears to have eroded as the century progressed.

Neither fenugreek nor its mucilage is mentioned on any of the army lists. There are only 13 references to fenugreek in the Wellcome sample, suggesting that it held a rather small place in popular medicine.

**Sources:** Brookes, *General Dispensatory*, p. 37; Healde, *New Pharmacopoeia*, p. 28; Lewis, *New Dispensatory*, p. 122; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 8; Salmon, *New*

*London Dispensatory*, pp. 57, 147.

**Figs:**

Although the leaves of the figtree were used in medicine, most often to treat cutaneous diseases, the fruit was much more important. Most figs were imported from Spain and Portugal. Dried figs appear to have been widely used in popular medicine, less so in professional practice. They were traditional remedies for the stone and were thought to lessen the pain of gout. Brookes regarded them as emollient and soothing, pectoral, and diuretic. If held in the mouth or used as a gargle, he asserted, they were effective in treating swollen or inflamed gums and fauces. He recommended them in decoction, to promote eruptions in children suffering from smallpox or measles (cf. *RP*, p. 59). Boiling figs in water with a small amount of licorice, then straining, made, he reported, an excellent cough suppressant (cf. *RP*, pp. 105, 121), as did steeping figs in brandy, then deflagrating the liquor, reducing it to the consistency of syrup. Figs were sometimes prescribed as a laxative. Considered emollient, they were applied externally in cataplasms, to promote suppuration. There was a tradition dating back to Galen (and, according to James, still widely accepted in the 18th century, by both medical authorities and the common people) that figs generated lice, but otherwise few writers complained about them, even among those who were fearful of most summer fruits.

Figs are not included in any of the army lists, and although they might have been purchased locally there is no reason to believe that this was a common practice. They are virtually never referred to in 18th-century literature on military medicine. They are, however, mentioned 109 times in the Wellcome sample, perhaps reflecting the bifurcation between professional and popular usage.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 284-85; Brookes, *General Dispensatory*, pp. 18-19 ("caricae"); Buchan, *Domestic Medicine*, p. 117; Hill, *History of the Materia Medica*, pp. 483-84; James, *Medicinal Dictionary*, "figus"; Salmon, *New London Dispensatory*, pp. 56, 133; Woodville, *Medical Botany*, II, 354-56.

Flowers of brimstone (*Flores sulphuris*): see under "sulfur"

### **Frogs:**

The medicinal use of frogs dates back to the Greeks; Diocorides recommended that they be eaten as an antidote to poisons. As late as the 17<sup>th</sup> century, frogs were widely used in professional medicine. Sydenham included frog spawn water in a gargle for quinsy. Culpeper reported, "The heart of a Frog being applied to the Region of the heart in a burning feaver, mitigates the fits to admiration." Salmon recommended the flesh of the frog for treating coughs, notably hectic, and for many other purposes. Nevertheless, it appears that after 1700 the frog fell from favor in professional medicine. Frogs were dropped from the *Pharm. Lond.* in the 1721 edition (though toads were still listed).

Frogs continued to be used in folk medicine, especially to treat consumption (cf. *RP*, p. 165). The Wellcome sample includes 23 references to frogs, their eggs, or their spawn; cf. entry on snails. **Sources:** Cullen, *A Treatise of the Materia Medica*, I, 280; Culpeper, *Pharmacopoeia Londinensis*, p. 34; Quincy, *Dispensatory*, p. 349; Salmon, *New London Dispensatory*, pp. 244-45; Sydenham, *Whole Works*, p. 210.

### **Garlic:**

A legacy of classical medicine -- Celsus had used it against ague -- garlic (*allium sativum*) was grown in many British gardens and was quite widely used in 18th-century medicine. Culpeper esteemed it "an enemy to all poysons" and classed it among the "attractive" (cf. entry on onions) and resolvent (thins humors, opens pores) simples. Advocates, including many major authorities, considered garlic to be useful in treating a number of diseases and conditions. Sydenham asserted that it eased fevers, by promoting a derivation from the head, while Cullen thought it effective in treating deafness. It was also sometimes prescribed as a stomachic, antiscorbutic, diuretic, and anthelmintic. In general, it was most widely used to heat and to stimulate. According to Brookes, it warmed and stimulated the solids, attenuated thick humors, and was antiputrefacient. While cautioning that it was

harmful to "hot bilious Habits," he asserted that it was of value in treating dropsy "and other Disorders in cold Constitutions" (cf. *RP*, p. 155). Lewis likewise endorsed garlic, but he warned that excessive use caused headache, flatulence, and other problems, and he noted that medical opinion was quite divided regarding its value: "Garlic has been celebrated by many practical writers in a great variety of disorders; whilst others condemn it not only as an offensive, but a noxious plant." Lewis claimed that dried garlic was more efficacious than was fresh, prompting criticism from Cullen and Woodville. James asserted that excessive use of garlic dimmed eyesight.

Garlic was a standard in popular medicine. Monro reported, "A gentleman told me, that he was once cured of an ague in the country, by applying a poultice of garlic to his wrists, and letting it lie on till it inflamed and blistered the part." Wesley recommended it as a remedy for toothache and snakebite, and Buchan claimed that a garlic ointment that was popular in North Britain was effective against coughs (though he also cautioned that garlic exacerbated fever and that the ointment had to be used when fresh, since garlic quickly lost medicinal virtues). In professional medicine, garlic was sometimes applied externally, frequently in cataplasms or ointments, to heal ulcers and other skin problems, but external uses seem to have been even more common in folk medicine. Garlic was sometimes held in the hand to relieve hiccup, or was laid on children's navels to expel worms.

While listed in the "Dispensatory," garlic is not noted on any comparator list, but it would have been readily available. Monro, a strong advocate of garlic, recommended that the army use it as a preservative in dressing meat and that it (as well as bark or other bitters) be added to spirits in order to enhance their power to ward off malignant or cold diseases. There are 72 references to garlic in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 6; Buchan, *Domestic Medicine*, p. 218; Cullen, *A Treatise of the Materia Medica*, II, 117-21; Culpeper, *Pharmacopoeia Londinensis*, pp. 2, 173; James, *Medicinal Dictionary*, under "allium"; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 87-88; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 66, 72, and II, 100; Parr, *The London Medical Dictionary*, I, 79 ("allium"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 33-34;

Wesley, *Primitive Physic*, pp. 157, 163; Woodville, *Medical Botany*, III, 458-61.

### **Ginger:**

Ginger, the root of *L. Zingiber officinale*, was imported from China and the East Indies entering the 18th century, but mainly from the West Indies at the close. Dioscorides recommended it as a mild laxative, and it was still used this way in the 18th century. Beyond that, it was applied in many ways.

Some thought that it aided memory and eyesight. Wesley asserted that an application of oil and ginger was an effective treatment for scalds, and he recommended that the victim of an epileptic seizure have ginger stuffed into his nostrils.

In professional practice, however, ginger was primarily used as an aromatic, antispasmodic, stomachic, and carminative. Lewis esteemed ginger "a very useful spice, in cold flatulent colics, and in laxity and debility of the intestines." Ginger was usually given with other medicines and was included in a number of official preparations. It was given to boost weak laxatives or to correct strong ones. The patients who were given ginger or its preparations were typically torpid or were suffering from cold conditions. Brookes indeed cautioned that it might harm people with hot constitutions, as well as those who were melancholic. Ginger was not only used to treat disease, but was commonly directed toward relieve fatigue. During the Seven Years' War, American rangers carried ginger root and drank it in water to refresh themselves. Ginger appears to have been widely used in the army. It is listed in the "Dispensatory" and in seven later comparator lists. There are 195 references to ginger in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 132-33; Cullen, *Treatise of the Materia Medica*, II, 141; Culpeper, *Pharmacopoeia Londinensis*, p. 2; James, *Medicinal Dictionary*, under "zingiber"; le Strange, *History of Herbal Plants*, p. 262; Lewis/Rotheram, *New Dispensatory*, p. 266; *Practice of the British and French Hospitals*, pp. 45 ("electuary for an asthma"), 47 ("electuary in the dropsy"), 49 ("jalap electuary"), 52 ("stomachic and antiscorbutic electuary"), Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 71-72; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 869;

Wesley, *Primitive Physic*, pp. 47, 86; Woodville, *Medical Botany*, I, 31-33.

### **Groundsell:**

Groundsell (*erigerum*; L. *Senecio vulgaris*) was a traditional emetic. Lewis reported that groundsell juice, infused in ale, was said to be emetic, but added that this was apparently so only when it was used in large amounts. On the contrary, Parr regarded it as a powerful emetic and cathartic, adding, "A tea cupful of the juice will operate with maniacs as an emetic when other means fail, and thus slight attacks of the disorder may be removed." Earlier, Salmon had lauded groundsell as an antiemetic (!) and vermifuge, and had seen it as useful in combatting i.a. jaundice, sciatica, and scrofula. He also thought it valuable -- cooling, vulnerary -- when applied outwardly. Brookes (who thought it useful against griping) noted, "some wear it as an Amulet against Agues," which may underline its association with folk medicine (cf. *RP*, p. 37). Among miscellaneous applications, groundsell was used to treat toothache (Pliny had recommended it for this) and sore gums. Cullen neither credited nor discounted its value as an emetic, but did write approvingly of Steedman's use of it as an external application. Despite its various applications, groundsell appears to have been little used in 18th-century medicine. In 1719, Quincy wrote that it was "much known and used amongst the Common People for a Vomit [but was] not used in the Shops." Although listed among the materia medica in the *Pharm. Lond.* of 1721, it was dropped from the 1746 edition.

Groundsell is not listed in the "Dispensatory" or in any comparator. It is mentioned 25 times in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 33; Cullen, *A Treatise of the Materia Medica*, II, 320; James, *Medicinal Dictionary*, "senecio"; Lewis, *New Dispensatory*, p. 126; Parr, *London Medical Dictionary*, I, 623 ("erigerum"); Quincy, *Lexicon Physico-Medicum*, p. 134; Salmon, *Pharmacopoeia Londinensis*, p. 103.

### **GUM AMMONIACUM:**

Known to Pliny, Dioscorides, and Galen, Gum Ammoniac was a gummy resin imported from North Africa, Turkey, and the East Indies (gummy resins were substances that, like gums, were water soluble, but that, like resins, were flammable; several were used medicinally as "milks"). Lewis considered the gum to be a good deobstruent and emmenagogue and, when applied externally, effective in softening and ripening tumors, often being applied with vinegar to this purpose. Buchan advised that patients who were being blistered drink an emulsion of it (or of gum Arabic, q.v.), in order to prevent strangury. Perhaps its most common use, however, was as a pectoral. Lewis recommended exhibiting it in pill form or in a solution of vinegar of squills.

*Lac ammoniacum:*

"Milk of Gum Ammoniac" was simply gum ammoniac rubbed in Pennyroyal Water (hyssop water) until it dissolved. Perhaps the most common form in which the gum was given, it was primarily valued as a pectoral. Brookes wrote, "This Milk is chiefly designed against Diseases of the Breast and Lungs, particularly the Asthma," and Lewis found it useful in incising tough phlegm (cf. *RP*, p. 107).

Lac ammoniacum is not listed in the "Dispensatory" of 1746. The gum, however, is included in six later comparator lists, and it could have been used to prepare the milk. Monro found the milk to be useful in treating coughs. Gum ammoniac appears in four recipes in *Practice*; in each case, it appears to have served as a pectoral or a deobstruent. The gum is mentioned only twice in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 436-38; Brookes, *General Dispensatory*, pp. 7, 187; Buchan, *Domestic Medicine*, pp. 124, 136; Healde, *New Pharmacopoeia*, pp. 7, 241-42; Hill, *History of the Materia Medica*, pp. 759-61; James, *Medicinal Dictionary*, under "ammoniacum"; Lewis, *New Dispensatory*, pp. 76-77, 434 ), Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 33; Pemberton, *Dispensatory*, p. 285; *Practice of the British and French*



*Hospitals*, pp. 56 ("an asthmatic emulsion"), 65 ("pills for an asthma and the jaundice," "cathectic pills"), 68 ("nervous pills").

### **Gum Arabic:**

Well known to Dioscorides, this gum was extracted from the acacia or Egyptian thorn (*Mimosa nilotica*) and was usually imported through Turkey. British shops often sold Gum Senega (from Guinea) in its place, according to Lewis, and although he considered the former to be purer, he noted that the substitute was cheaper and perhaps more potent.

Gum Arabic was widely used as a pectoral, so often prescribed to combat coughs and catarrhs. It was also valued as a lubricant and emollient that was effective in treating strangury and viscera that had been abraded by violent and frequent defecation, as in dysentery. Its mucilage was often used in the preparation of pills. It was a prime ingredient in several widely used decoctions, emulsions, troches, and other medicinal compounds. In simple or compound solutions, it was used in enemas. Solutions of it were widely valued as diuretics (Buchan recommended the inclusion of nitre) and were often prescribed to relieve strangury or dysuria. Buchan recommended mixing mercury with gum arabic and water in order to prepare it for application in liquid form. Similarly, Plenck advised that, since the gum was closest in nature to the human mucus that mercury tended naturally to join, if mercury were mixed with it the patient could consume large doses without risking salivation.

Long a part of European practice, gum Arabic retained its popularity in the 18th century and was, according to Hill, "of very frequent Use in Medicine." It appears in the "Dispensatory" and in seven comparator lists. It is included in three recipes in *Practice*, and an emulsion of it is recommended to treat the strangury that might arise from blistering. There are 15 references to gum Arabic in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 9; Buchan, *Domestic Medicine*, pp. 124, 186n, 267, 369, 371; Cullen, *A Treatise of the Materia Medica*, II, 281-82; Culpeper, *Pharmacopoeia Londinensis*, p. 33; Hamilton, *Duties of a Regimental Surgeon*, I, 199; Hill, *History of the Materia Medica*, pp. 740-42;

James, *Medicinal Dictionary*, under “Arabicum gummi”; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 98 ), Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 274, and II, 93; Plenck, *A New and Easy Method of Giving Mercury*, pp. 40-41; *Practice of the British and French Hospitals*, pp. 38 (“camphire bolus”), 56 (“Arabic emulsion”), 60 (“chalk julap”), 69 (“blistering plaister”); Woodville, *Medical Botany*, I, 187-90.

### ***Gum Guaiacum:***

Guaiacum (*L. Guaiacum officinale*) had first been brought to Europe from America c.1508. Von Hutton wrote his well-known tribute to it in 1519. Guaiacum wood (with or without bark) was used medicinally, often in decoctions or tinctures, but it was the gum (actually, a resin) that was mainly employed in 18<sup>th</sup>-century British medicine.

At first guaiacum was widely hailed as a specific against syphilis, and Salmon regarded it as such, but even 16<sup>th</sup>-century writers, including Paracelsus, by the mid-18th century it was seldom used for this purpose, except to assist mercury. Hill believed that its value in combatting venereal disease may have been greater in the tropics, where patients were more easily stimulated to sweat profusely. Salmon maintained that guaiacum was useful in treating "all Diseases that may be cured by Sweat," and indeed by the 18th century it was mainly used as a sudorific. Alston also proclaimed it an antiseptic and noted that some contemporaries found it valuable against "almost all chronical distempers." Lewis was likewise impressed, describing it as "a warm, stimulating medicine" that strengthened the stomach and viscera and promoted urine and cuticular discharge (which made it effective against scurvy). Wesley hailed it as the best remedy for rheumatism and Cullen likewise thought it useful, though difficult to administer in sufficient quantities because many patients found it repellant. Guaiacum was also widely used to treat gout, mainly through sweat, though Gardiner and Cullen questioned its value and the latter regarded this use as dangerous. Summing up its main application, Parr wrote, “It is of course esteemed more effectual than other sudorifics in the lues veneris, in all cases of rheumatism, perhaps in gout.”

Guaiacum was widely used in the army, being listed in the "Dispensatory" of 1746 and six

later comparator lists and being included in a number of recipes in *Practice*. Volatile tincture of guaiacum, which was prepared by digesting the gum in an aromatic spirit, was popular as a cold remedy and was used in treating rheumatism and other chronic ailments. Monro thought it useful against palsy. It, too, was included in the "Dispensatory" and in three comparators. Gum guaiacum appears three times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 41-46; Astruc, *Treatise of the Venereal Disease*, II, 176-86; Brookes, *General Dispensatory*, pp. 43-44, 168-69; Buchan, *Domestic Medicine*, p. 191n; Cullen, *Treatise of the Materia Medica*, II, 133-36; Fowler, *Medical Reports of the Effects of Blood-letting*, pp. 18, 116, 212, 227, 279; Gardiner, *Inquiry into the Nature, Cause, and Cure of the Gout*, pp. 153-54; Healde, *New Pharmacopoeia*, p. 32; Hill, *History of the Materia Medica*, pp. 679-81; James, *Medicinal Dictionary*, under "guaiacum"; Lewis, *New Dispensatory*, p. 135; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 166-67, 486-87; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 144; Munger, "Guaiacum, the Holy Wood from the New World," pp. 198-99, 202, 208-21; Parr, *London Medical Dictionary*, I, 719-20; *Practice of the British and French Hospitals*, pp. 36 ("balsam of guaiacum"), 42 ("anti-splenetic diet-drink with steel"), 48 ("electuary for the gonorrhoea after the inflammation"), 51 ("electuary in the rheumatism"), 65 ("Aethiopic pills"), 67 ("guaiacum pills"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 355-56, 816; Reide, *View of the Diseases of the Army*, pp. 78-79, 249, 273; Salmon, *New London Dispensatory*, pp. 24, 163; Wesley, *Primitive Physic*, p. 133; Woodville, *Medical Botany*, I, 43-47.

### **Gum tragacanth:**

Tragacanth (*L. Astragalus gummifer*) was grown in southern Europe, but generally the gum was imported from Turkey and Crete. It was mentioned in Dioscorides. Alston regarded it as having the same virtues as gum Arabic, but thought it "much more mucilaginous, therefore more incrassating, and more efficacious in diseases from the thinness or acrimony of the liquids, or irritation of the solids." Hill likewise believed that it had "the same Virtues with Gum Arabic, but in a greater Degree."

Tragacanth was sometimes employed as an medium for mixing oils and resins. It imparted more body than did any other gum used medicinally; Lewis wrote that 1 dr. of it was sufficient to produce a syrup-like consistency in a pint of water. For this reason, it was often used in troches. Perhaps its primary medicinal application was in treating coughs and hoarseness, but it was also used to combat hot or painful urine and to coat abraded or inflamed intestines (cf. *RP*, "Degner" fragment). It was frequently administered combined with more powerful medicines. Its popularity in Britain appears to have peaked in the mid-17th century and to have declined after 1750.

Gum tragacanth is not mentioned in the "Dispensatory" or in *Practice*, although it does appear on three comparator lists. Possibly the bias against thick, coating drugs (cf. *RP*, n. 235) accounts in part for the limited popularity gum tragacanth. The gum is mentioned three times in the Wellcome sample. **Sources:** Alston, *Lectures on the Materia Medica*, II, 384-85; Brookes, *General Dispensatory*, pp. 123-24; Hill, *History of the Materia Medica*, p. 743; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 257, Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 364; Parr, *London Medical Dictionary*, I, 721 (under "gummi"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 356, 820-21; Woodville, *Medical Botany*, II, 267-69.

### ***Helenium:***

Medicinal use of the root of helenium, or elecampane (*L. Inula helenium*; scabwort), dates at least from the time of Dioscorides, probably Hippocrates, and some 18th-century authorities thought it to be the "radix amara" mentioned in the *Iliad* and associated its popular name with Helen of Troy.

It was the extract of the root that was usually used medicinally. Elecampane was thought by some authorities to be a useful stomachic, laxative, deobstruent, diuretic, emmenagogue, and alexipharmic. It appears, however, to have been most often used as a pectoral. Hill recommended an infusion of it, sweetened with honey, as a remedy for whooping cough, and Townsend included it in a formula for phthisis. Among other things, it was used to deterge gravel, relieve flatulence, and (mixed with fennel in a decoction) curtail the trembling that often followed salivation.

Despite the apparent range of uses, elecampane is seldom noted by authorities in terms of their own practice. Furthermore, Cullen, who claimed to have experimented with it extensively, concluded, "I am at a loss to determine what are its peculiar virtues." It appears to have played only a small role in professional medicine. Indeed, its main application may have been as a remedy for horses, rather than for humans. Hill reported, "vast Quantities of it are used by Farriers and others for the Diseases of Horses" (cf. *RP*, p. 253).

Elecampane is not mentioned in the "Dispensatory" or in any comparator list, and although it could have been obtained locally, the likely explanation is that it was little used in army practice. On the other hand, it appears 129 times in the Wellcome sample, suggesting that at least early into the 18th century it enjoyed a significant role in popular medicine.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 453-56; Brookes, *General Dispensatory*, p. 33; Cullen, *A Treatise of the Materia Medica*, II, 310; Healde, *New Pharmacopoeia*, p. 26; Hill, *History of the Materia Medica*, pp. 619-20; le Strange, *History of Herbal Plants*, pp. 148-49; Lewis, *New Dispensatory*, p. 126; Parr, *London Medical Dictionary*, I, 612 (under "enula"); Salmon, *New London Dispensatory*, pp. 9, 54; Withering, *Botanical Arrangement*, II, 922.

### **Honey:**

Two forms of honey were widely used in 18th-century British medicine and were official (in the pharmacopoeias of 1746 and 1788, London included only *mel* in its materia medica). The purer type (*mel Anglio optimo* or *mel virgineum*) was extracted from the comb through spontaneous percolation; the more common method of extraction, pressing the comb through canvas, produced *mel Anglio* or *mel commune*, which included bits of matter mixed in. Honey was sometimes used raw, otherwise clarified with eggwhite. It was generally recognized that the taste of honey – and, to Lemery and others, its medicinal virtues – varied in relation to several factors, most notably which flowers the bees had used in producing it.

Lewis esteemed honey "a very powerful detergent and aperient, powerfully promoting the

expectoration of tough phlegm." Besides being widely used to treat problems of the lungs, honey was thought to be especially friendly to the stomach and kidneys. Beyond that, authorities saw it as (Brookes's words) "friendly to the internal Parts that are hurt," and so useful in treating injuries. Some writers, like Hill, also valued honey as a diuretic. Although honey was most often administered orally (generally mixed in a liquid, most often water), it was frequently introduced in clysters and was sometimes applied externally, being used to cleanse wounds and ulcers because it was widely thought to be resistant to putrefaction. Honey was also a common gargle. It was often used as an [intermedium], to mix oils and balsams with water. Finally, it was central to a class of drugs, perhaps the two most prominent of which were oxymel (note *oxymel scilliticum*, under "squill") and *mel rosarum* (see under "roses"). In general, honey was not included in these drugs merely to enhance the flavor or consistency, but to serve a medicinal purpose.

The use of honey of medicine dated back to Hippocrates and before, but during the 18th century it went into decline in professional medicine. Critics advised against using it when inflammation and heat were present. Some also advised against it in cases of hysteria or melancholia, and there were widespread concerns that it griped. It also tended to ferment. Because of the griping problem, Edinburgh dropped all honey-based medicines from its pharmacopoeia in the late 18th century, substituting syrups, which were of the consistency of honey, but were sugar based and had a longer shelf life. Cullen, who found sugar to have the same medicinal virtues as honey, criticized the RCPL for continuing to use honey as the base of its syrups. Honey, however, remained an important element in household medicine, and Buchan specified several applications for it.

The extent of army use at the time of Buchanan's service is impossible to determine. Mel Anglio is listed in the "Dispensatory" of 1746, but that alone, and mel Anglio optimo in included only on one comparator list. However, honey would have been readily available to medical officers who wished to use it, and five drugs discussed in *Practice* include it. Honey appears 501 times in the Wellcome sample, more than any other medicinal.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 490; Brookes, *General Dispensatory*, p. 69;

Buchan, *Domestic Medicine*, pp. 136, 165, 208n; Cullen, *Treatise of the Materia Medica*, II, 276-77; Healde, *New Pharmacopoeia*, p. 38; Hill, *History of the Materia Medica*, p. 891; James, *Medicinal Dictionary*, under "mel" and "syrupus"; Lewis, *New Dispensatory*, pp. 158-59; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 194-95; Parr, *London Medical Dictionary*, I, 971-72 (under "mel"); review of 6th ed. of *Pharm. Edin.*, *Medical Commentaries*, 2 (1774), pp. 410-11; *Practice of the British and French Hospitals*, pp. 45 ("electuary for an asthma"), 57 ("turpentine clyster"), 57-58 ("a gargle"), 58 ("a lenient gargle"), 63 ("mixture for the mouth"); Quincy, *Dispensatory*, p. 352; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 794, under "syrupus"; Salmon, *New London Dispensatory*, p. 254; White, *Analysis of the New London Pharmacopoeia*, p. 31.

Honey of Roses/*mel rosarum*; see under "rose"

### ***Hordeum*/Barley:**

Throughout the 18th century, two kinds of barley were included in the RCPL material medica: row (*hordeum distichon*); and pearl (*hord. perlatum*). The significance of barley in medicine was established by the Greeks, who prescribed it as both the principal aliment and a standard medicine in treating acute diseases. In the 18th century, too, barley was mainly used as an aliment for the sick. Lewis regarded barley as less glutinous and less nutritious than wheat or oats (Alston disputed this). However, he also thought it more cooling, and the perceived ability of barley water to cool feverish patients represented its greatest medicinal appeal. It was also widely used as a diluent. A decoction with gum was used by some to treat strangury and dysuria, and barley water itself was often relied on to flush the system (cf. *RP*, p. 143). Barley water was included in many emulsions and other drugs, especially those that were intended to cool the patient, and it was routinely prescribed as a vehicle for drugs. Milk that was given to consumptive or weak patients was often diluted with barley water.

*Hordeum distichum* appears in the "Dispensatory," but in no comparator list, while *hordeum perlatum* is included just in a comparator. Barley, however, would have been easy to acquire locally

as needed, and it was used significantly in army practice, as illustrated by the many references to barley water in the writings of Monro and other medical officers. It was a standard component of "low diet" in army hospitals. Barley and barley water appear 100 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 354-56; Ball, *The Modern Practice of Physic*, I, 12; Barker, *Essay on the Agreement betwixt Ancient and Modern Physicians*, p. 96; Buchan, *Domestic Medicine*, pp. 116, 117, 124, 266, 267; Healde, *New Pharmacopoeia*, p. 34; Lewis, *New Dispensatory*, p. 313; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 171; Mead, *Medical Works*, p. 359; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 107, 109, 113, 239, 350, 351, 354, and II, 5, 17, 32, 58; Parr, *London Medical Dictionary*, I, 762-63; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 9; Pemberton, *Dispensatory*, p. 131; *Practice of the British and French Hospitals*, pp. 50 ("nephritic electuary"), 56 ("Arabic emulsion"), 57 ("clyster in a bloody flux"), 57 ("a gargle"), 58 ("pectoral infusion"), 69 ("blistering plaister"); Quincy, *Dispensatory*, p. 313; Reide, *View of the Diseases of the Army*, p. 249; Rollo, *Observations on the Diseases*, p. 74; Sydenham, *Whole Works*, pp. 194, 207, 209.

Horseradish; see *raphani radix*

### **Ipecacuanha:**

Ipecacuanha (*L. Psychotria ipecacuanha*), which was imported from Brazil and Peru (Hill regarded the Brazilian as more emetic), had been used medicinally by the Portuguese in Brazil as early as 1570, but possibly because it was at first often given in large doses, which were violently nauseating, it did not become generally popular in Europe prior to the late 17th century, when it gained notoriety, first in France, on the strength of experiments by Helvetius. Use in Britain began to take off in the 1730's.

Although widely prescribed as a cathartic, ipecacuanha was most often used to cause vomiting (cf. *RP*, pp. 21, 73, 77, 279, 282, 289, "Degner" fragment). The size of the dose was determined by the



action desired Hill considered ipecacuanha "one of the most valuable Drugs the *Materia Medica* affords us," and Lewis saw it as "one of the mildest and safest emetics with which we are acquainted ... now advantageously employed in almost every disease in which full vomiting is indicated." Buchan and Wesley both enthusiastically endorsed it as an emetic. Millar recommended administering it in large (30-40 gr.) doses, to clear the body upwards and downwards, rather than give emetics and cathartics individually (for the same dual purpose, he suggested 10-20 gr. of jalap, q.v.). Ipecacuanha was thought less damaging to the system than were other strong cathartics like scammony and colocynth (qq.v.), and Geoffroy believed that it was beneficial in treating dysentery not only because it was purgative but because it helped heal intestinal ulcers. Besides being employed as an emetic, it was sometimes used as a succedaneum to tartar emetic (q.v.).

Ipecacuanha was widely used in the army, being included in the "Dispensatory" and on all comparator lists. It is a primary ingredient in three compound drugs included in *Practice*, and is noted as the preferred emetic to be used in association with three others. Most of the major authorities on military medicine endorsed it, including Pringle. While it was generally boosted as an emetic, Rollo used it primarily as a cathartic. Monro was an enthusiastic supporter, using the root as his vomit of choice, but he noted that even when he prescribed it as a cathartic it so nauseated some patients that they refused to take additional doses. He reported the advice of a medical officer, that when mixed with a small amount of rhubarb ipecacuanha could be relied on to serve solely as a cathartic and not to nauseate. Reflecting its late arrival on the British medical scene, ipecacuanha is not mentioned in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 52; Buchan, *Domestic Medicine*, pp. 110, 142, 160, 228n, 266, Cullen, *Treatise of the Materia Medica*, II, 321-25; Hill, *Materia Medica*, pp. 562-65; James, *Medicinal Dictionary*, under "ipecacuanha"; le Strange, *History of Herbal Plants*, pp. 210-11; Lewis, *New Dispensatory*, pp. 142-44; Lewis/Rotheram, *New Dispensatory*, pp. 178-80; Manning, *Modern Improvements in Physic*, p. 437; Millar, *Observations on the Management of the Prevailing Diseases in Great Britain*, p. 284, Monro, *Observations on the Means of Preserving the Health of Soldiers*, I,

308, 340, 343n, 359, and II, 92; *Practice of the British and French Hospitals*, pp. 38 ("bolus for bloody flux"), 39 ("ipecacoanha bolus"), 45 ("decoction of the bark," "astringent electuary"), 54 ("emetic draught"), 62 ("astringent mixture"); Pringle, *Observations on the Diseases*, pp. 204, 232; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 415-16; Rollo, *Observations on the Diseases*, pp. 71, 75, 80, 83, 89; Shaw, *Dispensatory of Edinburgh*, 18n; Wesley, *Primitive Physic*, pp. 41, 96, 166; Woodville, *Medical Botany*, III, 562-65.

### **Irish slate:**

Official in London until 1788, Irish slate (*lapis Hybernicus*) was, according to Salmon, "often used against bruises [cf. *RP*, p. 209] in place of **Sperma Ceti**, and is said to be very effectual against Quartan Agues." Sydenham likewise noted that many considered the slate (and spermaceti) to be a specific remedy for contusions, but he regarded this belief as ignorant. The slate was sometimes given in powder as a styptic. Hill believed that it derived its medicinal value from a high content of alum and of a vitriolic salt. He further recommended that patients be given the salts, "without the Load of useless earthy Matter, that they are mixed with in this Substance."

Irish slate does not appear on any army list, and it is mentioned only once in the Wellcome sample.

**Sources:** Hill, *Materia Medica*, pp. 257-58; James, *Medicinal Dictionary*, "tegula Hybernica"; Salmon, *New London Dispensatory*, pp. 411-12; Sydenham, *Whole Works*, p. 383.

### **Jalap:**

Jalap was named after the town of Xalapa and was initially imported from New Spain, but by the mid-18th century the main source was the Madeiras. It became popular in England about 1700, initially among empirics and later in the profession.

While sometimes used as a diuretic, jalap was primarily employed as a cathartic (cf. *RP*, pp. 79, 171, 173). In large doses or combined with calomel, it served as an anthelmintic (cf. *RP*, p. 231) or

hydragogue. Being both a diuretic and a hydragogue, jalap was often recommended for dropsy. Hill and Brookes cautioned against using it on patients suffering from acute fevers, fearing that it would exacerbate heat and inflammation, but the medical profession in general does not appear to have shared their concern. Jalap enjoyed great popularity during the century, on all levels. Brookes wrote, "This is a celebrated Purge, and much used among the common People, because it has no Smell, is not disagreeable, and is not taken in large Doses. It carries noxious, particularly the serous, Humours downward, and without working roughly." He and Lewis considered jalap gentle enough to administer to infants. Other writers, Hoffman and James among them, counted jalap among the drastic purgatives -- not necessarily as a point of criticism -- possibly because they assumed a large dose. Jalap was the prime ingredient in many official preparations and nostrums. Cullen asserted that combining it with calomel (q.v., under "mercurials") created the safest of the drastic purgatives; this formula would be much used in America.

Jalap is included in the "Dispensatory" and in eight later comparator lists, and when quantities are specified they are for the most part moderately large. Jalap is an active or primary ingredient in recipes of four drugs, each of them cathartic, included in *Practice*. Since it did not become widely used in England until 1700, it is mentioned only three times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 463-66; Brookes, *General Dispensatory*, p. 51; Buchan, *Domestic Medicine*, 110, 142, 160, 228n, 266; Cullen, *A Treatise of the Materia Medica*, II, 364-65; Healde, *New Pharmacopoeia*, pp. 131-32; Hill, *Materia Medica*, pp. 549-51; James, *Medicinal Dictionary*, under "jalapa"; Kopperman, "Venerate the Lancet," pp. 542-43; Lewis/Rotheram, *New Dispensatory*, pp. 176-77; Parr, *London Medical Dictionary*, I, 839-40; *Practice of the British and French Hospitals*, pp. 38 ("cathartic bolus"), 47 ("electuary for a virulent gonorrhoea"), 49 ("jalap electuary"), 54 ("a purging draught"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 421-22; Salmon, *New London Dispensatory*, p. 11; Turton, *A Medical Glossary*, p. 429.

James's Fever Powders; see under "antimonials"

## Juniper

Juniper (*L. Juniperus communis*) seems to have been used in ancient medicine, though Alston felt that the description provided by Dioscorides suggested that he had a different shrub in mind. By the 18th century it grew widely in Britain, but much was imported from the Netherlands.

Juniper gum (actually, a resin), wood, and tops were sometimes listed in the materia medica. The gum was occasionally used to combat catarrhs, venereal disease, and kidney ulcers, while the wood was burnt as a fumigant, to purify foul air. It was, however, usually the berry that was used medicinally. Juniper berries were administered in substance, but more typically as a compound spirit, an essential oil, or a rob. In all forms, they were used to strengthen and heat the stomach and to promote expectoration and circulation. They were variously considered anodyne (cf. *RP*, p. 211), carminative, diaphoretic. Perhaps most of all, they were regarded as diuretic, and for this reason they were often employed in treating dropsy. Lewis and Hoffmann strongly endorsed juniper rob, especially for treating stomach, intestinal, and urinary problems of the elderly. Cullen, however, dismissed the rob as "an inert preparation." The essential oil of juniper berries was warm and pungent. It had some advocates, notably Lewis, and was used as a carminative, stomachic, diuretic, and emmenagogue. Brookes warned that if the berries were taken while the stomach was inflamed, it might cause wind, but in general authorities did not complain of side effects. According to Hill, the berries in substance, their rob, and an infusion of them in white wine were extremely popular in Germany, but the only preparation still to be found in English apothecary shops was the essential oil, the older "Spirituos Water of Juniper" having given way to gin, which was "the Business, not of the Apothecary but of the Distiller."

Juniper berries are included in the "Dispensatory." but in no comparator list, while the oil is included in one comparator only. *Practice* includes a recipe for "a cathartic bolus" (cf. *RP*, n. 294), which includes oil of juniper and is recommended for dropsy. On the whole, however, there are few references to juniper or its products (aside from gin) in 18th-century British works that detail medical practice. Juniper berries, the oil or (less often) the leaves appear in the Wellcome sample 54 times.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 257-60; Brookes, *General Dispensatory*, pp. 53-54; Buchan, *Domestic Medicine*, p. 288n; Cullen, *A Treatise of the Materia Medica*, II, 126-27; Culpeper, *Pharmacopoeia Londinensis*, p. 172; Healde, *New Pharmacopoeia*, p. 35; Hill, *History of the Materia Medica*, p. 487; James, *Medicinal Dictionary*, under "juniperus"; Lewis, *New Dispensatory*, pp. 144-45; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 181, 311, 314, 327; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 10; Pemberton, *Dispensatory*, p. 136; *Practice of the British and French Hospitals*, p. 38; Quincy, *Dispensatory*, p. 317; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 423-24, 569; Short, *Medicina Britannica*, #163; Townsend, *Elements of Therapeutics*, p. 422; Woodville, *Medical Botany*, II, 259-62.

*Lac ammoniacum*; see under *gum ammoniacum*

*Lapis calaminaris*; see under "calamine"

*Lapis contrayerva*; see under "contrayerva"

***Lapis medicamentosus*:**

*Lapis medicamentosus* first appeared under that name in the 1721 ed. of *Pharm. Lond.* The recipe then called for rock alum (q.v.), litharge of gold (a product of lead, so-called for its color), colcothar of vitriol (the end-product of calcining; a powerful styptic), Armenian bole (one of two edible earths in the materia medica; formerly much used, boles were then rapidly losing popularity), and vinegar, boiled together to the consistency of a stone. This was the simplified version of *lapis medicamentosus Crollii* ("Medicinal Stone of Crollius"), which included (1677 London recipe) 14 ingredients. There were many varieties of this stone, and it appears to have been quite popular. Lewis reported that a French version was reputed to be a favorite of French army surgeons. The various medicinal stones were usually served mixed in liquid. Like almost all vitriolic medicines, *lapis*

*medicamentosus* was used to heal wounds and close sores (cf. *RP*, p. 205), whether administered internally or externally. Brookes also recommended it for treating the gums and fastening loose teeth, and for use in eye waters.

This preparation is not included in the "Dispensatory" or in any comparator list.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 207; Brookes, *General Dispensatory*, pp. 14, 287, 304; Lewis, *New Dispensatory*, p. 358; Quincy, *Dispensatory*, p. 252; Salmon, *New London Dispensatory*, p. 563.

Lard; see *auxungia porcina*

Laudanum; see under "opiates"

### **Lemon:**

The lemon (*Citrus medica*; juice, rind and essential oil were official) was usually regarded as being somewhat more potent than the orange (q.v.), but some writers disputed this, and in any case the two fruits were used for similar purposes. It was generally believed that lemon peel held the virtues of the fruit in most concentrated form. Lemon juice was valued as a diuretic, so useful for ischuria, and was sometimes used to deterge urinary passages and so relieve stone and gravel. Being more acidic than oranges, they were also considered more cooling (though not so much as the citron, in Culpeper's view), and so were often prescribed as febrifuges. Lemons were also considered good diaphoretics and diluents, which also promoted their use in fevers. Salmon thought lemon peel a better alexipharmic than orange peel. Lemons, and late in the century limes, were more likely than oranges to be applied as antiscorbutics. In his pamphlet advocating wort in preventing scurvy (1767 [app. B-1, under "scurvy"]), MacBride endorsed the lemon as an antiscorbutic, and thereafter so did Wesley, on his authority. Another common use of the lemon was to control nausea. It was used to quench thirst and to flavor. Lemons and their products were also used to impart a pleasant fragrance to medicinal

compounds. Lemons were also thought to be effective in protecting against putrid diseases; they served as an air freshener in sickrooms, and Buchan recommended that those attending patients with putrid fever hold a handkerchief or sponge dipped in lemon juice (or vinegar) to their nose. Lemons were included in many compound medicines, notably saline drafts that were intended to control fever and vomiting. The main complaints against the lemon was that excessive use could harm the stomach and that the fruit was highly perishable. For the latter reason, Lewis warned against substituting lemon peel for orange peel as a flavoring

No form of lemon appears in the "Dispensatory," and the two lemon products noted in army lists, lemon peel and essential oil of lemon, are mentioned only once apiece in comparators, but this is because the army bought lemons in local markets, as needed. They were in fact widely used in army practice, and the relevant literature includes many references to them. Lemons or their juice or rind are mentioned 125 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 294-97; Brookes, *General Dispensatory*, p. 61; Buchan, *Domestic Medicine*, p. 118, 136, 142, 149, 153, 242, 264, 302; Cullen, *Treatise of the Materia Medica*, II, 61, 183; Culpeper, *Pharmacopoeia Londinensis*, p. 19; Dickinson, *An Inquiry into the Nature and Causes of Fever*, pp. 155-57; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 194, 279; Healde, *New Pharmacopoeia*, p. 37; Huxham, *Essay on Fevers*, pp. 45-46, 139; James, *Medicinal Dictionary*, under "limonum"; Kirkland, *An Inquiry into the Present State of Medical Surgery*, I, 227; Lewis, *New Dispensatory*, p. 153; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 188-89; Mead, *Medical Works* p. 243; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 32, 33, 35, 239, 247, 250, and II, 185; George Pearson, *Arranged Catalogues of the Articles of Food, Drink, Seasoning, and Medecine; for the Use of Lectures on Therapeutics and Materia Medica*. (London: Wilson and Company, 1801), p. 5; *Practice of the British and French Hospitals*, p. 55 ("a saline draught"), 64 ("a saline mixture"); Rollo, *Observations on the Diseases*, p. 74; Salmon, *New London Dispensatory*, pp. 20, 129, 135; Sydenham, *Whole Works*, pp. 34, 202, 228; Tissot, *Advice to the People in General*, p. 127; Townsend, *Elements of Therapeutics*, p. 591 Wesley, *Primitive Physic*,

pp. 140-41, 166, 167; Woodville, *Medical Botany*, III, 500-02.

### **Licorice:**

Licorice had been used in Greek medicine. Although a 1552 herbal, by Jerome Bock, associated it mainly with Germany, by the 18<sup>th</sup> century it was popular virtually throughout Europe. It was widely prescribed to combat coughs and other pectoral complaints. It was used in treating various other problems, as well (e.g., relieving heartburn and the pain associated with gravel), and was included in many preparations, mostly pectorals. One of its perceived values, noted by many authorities, was that it relieved thirst, which all other sweet substances encouraged. Licorice was important in popular, as well as in professional, medicine, and it served a range of purposes (e.g. Wesley thought it useful against asthma; Spilsbury recommended the root for applying tooth powder). Buchan included licorice in several decoctions.

#### *Trochisci bechici nigri:*

The Black Pectoral Troches (in the 1788 ed. of *Pharm. Lond.*, renamed *trochisci glycyrrhizae* [Troches of Licorice]) was used to relieve coughs (cf. *RP*, pp. 107, 127) or soothe sore throats. The Black Pectoral was prepared (London recipe, 1721) by mixing powdered licorice with sugar, gum tragacanth, and almonds into mucilage of quince seeds. The 1746 recipe substituted licorice extract for powdered licorice (which had not imparted blackness to the pectoral), eliminated almonds, and replaced the mucilage with water.

*Trochisci bechici nigri* is not mentioned in any of the army lists. Licorice juice (*succus glycyrrinae*; also known as licorice extract, *extractum glycyrrhinae*) is included in the "Dispensatory" and on seven comparator lists (the root, *radix glycyrrhiza*, is found on one of the same comparators). Judging from the literature on military medicine, licorice itself and several of the compound medicines that included it were widely used in the army. It was an active ingredient in the "pectoral infusion" of



the army hospitals. The enthusiasm for licorice in popular medicine is reflected in the fact that it is referred to 301 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 384-85; Agnes Arber, "From Medieval Herbalism to the Birth of Modern Botany," *Science Medicine and History: Essays on the Evolution of Scientific Thought and Medical Practice written in Honour of Charles Singer*, ed. E. Ashworth Underwood (London, New York, Toronto: Oxford University Press, 1953), I, 327; Brookes, *General Dispensatory*, pp. 42, 233; Buchan, *Domestic Medicine*, pp. 117, 191, 271n, 304n; Culpeper, *Pharmacopoeia Londinensis*, p. 4; Grainger, *An Essay on the More Common West-India Diseases*, p. 20; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 199; Healde, *New Pharmacopoeia*, p. 271; Hill, *History of the Materia Medica*, pp. 743-45; James, *Medicinal Dictionary*, "glycyrrhiza"; Lewis, *New Dispensatory*, p. 461; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 165-66; Pemberton, *Dispensatory*, p. 319; *Practice of the British and French Hospitals*, p. 59; Quincy, *Dispensatory*, p. 143; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 824; Francis B. Spilsbury, *Every Lady and Gentleman Their Own Dentist, as Far as the Operations will Allow: Containing the Natural History of the Adult Teeth and Their Diseases with the Most Approved Methods of Prevention and Cure, etc. to Which is Added, Dentition, and Treatment of Children at That Period* (London: Barker, 1791), p. 26; Wesley, *Primitive Physic*, pp. 39, 67, 104; Woodville, *Medical Botany*, III, 458-59.

### **Lime:**

Quicklime (*calx viva*) was derived from limestone, chalk, oystershells, and other sources. Limewater was prepared by boiling it in spring water or distilled water. This water was perhaps most often used as a diuretic, but it was also administered as a pectoral, used externally to treat scrofula and other skin conditions, and given to treat ulcers both external and internal. Its greatest notoriety came during the middle third of the century, as writers debated whether it was lithotriptic (cf. *RP*, n. 300). Beyond that, however, it was recommended by major authorities in the treatment of a considerable range of diseases. More than with most medicinals, applications varied from author to author. Huxham

considered it useful in countering acidity in the humors, and in treating rheumatism. Mead numbered it among the antiscorbutics.

Although not included in the "Dispensatory" or comparators, lime and limewater are commonly referred to in works on military medicine. Monro recommended limewater in treating consumption and in soothing intestines abraded by dysentery, and Pringle found it effective in checking the colliquative sweats of intermittents, in relieving dysentery, and in treating several chronic diseases. Lime is mentioned 44 times in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, pp. 16, 156; Buchan, *Domestic Medicine*, pp. 249-50, 262, 267, Healde, *New Pharmacopoeia*, pp. 210-11; Huxham, *Observations on the Air and Epidemic Diseases*, pp. 46, 263; Leigh, *Experimental Inquiry*, p. 77; Lewis, *New Dispensatory*, pp. 102-03; Mead, *Medical Works*, p. 335; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 364, and II, 35; Pemberton, *Dispensatory*, pp. 255-56; Pringle, *Observations on the Diseases*, pp. 161, 239, 349-50, 379-80; Rollo, *Observations on the Diseases*, p. 91; Quincy, *Dispensatory*, p. 16.

### ***Linimentum Arcaei:***

*Linimentum Arcaei* or *Unguentum Arcaei* (Liniment or Ointment of Arcaeus) was named after its inventor, Francisco Arceo, a 16th-century Spanish surgeon. By the early 18th century, there were many recipes for it. Perhaps to reduce the confusion, the London college replaced it in 1721 with the Ointment of Gum Elemi (*ung. e gummi elemi; ung. elemi*, 1788). It was prepared (London recipe, 1721; Edinburgh recipe similar) by melting fresh mutton suet with gum elemi, removing the mixture from the fire, adding common turpentine, then straining the whole.

Genuine gum elemi -- really a resin, as Hill noted -- came from Ethiopia, although a spurious one, imported from the West Indies, was apparently much more common in the shops. The gum was used in several plasters and tinctures, and was sometimes given inwardly, especially for gonorrhoea, but according to Alston it was "little used except in the *Linimentum Arcaei*."

One of the main uses of gums was in topical applications for wounds. Hill regarded the

linimentum Arcaei as antiputrefacient and reported that it was "esteemed the greatest of all Balsams for Wounds of the Head" -- significant, in that Arceo himself especially promoted his liniment for treating head wounds. The liniment was mainly used to deterge and cleanse. Again, the applications reflect the original intention of Arceo, who claimed, according to Shaw, that "it at the same time ripens, digests, deterges, and incarns; and that in so certain and excellent a manner, as never once to have failed him"; Quincy reported, "our Surgeons say it digests and incarns much better than the **BASILICON** [q.v.] which is apt to foul a Wound, and generate fungous growth" (cf. *RP*, p. 284). Lewis likewise noted the liniment's popularity.

Ung. Arcaeus is included in one earlier army comparator list and ung. gum elemi in a later one, but neither is listed in the "Dispensatory" of 1746.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 411-12; *Biographisches Lexicon*, I, 185; Brookes, *General Dispensatory*, p. 341; Healde, *New Pharmacopoeia*, p. 300; Hill, *History of the Materia Medica*, pp. 721-23; James, *A Medicinal Dictionary*, under "elemi"; Lewis, *New Dispensatory*, pp. 507-08; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 569; Quincy, *Dispensatory*, pp. 177-78; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 285; Shaw, *Dispensatory of Edinburgh*, p. 185n.

Linseed, linseed oil; see *semen lini*

### **Manna:**

The concreted juice of the flowering ash (*L. Fraxinus ornis*), manna was generally imported from Sicily or Calabria. Two grades were used in medicine. *Manna optima* was supposed to have concreted on the tree and was often flaky in texture, while *manna secunda* was typically moist and unctuous. The name of the medicinal reflected the belief of Classical authorities, including Pliny and Galen, that it emanated from the air, like dew. Dioscorides noted its purgative quality, and the Arabs valued it as a gentle cathartic.

James wrote, "Manna may, on many Accounts, be said to be the best of Purgatives," and his

contemporaries regarded it as a mild laxative (cf. *RP*, pp. 47, 61, 62, 83, 137, 143, 173, 231). Because of its gentleness, it was often prescribed to pregnant women and to children. It was generally accounted among cathartics of the emollient and cooling classes. Lewis cautioned that manna sometimes caused flatulence or bloating, and also that it was so weak that it was effective as a cathartic only in large doses, "hence it is rarely exhibited in this intention by itself" (cf. *RP*, p. 79) There were also great concerns about the quality of the imported product; Hill reported, "no Drug [is] so subject to Decay, or to be adulterated." Despite such reservations, manna appears to have been highly popular.

One or both grades of manna appear in the "Dispensatory" and on seven comparator lists. *Practice* provides one recipe that includes manna and the author specifies manna enemas for patients who require purging and display inflammatory symptoms. Dancer advocated using mild purgatives like manna in the West Indies, adding that cathartics that were hot and acrid were excessively debilitating. Monro likewise wrote favorably of manna in reference to his army practice and reported positive assessments of it that had come to him from medical officers serving abroad.. Perhaps because it was not produced in Britain, manna does not appear to have played a major role in traditional popular medicine. It is mentioned only seven times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 470-73; Brookes, *General Dispensatory*, pp. 65-66; Buchan, *Domestic Medicine*, pp. 262, 369; Cullen, *Treatise of the Materia Medica*, II, 343-44; Dancer, *A Brief History of the Recent Expedition*, pp. 47-48; Hill, *Materia Medica*, pp. 745-51; James, *A Medicinal Dictionary*, under "manna"; Lewis, *New Dispensatory*, pp. 156-57; Lewis/Rotheram, *New Dispensatory*, pp. 192-93; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 341, 343, and II, 87n, 91; Parr, *London Medical Dictionary*, I, 913-14; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 24; *Practice of the British and French Hospitals*, p. 49 ("electuary against the stone and gravel"), 59 ("pectoral infusion"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 182, 470-71; Woodville, *Medical Botany*, I, 104-08.

**Marshmallow:**

Marshmallow (*L. Althaea officinalis*) was readily available in Britain and was sometimes grown in gardens. Used medicinally in the time of Dioscorides and probably by Hippocrates, it was traditionally and in the 18th century most valued as an emollient. More than perhaps any other medicinal, marshmallow and its products were relied upon to soothe and heal. In professional and popular medicine alike, marshmallow was widely used as a pectoral and cough suppressant. It was relied on to heal abraded intestines and to soften hard tumors. Marshmallow was thought to coat the urethra and the intestines and so was often used to treat and relieve gravel, the stone, hot urine, or other problems associated with the kidney and bladder (cf. *RP*, pp. 89, 137, 171). Syrup of marshmallows served as a base for some electuaries and emulsions, and as a soothing vehicle for medicines. Marshmallow root was sometimes applied to tumors, and it was chewed by children to ease teething. Withering noted the popularity of marshmallow: "The root boiled is much used as an emollient cataplasm, and an infusion of it is very generally prescribed in all cases wherein mild mucilaginous substances are useful." Nevertheless, there are indications that the use of marshmallow in professional medicine declined late in the century, as it was included in progressively fewer official compounds. Parr commented, "The great comfrey root is preferable in all the cases where the *althaea* is used."

*Unguentum de althaea:*

Ointment of Marshmallow (officially, *ung. dialtheae* [*Pharm. Lond.*, 1721, and *Pharm. Edin.*]; renamed *ung. ex alth.* in London version, 1746) was prepared (London recipe, 1721) by melting together oil of mucilages (which contained marshmallow), linseed, fenugreek, neat's foot oil, beeswax, and resin, then adding common turpentine; in 1746, neat's foot oil, owing to its offensive smell, was replaced by olive oil. Quincy complained of "some Medicine Merchants amongst us, who, to save both Trouble and Charge, put in little or none of the Mucilage, but give their Smell to it by a Mixture of some of the Seeds.... the Composition is justly desiged for some Purposes of Consequence, and ... it may fail in by means of such unworthy Practices." Lewis contended, "These ointments [i.e. the London and Edinburgh

versions] receive no virtue from the ingredient which they take their name from." Perhaps because of his assessment or others like it, the ointment was dropped from the 1788 ed. of *Pharm. Lond.*

Marshmallow does not appear in the "Dispensatory" or in any comparator list. Unguentum ex althaea is the only preparation of it that does, and it is included only once, in a comparator. Marshmallow is included in three compound drugs in *Practice*, but is never the primary active ingredient. Marshmallow or its syrup appears 68 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 361-64; Brookes, *General Dispensatory*, pp. 6, 341; Cullen, *Treatise of the Materia Medica*, II, 84; Culpeper, *Pharmacopoeia Londinensis*, pp.172, 174; Fowler, *Medical Reports of the Effects*, pp. 245-46; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 188; Healde, *New Pharmacopoeia*, p. 7; Home, *Medical Facts and Experiments*, p. 195; James, *Medicinal Dictionary*, under "althaea"; le Strange, *History of Herbal Plants*, pp. 16-18; Lewis, *New Dispensatory*, pp. 74-75, 144-45, 505; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 63n; Parr, *London Medical Dictionary*, I, 83 (under "althaea"); Pemberton, *Dispensatory of the Royal College*, p. 364; *Practice of the British and French Hospitals*, pp. 52 ("a sperma-ceti electuary"), 56 ("the Arabic emulsion"), 64 ("the scillitic mixture"), 72-73 ("Mindererus' spirit"); Quincy, *Dispensatory*, pp. 181-82, 317; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 37; Salmon, *New London Dispensatory*, pp. 1, 30-31; Short, *Medicina Britannica*, #5; Theobald, *Every Man His Own Physician*, pp. 31, 60; Withering, *Botanical Arrangement*, II, 736; Woodville, *Medical Botany*, I, 146-48.

### **Mastic:**

Hippocrates used the wood, bark, and leaves of the mastic tree (*L. Pistacea lentiscus*) as astringents, often against internal ulcers. As known to 18th-century medicine, mastic was a resin, mainly imported to Britain from Chios. Alston considered it antiseptic, diuretic, astringent, and nervine. Taken in small doses, it mainly served as a stomachic and to control vomiting and looseness; larger

doses were used to treat chronic coughs and catarrh. Because of its perceived astringency, it was prescribed for dysentery and relaxed fibers. Applied externally, it was used to relieve pain (perhaps most often, rheumatism) and to calm a target region (e.g., it was rubbed on the navel for looseness). By the mid-18th century, its reputation was in decline, and it was found in no compound medicines listed in the *Pharm. Lond.*

Mastic is not mentioned in the "Dispensatory" of 1746 or in any comparator list, but it is included in one preparation in *Practice*. There are 129 references to mastic in the Wellcome sample, suggesting that at least as late as the early 18th century mastic held an important place in popular medicine.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 415-17; Brookes, *General Dispensatory*, pp. 67-68; Healde, *New Pharmacopoeia*, p. 38; Hill, *History of the Materia Medica*, pp. 718-19; Lewis, *New Dispensatory*, p. 158; *Practice of the British and French Hospitals*, p. 52 ("a strengthening electuary"); Quincy, *Dispensatory*, p. 322.

## **MERCURIALS:**

During the 18th century, most of the mercury that was used in British medicine was imported from Hungary. Mercury had been introduced into medicine by the Arabs, but they appear to have used it only externally. In the late Middle Ages European empirics, impressed by how well mercurials worked on external sores, began to administer it internally. The use of mercury to combat syphilis did not originate with Paracelsus, but by his ardent support he popularized the treatment. Mercury he believed to be one of the three elements of nature, and so essential to the human constitution. Conversely, he recognized it as a potent poison, but adhering to the folk belief that like cured like, he thought that its very toxicity would enable it to cure virulent diseases like syphilis.

That mercury came to be so widely used in British medicine was not because of an association with Paracelsus -- he was widely ridiculed -- but despite it. For his part, Sydenham remained critical, of spagyrics in general and mercurials in particular. However, during the course of the 17th century

opposition moderated, and a number of writers wrote in praise of mercury. Nevertheless, an ambivalence remained. Even one of the strongest advocates, John Woodall, wrote in *The Surgeon's Mate* (1617) that mercury was "The hottest, the coldest, a true healer, a wicked murderer, a precious medicine, and a deadly poison, a friend that can flatter and lie." When 18th-century British practitioners used mercury, it was almost always highly buffered. Untrammelled use of mercurials was often associated with quackery. There was a general recognition that mercury, more than any other drug in common use, was dangerous, and quacks and country apothecaries were regularly accused of killing patients by abusing it. Even during the first half of the century, practitioners who used mercurials extensively were often subjected to criticism by peers. Indeed, a number of writers embraced it wholeheartedly. Cheyne wrote, "Mercury judiciously manag'd, seems to me, to be the only true Panacea, and universal Antidote, sought by wise, and boasted of by pyrotechnical Enthusiasts. Mercury seems pointed out and impress'd by the Signature of the God of Nature, for the Cure, at least for the Relief, of intelligent Creatures." For the most part, complaints about mercury focused on claims that it was being used too regularly by some practitioners, or in excessive doses, or in a dangerous form. There were still some anti-mercurialists, who condemned the medicinal use of mercury and claimed that alternative drugs worked better and were less dangerous. But they were becoming ever more isolated. During the 16th century a number of remedies had been put forward as successful in treating syphilis, and guaiacum in particular had been widely endorsed as a cure. At least 10 other metals and semi-metals, and 22 or more plants, were used to treat syphilis. By 1700, however, all but the most ardent critics of mercury had conceded that the alternatives were not nearly as effective against syphilis as it was. In reference to the treatment of his own case of syphilis, John Hunter claimed, "I knocked down the disease with mercury and I killed it."

What truly marked off the century, however, was not that mercury was being widely used against syphilis, but that it was increasingly relied upon as well in the treatment of a vast range of other problems, internal and external. Furthermore, mercurials were directed toward a number of actions. There were mercurial salves and plasters, mercurial emetics, purgatives, and diuretics. Not many



practitioners would have disputed Moore's assertion that "Quicksilver is one of the most useful Medicines of the whole Materia Medica" or Hooper's observation, "There is scarcely a disease against which some of its preparations are not exhibited."

There are 38 references to mercurials or to "mercury" in the Wellcome sample, but in about half of the instances the writer may intend the herb popularly known as "French Mercury," which had medical application, notably as a cathartic.

*Aethiopsis mineralis:*

Aethiopic Mineral, so-called because of its blackness, was composed of equal parts quicksilver and flowers of sulfur mixed until the globules of mercury disappeared. It generally acted as a mild cathartic, but critics regarded it as unreliable. Advocates considered it a specific against worms, but it was also given for venereal sores, scurvy, itch, piles, and other skin problems. It seldom raised a salivation and was thought to work by diaphoresis or purge. Brookes and Lemery endorsed it, and according to Alston it was "esteemed the safest but yet not the least powerful of the Preparations of Mercury." But Boerhaave and Cheyne doubted its efficacy, and Lewis considered it to be one of the least active mercurials, although he noted that some contemporaries were doubling the amount of mercury, which he thought might increase its effectiveness. Alston believed that the mercury was fixed by the sulfur, and consequently the medicine owed its effect to the latter. The popularity of this drug appears to have declined markedly during the course of the century. James commented, "Upon the whole Aethiops Mineral has had the fate of most other Medicines. When one considerable Man spoke well of it, this was sufficient to make all those concerned in the Practice of Physic, who have neither Character nor Ideas of their own, to extol it beyond all Bounds of Credibility. And the Disapprobation of another great Man, however ill founded, has been sufficient to sink it into its present Disrepute"

Aethiopsis mineralis is not listed in the "Dispensatory," but it does appear in three

comparator lists and according to the author of *Practice* as of the 1770's it was being used in army hospitals, serving as the primary ingredient in a pill and an electuary that were mainly used against skin problems. The mineral is not mentioned in the Wellcome sample.

Calomel:

Calomel underwent several official name changes during the 18th century; furthermore, the name itself had formerly been applied to a compound that during that century was popularly known as the Aethiopic Mineral (see preceding). The calomel that was known to the 18th century, however, was a white powder, sublimated from *mercurius dulcis sublimatus* (muriated mercury mixed with purified mercury, then sublimed). According to Quincy, true "calomel" was the result of four sublimations; Pemberton specified six and Lewis, seven. Preparation was not only laborious, but dangerous. The resultant drug, however, was highly valued. Lewis wrote, "Mercurius dulcis is one of the best and safest preparations of this mineral. Many of the more elaborate processes are no other than attempts to produce such a medicine as this really is: all that mercurials are capable of performing, as sialogogues, diaphoretics or alterants, may be effected by it." It was milder than muriated mercury, which was also used medicinally. Like other mercurials, it was often, but not solely, used in treating venereal disease. The popularity of calomel rose steadily during the 18<sup>th</sup> century, and in 1812 John Ayrton Paris wrote that it was "a preparation more extensively and more usefully employed than almost any other article in the whole range of the materia medica." A reaction soon set in, however.

Under one or another of its official names, calomel is listed in the "Dispensatory" of 1746 and in seven comparators. Army hospitals made use of a "calomel bolus" -- calomel and conserve of red roses -- following up the administration by a purging draught that was intended to limit salivation.

Cinnabar:

Kinnabaris had been used medicinally by Hippocrates, but most 18<sup>th</sup>-century authorities on the materia medica believed that he referred to Dragon's Blood (*sanguis draconis*, a red resin that was still used in 18th-century medicine). Although native cinnabar, the primary ore of mercury, was sometimes used for medical purposes, as was "Factitious Cinnabar" (renamed *hydrargyrus sulphuratus ruber* in the 1788 *Pharm. Lond.*), a compound of common sulfur and mercury, the official type was Cinnabar of Antimony (*cinnabaris antimonii*), which was prepared by heating the residue left from the production of Antimonial Caustic (antimony mixed with corrosive mercury sublimate, then heated). Healde warned preparers that they needed to take precautions, since the mixture could explode when heated. Native cinnabar was dropped from the materia medica in the 1746 *Pharm. Lond.*, but was restored in 1788, under the name of *Hydrargyrus sulphuratus*. According to Alston, it retained a high reputation on the Continent. He also regarded the factitious type as ineffective and Lemery thought it more nauseating, but Hill asserted that it was just as effective and less likely to nauseate. Lewis also noted its nauseating quality, blaming this on the arsenic that was often intermixed in the ore. Quincy believed cinnabar of antimony to be "diaphoretic and a powerful alterative in all chronic cases." In substance, the drug was regarded as a mild alterative, and as such was prescribed for women and children.

*Cinnabaris antimonii* is listed in the "Dispensatory" of 1746 and in several comparator lists, although in rather small quantities. This cinnabar was a primary ingredient in an electuary and a compound powder that were used in army hospitals to relieve apoplexy, epilepsy, and paralytic and convulsive disorders.

Corrosive mercury:

*Mercurius sublimatus corrosivus* (renamed *hydrargyrus muriatus* in 1788 *Pharm. Lond.*) was prepared by sublimating a mixture of mercury, sea salt, and sulfuric acid (some variations in recipe). Cole characterized it as "a deadly poyson" and Brookes considered it "a strong

Poison and a violent Escharotic," which should in general be applied externally and even then in moderation. Boerhaave, however, recommended drinking small doses of it regularly in water and syrup of violets, and Van Swieten (who also encouraged its external use) promoted a solution of it in rectified wine as a medicine to be taken internally to combat venereal disease. Pringle, a classmate and friend of Van Swieten's, recommended that army surgeons test this form. The conclusion generally drawn from the trials, however, appears to have been that mercurial ointment was a more reliable cure. According to Lewis, as of mid-century the British were importing most of their muriated mercury (often adulterated with arsenic) from Venice and the Netherlands, but it appears that by the 1790's the situation had changed, for Healde noted that the British were now producing in such quantity that they were themselves exporting it.

*Hydrargyrus purificatus* :

was prepared by rubbing together equal quantities of quicksilver and iron filings. Quincy thought it a useful laxative, but Lewis reported, "it is very doubtful whether much advantage be obtained from this process," and noted that because of this (and because retorts were often broken in the process), Edinburgh had dropped it from its pharmacopoeia. *Hydrarg. Depur.* is not listed in the "Dispensatory" of 1746 and appears on only one comparator list.

*Mercurius corrosivus sublimatus*:

Corrosive mercury sublimate (renamed *hydrargyrus muriatus* in 1788 ed. of *Pharm. Lond.*; Edinburgh version named *mercurius sublimatus corrosivus*) was prepared by mixing purified quicksilver and vitriolic acid, then boiling dry, mixing in sea salt, subliming, and finally separating the sublimate from the scoriae. According to Lewis, British apothecaries rarely made it, instead importing it from Venice and Holland; the imported sublimate, he warned, was sometimes adulterated with arsenic. Later in the century, however, Healde reported that London chemists now prepared much of the drug, fears that the Dutch product was adulterated were

unfounded. Most authorities agreed that the sublimate was so corrosive that it should be used only in highly diluted form. Lewis reported that it was sometimes used in solutions of 1 dr./1 qt. water, to keep down proud flesh and cleanse ulcers; more diluted, it was used as a cosmetic, or to destroy cutaneous insects. Hill regarded it as "a terrible poison," never to be taken internally. Nevertheless, Boerhaave recommended some internal use, and Alston, while referring to it as "a violent caustic," claimed that Van Swieten had shown how to give it internally with safety. Van Swieten in fact recommended the following therapy in treating venereal disease: 8 gr. sublimate dissolved in 16 oz. proof spirit or rectified wine; 1-2 spoonfuls twice daily; given this way, the sublimate would purge at first, then operate by urine and perspiration. The sublimate is not listed in the "Dispensatory" of 1746, but it does appear on most later comparator lists, though in small quantities.

*Mercurius praecipitatus albus:*

The "white precipitate of mercury" (in 1788 *Pharm. Lond.* renamed *calx hydrargyri alba* (white calx of mercury]) was prepared (*Pharm. Lond.*, 1746) by dissolving in water equal amounts of corrosive mercury sublimate and sal ammoniac, filtering, and then precipitating in a solution of alkaline salt. The 1721 ed. of *Pharm. Lond.* had included this item under the name *Merc. dulcis precip.*, only Edinburgh's version being called *Merc. precip. alb.* Both versions had included aqua fortis, a traditional component, but Pemberton's committee omitted it, a move praised by Brookes. Salmon regarded this precipitate as "the gentlest of all the Purgatives drawn from Mercury," but by the mid-18th century it was used primarily in ointments and liniments. Of the Edinburgh version, which continued to include aqua fortis, Lewis wrote that it was so strong that it was used by farriers as an escharotic, while "internally, it is among us very rarely made use of; notwithstanding the character given of it by Boerhaave, of being 'perhaps the best remedy hitherto afforded by mercury.'" Healde noted that it was often adulterated with ceruse. [xref w/pomatum]

*Mercurius praecipitatus ruber:*

The red precipitate was officially named *mercurius calcinatus* (calcined mercury; renamed *hydrargyrus calcinatus* in 1788 *Pharm. Lond.*) in London and Edinburgh. It was prepared by heating calx of mercury in a crucible, progressively increasing the heat as the mercury turned white, brownish, yellow, and finally bright red. Like the other precipitate, this was widely used by surgeons to consume foul flesh and heal ulcers. It was, however, very corrosive, and according to Brookes always caused thick pus and left a scar. He cautioned that it was not to be used internally, but noted that some prescribed it, claiming that by promoting sweat and urine it cured otherwise incurable diseases. Lewis recommended it as an alterative and diaphoretic in venereal cases and, in doses of 5-6 gr., a "rough emetic and cathartic." *Merc. praecip. rub.*, probably the precipitate, is listed twice in the "Dispensatory" of 1746.

*Turpethum minerale:*

Lewis rated turbith mineral (renamed *Mercurius emeticus flavus* ["yellow emetic mercury"]) in 1746 ed. and *Hydrargyrus vitriolatus* [vitriolated mercury] in 1788 ed. of *Pharm. Lond.*, which had reputedly been invented by Paracelsus, as the most powerfully emetic of all mercurials that could safely be taken internally, and Alston described it as "a violent emetic and purgative." In small doses, however, it could serve as a moderate laxative or an alterative. Sydenham endorsed it as a sialogogue, useful for combatting gonorrhoea, while Shaw considered it "one of the most effectual emetics and purgatives in obstinate chronic, but especially venereal, cases." Turbith mineral was prepared by distilling to dryness a mixture of mercury and vitriolic acid, then washing and drying the resultant mass several times. Turbith mineral is not included in the "Dispensary"; it appears in only one comparator list, and even then it is in small quantity.

*Unguentum citrinum:*

This "yellow ointment" was listed only by Edinburgh, which specified that it be prepared by mixing quicksilver with spirit of nitre (q.v.) and digesting them in a sand heat until the quicksilver dissolved, then beating in lard. According to Brookes, it was "reckoned a useful Detergent in venereal Ulcers." It is not found on any of the army lists.

*Unguentum mercuriale:*

Mercurial ointment was prepared by rubbing mercury with two to four times its weight of lard; mutton suet was sometimes substituted for all or part of the lard -- Lewis claimed that it stiffened the ointment and improved consistency -- and increasingly so later in the century; butter was also sometimes substituted for lard, a practice that Astruc criticized. Of basic *ung. mercuriale*, Lewis commented, "This is the most simple of the mercurial ointments, tho' possibly as efficacious as any," and he included it in his *pharmacopoeia pauperum*. *Ung. mercuriale* so called was included only in the *Pharm. Edin.* The *Parm. Lond.*, however, included two similar ointments: *ung. caeruleum mitius* ("The Weaker Blue Ointment") included turpentine (apparently added to facilitate blending, though Lewis asserted that the resulting ointment sometimes irritated the skin); *ung. mercurius fortius*, or *ung. caeruleum fortius* ("The Stronger Blue Ointment"), included balsam of sulfur. *Ung. caeruleum mitius* was listed in the "Dispensatory" of 1746, while the stronger ointment is included in most later comparator lists. Mercurial ointment was used against various cutaneous problems, as well as venereal disease; when rubbed into the skin it could raise a salivation, so it tended to be used in small quantities and the patient was kept laxative. Although mercurial ointment was widely prescribed for itch, Pringle, Brocklesby, and Monro preferred sulfur, another common remedy. Grainger, like Buchanan, favored mercurial ointment, though with an admixture of sulfur. Buchan cautioned against the use of mercury.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 84-87, 89, 91-92, 98, 319; Astruc, *Treatise of the*

*Venereal Disease*, I, 175, 203-04, and II, 107; Brocklesby, *Oeconomical and Medical Observations*, pp. 285-86; Brookes, *General Dispensatory*, pp. 70, 212-13, 320-25, 331-32, 343, 344; Buchan, *Domestic Medicine*, p. 307; William F. Bynum, "Treating the Wages of Sin: Venereal Disease and Specialism in Eighteenth-Century Britain," *Medical Fringe & Medical Orthodoxy 1750-1850*, ed. W. F. Bynum and Roy Porter [The Wellcome Institute Series in the History of Medicine] (London, Sydney, Wolfeboro: Croom Helm, 1987), pp. 16-17; Culpeper, *Pharmacopoeia Londinensis*, p. 210; French, Robert Whytt, *The Soul, and Medicine*, pp. 46-47; Goldwater, *Mercury*, pp. xi, 203-12, 225-28, 234-38, 240-42; Grainger, *An Essay on the More Common West-India Diseases*, p. 19; Healde, *New Pharmacopoeia*, pp. 34, 160, 162-67, 170-71, 172-73; Hill, *History of the Materia Medica*, pp. 56-57, 60-61; James, *Medicinal Dictionary*, "aethiopsis mineralis," "cinnabar", "mercurius"; Irvine J. Hunter, "Syphilis in the Illness of John Hunter," *JHM*, 8 (1953), p. 251; Lewis, *New Dispensatory*, pp. 115-16, 330-40, 506, 508, 580; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 397, 399-406, 570, 571; Monro, *Observations*, II, 266-72; Moore, *Essay on the Materia Medica*, p. 216 ; Packard, "The Earlier Methods employed in the Treatment of Syphilis," pp. 226-28; W. D. M. Paton, "The Early Days of Pharmacology, with Special Reference to the Nineteenth Century," *Chemistry in the Service of Medicine*, ed. F. N. L. Poynter (London: Pitman Medical Publishing Company Ltd., 1963), p. 77; Pemberton, *Dispensatory*, pp. 219-24, 376; *Practice of the British and French Hospitals*, pp. 39 ("calomel bolus"), 45 ("Ethiopic electuary"), 65 ("Aethiopic pills"), 71 ("mercurial solution"), 75 ("mercurial ointment"); Pringle, *Observations on the Diseases*, pp. 303-04; Quincy, *Dispensatory*, pp. 260, 261, 262, 358; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 21, 54 (under "anthelmintics"), 147, 382 ("hydrargyrus cum sulphure"), 383, 491, 780 ("sulphuretum hydrargyri rubrum"), 830; Salmon, *New London Dispensatory*, p. 305; Swediaur, *Practical Observations*, p. 98; Turton, *Medical Glossary*, pp. 26, 150.

### **MILK:**

Milk was a standard element of diet for the sick. The milk of cows, asses, goats, and humans



were also used medicinally. Many writers, including Sydenham, Mead, and Buchan, preferred ass milk, believing it most digestible, but considered cow milk an acceptable substitute. Milk was regarded as anodyne and emollient, and was often used externally, generally in fomentations or mixed with bread in a poultice. Sharp regarded an application of milk, oil, and bread to be the best means of promoting suppuration; by contrast he condemned using plasters, which might irritate and were painful to remove. Drugs were often consumed in milk. It was also to obtund "acid and deleterious Substances" (Brookes) and to counter overdoses of cathartics and emetics, and was likewise looked on as an antidote to many poisons, including copper, arsenic, and corrosive sublimate. It was valued as a restorative for emaciated or wasted patients, and so was often recommended to consumptives. Of its significance in treating consumption, Buchan wrote, "Milk alone is of more value in this disease than the whole *materia medica*." Besides popularizing the use of milk in treating consumption, Sydenham founds many other uses of milk, notably with sugar in enemas, which were intended to cool. Valued as a palliative, milk was used to combat gout. Milk was sometimes drunk to mitigate the effects of alcohol. It had many other uses as well, though Brookes advised against its use for acute diseases and when the viscera were obstructed, and Mead, noting an aphorism of Hippocrates, deemed it a "poison" when administered to a patient who had a headache, fever accompanied by thirst, flatulence, bilious looseness, or bloody stools

#### Butter:

Both fresh and salt butter were listed among the *materia medica* by London until 1746. Buchan warned against the English love of butter, claiming that rancid butter was a danger to bilious types and that salt butter might promote sea scurvy. In medicine, butter was most often used as an emollient rub and as a vehicle for topical applications.

#### Whey:

### Scorbutic Whey:

*Serum scorbuticum* was included in the *Pharm. Lond.*, but not in the *Pharm. Edin.*, and London dropped it in 1788. It was prepared by boiling together milk and scorbutic juices until the milk turned, at which point curd and whey were to be separated. Lewis considered it effective enough to serve as the common drink in scorbutic cases.

Given the perishability of milk, it of course does not appear on any list of drugs intended for the army, but it was certainly widely used by medical officers. *Practice* lists recipes for four drugs that include milk, specifically "alexiterial milk water." Milk, its simple preparations like milk-water, or buttermilk is mentioned in 460 recipes or lists of suitable medications in the Wellcome sample. Cow's milk or simply "milk" (presumably from a cow) is most often called for, followed by woman's milk, goat's milk, and ass' milk, with a few references to other varieties, e.g. sow's and ewe's. Butter and its simple preparations (e.g., buttered beer) are mentioned 256 times. There are 23 references to whey or sack whey.

**Sources:** Bell, *An Inquiry into the Causes*, p. 26; Brookes, *General Dispensatory*, pp. 55, 58, 209; Buchan, *Domestic Medicine*, pp. 24-28, 133, 142n, 204, 252, 264, 266n, 267, 330, Buchan, *Observations concerning the Diet of the Common People*, pp. 24-28; Cullen, *Treatise of the Materia Medica*, II, 223-26; Healde, *New Pharmacopoeia*, p. 37; Hill, *History of the Materia Medica*, p. 32; James, *Medicinal Dictionary*, "lac"; Lewis, *New Dispensatory*, pp. 249-50, 394-95; Mead, *Medical Works*, pp. 359, 413; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 310n, and II, 34, 227; Parr, *London Medical Dictionary*, I, 851-53; *Practice of the British and French Hospitals*, pp. 53 ("an alexipharmic draught," "an anodyne draught,"), 54 ("an emetic draught"), 55 ("a sudorific draught"), 63; Quincy, *Dispensatory*, pp. 319; 350; Rollo, *Observations on the Diseases*, p. 93; Salmon, *New London Dispensatory*, pp. 22, 69, 266-67; Sharp, *Treatise on the Operations of Surgery*, pp. ix, xi, xlvi; Sydenham, *Whole Works*, pp. 24, 107, 140-41, 195, 196-97, 202, 366.

### **Mountain Flax:**

Mountain flax (dwarf flax; *linum catharticum*) grew widely in Britain. The leaves, both dried and fresh, were used medicinally, as were the seeds. It was listed among the materia medica until the 1746 ed. of *Pharm. Lond.*, but even while it remained official it appears to have been losing favor in professional medicine. Hill referred to it as "a common Purge among the Country People," but accounted it quite "rough," which may suggest a reason for decline, as may his reference to its nauseating quality. James reported a case of a man who received an infusion of it from a quack and quickly became grossly bloated, being relieved only by milder purgatives. As Withering noted, mountain flax was also a diuretic and was sometimes used to combat dropsy, though Hill recommended that it be prescribed only to patients with robust constitutions, and even then be mixed with aniseed, to reduce griping. Quincy observed that the common people, impressed by its ability to remove "viscid and watry Humours from the most remote Lodgments," frequently used it to combat rheumatism (cf. *RP*, p. 121).

No form of the flax is listed in the "Dispensatory" of 1746 or in any comparator list. This omission, coupled with the fact that it is very seldom mentioned in 18th-century literature that deals with professional practice, suggests that mountain flax was seldom if ever prescribed by medical officers. There are only eight references to flax in the Wellcome sample, none of them specifying a variety.

**Sources:** Brookes, *General Dispensatory*, p. 62; Hill, *History of the Materia Medica*, pp. 389-90; James, *Medicinal Dictionary*, under "linum catharticum"; Lewis, *New Dispensatory*, p. 153; Quincy, *Dispensatory*, p. 320; Quincy, *Lexicon Physico-Medicum* (1719), p. 234; Withering, *Botanical Arrangement*, I, 330.

### **Mustard:**

Mustard seed (*semen sinapis*) played a major role in 18th-century medicine. White mustard was official before being dropped from *Pharm. Lond.* in 1746; afterwards, only *sinapis nigra* was listed in

the materia medica. Many applications of mustard dated back to Dioscorides. Besides being long popular, mustard had the added attraction of being inexpensive and easy to obtain, since it grew widely in Britain.

Mustard was often applied externally in a poultice or plaster called a "sinapism," which was commonly used to relieve rheumatism, gout, palsy, and delirium. Frequently sinapisms were applied to the feet of fever patients, to produce a sweat or to revive them if they were sinking. Brookes thought it useful for making a revulsion or for drawing humors to the region where it was applied. Traditionally, sinapisms had often been applied to raise ulcers, in order to concentrate humors, but James cautioned that repetition of the procedure could cause gangrene. Buchan, who found many applications for the stimulating quality of mustard, thought preferred mustard poultices to blisters, because they raised the patient without weakening him. The internal applications of mustard were even more varied; 17th-century authorities like Salmon prescribed it for dozens of different ailments and ascribed to it many virtues, and in the 18th century it was still valued as an astringent, diuretic, stomachic, antiscorbutic, and an emetic (in large doses or mixed into warm water), and was prescribed for many diseases, including ague, catarrh, dropsy (cf. *RP*, p. 155), and rheumatism (cf. *RP*, p. 121). Bate strongly endorsed it in the treatment of paralysis, and Withering wrote, "wherever we want a strong stimulus, that acts upon the nervous system, without exciting much heat, we know none preferable to mustard seed." Cullen noted that it was common practice to consume a tablespoon of mustard seed daily, as a laxative and (less reliably, he believed) a diuretic.

Mustard seed appears in the "Dispensatory," but on only two comparator lists. However, given its ready availability it may have been purchased at local shops as needed. In *Practice*, it is included in three preparations: a cataplasm that, when applied after bleeding and purgation, was expected to reduce pain and also relieve paralysis; a diuretic electuary that was intended particularly for victims of paralysis, asthma, and dropsy; and an infusion that was intended to relieve rheumatic pains and paralysis. There are 55 references to mustard in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 375-76; Brookes, *General Dispensatory*, pp.

115, 339-40; Buchan, *Domestic Medicine*, p. 119, 142n, 151, 288n, 298; Cullen, *Treatise of the Materia Medica*, II, 115-16; Gardiner, *Inquiry into the Nature, Cause, and Cure of the Gout*, p. 162; Healde, *New Pharmacopoeia*, p. 57; Hunter, *A Treatise on the Blood*, II, 85; James, *Medicinal Dictionary*, under "paralysis" and "sinapis"; Lewis, *New Dispensatory*, p. 207; Lind, *Essay on Diseases*, p. 223; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 259; *Practice of the British and French Hospitals*, pp. 42 ("mustard-seed cataplasm"), 50 ("electuary against the palsy"), 59 ("paralytic infusion"); Quincy, *Dispensatory*, p. 340; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 748; Salmon, *New London Dispensatory*, pp. 151-52; Withering, *Botanical Arrangement*, II, 714; Woodville, *Medical Botany*, III, 409-11.

### **MYRRH:**

Myrrh was a gum resin imported from the East Indies, Egypt, and (its traditional source) Ethiopia. Its precise origins were a mystery to 18th-century British authorities, however, for as Hill conceded, "The Tree which produces the Myrrh in Use in our Times is wholly unknown," and fifty years later Parr was still finding several different trees being denoted as its source. Although "myrrh" was applied to several different items by the Ancients, the gummy resin known by that name in the 18th century appears to have been among them. Both Galen and Celsus recommended it as a febrifuge, bitter, and stimulant. In the early and mid-18th century, myrrh was promoted by authorities like Boerhaave, and was used internally against many diseases -- coughing, jaundice, scurvy, cachexy, and various uterine problems among them; by itself or in various preparations, it was probably the most used emmenagogue and, in Astruc's estimation, an effective one. It was also used also to warm the patient, remove obstructions, and counter putrefaction. Advocates regarded it as very effective when used externally to heal wounds and old ulcers and for sores of the mouth, and during the latter half of the century these uses seem to have become predominant. Myrrh was used in many preparations, but after 1750 its professional reputation began to decline, and Lewis commented that it was "now less employed than formerly." Tissot warned that myrrh, like turpentine, mastic (qq.v.), and other balsamics were hard

on the stomach, heated the body, and clogged capillaries. Nevertheless, myrrh continued to have its supporters. In a 1780 treatise, Samuel Foart Simmons promoted myrrh as a treatment for consumption. Townsend recommended gargles of myrrh to combat ulcerous sore throat, and Wesley advised applying a solution of myrrh to scorbutic gums. Brookes was also an advocate, though he warned against giving myrrh to pregnant women, cautioning that it might cause abortions.

*Tinctura myrrhae et aloes:*

The name *tinctura myrrhae et aloes* (Tincture of Myrrh and Aloes) appeared in *Pharm. Edin.*, while the RCPL referred to its product as *tinc. myrrhae composita*. The recipe for the latter (1721) was patterned on Bate's and was quite simple: aloes and myrrh in brandy. The compound tincture was dropped from the *Pharm. Lond.* in 1746, although *t. myrrhae* remained. The Edinburgh recipe for the tincture with aloes differed from London's only in that rectified spirit was used instead of brandy, and London switched to proof spirit for *t. myrrhae* in 1746, even though Pemberton's committee had reported that, contrary to the opinion of some writers, myrrh dissolved in boiling water.

Brookes described the Edinburgh version as "very good, used externally for Wounds, Ulcers, &c." The tincture was often gargled, and was valued for treating sores in the mouth. Internally, it was used to treat jaundice (cf. *RP*, p. 133), coughs, scurvy, and several women's diseases.

*Tinc. myrrhae et aloes* is included in the "Dispensatory" and the earlier (1703) comparator list; *tinctura myrrhae* is in two comparators. Myrrh appears in four comparators, while *elixir aloes*, which was the same as *tinc. myrrhae et aloes* except that it also included saffron, is mentioned in one. In the army as in civilian practice, myrrh had only a moderate role, probably declining somewhat after 1750. Myrrh is referred to 55 times in the Wellcome sample.

**Sources:** Astruc, *Treatise on the Diseases of Women*, I, 112; Brookes, *General Dispensatory*, pp. 6,

74-75, 171-72, 174, 182; Buchan, *Domestic Medicine*, pp. 283-84; Cullen, *Treatise of the Materia Medica*, II, 132; Healde, *New Pharmacopoeia*, pp. 7, 231-32; Hill, *History of the Materia Medica*, pp. 757-59; Huxham, *Essay on Fevers*, p. 78; James, *Medicinal Dictionary*, under "aloes," "balsamum," and "myrrhus"; Lewis, *New Dispensatory*, pp. 72-74, 420; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 130, 201-02, 489; Mead, *Medical Works*, p. 372; Parr, *London Medical Dictionary*, I, 1018-19; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 17, 22; Pemberton, *Dispensatory*, pp. 86-87, 130, 273; *Practice of the British and French Hospitals*, pp. 37 ("borax bolus"), 67 ("gum pills"), 68 ("Rufus's pills"); Quincy, *Dispensatory*, pp. 20-21, 285; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 35-36, 751, 816; Tissot, *Advice to the People in General*, p. 51; Wesley, *Primitive Physic*, p. 139; Woodville, *Medical Botany*, II, 556-62.

### **Nasturtium:**

Nasturtium (*L. Nasturtium officinale* [*Sisymbrium Nasturtium aquaticum*]; watercress; the leaves), used medicinally, was often consumed in salads, although it was also administered in the form of depurated juice and powder. Although 18th-century writers referred almost entirely to internal applications, Salmon boosted it as a vulnerary. Internally, it was, he asserted an excellent expellant -- an effective emmenagogue, useful in treating dropsy and the stone. Brookes valued cress for many purposes, finding it diuretic and pectoral. However, while he considered it useful in a number of diseases and conditions, he noted that its value lay "specifically in the Scurvy." Virtually all authorities rated highly its value in treating scurvy, and it was in fact one of the more widely used antiscorbutics of the time (cf. *RP*, p. 199). Withering wrote that it was "an excellent anti-scorbutic and stomachic, with less acrimony than the Scurvy-grass." Hoffmann had a high opinion of it, believing that it purified the blood and other fluids, accelerated circulation, strengthened viscera, and opened obstructions. Sydenham included it in a water that he prescribed for "scorbutic rheumatism." When used as an antiscorbutic, nasturtium was generally mixed with vegetable acids, as in *succi scorbutici* (q.v.), and Cullen believed that the acids made the juice of nasturtium more effectual.

There are no references to nasturtium in the army lists, and although in many cases it could have been obtained locally it is seldom mentioned in the literature that deals with army practice. The Wellcome sample includes 44 references to watercress.

**Sources:** Sources: Alston, *Lectures on the Materia Medica*, II, 187-88; Brookes, *General Dispensatory*, p. 76; Cullen, *Treatise of the Materia Medica*, II, 112; Healde, *New Pharmacopoeia*, p. 41; Hill, *History of the Materia Medica*, pp. 385-86; Lewis, *New Dispensatory*, p. 93; Mead, *Medical Works*, p. 335; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 185; Quincy, *Dispensatory*, pp. 267-68; Salmon, *New London Dispensatory*, p. 31; Sydenham, *Whole Works*, p. 205; Withering, *Botanical Arrangement*, II, 690.

#### **NITRE:**

"*Nitrum*" had been valued in Ancient medicine (cf. *RP*, p. 165), but Geoffroy argued that the term referred not to nitre but to borax and Barker commented that Hippocrates was limited by his lack of nitre. The nitre (saltpeter) used in 18th-century medicine occurred naturally in Persia, China, and the East Indies, with smaller deposits elsewhere, but in Europe what was not imported generally had to be created by rotting animal and vegetable matter together, then adding lime and ashes (Hoffmann called for greater exploitation of European reserves). In the 18th century, nitre was esteemed for many reasons. It was perhaps most valued as a coolant. According to James, "As Nitre is a powerful Cooler, when internally exhibited; so there is no more effectual Antifebrile, no Medicine which either so soon, or so safely, corrects the febrile Heat, and removes the woeful Train of Symptoms produc'd by it." In inflammatory diseases like pleurisy, it was often administered to cool the patient. It was also valued as an antiputrefacient -- though Pringle believed it septic -- and because of this and its refrigerant quality it was widely used, in various preparations, in treating malignant and putrid fevers. Nitre was regarded highly as an expellant -- laxative, emetic, and diuretic, though especially the last -- and was also valued as an anodyne. It was used to combat spitting of blood, dropsy, headaches, delirium, and many other conditions and, despite its laxative quality, it was prescribed as a corrective to drastic



purgatives like gamboge, scammony, jalap, and colocintida. As a diuretic, it was sometimes prescribed for dropsy, and some thought it effective against gonorrhoea, not only in promoting urine but in washing out venereal poison (Hunter doubted it had this virtue). It was frequently used against diarrhoea, and that may have been its purpose in the regimen noted here by Buchanan, but conversely it sometimes served as a purgative (the evacuations it caused being considered salutary). Lewis warned that nitre might not rest easy on the stomach, but added that it was "a medicine celebrated in many disorders." Alexander was more negative, reporting that while trials on himself suggested that nitre reduced the pulse, they did not demonstrate that it lowered body temperature, and that contrary to Lewis's claim that nitre relieved hot urine and stranguary, it actually impregnated urine and caused pain.

*Decoctum nitrosum*

Prepared (as specified in the *Pharm. Edin.*) by boiling. purified (i.e. boiled and filtered) nitre, white sugar, and, and cochineal in spring water. Cochineal, an insect (some thought it a vegetable), was imported in large quantities from the New World. In medicine, it was valued by some as a cordial, sudorific, and febrifuge, but the consensus, as reported by Lewis, was that "practitioners have never observed any considerable effects from it ... and in medicine its principal use is as a colouring drug." However, the red color that it imparted to the feces or urine frightened some patients, and this (coupled with the sense that it had little medicinal value) brought about its removal from some compound drugs. More generally, it was valued as a dye. *Decoctum nitrosum* was used in the same cases as nitre, and was thought to have the same virtues. Its main value, as seen by Lewis, was that the cochineal and sugar served to mask the nitre, which by itself was difficult for patients to consume. Possibly because it was not seen to possess any advantages over simple nitre, it was dropped from the 1746 ed. of *Pharm. Lond.*

*Spiritus nitri dulcis:*

“Dulcified spirit of nitre” (renamed *spiritus aetheris nitrosi* ["Spirit of Nitrous Ether"] in *Pharm. Lond.* of 1788) was prepared by blending rectified spirit of wine (distillate of brandy with salt of tartar; 95% alcohol) with Glauber's Spirit of Nitre (distillate of nitre with spirit of vitriol; renamed *acidum nitrosum* or Nitrous Acid in the 1788 ed. of *Pharm. Lond.*), then distilling. Lewis and Healde warned of dangers associated with preparation. There were many variants, and other spirits of nitre were specified in the various recipes, but the RCPL insisted on Glauber's, "for left at large the dose of medicine will be altogether uncertain." This spirit was endorsed by Boerhaave and other leading authorities. Hoffmann also recommended it, though Pemberton regarded the dosage that he prescribed as too small. It was widely used as a febrifuge, diaphoretic, diuretic, stomachic, and tonic, and as an antispasmodic. Lewis believed that its diaphoretic property was enhanced by mixing it with an alkaline spirit, e.g. spirit of hartshorn. It was also highly regarded as a thirst quencher.

The dulcified spirit is included in the "Dispensatory" of 1746 and on most comparator lists. Decoctum nitrosum is listed in the Dispensatory, but in no later comparator lists and so appears to have passed from army practice. Nevertheless, the army used other forms of nitre in large quantities. Purified nitre appears in some form on almost all lists, and the quantities increase later in the century. Nitre is included in eight drugs listed in *Practice*, most of them cooling or diuretic. And nitre was also a popular fumigant. Ferriar lauded "Fumigations with nitre and concentrated vitriolic acid, which have lately been employed with such success in his Majesty's military and naval hospitals, as an antidote to contagion." Writers on military medicine often wrote of the merits of nitre and nitrous drugs. Brocklesby valued it highly, especially as a sudorific, and recommended that to treat rheumatism as much as 600 gr./day be administered; noting that some practitioners might be reluctant to give such large doses, he declared that experience and his experiments, which he discussed, showed them to be safe and that the strong cooling effect that they might cause would be only momentary (Cullen, who

found nitre to be hard on the stomach, commented, "I could hardly, or at least seldom, find a .stomach that would bear half the quantity of nitre that he seems to have employed"). Nitre and nitrous medicines were very common in Monro's practice, especially as diuretics and refrigerants. Pringle was more reserved, endorsing nitre in treating inflammatory fever, but comparing it unfavorably to Mindererus's Spirit (cf. *RP*, n. 888) and noting that patients had difficulty stomaching doses of nitre exceeding 15 gr.

There are no references to nitre or its preparations in the Wellcome sample, reflecting the fact that nitre was more an 18th- than a 17th-century, or traditional, drug.

**Sources:** Alexander, *Experimental Essays*, pp. 120-26; Alston, *Lectures on the Materia Medica*, I, 178, 184; Barker, *Essay on the Agreement betwixt Ancient and Modern Physicians*, p. 93; Brocklesby, *Oeconomical and Medical Observations*, pp. 120-25; Brookes, *General Dispensatory*, pp. 77-78, 199, 286; Brookes, *The General Practice of Physic*, I, 303; Buchan, *Domestic Medicine*, pp. 118, 126, 153, 289, 300, 317, 369; Cullen, *Treatise of the Materia Medica*, II, 235; Ferriar, *Medical Histories and Discoveries*, III, 67; Healde, *New Pharmacopoeia*, pp. 60, 111-13, 189-91; Hill, *History of the Materia Medica*, pp. 93-98; Hunter, *A Treatise on the Venereal Disease*, p. 67; Huxham, *Essay on Fevers*, p. 134; Huxham, *Observations on the Air and Epidemic Diseases*, pp. 114, 166, 220, 240; James, *Medicinal Dictionary*, under "nitre"; Lewis, *New Dispensatory*, pp. 116, 209-10, 286, 298-99; 392; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 204, 358, 442-43, 471-72 (under vinum ipecacuanhae); Manning, *Modern Practice of Physic*, pp. 3-4; Mead, *Medical Works*, 212, 243, 244, 376; Monro, *Observations*, I, 274, and II, 8, 32, 49, 58, 86, 93, 238-39; Pemberton, *Dispensatory*, pp. 54-55, 197; *Practice of the British and French Hospitals*, pp. 38 ("contrayerva bolus"), 45 ("decoction of the bark"), 47 ("diaphoretic electuary," "electuary for a virulent gonorrhoea"), 48 ("electuary for the gonorrhoea after the inflammation," "electuary for the piles"), 59 ("pectoral infusion"), 63 ("nitrous mixture"); Pringle, *Observations on the Diseases*, pp. 132-33; Salmon, *New London Dispensatory*, p. 165; Townsend, *Elements of Therapeutics*, p. 422.

## **Nutmeg:**

The seed of *Myristica moschata* (*nux moschata*; this term sometimes also comprehended mace), nutmeg was mainly supplied by the Dutch, who brought it from the East Indies. Impetus for its use in medicine came from the Arabs, though some 18th-century writers believed that it was known to Pliny.

Nutmeg was used medicinally as an astringent, stomachic, and aromatic. Cullen esteemed it “a medicine of considerable power.” Oil of Nutmeg, sometimes inaccurately called "Oil of Mace," was also popular, especially as an astringent, while mace (*macis*), the shell of the nutmeg, was thought to have the same virtues as the seed and was used similarly. Hooper, however, regarded mace as being easier on the stomach than nutmeg, but more bitter (though less astringent) and less unctuous. Nutmeg was often used to treat diarrhea and dysentery, as well as vomiting and colic. Some writers thought it useful in combating catarrhs and cold nervous diseases. It was sometimes mixed with alum, a more powerful astringent, to combat ague and hemorrhage.

Neither nutmeg nor mace nor the oil is mentioned in the "Dispensatory," but at least one of the three, usually more, appears on six if the later comparator lists, suggesting that army use of them may have increased during the latter half of the century. Regardless, nutmeg had long been a staple in medicine, so much so that a "nutmeg" was a common crude measure. Reflecting its popularity as a drug, nutmeg is referred to 197 times in the Wellcome sample, while mace is referred to 127 times.

**Sources:** Brookes, *General Dispensatory*, pp. 64, 79; Cullen, *Treatise of the Materia Medica*, II, 139-40; James, *Medicinal Dictionary*, entry for "nux moschata"; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 205, 322; Parr, *London Medical Dictionary*, II, 52-53; *Practice of the British and French Hospitals*, pp. 37 (“aluminous bolus”; “borax bolus”), 45 (“astringent electuary”), 46 (“cephalic electuary”), 71 (“compound chalybeate powder”); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 461, 558; Woodville, *Medical Botany*, II, 363-66.

## ***Oleum olivarum:***

This was an expressed oil, but it was generally classed with the simples, since oil was the main

form in which the olive was used medicinally, although the fruit and dregs of the olive (*L. Olea europaea*) were listed among the materia medica by Edinburgh. It was used in two grades: the higher, "optimum" or "primum," was produced by a light pressing of ripe olives, while "secundum" came from a second, heavier, pressing, plus heat. Sea salt was sometimes added to the oil, to precipitate out the components that were thought to make it go bad. Internally, olive oil was used to relieve hoarseness and cough, either mixed with water and alkalis, or mixed with syrups and conserves into linctuses. A mixture of the oil and warm water was administered as a mild emetic. It was variously employed: as a vermifuge and to treat dysentery; a mild, emollient laxative, whether taken internally or applied to the abdomen; thought by some to combat many poisons; often administered in enemas (usually mixed with egg, to make it water-soluble), to ease intestinal pain and soften feces; applied externally to relieve colic, but most important in external use as a key ingredient in several important plasters (see *emplastrum commune*) and ointments, as well as in bougies.

Olive oil is listed in the "Dispensatory" of 1746, and one or both grades of the oil are noted on six comparator lists, sometimes in large quantities. Although olive oil is included in only three recipes in *Practice*, each is for a standard of its category, with common applications. According to Hamilton, however, linseed oil (q.v.) was often substituted for it in preparations, for olive oil was more expensive. Olive oil or (much less often) olives are referred to 218 times in the Wellcome sample, "best oil" sometimes being specified.

**Sources:** Brookes, *General Dispensatory*, p.80; Cullen, *Treatise of the Materia Medica*, II, 86; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 191; Healde, *New Pharmacopoeia*, p. 41; Hunter, *Treatise on the Venereal Disease*, p. 126; Lewis, *New Dispensatory*, pp. 169-70; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 206-07; *Practice of the British and French Hospitals*, pp. 56 ("an oily emulsion"), 61 ("the common linctus"), 69 ("the common plaister"); Quincy, *Dispensatory*, p. 326 ; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 182; Woodville, *Medical Botany*, III, 369-72.

## **Onion:**

Traditionalists classed onions among attractive remedies, i.e. they drove humors from the center to the circumference; Culpeper added, "now you may know a Reason why the cutting of Onions makes your Eyes run a water." During the 18th century, onions were sometimes prescribed for internal use, especially as a stomachic or pectoral. Their main medical application, however, was external, often roasted or in cataplasms. They were generally applied to soothe and heal burns and scalds or to encourage suppuration. Cullen was among those who recommended that onion juice be rubbed into the ears to relieve deafness (cf. *RP*, p. 229). Another general purpose in applying onions was to warm and stimulate. To treat baldness, Theobald recommended rubbing the part with onion until it was red (or using beargrease, the most "subtle & penetrating" animal fat known). The use of onions for gravel (cf. *RP*, p. 137) seems by 1750 to have been largely relegated to folk medicine, although the French physician Pierre Chomel (d. 1730) wrote that the strained liquor of a white onion, drunk fasting for three days (before the new moon) would cure gravel. The onion was dropped from London's list of the *materia medica* in 1788.

Onions are not included in any of the army lists, and while they were of course readily available almost anywhere the forces went, the literature does not suggest that they played more than a marginal role in army practice. The onion is mentioned 74 times in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 22; Buchan, *Domestic Medicine*, p. 378; Cullen, *Treatise of the Materia Medica*, II, 119, 373; Culpeper, *Pharmacopoeia Londinensis*, p.173; Hill, *History of the Materia Medica*, pp.379-80; Lewis, *New Dispensatory*, pp. 111-12; Quincy, *Dispensatory*, p. 299; Salmon, *New London Dispensatory*, p. 5; Henry E. Sigerist, "Ambroise Paré's Onion Treatment of Burns," *BHM*, 15 (1944), pp. 146-47; Theobald, *Every Man His Own Physician*, pp. 4-5; Wesley, *Primitive Physic*, p. 47.

## **OPIATES:**

Opium was imported from Persia, Turkey, Asia, India, and the East Indies, but Lewis preferred

the Egyptian product. Huge quantities were used in Europe, the Ganges region alone reportedly exporting 600,000 lbs. annually. Purified opium was prepared by dissolving the raw drug in proof spirits (q.v., "wines and spirits"; water and rectified spirits had their advocates), then filtering the tincture and boiling off the spirit. The end product might be kept soft, for pills, or hard, for powder. Purified opium was often given in substance, but it also served as the key ingredient in many compound drugs.

Opium was much used in Greek and Roman medicine, though some authorities were critical. Paracelsus endorsed it fervently. It ranked among the few most important drugs in 18th-century practice, and many authorities extolled it almost without reservation. Sydenham wrote, "I cannot here forbear mentioning, with Gratitude, that Omnipotent GOD, the Giver of all good Things, has not provided any other Remedy for the Relief of wretched Man, which is so able either to quell more Diseases, or more fully to extirpate them, than Opiate Medicines taken from some Species of Poppies" Cheyne was no less enthusiastic: "Providence has been kind and gracious to us beyond all Expression, in furnishing us with a certain *Relief*, if not a Remedy, even to our most *intense Pains* and extreme *Miseries*.... I mean *Opium*, and its Solution *Laudanum*." Nevertheless, opium had its critics. Especially before 1750, numerous writers argued that it encouraged inflammation and should not be used if inflammatory symptoms were present. Huxham challenged this, as did several Continental authorities. Some practitioners were uneasy that if opium were abused it could be dangerous. The concept of addiction was not yet recognized, but at least a few observers believed that frequent users of opium became habituated to it, with harmful results. As early as 1701 John Jones noted that when habitual users were deprived of the drug, they suffered "Great and even intolerable Distresses, Anxieties and Depressions of Spirits, which in a few days commonly end in a most miserable Death, attended with strange Agonies, unless Men return to the Use of Opium." In 1753 Brookes wrote of opium, "When it once becomes habitual, it cannot be left off without extreme Danger, and intolerable Dejection of Mind." Cullen and Lettsom asserted that habitual users were prone to hemorrhages. But critics did not think of opium primarily in terms of long-range threats. Immediate danger could result from using it

too freely. Moore warned against large doses. He observed that many practitioners were prejudiced against opium, and speculated that this was because they had seen bad effects caused by overdosing. George Young, the Edinburgh physician whose *Treatise on Opium* was the most influential work written on the drug during the century, noted in his preface that a friend who had read the book in manuscript had wondered if it might not be dangerous for the ignorant to find opium so generally recommended. Young responded: "To lay aside the pen, and write nothing about it, will not mend the matter, for opium has already into the hands of every pretender to practice, and is prescribed every day, not only by many charitable and well meaning ladies, but even by the too officious and ignorant nurses; so that we must either assist the unskilful by our experience, or they will proceed boldly without us."

It appears that late in the century the medicinal use of opium increased markedly. Doses were often large. Parr recommended that practitioners take into account the patient's constitution and experience with opium, then start with a moderate dose and increase it until the desired effect was achieved. Habituated patients might require an ounce daily. In spasmodic cases, he noted, "twenty-two grains of pure opium, besides three hundred drops of laudanum, have been given in the space of thirty-six hours, without any remarkable inconvenience." The number of diseases for which professionals prescribed opium also appears to have increased. Leigh noted with approval that it was being used to treat a considerable range of illnesses. Young had not discussed syphilis, and had cautioned against the use of opiates in treating dysentery, yet both were included in Leigh's list of diseases that were suited to an opium course. Many patients who suffered chronic pain took it regularly. According to a friend, Nelson took opium every night in the wake of the botched amputation of his right arm. The last drug for many individuals was opium. For cancer patients, Buchan advised, "When all other medicines fail, recourse must be had to opium, as a kind of solace. This will not indeed cure the disease, but it will ease the patient's agony, and render life more tolerable while it continues." Adding to the popularity of opium was the fact that it was widely used not only as a sedative but as a stimulant. Cullen and Lettsom were among those who claimed that it served both purposes, and Erasmus Darwin recommended it to stimulate appetite. In the doctoral dissertation that he submitted at Edinburgh in



1773, Robert Butler Remmett attempted to demonstrate that opium was not a stimulant, but was rather entirely sedative. Despite his efforts, and despite a full review of the dissertation in *Medical Commentaries*, his assertion had little impact, and some writers like Dickinson promoted opium entirely as a stimulant.

#### Laudanum:

The invention of laudanum has been credited to Paracelsus. There is, however, some question whether his "laudanum" was an opiate, whereas by the 18th century opium was the key ingredient. Liquid laudanum (drugs in this class were sometimes given as pills), the form of the drug that was so widely used in Britain, owed its origin particularly to Sydenham, whose devotion to it won him the sobriquet of *Opiophilus*. By the mid-18th century, laudanum had been renamed *tinctora opii* (Edinburgh) or *tinctora thebiaca* (London; "thebiaca" derived from the ancient association of the poppy with Thebes); the former, which retained laudanum as its popular name, was composed of opium and saffron mixed into aromatic or cinnamon water, while the latter included opium, cinnamon, or cloves in a menstruum of white wine. Leigh preferred the Edinburgh formula, which included a higher proportion of opium (ironically, earlier in the century Shaw had observed that the London formula contained considerably more opium), and, despite noting that the opium that was used (apparently in both recipes) contained much inactive matter, making dosage uncertain, he added that this was perhaps the best fluid form of opium to administer. Brookes notes of *tinctora thebiaca* that the spices were intended to correct the smell of the opium, and it may well be that saffron and aromatic water served the same purpose in the case of *tinctora opii*. Laudanum and other opiates were regularly prescribed to quiet coughs. British dispensatories of this period often specified, as does Buchanan, which drugs were useful for chronic or stubborn illnesses.

#### *Pilulae Matthaei:*

"Matthew's Pill" was named after its creator, Richard Mathews. A booklet published c.1664 by George Kendall, *An Appendix to the Unlearned Alchemist*, boosted it as a diaphoretic and diuretic. Besides opium, the pill included (Edinburgh recipe) castor, an antihysterical and nervine known to Celsus, which was sometimes used to correct opium. Gum ammoniac and saffron (qq.v.) were also components. In Brookes' opinion, only the opium was of value, the other ingredients "being too inconsiderable to answer any useful Purpose." Possibly because of similar criticism, and because other opiates were more highly esteemed, Matthew's Pill was omitted from the *Pharm. Lond.* in 1746.

*Theriac (or electuarius) Andromachi:*

Treacle of Andromachus, also known as "Venice Treacle," was traditionally ascribed to Andromachus, physician to Nero. It was a variant of Mithridatium, which was credited by legend to Mithridates of Pontus, as modified by Damocrates in the 1st century. "Theriac," from the Greek for "venomous creature," referred to the use of viper flesh in the mix. Quincy reported that many London apothecaries were selling their product as "Venice treacle," since this variant was held in particular regard (in his opinion, however, it was no better than the London variety). In the 1746 edition of the *Pharm. Lond.*, the recipe for theriac Andromachi specified 63 ingredients, including dried vipers, mixed into honey. This recipe had changed little from the one used in 1721 or indeed in 1618. Quincy did note one change in the 1721 recipe, the substitution of diacodion for honey (qq.v.), but he was upset by this, and James also complained, asserting that "Honey, by its Fermentation, induces a very great Change in all the Ingredients ... and unites the Virtues of all the Simples together." Theriac Andromachi was a prime example of an alexipharmic, i.e. a drug that was supposed to expel poisons or render them harmless. Originally designed as an antidote to poisons, the treacle had come to be thought of as effective against all malignant diseases and fevers, since the agents that caused these were thought to be similar to poison. The list of applications continued to grow. A sense of the

traditional reliance on treacle comes from Culpeper, who recommended theriac Andromachi against all poisons, as well as headaches, vertigo, deafness, epilepsy, "astonishment," apoplexy, asthma and other pectoral problems, cold stomach, urinary problems, difficulties in childbirth, fever (especially pestilential, following Galen), and melancholy. Because the treacle included so many ingredients enhanced its range of applications. For example, James noted that it included gentian (q.v.), and inferred that this was because of gentian was effective against ague, although he doubted that it had this virtue. In any case, theriac Andromachi contained opium, and indeed during the 18th century it was mainly used to achieve the usual effects of opiates: as a calmative, anodyne, and diaphoretic, and (cf. *RP*, p.282) to relieve diarrhea and dysentery. Nevertheless, since there were so many opiates available during that century, many of which were thought to be superior in effect to treacle and all of which were simpler than were any of its official forms, theriac was dropped by both British pharmacopoeias after 1750. The complexity of treacle was denounced by some, including Lewis (who, however, stopped short of calling for its removal from the pharmacopoeias) and Heberden, who in 1745 published an influential pamphlet, *Antitheriaka*. Earlier in the century, however, some authorities saw this complexity as a virtue; Quincy cited with approval Diemerbroek's assertion that "the ingredients magnified each other." Theriac Andromachi and Mithridatium remained in the *Pharm. Lond.* until the 1788 ed., though they were eliminated from the 1756 ed. of *Pharm. Edin.* By 1800, not only treacle but the theory that supported it was gone, as Woodville noted: "Modern physicians ... have exploded this theory of antidotes, and the alexiterials and theriacas so industriously studied ever since the first ages of Greece, are now wholly disregarded."

Neither opium nor purified opium is included in the "Dispensatory," but one or the other is included in five later comparator lists, though only in moderate quantities. Opiates of some type are to be found in all of the lists. So long as it was official, theriac Andromachi played a moderate role in army practice. It is listed in the "Dispensatory" and in seven comparators (mithridatium is on three lists)

and is included in three recipes published in *Practice*. Theriac Andromachi is seldom mentioned in the literature devoted to army practice, but Monro made significant use of mithridatium. Since opium became fashionable only around 1700, there are just 17 references to it in the Wellcome sample, along with 6 for laudanum (including a reference to "laudanum Paracelsus"). There are 101 references to treacle in the Wellcome sample; generally a variety is not specified (and it is quite possible that not all of them included opium), although when it is treacle of Andromachus or of Venice is most recommended, London treacle also being specified in a number of cases.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 455-62; Alex Berman, "The Persistence of Theriac in France," *Pharmacy in History*, 12 (1970), p. 5; Brookes, *General Dispensatory*, pp. 81-83, 172, 251, 263-65; Buchan, *Domestic Medicine*, p. 365; Cheyne, *Essay of Health*, p. 213; Cullen, *Treatise of the Materia Medica*, II, 153-83; Culpeper, *Pharmacopoeia Londinensis*, pp. 146-47; Darwin, *Letters of Erasmus Darwin*, p. 245; Dickinson, *An Inquiry into the Nature and Causes of Fever*, pp. 178-82; Hill, *History of the Materia Medica*, pp. 868-73; James, *Medicinal Dictionary*, under "Andromachus," "gentiana," "laudanum," "opium," "sedantia," and "theriace"; Leigh, *Experimental Inquiry into The Properties of Opium*, pp. 75, 132-43; Lewis, *New Dispensatory*, pp. 339-41; Lewis/Rotheram, *New Dispensatory*, pp. 298-300, 549; Lettsom, *Medical Memoirs*, pp. 123, 131-34; Lloyd and Coulter, *Medicine and the Navy*, III, 145; Maehle, *Drugs on Trial*, ch. 3; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 347, and II, 58, 92, 118; Moore, *Essay on the Materia Medica*, pp. 181-82; Parr, *London Medical Dictionary*, II, 79-83; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 17; Pearson, *Arranged Catalogues*, p. 32; Pemberton, *Dispensatory*, pp. 339-41; *Practice of the British and French Hospitals*, pp. 37 ("alexipharmic bolus"), 53 ("anodyne bolus"), 57 ("sudorific electuary"); Quincy, *Dispensatory*, pp. 103-06; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 809; review of Remmett's "Dissertatio medica inauguralis, de Opii Usu in morbis inflammatoriis," *Medical Commentaries*, 2 (1774), pp. 20-26; Shaw, *Dispensatory of Edinburgh*, pp. 87-88, 88n; Henry E. Sigerist, "Laudanum in the Works of Paracelsus," *BHM*, 9 (1941), pp. 530-44; Glenn Sonnedecker, *Emergence of the Concept of Opiate Addiction* (Madison:

American Institute of the History of Pharmacy, 1962-63), pp.11, 13-14; Sydenham, *Whole Works*, p. 125; Turton, *Medical Glossary*, p. 38 ("alexipharmicon"); Urdang, *Pharmacopoeia Londinensis of 1618*, p. 30n105; Gilbert Watson, *Theriac and Mithridatium: A Study in Therapeutics* [Wellcome Historical Medical Library, *Publications*, n.s., 9.], (London: Wellcome Historical Medical Library, 1966), esp. pp. 135-50; Woodville, *Medical Botany*, II, 293; Young, *Treatise on Opium*, iii-iv.

Opodeldoch; see under "saponaceous preparations"

### **Orange:**

Citrus fruits were used in ancient medicine, though 18th-century authorities differed on whether these had included the orange. The China orange (*Aurantiorum sinensis* [*Citrus sinensis*]), which appears first to have been brought to Europe by the Portuguese in the 14th century, was not official, though some writers thought it useful in treating ague. It was mild, and Pearson catalogued it among the sub-acid fruits. Although not thought to be as potent medically as the Seville orange, it was often given to patients who relished it for its flavor. The juice, flower, peel, and leaf of the Seville orange (*Aurantium hispalense*) were official, and this type was probably more used in professional medicine. Its peel (especially the yellow outer layer, rasped off) provided an oil that was included in many drugs and preparations.

Lewis considered the orange to be carminative and stomachic, and he found the orange peel to be warmer than lemon peel and more productive of essential oil. Lewis considered the orange to be carminative and stomachic; he also thought it effective against fevers and inflammatory diseases, for it allayed heat and encouraged evacuations. It was the orange, he noted, that was used in the bitter tincture, for its flavor lasted longer than did the lemon's. The use of the Seville orange he regarded as effective against fevers and inflammatory diseases, for it allayed heat and encouraged evacuations. He and many other writers also acclaimed the orange as an antiscorbutic. Buchan, who strongly advocated the use of both oranges and lemons for a range of purposes, preferred the former to the latter as a

treatment for scurvy, commenting that it was not as hard on the stomach. Cheyne, however, complained that oranges and lemons intended for transport were picked green, in order to reduce the chance of spoilage, and the juice of this unripe fruit was harmful. Even if the fruit was ripe, he cautioned, it often caused stomach aches and cramps. Van Swieten asserted while both the orange and the lemon were good antiscorbutics, the former was more effective. However, Macbride, in his influential work on sea-scurvy, asserted that lemon was the more effective antiscorbutic, and this was the opinion that prevailed. Nevertheless, some authorities continued to promote oranges and their products as antiscorbutics. Monro recommended orange marmalade as an antiscorbutic, noting that it remained usable for 2-3 years and that the Spaniards had a long-standing practice of carrying it with them.. Cheyne, however, complained that oranges and lemons intended for transport were picked green, in order to reduce the chance of spoilage, and the juice of this unripe fruit was harmful. Even if the fruit was ripe, he cautioned, it often caused stomach aches and cramps. Like lemons, oranges were widely used in 18th-century medicine and were included in many compound drugs, notably tinctures and infusions; the peel was especially valued, though fruit, juice, flowers, and leaves, were also used, and for similar reasons. Like most acidic and sub-acidic fruits, they were considered antiseptic and alexipharmic. They were highly valued as tonics, stomachics, coolants, and bitters. The peel provided an oil that was included in many drugs and preparations, and its conserve was very popular. Often oranges were included in drugs or administered with them, to serve as aromatics or to mask disagreeable flavor.

The orange per se is not included in any army list, but this is probably because, like the lemon, it was purchased locally. Orange peel appears on two comparators, syrup of orange peel only in the "Dispensatory" of 1746, and the conserve of orange peel in the "Dispensatory" and one comparator. Several compound drugs that included orange products are also listed. Oranges, their parts, and their juice are mentioned 86 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 294-97; Ball, *Modern Practice of Physic*, I, 11; Brookes, *General Dispensatory*, p. 11; Buchan, *Domestic Medicine*, pp. 111-12, 115, 116, 142, 149, 288-89; 302; Cheyne, *Essay of Health and Long Life*, pp. 56-57; Cullen, *A Treatise of the Materia*

*Medica*, II, 57-58; Healde, *New Pharmacopoeia*, p. 11; Huxham, *Essay on Fevers*, pp. 139, 154; Lewis, *New Dispensatory*, p. 89; Mead, *Medical Works*, p. 334; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 142n, and II, 185, 192-94; Pearson, *Arranged Catalogues*, pp. 5, 24; *Practice of the British and French Hospitals*, pp. 37 ("a borax bolus"), 38 ("camphire bolus", "cathartic bolus," "contrayerva bolus"), 38-39 ("bolus for bloody flux"), 39 ("ipecaeoanha bolus"), 45 ("decoction of snakeroot," "Ethiopic electuary"), 58 ("a bitter infusion"); Van Swieten, *Diseases incident to Armies*, pp. 138-39; Sydenham, *Whole Works*, pp. 205; Wesley, *Primitive Physic*, pp. 140-41; Woodville, *Medical Botany*, III, 496-500.

Peruvian Bark; see "*cortex Peruvianus*"

*Pilulae cocciae minores*; see under "colocynth"

*Pilulae Matthaei*; see under "opiates"

### **Plantain:**

Plantain (*plantago*) grew widely in Britain. Many of its uses, including its central one as a vulnerary, dated back to Dioscorides and Galen, and in Alston's view, "Few plants seem to have been more used by the ancients than plantain." The leaves were often applied to cuts on horses (cf. *RP*, p. 314). Salmon regarded plantain as anodyne and vulnerary, and Brookes wrote, "The Leaves, either bruised or whole, laid to old Ulcers will heal them." Lewis likewise noted that plantain leaves were said to be slightly astringent, so common people often used them on wounds. Beyond this, plantain leaves, roots, and seeds were used in treating a host of physical problems, and some of the purported cures stretched the credulity of 18th-century authorities. Nevertheless, Black considered it effective against rattlesnake bite and Brookes reported, "The fresh Root just taken out of the Earth, scraped and put into the Ear cures the Tooth-ach like a Charm." In professional medicine, however, the popularity of

plantain seems to have declined during the 18th century, and Alston reported that, aside from its inclusion in an official syrup and the *emplastrum defensivum* (q.v.), "it is little used here." Although as late as the 1721 ed. of *Pharm. Lond.*, the RCPL continued to list both broad- and narrow-leaved plantain among the materia medica, both were dropped in 1746.

Plantain is not listed in the "Dispensatory" of 1746 or in any comparator, though it could easily have been acquired locally. Its juice was included in one recipe in *Practice*, that of "an astringent diet drink." Even this recipe is rather complex and traditionalist. It includes a number of items that were seldom used in 18th-century army medicine, and plantain appears to have been in this category. The plantain or plantain water is mentioned nine times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 199-202; Black, *Historical Sketch of Medicine*, p. 305; Brookes, *General Dispensatory*, pp. 93-94; Gibson, *The Farrier's New Guide*, p. 143; Lewis, *New Dispensatory*, p. 185; *Practice of the British and French Hospitals*, p. 43; Quincy, *Dispensatory*, p. 331; Salmon, *New London Dispensatory*, p. 15.

### **PLUMBIC PREPARATIONS:**

Lead was mined in England. The medicinal use of plumbic preparations went back to the Greeks, but in 18th-century Britain concerns over lead poisoning limited usage. Parr reported, "Lead is now almost banished from the practice of medicine as an internal remedy," but he wrote favorably of attempts to restore it to practice. This same period saw a generally more aggressive stance on external application of lead. Despite some opposition, however, external applications of lead became more popular after 1750, partly because of the encouragement of a French surgeon, Thomas Goulard. In England, Goulard's preparations were discussed by John Aikin, a surgeon who practiced in Warrington. Although Aikin criticized Goulard for being too theoretical, for misinterpreting the effects of his preparations, and for making unproven claims, and although he argued that Goulard's recipes were less original than the author claimed, he also served to give some currency to Goulard in Britain. During the last third of the century, several noteworthy British writers, e.g. Percival, endorsed some use



of plumbic preparations, but they generally suggested safeguards and opposed internal use. Although advocates lauded the preparations, externally applied, as astringent, discutient, and resistant to inflammation and putrefaction, they saw as their main virtue the power to numb centers of pain. Aikin wrote that they were "sedative ... from some occult quality, which for want of a more explicit term we must call specific, tending to destroy nervous influence."

#### Minium:

When lead was melted and the heat was maintained, it turned progressively black, yellow, and finally red; this end product was called minium. Although "minium" was used by Hippocrates and Celsus – and Pliny criticized its overuse -- it appears that this was cinnabar (q.v.), and indeed this confusion continued into the 17th century. Minium was esteemed a powerful dryer, and it was mainly used to treat foul ulcers and to cicatrize wounds. Alston regarded it as "excellent in the cleansing and healing of old Ulcers." It was sometimes given internally, for hemorrhaging, inflammation, and excessive sweats, but Lewis strongly warned against any internal use, and he likewise doubted its effectiveness in external applications.

#### *Saccharum saturni:*

Ceruse was prepared -- since the time of Theophrastus, though Boerhaave simplified the process -- by exposing lead plate to the vapor of vinegar or other vegetable acids. Sugar of Lead (in the 1788 ed. of *Pharm. Lond.*, renamed *cerussa acetata*, "Acetated Cerusse") was prepared (London recipe, 1721) from oil of roses, litharge, calcined lead, turpentine, ceruse, and antimony, mixed into white wax. In the simplified recipe of 1746 -- changed again, slightly, in 1788 -- it was produced by taking any quantity ceruse boiled in distilled vinegar, in a lead vessel, until the vinegar turned sweet, at which point the solution was filtered through paper and, after evaporation, set aside to shoot into crystals. The resultant "sugar" was for the most part used externally, often in salves and ointments. It was valued as an anodyne and styptic, and was

generally applied to soothe or constrict, as in the cases of sore eyes, wounds, ulcers, running sores, various skin diseases, burns, inflammations, or hemorrhoids. In this respect, its use seems to have increased during the latter half of the 18th century, and it became a favorite application of the influential surgeon, Benjamin Bell. Hunter promoted injections of the sugar in solution into the urethra of gonorrhea patients. Much more controversial was its internal use. Boerhaave was an advocate, and in part on his authority it was sometimes given internally as a styptic or to curtail discharges, like gleans. Healde took an intermediate position, observing, "Its use is chiefly external. Internally employed, by the cautious and skilful, it is a most useful medicine; -- by the ignorant, a dangerous poison." However, a number of important British writers, including Lewis, Brookes, Alston, and Hill, opposed internal use almost entirely, warning that sugar of lead could cause severe cramps and constipation, and might even kill.

Sugar of lead is not included in the "Dispensatory," but as either *saccharum saturni* or *cerussa acetata* it appears in six later comparator lists.

**Sources:** Aikin, *Observations on the External Use of Preparations of Lead, With Some General Remarks on Topical Medicines*, 2nd ed., corr. (London: Joseph Johnson, 1772), esp. pp. 2-3, 12-21, 37 (quotation), 41-43, 48-51, 98; Alston, *Lectures on the Materia Medica*, I, 111-12, and II, 390-92; Bell, *System of Surgery*, I, 298, and IV, 16, 110; Brookes, *General Dispensatory*, pp. 316-17; Buchan, *Domestic Medicine*, p. 368; Culpeper, *Pharmacopoeia Londinensis*, p. 211; Healde, *New Pharmacopoeia*, p. 45; Hill, *History of the Materia Medica*, pp. 21, 22-23; Hunter, *Treatise on the Venereal Disease*, p. 73; James, *Medicinal Dictionary*, under "plumbum"; Lewis, *New Dispensatory*, pp. 323-25; Parr, *London Medical Dictionary*, II, 198-204 (quotation p. 201); Thomas Percival, "Extract of a Letter from Dr Percival to Dr Duncan, on the External Use of Preparations of Lead," *Medical Commentaries*, 3 (1775), pp. 199-205; *Practice of the British and French Hospitals*, pp. 66 ("dysenteric pills"), 68 ("resinous pills"), 73 ("the anti-hectic tincture"); Quincy, *Dispensatory*, p. 358; Salmon, *New London Dispensatory*, pp. 294-95, *Pharmacopoeia Londinensis of 1618: Reproduced in Facsimile*,

introd, George Urdang (Hollister Pharmaceutical Library, no. 2 [Madison: State Historical Society of Wisconsin, 1944]), pp. 48-49nn150-152; William White, "Observations on the Medical Virtues of Lead," *Medical Commentaries*, 3 (1775), pp. 72-80.

### **Pomatum:**

As the name suggests, traditionally pomatum had been made with apples, and even the 1721 London recipe included them, along with lard, sheep suet, rose water, and orrice root, all these ingredients being boiled together and strained. Quincy noted, however, that the common pomatum sold as hairdressing was merely lard and rose water beaten to a curd, then scented in accordance with the customer's preference. In the 1746 *Pharm. Lond.*, pomatum was renamed *unguentum simplex*; in 1788, *ung. adipis suillae* (Ointment of Hog's Lard). It was mostly lard, mixed, heated, and beaten with a small amount of rose water; as a last step, essence of lemons was added to provide a pleasant scent. The most common medical application of pomatum was to smooth rough skin or to heal chapped lips. It also served as a component in more complex ointments. Nevertheless, pomatum appears to have played only a small role in 18th-century medicine.

Pomatum is not listed in the "Dispensatory" of 1746 or on any comparator list. The Wellcome sample includes one reference to pomatum as an ingredient and two formulas for its preparation (neither of which calls for apples).

**Sources:** Brookes, *General Dispensatory*, p. 347; Healde, *New Pharmacopoeia*, p. 297; Lewis, *New Dispensatory*, p. 510; Pemberton, *Dispensatory*, pp. 357-58; Quincy, *Dispensatory*, pp. 188-89.

### **Prune:**

The use of prunes had been promoted by many Ancient authorities, including Dioscorides and Galen. As of the mid-18th century, only two types of prune were official -- earlier, there had been several more -- the one in common use being *pruna Gallica* (French Prune; *Prunus domestica*). Woodville, however, reported that there was difficulty in distinguishing among some kinds of prunes,

so it is possible that several varieties were used in medicine. Besides being laxative, prunes were considered cooling, emollient, and lubricating. Alston regarded them as less likely than plums to cause diarrhea, and commended their use "in ardent and putrid fevers, and wherever heat, thirst, or bilious acrimony offend." Parr compared them to plums more negatively, asserting that their laxative powers were reduced by drying. In Lewis's view, prunes served to "abate heat; and gently loosen the belly, which they perform by lubricating the passage and softening the excrement." He recommended rhubarb if a boost were needed and also suggested associating prunes with a carminative, to avoid flatulence. Prunes, often stewed and augmented by senna, were frequently included in the diets of patients, in order to keep them laxative, and not surprisingly they were a standard recourse in treating constipation. Besides being eaten, prunes were widely used in decoctions, ptisans, and electuaries, and inspissated prune juice was often sold in shops.

Prunes are not included in the "Dispensatory" or in any comparator list, or in any recipe in *Practice*, though some drugs that appear to have included them, e.g. *electuarium lenitivum* (q.v.), are. Nor are prunes often mentioned in 18th-century works that deal with practice. They were readily available, however, and their applications were so well known that discussing them may have been considered to be superfluous. There are 13 references to prunes in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 314-16; Brookes, *General Dispensatory*, p. 95; Buchan, *Domestic Medicine*, p. 117; Cullen, *Treatise of the Materia Medica*, I, 185; Healde, *New Pharmacopoeia*, p. 45; Lewis, *New Dispensatory*, p. 187; Parr, *London Medical Dictionary*, II, 232-33 ("pruna"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 638; Salmon, *New London Dispensatory*, p. 139; Woodville, *Medical Botany*, II, 234-36.

### **Radish:**

Salmon asserted that the common radish (*L. Raphanus sativus*) had the same virtues as had horseradish (*Raphani rusticani*, q.v.) i.e. that it was diuretic, emmenagogue, febrifuge, deobstruent, and

pectoral. However, he added that horseradish was "much the more Physical" or the two, and that the radish was mainly used in salads. Radishes were dropped from the London's materia medica. in 1746 and seem not to have had a significant part to play in professional medicine even early in the century.

Radishes are not included in any army list. On the other hand, the radish, its roots, seeds, juice, and oil, appear 34 times in the Wellcome sample, reflecting at least a modest role in popular medicine in the late 17th and early 18th centuries.

**Sources:** Cullen, *Treatise of the Materia Medica*, I, 196; Quincy, *Dispensatory*, p. 334; Salmon, *New London Dispensatory*, pp. 16-17, 151.

### **Raisins:**

Raisins were esteemed a mild pectoral and were included in various compound pectorals (cf. *RP*, p. 127). Gently laxative, they were likewise included in compounds that were intended primarily or in part as purgatives. Their action was generally seen to be mild, and for this reason they were often used to correct harsher drugs. In many cases, they were included in compounds to enhance the flavor. Salmon also considered raisins to be a good vulnerary when applied externally. However they were employed, they were seen to soothe and heal, whether this was manifest in moderating acrid humors or in healing ulcers in the throat.

Raisins are not mentioned in the army lists, though they would have been available for local purchase. They are referred to 178 times in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 131; Buchan, *Domestic Medicine*, pp. 117, 191n, 271n, 304; Hill, *History of the Materia Medica*, pp.484-85; *Practice of the British and French Hospitals*, p. 43 ("an astringent diet drink"); Salmon, *New London Dispensatory*, p. 141.

### ***Raphani rusticani:***

Horseradish (*L. Armoracia rusticana*) was an ancient remedy, although Alston doubted that the horseradish of his day was the same as the plant described by Dioscorides and Pliny. During the 18th

century it was widely cultivated in English gardens.

Boerhaave was among the many authorities that endorsed horseradish. Salmon regarded the root as a specific against scurvy, and Brookes, Lewis, and Cullen likewise endorsed it as an antiscorbutic (cf. *RP*, p. 199). Lewis also observed, "It has frequently done good service in ... chronic disorders proceeding from a viscosity of the juices, or obstructions of the excretory ducts." As the quotation suggests, horseradish was valued likewise for promoting excretion, particularly urination, and like many diuretics it was recommended (by Sydenham among others) to combat dropsy. Withering regarded a strong infusion of it to be an effective emetic, and he also reported, "In paralytic cases it is an useful stimulant." Despite this approval, the position of horseradish in professional medicine declined during the 18th century.

Horseradish is not included in any army list, though it was available locally and references by authors like Monro suggest that it was occasionally used in army practice. It is mentioned 19 times in the Wellcome sample, less than would be expected.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 499-501; Brookes, *General Dispensatory*, pp. 96-97; Buchan, *Domestic Medicine*, p. 288n; Cullen, *Treatise of the Materia Medica*, II, 114-15, Healde, *New Pharmacopoeia*, pp. 14, 26, 41; Lewis, *New Dispensatory*, p. 189; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 287, and II, 187; Pemberton, *Dispensatory*, p. 214; *Practice of the British and French Hospitals*, p. 59 ("a paralytic infusion"); Quincy, *Dispensatory*, pp. 267-68; Salmon, *New London Dispensatory*, pp. 31, 95; Sydenham, *Whole Works*, p. 52; Withering, *Botanical Arrangement*, II, 681.

### ***Rhabarbarum:***

Rhubarb (*L. Rheum rhabarbarum*) was probably not a part of Hippocratic medicine, and James dismissed as ignorant the belief that the *rheum* referred to by Dioscorides and Galen was identical to the rhubarb of his time. Nevertheless, rhubarb may have been used by later Greeks, and it was valued by the Arabs. During the 18th century, medical authorities tended to prefer the rhubarb that was

imported from Russia or Turkey, though some came from China (where rhubarb had been used medicinally as early as 2700 b.c.e.) and the East Indies. Increasingly, rhubarb was also raised in England, and Lewis praised the domestic product.

Considered a cooling cathartic, rhubarb was given in large doses as an anthelmintic, but was mainly looked to for gentle action. It was widely used when a mild laxative was preferred and as such was given to children and pregnant women. Like many laxatives, rhubarb was used as a deobstruent, and was thought especially effective in resolving liver obstructions (it was sometimes called "Soul of the Liver"). Rhubarb was given to relieve without overstimulating patients who were prone to diarrhea, and Buchan regarded it as the best remedy for costiveness. Conversely, since rhubarb was widely thought to be astringent, it was used to combat diarrhea and dysentery and was valued (by Alston, among others) as a stomachic.

Rhubarb had its critics, however. Sydenham used it fairly extensively, but recommended following it with liquid laudanum (q.v., under "opiates"), noting that rhubarb, like laxatives generally, caused griping and turbulence in the blood and humors. The sense that rhubarb caused or exacerbated turbulence prompted Brookes and others to advise that it was unsafe to give it to patients whose blood or viscera were heated (cf. *RP*, n. 14). Cullen, a strong advocate for rhubarb, denied that it heated the system. He conceded, however, that, like other laxatives, it griped, and he asserted that it was dangerous to use in treating the colliquative diarrhea of hectic patients. Hooper believed that the laxative quality of rhubarb was countered by its astringency, making it an unreliable cathartic. Parr cautioned that the common practice of toasting rhubarb in order to enhance its astringency actually made it less laxative. It appears that the value assigned rhubarb by medical professionals declined in the late 18th century, and Gregory even suggested that it had fallen into neglect, though this exaggerates. Hamilton claimed that the reputation of rhubarb was suffering because much of what was sold was of poor quality.

*Radix rhabarbarum* is listed in the "Dispensatory" of 1746 and in every comparator list, although never in large amounts. In army practice it retained a fair degree of popularity throughout the

century. The numerous references in *Practice* and in army medical literature suggest this. Rhubarb was widely used to combat dysentery, Pringle being among its advocates in this regard. Monro reported that *sal catharticus amarus* (q.v.) was preferable in some cases, because unlike rhubarb it did not cause griping, but in most respects he strongly endorsed rhubarb in his practice. Rhubarb is mentioned 135 times in the Wellcome sample. It was in fact a standard in folk medicine, and Woodforde prescribed it for a considerable range of problems.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 502-06; Buchan, *Domestic Medicine*, p. 218, 262, 266, 282, 284n, 317, 369n; Hill, *History of the Materia Medica*, pp. 546-49; Brookes, *General Dispensatory*, pp. 97-98; Cullen, *First Lines of the Practice of Physic*, II, 206; Gregory, *Observations on the Duties*, p. 150; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 190, 194; Neil C. Hultin, "Medicine and Magic in the Eighteenth Century: The Diaries of James Woodforde," *JHM*, 30 (1975), pp. 360-61; Huxham, *Observations on the Air and Epidemic Diseases*, II, 87, 140, 150; James, *Medicinal Dictionary*, "rhabarbarum"; Kirkland, *Inquiry into the Present State of Medical Surgery*, I, 355; Lempriere, *Practical Observations on the Diseases of the Army in Jamaica*, II, 158-59; Lewis, *New Dispensatory*, pp. 189-90; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 224; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 242, 273, 341, 346, 347, and II, 91, 95, 105, 135; Moore, *Medical Sketches*, p. 179; Parr, *London Medical Dictionary*. II, 282; *Practice of the British and French Hospitals*, pp. 38 ("bolus for bloody flux"), 45 ("astringent electuary"), 48 ("electuary for the gonorrhoea after the inflammation") 49-50 ("electuary in a jaundice"), 51 ("electuary for a looseness"), 53 ("aromatic anodyne draught"); Pringle, *Observations on the Diseases*, p. 234; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 182 ("cathartics"), 691-92; Salmon, *New London Dispensatory*, p. 17; Sydenham, *Whole Works*, pp. 25, 121; Woodville, *Medical Botany*, I, 127-31.

## **ROSES:**

Roses had been used medicinally for centuries. In the 18th century, red and damask roses were official and both, though particularly the former, were used in a number of simple preparations that were



widely used in both professional and popular medicine, as well as in dozens of official compound drugs..

*Conserva rosarum (rubiarum)*

A drug that Culpeper praised, sugar of roses, was quite similar. Conserve of (red) roses was prepared on the same pattern as many other conserves, by grinding the active ingredient (rose petals) in a pestle, then adding in three times its weight of double-refined sugar. It was among the most widely used drugs in its class, and Lewis acclaimed it "a very agreeable and useful conserve." He and Brookes agreed that, served in warm milk, the conserve helped to combat weak stomach and coughs. It also served as a constituent of many other preparations. Lewis challenged the claim that it was useful against phthisis and hectic fever, but it appears to have been widely used for this purpose. Cullen questioned the medicinal value of not only this conserve but of the rose itself.

*Mel rosarum or mel rosaceum*

Honey of Roses (renamed *mel rosae*) was prepared (*Pharm. Lond.*, 1746) by boiling in honey the juice or an infusion of roses. It was regarded as detergent and astringent (as were both rosebuds and honey), and was primarily used to heal ulcers of the mouth and throat. Hill regarded the red rose as "a powerful Astringent," which would stop diarrhea if eaten; the conserve he regarded as weaker, tho still astringent. It is not listed in the "Dispensatory" of 1746. Spermaceti was a common base for lip salves.

*Oleum rosarum*

Oil of roses was last listed in the *Pharm. Lond.* (as *ol. rosaceum*) in the 1721 ed. It was prepared by infusing rose petals in olive oil three times, then letting the oil stand, without pressing out the roses, for 40 days. It appears to have been fading from professional medicine

by this time and is not listed in the "Dispensatory" of 1746.

*Syrupus rosaceus solutivus cum sena:*

Solutive Syrup of Roses with Senna was prepared (*Pharm. Lond.* recipe, 1721) by steeping senna leaves, caraway, and sweet fennel seeds (sprinkled in white wine) in *syrupus rosaceus solutivus*, which had in turn been prepared by successively boiling rose leaves in water three times, then adding sugar to the strained liquid and boiling down to a syrup. Edinburgh did not list a syrup of this name. Quincy asserted that the senna provided no benefit and should be dropped, and it was in fact omitted from the 1746 *Pharm. Lond.* The simpler *syrupus rosaceus solutivus* (renamed *syrupus rosae* in the 1788 edition) continued to be listed, and both Lewis and Healde considered it a good, mild laxative, ideal for children. Similarly, Salmon had praised the earlier version of the syrup as a purgative, especially of melancholy, so effective against diseases that were melancholic in origin.

The rose, its leaves, and its water appear 515 times in the Wellcome sample, the most of any medicinal or component. There are 73 references to oil of roses and 39 to conserve of roses. Honey of roses is mentioned 9 times and syrup, 18. The composition of these preparations varied.

**Sources:** Brookes, *General Dispensatory*, pp. 99, 176, 222, 231; Cullen, *A Treatise of the Materia Medica*, II, 23-24; Culpeper, *Pharmacopoeia Londinensis*, p. 134; Healde, *New Pharmacopoeia*, pp. 82-83, 251, 255; Hill, *History of the Materia Medica*, pp. 438-39; James, *Medicinal Dictionary*, under "conserva" and "rosa"; Lewis, *New Dispensatory*, pp. 443, 448; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 279, 280-81; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 18; *Practice of the British and French Hospitals*, pp. 39 ("calomel bolus"), 45 (Ethiopic electuary"), 46 ("balsamic electuary"), 51 ("restringent electuary"), 52 ("strengthening electuary"), 59 ("infusion of red roses"), 59-60 ("compound infusion of roses"), 61 ("the common linctus"); Quincy, *Dispensatory*, pp. 57-58, 61, 159; Salmon, *New London Dispensatory*, pp. 465, 604, 606; Shaw, *Dispensatory of Edinburgh*, p. 175;

Theobald, *Every Man His Own Physician*, p. 60; Wesley, *Primitive Physic*, pp. 53, 106; Withering, *Botanical Arrangement*, II, 524.

### **Rudius's Extract:**

Named after its inventor, the Italian physician Eustachio Rudio (d. 1611), *extractum Rudii* (sometimes prepared as pills; renamed *extractum catharticum* in 1746 *Pharm. Lond.*; *extractum colocynthis compositum* [Compound Extract of Coloquintida], 1788) consisted (1721 London recipe) of 9 ingredients, including aromatics and hellebore. Pemberton criticized the inclusion of spices, which he regarded as too volatile, and in 1746 they were replaced with cardamom, the other active ingredients being aloes, coloquintida, and scammony. The last three items had also been in the pill Rudii, which Cole had regarded as a balanced pachymagogue: "It has *Coloquintida* and *Turbith*, two stout knaves and the gentle *Agarick* to purge *Phlegm* and *Rheum*, *watrish* and *wheyish Humors*; *Black Hellebore*, a surly fellow to beat melancholy out of doors, bitter *Sr. Aloes* to cope with captain general Choller." As his comment suggests, Rudius' extract was, like other powerful cathartics, sometimes used to combat melancholy, hypochondria, and lethargy.

By one or another of its official names Rudius' extract appears on five comparator lists, though it is not included in the "Dispensatory." References to it in 18th-century medical literature are few, perhaps reflecting the general move away from drastic purgatives. There are two references to Rudius' pills in the Wellcome sample.

**Sources:** *Biographisches Lexicon*, IV, 911; Brookes, *General Dispensatory*, p. 228; Culpeper, *Pharmacopoeia Londinensis*, p. 161; Pemberton, *Dispensatory*, pp. 51, 168-69.

### **Rue:**

The leaves and seeds of rue (*L. Ruta graveolens*), a garden plant, were official. Boerhaave asserted that its essential oil was useful as a sudorific and in treating epilepsy and hysteric fits. Salmon regarded it as an excellent pectoral and lithontriptic, and even recommended it to grow hair. Alston

catalogued many of its perceived virtues and applications: “It is antacid, acrid, detergent, diaphoretic and diuretic, powerfully dissolving as well as stimulating; called alexipharmic, cephalic, nervine and uterine; and is commended internally in malignant fevers, pestilence, poisons, bites of mad dog, serpents &c. in cachexies, scurvies, agues, palsies, epilepsies, palpitatio cordis, vapours, melancholy, worms, &c. and outwardly, for pains, inflammations, tumors, gangrenes, &c.” For most of the century rue was included in a number of official compositions. Lewis valued its extract, regarding it as a good bitter, stimulant, and detergent, useful especially in treating cold diseases.

The admirers of rue not only recommended it in the treatment of a great range of diseases and conditions, but many authorities, including Boerhaave and Hoffman, esteemed it a preventative, a belief that was sanctioned by Hippocrates and Pliny. Rue was, indeed, one of the primary alexipharmics (i.e. preservatives against poisons) of Ancient medicine. Prior to 1760, British writers continued to credit rue as an alexipharmic. According to Brookes, “When contagious Diseases rage, two spoonfuls [of rue juice], with as much generous Wine, is a good Preservative against infectious Air” (cf. *RP*, p. 55). By late in the century, however, this perceived power was, according to Woodville, “very little credited.”

Despite the many positive appraisals, rue does not appear to have been widely used in the army, and it is not listed in the “Dispensatory” of 1746, in any of the comparators, or in a recipe in *Practice*. It is seldom referred to in practice-oriented medical literature of the period. In traditional popular medicine, however, it was more valued. Rue and its water are referred to 196 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 211-14; Brookes, *General Dispensatory*, p. 100; Healde, *New Pharmacopoeia*, p. 50; Hill, *History of the Materia Medica*, p. 340; James, *Medicinal Dictionary*, “ruta”; Lewis, *New Dispensatory*, pp. 192-93; Salmon, *New London Dispensatory*, pp. 97, 151; Woodville, *Medical Botany*, I, 108-10.

### **Saccharum/sugar:**

Sugar was known medicinally to Dioscorides and Pliny. During the 18th century it was usually

imported into Europe from the East and West Indies. Most of the refinement took place in Britain. Lewis regarded impure sugar as emollient and laxative, and other writers thought it an effective antiseptic and antiputrefacient. In general, however, medicine made use of white sugar (*saccharum album*; also known as *saccharum purificatum* or *saccharum bis coctum* [Double Refined Sugar]).

Alston esteemed sugar diluent, detergent, emollient, and antacid and recommended it as a pectoral, stomachic, diuretic, and laxative. Pringle accounted it an antiseptic and preservative, and so useful against many putrid diseases, such as scurvy, pestilential fever, and dysentery. Applied externally, often in brandy, sugar was used as a vulnerary and antiputrefactive. Sugar and milk were often administered by enema, Sydenham being a main advocate. But sugar also aroused strongly negative appraisals. Some contemporaries blamed the early death of William Stark (1740-70) on an experiment in which for an extended period he consumed 4-20 oz. of sugar per day. Most often, critics claimed that sugar encouraged putrid diseases or decay. Geoffroy asserted that it caused scurvy and consumption; but Alston (as well as Brookes and Pringle) disagreed and in passing noted a proverb, "That which preserves apples and plumbs, will always preserve liver and lungs." To counter the assertion that sugar and honey bred worms he referred to an experiment by Redi that demonstrated to his satisfaction that a solution of either killed them faster than an infusion of wormwood or aloes. Some writers asserted that sugar turned into bile in the body, but Boerhaave denied this. Brookes and others sought to refute claims (by Buchan, among others) that sugar caused tooth decay or toothache. Despite the support and praise of some authorities, however, during the 18th century sugar was used medicinally, in the words of Alston, "more often used for its taste than virtues." It was, however, among the most common flavorings. Bark was often mixed with sugar to mask its taste. In addition, it was often given as candy, to relieve sore throat or coughing.

Under three names, sugar is listed in the "Dispensatory" and in two later comparator lists. Despite such limited references, it was much used in army practice and would have been readily available for local purchase or transport. A better sense of its value to the army comes in *Practice*, where it is included in 12 recipes. Bell noted several uses that were of particular relevance to the

military, asserting that: sugar mixed into rum made the beverage less dangerous; sugar was useful in relieving fatigue; mixed with salt, sugar not only helped to preserve meat but also enhanced its flavor, as opposed to simple salting. Noting that medicinal syrups spoiled quickly, Hamilton recommended that army surgeons keep coarse sugar handy, to sweeten drafts. Sugar figured prominently in the hospital diet recommended by Monro, and he promoted lemon and sugar as a cordial.

Sugar, sugar candy, sugar loaf, and lesser variants appear in 579 recipes in the Wellcome sample, suggesting that even in the 17th century sugar was already on a par with honey (q.v.) as a sweetener in popular medicine, besides being considered medically useful in other respects.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 473-78; Bell, *Inquiry into the Causes*, pp. 25, 32, 50, 73; Brookes, *General Dispensatory*, pp. 101-02; Buchan, *Domestic Medicine*, pp. 136, 200n, 242, 272, 332; Cullen, *Treatise of the Materia Medica*, II, 274-81, 291, 343; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 194; Hill, *History of the Materia Medica*, pp. 794-98; James, *Medicinal Dictionary*, under "saccharum"; Leigh, *An Experimental Inquiry into The Properties of Opium*, pp. 118-19; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 25, 229; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 110-13, 247, 310n; *Practice of the British and French Hospitals*, pp. 43 ("the white drink"), 44 ("decoction against vomiting and fevers"), 52 ("strengthening electuary"), 55 ("saline draught"), 56 ("chalk emulsion"), 59 ("compound infusion of roses"), 60 ("chalk julap"; "musk julap"), 61 ("detergent linctus"), 62 ("linctus for a hoarseness"), 68 ("sperma-ceti pills"), 71 ("compound chalybeate powder"); Pringle, *Observations on the Diseases*, pp. 347-48; Sydenham, *Whole Works*, pp. 24, 109, 195, 202; Woodville, *Medical Botany*, III, 539.

### **Saffron:**

Although some saffron (*L. Crocus sativus*) was imported, Lewis regarded the English variety as best, and Alston and Hill preferred it because it was most likely to be fresh. "Celebrated by all the ancients" (Alston), saffron was for a time known as "King of Vegetables," and its applications in traditional medicine were many.

Among the uses cited by Salmon is that it "drives forth the measles, and small Pox" (cf. *RP*, p.59). Huxham also recommended it to invigorate smallpox patients who were debilitated or depressed. In 18th-century professional medicine, saffron was generally used as a stomachic, aromatic, and cordial. Pringle thought it powerfully antiseptic. Its ability to stimulate and exhilarate prompted both praise and criticism. Lewis wrote, "it remarkably exhilarates, raises the spirits, and is deservedly accounted one of the highest cordials," and he endorsed its use against hysteric depression. Hill, however, regarded it as dangerous to pregnant women, and Brookes warned, "Too large a Dose not only stupifies the Senses and causes Sleep, but provokes excessive and perpetual Laughter, which at last becomes convulsive and ends in Death." Tissot advised against using saffron or other heating medicines on patients suffering from acute diseases, asserting that they would further thicken blood that was already too thick. In general, however, saffron was seen as a drug that acted moderately. In Rufus' Pill, a cathartic, it was included to correct the aloes, though Parr doubted that it had this effect. During the latter half of the century, Cullen and other writers began to question the efficacy of saffron. Alexander experimented by taking a very large dose (4 scr.), but experienced no sensible effect and commented, "I cannot help thinking that it is a medicine (if it deserves that name) just as innocent and as useless as any in all the materia medica." It appears that late in the century professional use of saffron declined markedly. Withering asserted that it formerly had been held "in high repute as a cordial; but modern practice pays no great attention to it, since it has been found to produce no sensible effect, even when given in doses greatly larger than those generally prescribed." Although it continued to be found in many compound drugs, this was often because it imparted an attractive color to them, rather than because of an perceived medical benefit.

Nevertheless, though not listed in the "Dispensatory" of 1746, saffron, as *Crocus Anglicanum*, is included in six later comparator lists. It appears in ten recipes in *Practice*, a rather large number. Most of the drugs are intended either to stimulate the patient or to expel (diaphoretics, expectorants, diuretics). The role that saffron was expected to play in them, however, is generally unclear, and other ingredients in most cases appear to have been more relied on to make the drug work. Saffron is

mentioned 209 times in the Wellcome sample.

**Sources:** Alexander, *Experimental Essays*, pp. 90-91; Alston, *Lectures on the Materia Medica*, II, 116-24; Brookes, *General Dispensatory*, p. 28; Buchan, *Domestic Medicine*, 144n, 213n; Cullen, *Treatise of the Materia Medica*, II, 214-15 (as "crocus"); Healde, *New Pharmacopoeia*, p. 23; Hill, *History of the Materia Medica*, pp. 435-37; Huxham, *Essay on Fevers*, pp. 75; Lewis, *New Dispensatory*, pp. 119-20; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 149-50; *Practice of the British and French Hospitals*, pp. 36 ("anodyne balsam"), 37 ("alexipharmic bolus"), 37-38 ("borax bolus"), 45-46 ("electuary for an asthma"), 53 ("alexipharmic draught"), 58 ("bitter infusion with steel"), 61 ("detergent linctus"), 68 ("Rufus' pills"), 70 ("alexipharmic powder"), 73-74 ("wine of millipedes"); Parr, *London Medical Dictionary*, I, 81; Pringle, *Observations on the Diseases*, p. 327; Salmon, *New London Dispensatory*, p. 120; Short, *Medicina Britannica*, #267; Tissot, *Advice to the People*, pp. 24-25; Withering, *Botanical Arrangement*, I, 38.

### **Sage:**

Common or red sage (*L. Salvia officinalis*) was common in Britain and was grown in many gardens. Widely used in Ancient medicine, it had become even more popular during the Middle Ages, when it acquired such nicknames as "the holy herb." In the 1746 ed. of *Pharm. Lond.*, only one variety of sage, *salvia hortensis major*, was listed among the materia medica. In the 1721 ed., there had been two others: *s. hort. minor* (which Parr thought more potent), and *s. sylvestris* (wild sage or Gerard's wood sage), and all three were likewise listed by Edinburgh.

Like most traditional herbs, sage lost reputation during the 18th century. Sage was perhaps most valued as a sudorific and as such was widely used in fevers, but a number of authorities, including Sydenham and Van Swieten, claimed that it was conversely capable of restraining colliquative sweats. At mid-century Brookes, though not entirely a believer himself, could still write, "the Virtues of this Plant are so numerous that many have esteemed it as a Panacea," but Lewis saw it as being, at best, a mild stomachic and stimulant, and late in the century Woodville wrote, "at present few practitioners



consider it as an article of much importance in the materia medica." Cullen observed that while sage tea was less likely to upset the stomach than was green tea, it lacked the virtues of the latter, adding, "What ... are the particular virtues of sage, I am a little uncertain." He did conclude that it had some value, but was in no respect more effective than were other herbs. Despite such disparagement, sage remained a staple of popular medicine; Hill noted, "An Infusion of it made in the manner of Tea, has long been famous, as the common Drink of People in Fevers."

As either *herba salvia* or *folia salvia*, sage appears in the "Dispensatory" and on two later comparator lists. It is not, however, mentioned in any recipe in *Practice*, and it does not appear that it was widely used in the army, its decline there paralleling the pattern in professional medicine. As might be expected, sage is one of the items most often referred to in the Wellcome sample, being included in 388 recipes or lists, usually unprocessed though sometimes as a water.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 215-17; Brookes, *General Dispensatory*, p. 105; Cullen, *Treatise of the Materia Medica*, II, 103-04; Healde, *New Pharmacopoeia*, p. 51; Hill, *History of the Materia Medica*, pp. 371-72; Lewis, *New Dispensatory*, p. 197; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 233; Parr, *London Medical Dictionary*, II, 307-08; Quincy, *Dispensatory*, p. 337; Salmon, *New London Dispensatory*, p. 98; Short, *Medicina Britannica*, #269; Woodville, *Medical Botany*, I, 110-12.

### **St. John's Wort:**

Introduced into medicine by the Greeks, St. John's Wort (*L. Hypericum perforatum*) had been traditionally valued particularly in hysterical and maniacal disorders, gaining the nickname "*fuga daemonum*" ("expel-the-demon"). During the 18th century, the herb, flower, and seed were official. *Hypericum* grew wild throughout Britain. An essential oil was extracted from its seeds, and its leaves and flowers were also used medicinally.

According to Lewis, in 18th-century Britain hypericum continued to be applied first and foremost as an antimanic. Hoffman among others concurred in this application. Beyond this, it was

perhaps most esteemed as a vulnerary and anodyne, being used internally and externally to treat wounds and ulcers. It was also valued as an expellant (diuretic, emmenagogue, anthelmintic) and a corroborant. No major British authority of the 18th or late 17th centuries cites it as a cure for baldness. Lewis believed that although hypericum might have active properties, there was little foundation for earlier claims, while Withering wrote that its medicinal uses were "very much undetermined." There is no reason to doubt Woodville's assertion that as of the late 18<sup>th</sup> century it was "very rarely used" in professional medicine.

St. John's Wort is not listed in the "Dispensatory" of 1746, though oil of hypericum appears in the comparator list of 1703. The wort is included in 53 recipes in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 150-52; Brookes, *General Dispensatory*, p. 49; Culpeper, *Pharmacopoeia Londinensis*, pp. 178, 182; Healde, *New Pharmacopoeia*, p. 34; Lewis, *New Dispensatory*, p. 140; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 176; Quincy, *Dispensatory*, p. 316; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 395; Salmon, *New London Dispensatory*, p. 65; Short, *Medicina Britannica*, #151; Withering, *Botanical Arrangement*, II, 814; Woodville, *Medical Botany*, I, 29-30.

### **Sal ammoniac:**

Crude sal ammoniac (*sal ammoniacum crudum*, renamed *ammonia muriata* in the *Pharm. Lond.* of 1788) was the sublimed soot of animal bones or dung. A purified form was also official, as was a volatile salt, produced by heating sal ammoniac and chalk over a strong fire.. Sal ammoniac was usually imported from Egypt, though some was prepared in Britain.

According to Lewis, 1 dr. in water promoted sweat, if the patient was kept warm, or urine, if he exercised in open air; a larger dose was cathartic, a still larger one, emetic. Some practitioners considered it a fine febrifuge, especially effective in treating intermittents and (because it was also stimulating) malignant fevers. It was thought to warm the system and promote circulation and generally raise the system -- in Brookes's words, to "excite the oscillations of the nerves" -- and it was therefore

used against cold diseases and conditions characterized by lethargy. In Lewis's view, it was an effective aperient, whether used alone or in combination with bitters or bark. Mead considered it an antidote to certain poisons. The crude salt was sometimes applied externally to resist putrefaction, and in lotions and fomentations it was used to resolve tumors and to remove warts. It was also used in gargles. Sal ammoniac was also used widely in popular medicine. Wesley recommended mixing it with lemon juice as a remedy for toothache.

*Sal ammoniacum purificatum* is included in the "Dispensatory," and in some form sal ammoniac appears on six comparator lists. The Wellcome sample includes six references to sal ammoniac.

**Sources:** Brookes, *General Dispensatory*, pp. 286, 308-09; Buchan, *Domestic Medicine*, p. 187n, 306; Healde, *New Pharmacopoeia*, p. 51; Hill, *Materia Medica*, pp. 123-26; Lewis, *New Dispensatory*, pp. 194-95; Lewis/Rotheram, *New Dispensatory*, pp. 230-31, 349; Mead, *Medical Works*, p. 98; *Practice of the British and French Hospitals*, pp. 72-73 ("Mindererus' spirit"), 74-75 ("itch ointment"); Quincy/Hooper, pp. 708-09; Salmon, *New London Dispensatory*, pp. 363, 364 ("crystallus salis armoniaci"); Theobald, *Every Man His Own Physician*, p. 54; Wesley, *Primitive Physic*, pp. 157, 169.

### ***Sal catharticus amarus:***

*Sal catharticus amarus* (bitter cathartic salt; later in the century, known as *magnesia vitriolata*) was simply a purging salt drawn from the brine that remained after common salt was extracted from sea water. It had been invented to provide an inexpensive substitute for Epsom Salt, one of the most common cooling purges, which had been introduced into British medicine shortly after 1610 and was often counterfeited. There was much confusion about how magnesia alba (the active ingredient in this purgative) was produced, but Black's thesis answered the basic questions. Sal cath. amarus was sometimes used as a diaphoretic or diuretic, but probably most often as a purgative, one that was widely regarded as mild and gentle, with few of the side effects (gripes, nausea) associated with resinous cathartics. It was counted among the cooling cathartics, so useful in treating patients who were plethoric or had inflammatory symptoms.

Sal cath. amarus is not listed in the "Dispensatory" of 1746, but it is included in five comparators, under three different names. Monro compared it favorably to rhubarb, observing that when administered with manna and oil it provided freer evacuation with less griping. Cleghorn joined it to bark in treating ague. Whether in the army or in professional practice generally, sal cath. amarus was certainly popular, though perhaps not as much as was Glauber's Salt, which was used for similar purposes and is noted on the comparator lists as having been ordered in considerably larger quantities (these lists, of course, provide only a sample of army medicinal supplies).

**Sources:** Cleghorn, *Observations on the Epidemical Diseases in Minorca* (1751 ed.), pp. 193-94; Noel G. Coley, "'Cures without Care.' 'Chymical Physicians' and Mineral Waters in Seventeenth-Century English Medicine," *Medical History*, 23 (1979), pp. 211-13; Audrey B. Davis and Jon B. Eklund, "Magnesia Alba before Black," *Pharmacy in History*, 14 (1972), pp.139-46; James, *Medicinal Dictionary*, under "magnesia"; Lewis, *New Dispensatory*, pp. 195-96; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 191-92; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 341; Parr, *London Medical Dictionary*, I, 378-79; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 182 ("cathartics"), 776 (under "sulphas magnesiae").

### ***Sal prunellae:***

Sal prunellae (popularly called "Crystal Mineral") was prepared by melting together saltpetre and flowers of sulfur. It was used to treat sore throat and mouth, as a diuretic and vermifuge, and for many other purposes, including the relief of thirst and heat associated with fever (cf. *RP*, p. 81). While Cole regarded this drug in a gargle as "a sovereign Remedy" for "prunella" (a term applied to thrush and other forms of sore throat), its popularity declined during the first half of the 18th century, and it was dropped from the *Pharm. Lond.* in 1746. It is not listed in the "Dispensatory." Alston believed that the sulfur made the nitre less cooling and more acrid, so that this was "a useless preparation." Lewis commented, "This preparation was formerly in great esteem, and is sometimes still ordered in prescription. It is nevertheless built upon an erroneous foundation, which supposed, that the nitre was

purified by the deflagration it undergoes upon injecting a little sulphur on it"; in reality, he added, sulfur altered the nitre into a salt, which had different properties.

Sal prun. is not listed in the "Dispensatory" and it is included in only the comparator list from 1703. It is included in just one recipe in *Practice*, that of "a diuretic draught." Either sal prunella or lapis prunella, a similar preparation, is mentioned 12 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 182; Brookes, *General Dispensatory*, pp. 302-03; Culpeper, *Pharmacopoeia Londinensis*, p. 209; Lewis, *New Dispensatory*, p. 292; *Practice of the British and French Hospitals*, p. 54; Quincy, *Dispensatory*, p. 259; Salmon, *New London Dispensatory*, pp. 366-68; Wesley, *Primitive Physic*, p. 56.

### **SAPONACEOUS PREPARATIONS:**

Three varieties of soap were generally included among the materia medica during the 18th century: Castile soap, *sapo mollis* (common soft soap), and *sapo niger* (black soap). Saponaceous preparations were many, and they played a large role in medical practice.

#### *Sapo Castillion:*

Castile Soap (sometimes called "Venice Soap"; officially named *sapo durus* [hard soap] in 1746 *Pharm. Lond.*; in 1788 ed., called *Sapo ex oleo olivae et natro [barilla] confectus*) was a white hard soap made from olive oil combined with caustic alkaline lixivium (usually, kali was used). It was the type of soap most used internally. Boerhaave, "a great admirer of sope" (Lewis), often prescribed it with resinous pills. This soap was thought a menstruum for calculi and was "esteemed one of the strongest solvents that could be taken with safety into the stomach" (Lewis). Its many perceived virtues and internal uses are summarized by Alston: "Spanish Soap is an emollient, detergent, diuretic, and laxative medicine; recommended internally in obstructions in the viscera, jaundice, gravel, &c. and outwardly for pains, inflammations, tumors, and ulcers." As of the close of the century, it was, according to Hooper,

losing reputation as a treatment for jaundice, although it was still thought effective against gravel. It was often used externally and provided names of an official plaster, a liniment, and a balsam. Brookes advised that 1 oz./day in shell water could resolve the stone.

Opodeldoch:

Opodeldoch was the popular name of the *balsamum saponaceum* (saponaceous balsam) of Edinburgh, whose London equivalent was *linimentum saponaceum* (renamed *linimentum saponis*, 1788). The London type consisted of Castile soap digested in spirit of rosemary, after which camphor was added. The Edinburgh recipe was slightly more complex, but likewise included Castile soap and camphor. Theobald put forward a simple formula for "opodeldoch": Castile soap and camphor dissolved in water. Clearly, soap and camphor were the key ingredients. Brookes asserted that the official versions were "good for external Use in Palsies of the Limbs, Pains of the Rheumatism, and Gout, and to resolve Tumours. It will be best to anoint the Parts before the Fire."

Castile soap is included in the "Dispensatory" of 1746 and in five later comparators. The Wellcome sample includes 52 references to Castile, Venetian, white, or hard soap, 32 to black soap, 14 to gray soap, and 8 to "soap," variety unspecified. Under one or another of its official names, opodeldoch appears in the "Dispensatory" and in eight comparator lists. There are few references to it in military medical literature, though Hamilton noted that when he treated the wounds left by lashing, "In discussing these inflammations, when it is practicable, I have succeeded best by the liniment: saponic" Monro reported that it was sometimes rubbed onto the toes of hospital patients to prevent or treat mortification.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 268; Brookes, *General Dispensatory*, pp. 107-08, 335-36; Cullen, *Treatise of the Materia Medica*, II, 349, 385; Hamilton, *Duties of a Regimental Surgeon Considered*, II, 56; Healde, *New Pharmacopoeia*, pp. 52, 307; James, *Medicinal Dictionary*, under

"kali," "linimentum," "opodeldoc," and "sapo"; Lewis, *New Dispensatory*, p. 512; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 235-36, 575-76; Monro, *Observations on the Means of Preserving the Health of Soldiers*, I, 285; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 447, 715; Theobald, *Every Man His Own Physician*, p. 52.

### **Savine:**

Savine (*Juniperus Sabina*) was recognized as a medicinal by Dioscorides and Pliny. In 18<sup>th</sup>-century Britain the leaves were recognized as official, and they were used for a variety of purposes, internal and external. Generally, savine was thought to expel, and Boerhaave among others endorsed it as an emmenagogue, Astruc considered its preparations to be ineffective and in some cases dangerous and Cullen, while observing that it revealed "a more powerful determination to the uterus than any other plant that I have employed," reported that he had often seen it fail to provoke menstruation. Moreover, he noted, it was heating and acrid. Savine was also used to hasten labor, but some writers warned that it induced abortion. It was widely recommended as an anthelmintic (cf. *RP*, p. 233), Ray being a noteworthy advocate of this use. Lewis considered it "a warm, irritating, aperient medicine, capable of promoting sweat, urine, and all the glandular secretions."

Despite these endorsements, savine appears to have been little used in either professional or popular medicine. There are few references to it in British works that deal with practice. Savine is not mentioned in any of the army lists and is noted only eight times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 214-15; Astruc, *Treatise on the Diseases of Women*, I, 115-16; Brookes, *General Dispensatory*, pp. 100-01; Cullen, *Treatise of the Materia Medica*, II, 250; Healde, *New Pharmacopoeia*, p. 50; Hill, *History of the Materia Medica*, p. 341; James, *Medicinal Dictionary*, "sabina"; Lewis, *New Dispensatory*, pp. 100, 193; Quincy, *Dispensatory*, pp. 295, 336; Salmon, *New London Dispensatory*, pp. 24, 39, 98.

### **Scammony:**

Scammony was a gum resin. There were two varieties in shops -- from Aleppo (usually thought superior) and Smyrna – but both came from the same plant, *L. Convolvulvis scammonia*. Scammony had been much used by the Greeks and Arabs, though Hill asserted that the plant described as the source by Dioscorides was slightly different from the one used in his day. He also wrote that the scammony that appeared in shops was often counterfeit or adulterated. Although sometimes applied externally, to combat itch, scammony was usually given orally, for one overriding purpose: purgation. Most often it was given to patients with cold, phlegmatic constitutions.

Like the Greeks, many medical authorities of the 18th century regarded scammony as drastic, even dangerous, though Lewis wrote that it (and all resins) represented a threat only if there was insufficient mucus in the intestines, and he suggested that triturating it with sugar or almonds would resolve the problem. Because of its power, scammony was often administered in preparations that were intended to minimize danger; it might be diluted with acid or water or mixed with niter, sugar, or licorice. Conversely, however, it was often mixed with other cathartics in an effort to enhance its action. Hill complained not only about the harshness of scammony, but also that it was unreliable, adding, "there is so much Difference in the purgative Virtue of some Masses of Scammony and that of others, that it is seldom depended upon alone in extemporaneous Practice." Cullen also complained of its inconsistency, and laid this to the fact that the scammony in the shops was often adulterated. He also claimed, however, that even good scammony offered no advantage over jalap. The use of scammony in professional practice, like the use of drastic purgatives generally, declined during the 18th century. Cullen commented, "I am persuaded that, either by itself, or in composition, it will never come much into the practice of this country." Besides its role in official drugs, however, scammony figured prominently in such cathartic nostrums as Ball's Worm Powder.

#### Diagrydium:

The name "diagrydium" was particularly applied to powdered scammony that had been baked or roasted in a quince, though it was sometimes used in reference to scammony that had



been exposed to the fumes of sulfur. Both processes had evolved in the ancient world, the intention being to correct the harshness of the scammony. In Parr's opinion, these processes did not work and were furthermore unnecessary, for scammony did not require correction.

Diagrydium is seldom mentioned in 18th-century literature on medical practice, and it appears on none of the army lists. Scammony is generally referred to only in association with compound drugs, almost invariably cathartics. An electuary and a compound powder of scammony are listed in the "Dispensatory," and the latter is also noted in one comparator list. So are several compound drugs that include scammony, e.g. Rudius' extract and *pilulae cocciae minores* (qq.v., latter under "colocynth"). None of these, however, was ordered often or in much quantity. All indications are that scammony was seldom used in army practice, especially after mid-century. There is not a single reference to it in the Wellcome sample and only four to diagrydium, suggesting that the role of scammony in popular medicine was also rather limited.

**Sources:** Brookes, *General Dispensatory*, p. 110; Buchan, *Domestic Medicine*, p. 282n; Cullen, *Treatise of the Materia Medica*, II, 365-66; Hill, *History of the Materia Medica*, pp. 769-72; James, *Medical Dictionary*, under "nitre," "scammonia"; Lewis, *New Dispensatory*, pp. 202-03; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 238-39; Parr, *London Medical Dictionary*, I, 551, and II, 316; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 8; Turton, *Medical Glossary*, p. 183 ("Cerberus").

Scorbutic whey; see under "milk"

### ***Semen lini:***

Medicinal use of linseed dated back to Hippocrates. The product of flax (*L. Linum usitatissimum*), linseed was primarily imported from Northern Europe, but because of its perceived medicinal value (and perhaps in part because of its other uses, e.g. as cattle-feed and in the manufacture

of linen and paper) the Society for the Encouragement of Arts, Manufactures, and Commerce (est. 1754) promoted its cultivation in Britain, with some success.

In 18th-century practice, linseed was sometimes used in substance, though Lewis cautioned that it had little nutritive value and that if eaten it could cause bloating. In all of its forms, linseed was considered anodyne, emollient, and demulcent and was often prescribed in emulsion, decoction, or infusion for strangury or hot urine, while its mucilage (obtained by boiling the seeds in water) was used to treat coughs. Preparations of the seed were administered in enemas to relieve tenesmus. Drunk as tea, linseed was thought cooling, soothing, and diluent. It was used in gargles. Linseed was also the basis of a cataplasm that was used to treat quinsy and various painful conditions. Hooper wrote that the *lini cataplasma* had replaced the former standard in its class, the bread and milk poultice, and that it was "the best and most convenient of all emollient poultices for common cases."

#### *Oleum lini:*

The expressed oil of linseed and, to a lesser extent, linseed mucilage were also valued medicinally. Culpeper's assertion that the oil relieved inflammation and pain, internal and external, would have been generally accepted 150 years later. Linseed oil was almost universally acclaimed as an emollient and lubricant, and it was often administered to quiet coughs (cf. *RP*, p.). It was also prescribed when urination was difficult. Linseed oil was often applied to bruises, sores, and rough or damaged skin as a demulcent or emollient. Sharp and others promoted its use in treating burns and scalds. Because of its soothing and lubricating quality, it was often given in enemas to relieve constipation, colic, and tenesmus. It was given internally to quiet coughs, to ease urination that was difficult or painful, and generally when a sheathing or healing objective was intended. Besides being used alone, it was a prime ingredient in many compound preparations, including linctuses that were used in army hospitals during the 18<sup>th</sup> century. Although it was usually administered internally, it was also the active ingredient in a cataplasm bearing its name, which by the close of the century had largely

replaced the milk and bread poultice and was, according to Quincy, regarded as "the best and most convenient of all emollient poultices for common cases." Summing up the appeal of linseed oil, Woodville commented that it was "supposed to be of a more healing and balsamic nature than the other oils of this class."

Linseed oil appears only on one comparator list, but it seems to have been widely used in army medicine and may well have been purchased locally as needed. Hamilton noted that it was inexpensive, suggesting this as a reason to prefer it to olive oil. Linseed, whole or powdered, is included in the "Dispensatory" and in six comparator lists. Linseed or its oil or mucilage is mentioned 80 times in the Wellcome sample, a number that suggests moderate rather than extensive usage.

**Sources:** Brookes, *General Dispensatory*, p.62; Cullen, *Treatise of the Materia Medica*, II, 84; Culpeper, *Pharmacopoeia Londinensis*, pp. 18, 172; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 188, 191; Hill, *Materia Medica*, pp. 527-28; Huxham, *Observations on the Air and Epidemic Diseases*, I, 221; Lewis, *New Dispensatory*, pp. 153-54; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 189; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 32, 152; *Practice of the British and French Hospitals*, pp. 47 ("electuary for a violent gonorrhoea"), 58 ("a lenient gargle"), 61 ("detergent linctus"), 62 ("linctus for a hoarseness"); Pringle, *Observations on the Diseases*, pp. 159-60; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 179, 447-48, 569; Reide, *View of the Diseases of the Army*, p. 249; Salmon, *New London Dispensatory*, p. 148; Sharp, *Treatise on the Operations*, xlvi-xlix; Withering, *Botanical Arrangement*, I, 328; Woodville, *Medical Botany*, II, 303-05.

### **Senna:**

The variety of senna most preferred by 18th-century medical authorities was imported through Alexandria, and was often called *sena Alexandrina* (L. *Cassia angustifolia*). Although Actuarius may have used senna, it was the Arabs who popularized it in medical practice. However, they apparently

used the fruit, whereas by the 18th century it was the leaves that were used medicinally.

Senna was generally considered to be a gentle, effective laxative. It was widely used and highly valued. Salmon referred to it as "the common purge for Cholera, Flegm, Melancholy, and watry Humors" and linked it to many cures. Alston considered it more cathartic but less astringent than rhubarb. Lewis believed senna to be a useful purgative, "operating mildly, and yet effectually" without the disadvantages of stronger ones, unless it was overdosed. Senna was thought to be cooling, so especially useful for fever patients. Lewis claimed that senna caused griping, because of its resinous nature, and it was also thought to encourage flatulence – Culpeper recommended ginger to alleviate this problem -- but otherwise it was not associated with negative side effects. While many authorities endorsed senna, however, Cullen expressed surprise that it was popular – he cited "imitation and habit on the part of practitioners" – given its offensive taste and odor, the large dose required to make it effective, and the problem of griping.

Senna is listed in the "Dispensatory" of 1746 and in all but one of the comparators. In addition, several compound drugs in which senna played a prominent role, including *electuarium lenitivum* and *elixir salutis* (qq.v.), were also on a number of lists. Senna is mentioned 96 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 314-16; Brookes, *General Dispensatory*, pp. 113-14; Buchan, *Domestic Medicine*, pp. 369n, 377; Cullen, *Treatise of the Materia Medica*, II, 363-64; Culpeper, *Pharmacopoeia Londinensis*, p. 15; Healde, *New Pharmacopoeia*, p. 53; Lewis, *New Dispensatory*, pp. 205-06; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 241; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 24, 26; *Practice of the British and French Hospitals*, pp. 54 ("purging draught"), 63-64 ("purging mixture"); Quincy, *Dispensatory*, pp. 333, 340; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 738; Salmon, *New London Dispensatory*, pp. 102, 139; Theobald, *Every Man His Own Physician*, p. 54.

***Serpentaria:***

Although snakeroot was grown in the Royal Botanic Garden beginning in 1770, the supply for medical use continued to come from Virginia. It was introduced into England in the 1630's as a remedy for snakebite, but during the 18th century this application came to be, in Hooper's estimation, "wholly disregarded." Instead, snakeroot was esteemed tonic, bitter, diuretic, deobstruent, diaphoretic, and alexipharmic. It was commonly applied to treatments where a stimulating or heating effect was needed, as for paralysis or hysteria. It was sometimes used as a vermifuge, or to treat gonorrhoea. Mead popularized its use in cases of smallpox where it was deemed necessary to promote eruptions. Theobald recommended it for patients suffering from malignant fever, "as it invigorates the Blood, opens the obstructed Nerves, procures Sleep, and is a most powerful Alexipharmic" Some valued snakeroot as a stomachic, but Alston disputed this and questioned the general value of the root. Despite such reservations, snakeroot remained quite popular throughout the century. A tincture and the essential oil were official, and several preparations were used in army hospitals as alexipharmics or cordials. Buchan strongly endorsed it and several remedies that contained it as an active ingredient. Cullen, who had a tendency to disparage claims made for drugs, regarded it as "antiseptic, and powerfully tonic" and of use in treating intermittents and gangrene. References to it dot the medical literature of the period, and on the whole they are highly positive.

Serpentaria, whole or powdered, is included in the "Dispensatory" and seven comparator lists, and the quantities suggested are in several cases rather large. There are nine references to snakeroot in the Wellcome same, none of them as a remedy for snakebite. The low figure probably reflects the fact that serpentaria was a latecomer to British medicine.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 520-23; Brookes, *General Dispensatory*, p. 114; Buchan, *Domestic Medicine*, pp. 112, 115, 144n, 289, 330n; Cullen, *A Treatise of the Materia Medica*, II, 57; Dickinson, *An Inquiry into the Nature and Causes of Fever*, p. 160; Healde, *New Pharmacopoeia*, p. 55; Home, *Medical Facts and Experiments*, p. 21; James, *Medicinal Dictionary*, under "serpentaria Virginianae"; Lewis, *New Dispensatory*, p. 393; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 242; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 124; *Practice of the*

*British and French Hospitals*, pp. 37 ("alexipharmic bolus"), 45 ("decoction of snakeroot"), 47 ("cordial electuary"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 740; Rollo, *Observations on the Diseases*, pp. 77, 87; Theobald, *Medulla medicinae*, pp. 20-21 ("decoction of snake-root"); Woodville, *Medical Botany*, II, 291-94.

### **Snail:**

Snails were regarded as pectoral and a cure for all coughs and consumptions. Boerhaave recommended that consumptives drink milk in which snails had been boiled. They had many other perceived virtues, and their shells and slime, as well as their flesh, were used medicinally. Snails were cut from the list of materia medica in the 1746 edition of the *Pharm. Lond.*, and like most animals they fell out of favor in professional medicine.

Snails are not included in any of the army lists, but of course they were readily available. Snail waters were a staple of 17th-century medicine. Their popularity is reflected in the fact that the Wellcome sample includes 136 recipes for waters and other medicines that included snails or their products. One of the recipes for snail water is accompanied by the claim, "this is good against the Jandes Consumption or any other Weakness in the Stomach liver or lungs."

**Sources:** Wellcome, ms. 4054, p. 78; Brookes, *General Dispensatory*, p. 60; Culpeper, *Pharmacopoeia Londinensis*, p. 34; Salmon, *New London Dispensatory*, pp. 259-60; Theobald, *Every Man His Own Physician*, p. 9.

### **Spermaceti:**

Technically, spermaceti was a fatty substance that was prepared by boiling a mixture of potash and sliced brain tissue from sperm whales. In this form, it was imported, mainly from France. By the mid-18th century, however, a variant was being produced in England, "from Whale Oil of any Kind" (Hill). Although earlier seen as valuable in treating a host of medical problems, by that time British medicine generally restricted it to two applications. Its most common medical application was internal,

as a pectoral or to coat abraded intestines, but it was widely used externally, either by itself or in combination with other ingredients, as an emollient, often to resolve tumors or to prevent pitting from smallpox.. According to Salmon, it was “much used by some to dissolve congealed blood within, coming from falls, bruises, and the like” (cf. *RP*, p. 209) None of the major 18th-century authorities classified it among the diaphoretics. Hill deemed it valuable in liniments, because it would dissolve in oil or fatty substances, and in emulsions (oily, thick mixtures), where it blended with egg yolk or almond oil. Huxham regarded it as "a soft relaxing animal Oil, very penetrating, though not heating"; balsams tended to heat, so Huxham's observation suggested an advantage for spermaceti. As an emollient, spermaceti was a common component in cerates and ointments.

Spermaceti is listed in the "Dispensatory" of 1746 and in five later comparator lists. It appears to have been moderately popular in army usage. There are 17 references to spermaceti in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 116; Culpeper, *Pharmacopoeia Londinensis*, p. 20; Hill, *History of the Materia Medica*, pp. 892-93; Huxham, *Essay on Fevers*, p. 134; Lewis, *New Dispensatory*, p. 208; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 243; Monro, *Observations on the Means of Preserving the Health of Soldiers*; I, 252, and II, 17, 32, 49; Parr, *London Medical Dictionary*, II, 368; *Practice of the British and French Hospitals*, pp. 52 ("sperma-ceti electuary"), 62 ("linctus for a hoarseness"), 66 ("dysenteric pills"), 68-69 ("sperma-ceti pills"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 291, 756; Salmon, *New London Dispensatory*, p. 404.

*Spiritus nitri dulcis*: see under nitre

### **Sponge:**

Sponge had several medical and surgical applications. Often burnt or dried and powdered (*spongiae ustio*), it was given orally to treat hemorrhaging, bronchocele, and various skin problems, notably scrofula. Hill considered it a good diuretic. Boerhaave, like Dioscorides centuries before,

strongly endorsed the internal use of sponge. Externally, sponge was often applied to wounded vessels to curb bleeding. It was also used in tenting wounds; when intended for this application, it was a common practice to immerse it in melted wax and then cool before applying. During the 18th century there was some controversy over the nature of the sponge; Boerhaave and Hill were among those who believed it to be a plant, but most later authorities (e.g. Lewis) contended that it was an animal.

Sponge appears in the "Dispensatory" but on no comparator list; presumably, it was purchased locally as needed or was numbered among surgical supplies (not specified in most comparator), rather than drugs. There are eight references to sponge in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, pp. 117, 143; Healde, *New Pharmacopoeia*, p. 60; Hill, *History of the Materia Medica*, pp. 335-36; James, *Medicinal Dictionary*, "spongia"; Lewis, *New Dispensatory*, p. 210; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 246-47, 276-77; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 763, 764.

### **Spruce beer:**

Spruce beer was a decoction of spruce, fermented in molasses. It was especially noted as an antiscorbutic and was widely used for this purpose in Canada and North America, but despite its widely reported success (notably, when used by the British Army), and despite the fact that a similar decoction, made from the leaves and tops of the common pitch tree, served as an antiscorbutic in Scandinavia, spruce beer was seldom used to prevent or to treat scurvy in Britain. While most acclaimed as an antiscorbutic, spruce beer was also assigned other uses. Parr thought it valuable in treating rheumatism, as well as cutaneous problems that were typically northern. Lempriere found that remittent patients craved it and that it was useful as a remedy -- perhaps, he speculated, because of its fixed air content.

There is only one reference to spruce in the Wellcome sample, that being a suggestion that rickets patients be bathed in spruce beer.

**Sources:** Buchan, *Domestic Medicine*, p. 301; Hill, *History of the Materia Medica*, pp. 107, 257-58; Jervey, *Practical Thoughts on the Prevention and Cure of the Scurvy*, pp. 34-36; Lempriere, *Practical*



*Observations on the Diseases of the Army in Jamaica*, II, 192; Lewis/Rotheram, *The Edinburgh New Dispensatory*, p. 81; Monro, *Observations on the Means of Preserving the Health of Soldiers*; I, 186, 187; Parr, *London Medical Dictionary*, II, 377; Salmon, *New London Dispensatory*, pp. 411-12.

### **Squill:**

Squill had been much used by the Ancients and had enjoyed consistent popularity. Woodville saw it as "deservedly in great estimation, and of very frequent use at this time." Squill was mainly imported from Spain, where it was found on the coastline, though it was cultivated in England as early as 1648. The vomiting squill caused could be violent, and Hill advised that its emetic quality could be tempered by mixing it with cinnamon -- likewise, Lewis advised joining it with water of cinnamon -- but Cullen warned that some degree of nausea was necessary if squill was to be effective. Squill was also valued as a diuretic and an emmenagogue, and was sometimes administered as a cathartic, the dosage being adjusted to the action desired. As a diuretic, it was often given for dropsy, sometimes with mercury.

### *Oxymel scilliticum*

Oxymel of squills was produced by boiling vinegar of squills (squills infused in vinegar) in honey. Both squill and honey were valued independently as expectorants, as was this medicine, but also like squill and some other expectorants honey could, in large doses, be an emetic, and Hippocrates had used it to this end. Oxymel of squills was a legacy of Arab medicine. By the 18th century, the oxymels were in decline as a class, because the honey made them prone to ferment or to candy. Pemberton cautioned that oxymels should not be kept in metal containers, because the vinegar would corrode. Nevertheless, as of the mid-18th century, squill was, in Hill's assessment, most commonly administered in oxymel. Perhaps the reason can be found in Culpeper's observation that it was "as wholesom, and somewhat more toothsom" than was vinegar of squills (still, he reported of the latter that Savius, "using no other Medicine

but this, lived in perfect health" to 117). According to Salmon, oxymel of squills had "the Virtues of Vinegar of Squills ... besides which this is much more Pectoral, cleansing and healing by reason of the Honey." Nevertheless, Shaw expressed regret that oxymel scilliticum was preferred to vinegar of squills in practice.

*Oxymel scilliticum* is listed in the "Dispensatory" of 1746, but not on any comparator list; vinegar of squills appears on three later lists, and dried squill is on two others. In the Wellcome sample, there are six references to squill and its preparations.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 512-15; Brookes, *General Dispensatory*, pp. 110, 111, 223; Hill, *History of the Materia Medica*, p. 648; Brookes, *General Dispensatory*, pp. 111, 223; Culpeper, *Pharmacopoeia Londinensis*, pp. 111, 127; Healde, *New Pharmacopoeia*, pp. 53, 258; James, *Medicinal Dictionary*, under "acetum" and "scilla"; Lewis, *New Dispensatory*, pp. 203, 449; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 276; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 7; Pemberton, *Dispensatory*, pp. 304, 305; *Practice of the British and French Hospitals*, pp. 61, 62; Quincy, *Dispensatory*, pp. 62-63; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 483, 484 (under "Mel acetatum," "Mel scillae"), 725-26; Salmon, *New London Dispensatory*, p. 208; Shaw, *Dispensatory of Edinburgh*, p. 77n; White, *Analysis of the New London Pharmacopoeia*, p. 32; Woodville, *Medical Botany*, II, 322-25.

### **Strengthening Plaster:**

Neither London nor Edinburgh endorsed a composition officially known as "strengthening plaster" until 1746, when London changed the name of its *emplastrum ad herniam* (plaster for ruptures) to *emplastrum roborans*; in 1788 it again renamed it, as *emplastrum thuris* (frankincense plaster). London recipe for *emplastrum ad herniam* prescribed 31 ingredients and several steps. Culpeper wrote that the plaster was useful not only against ruptures, but in preventing miscarriage and consolidating wounds; Cole believed that it was effective in treating toothache, gonorrhoea, looseness, and vomiting.

According to Salmon, it was used not only against ruptures but generally to reinforce and fortify weakened parts and to set broken bones. As redefined in 1746, the plaster was prepared by adding frankincense (*gummi thus* or *olibanum*; listed in the "Dispensatory" and three comparators) and dragon's blood (*sanguis draconis*; a red resin, imported from the East Indies) to melted common plaster (olive oil, litharge, and water boiled together). Strengthening plaster was mainly applied, over other dressings, to wounds and ulcers, to protect them from inflammation. It was sometimes used to support weak muscles. Lewis was critical of both uses, claiming that other plasters gave equal support and that this one, rather than retarding inflammation, actually promoted it (as he believed all plasters did to some extent). He further asserted that, contrary to popular belief, plasters that included astringents -- in this case, the frankincense and dragon's blood -- did not tighten, but rather relaxed.

As *emplastrum ad herniam* (1703 list) or *emp. roborans*, this plaster appears in three comparators, but not in large quantities, and it is seldom mentioned in army medical literature, though these writings stress internal medicines rather than plasters. The Wellcome sample includes a recipe for a "strengthening plaster," but it is entirely different from the one specified by London in 1746 or the earlier *emp. ad herniam*, and in fact there would have been many extemporaneous plasters that were designed to satisfy the same needs that the official ones were.

**Sources:** Wellcome ms. 1590, p. 51; Brookes, *General Dispensatory*, p. 354; Culpeper, *Pharmacopoeia Londinensis*, p. 200; Healde, *New Pharmacopoeia*, p. 296; Lewis, *New Dispensatory*, p. 502; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 562-63 (under "emplastrum thuris compositum"); Salmon, *New London Dispensatory*, pp. 787-88 Theobald, *Every Man His Own Physician*, p. 59..

### ***Succi scorbutici:***

*Succi scorbutici* ("the scorbutic juices"; in 1788 renamed *succus cochleariae compositus* [compound juice of scurvy grass]) was prepared (*Pharm. Lond.*, 1746) by mixing the juices of scurvy grass (*L. Cochlearia officinalis*), Seville oranges (q.v., under "oranges and lemons"), becabunga (q.v.),

and nasturtium (q.v.). Each of these components was individually valued as an antiscorbutic, as was horseradish (*raphani radix*, q.v.), which was included in the Edinburgh recipe. Lewis, however, asserted that they were more effective when mixed than any one was individually. Cullen regarded succi scorbutici as “a very useful medicine.” Brookes seems to have especially valued the orange, for he asserted, “The Juice of the Oranges, at the same Time that it improves the Flavour, renders these Juices a very safe and efficacious Medicine against the Scurvy.”

Scurvy grass is mentioned in 67 recipes in the Wellcome sample. Not all of the recipes specify an antiscorbutic application, and there are recipes for antiscorbutic compounds that do not include it. See the respective entries on the other components of succi scorbutici regarding their inclusion in the sample.

**Sources:** Brookes, *General Dispensatory*, p. 209; Cullen, *Treatise of the Materia Medica*, II, 111; Healde, *New Pharmacopoeia*, pp. 86-87; Lewis, *New Dispensatory*, pp. 243-44; Pemberton, *Dispensatory*, pp. 50, 166.

### ***Succus marrubium album:***

Horehound was an ancient remedy; Galen had recommended it to treat the bite of a mad dog. The juice or powdered leaves of white horehound (*marrubium album*; *Marrubium vulgare*) were thought to thin viscid humors, and were therefore used against asthma, as a deobstruent (against jaundice and other liver problems), and to promote evacuations (diuretic, emmenagogue). Its expulsive virtue encouraged its use as an anthelmintic (cf. *RP*, p. 233), and Ray recommended it for this purpose. Lewis believed that it had the virtues common to strong bitters, being aperient, deobstruent, and laxative. Cullen asserted that the claims made for it as a pectoral and deobstruent were weakly based. Black horehound was also used medicinally, though London dropped it from the materia medica in 1746. Horehound is seldom mentioned in 18th-century British literature on professional practice.

Neither this juice nor any preparation of horehound is included in the army lists. White horehound or horehound (variety unspecified; black horehound never specified) is mentioned 38 times

in the Wellcome sample, suggesting that at least into the 18th century horehound held a moderate place in popular medicine.

**Sources:** Astruc, *Treatise on the Diseases of Women*, I, 113; Brookes, *General Dispensatory*, p. 67; Cullen, *Treatise of the Materia Medica*, II, 104-05; Healde, *New Pharmacopoeia*, p. 38; Lewis, *Dispensatory*, p. 157; Mead, *Medical Works*, p. 65; Quincy, *Dispensatory*, p. 322.

### ***Succus porrum:***

The root of the leek (*L. Allium porrum*) continued to be listed among the materia medica by London through the *Pharm. Lond.* of 1721. While warning that leeks could damage the eyes, Salmon claimed that they were nourishing and could restore patients suffering from consumption, as well as moderate such symptoms as spitting of blood. According to Quincy, its medicinal uses were the same as those of the onion (q.v.), while Lewis believed that it had the same virtues as garlic (q.v.), but was less potent. Regarding the treatment of dropsy (cf. *RP*, p. 151), Wallis reported, "The juice of leeks ... has been known to perform a cure."

The leek is not listed in the "Dispensatory" of 1746 or on any comparator list. While leeks virtually disappeared from professional practice during the 18th century, they continued to play a moderate role in popular medicine, as reflected by the fact that they are mentioned 102 times in the Wellcome sample.

**Sources:** Lewis, *New Dispensatory*, p. 186; Quincy, *Dispensatory*, p. 332; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 360; Salmon, *New London Dispensatory*, pp. 16, 91, 150; Wallis, *Art of Preventing Diseases*, p. 459.

### **Sulfur:**

Although some sulfur was mined in England, it was in large part imported from Italy, which had rich deposits in proximity to volcanoes. As Quincy noted, it had "been long an esteemed article of the Materia Medica." As *sulphur vivum*, it was used in simple form, simply ground with impurities. Lewis

questioned its medicinal value, both because the admixture of components sometimes included dangerous elements like arsenic and because the composition, and consequently the physical impact, varied. The form most often used, and the basis of most sulfurous compound medicines, was flowers of sulfur (below).

*Balsamum sulphurous anisatum:*

During the 18th century, anisated balsam of sulfur was listed in only *Pharm. Edin.* It was prepared by boiling flowers of sulfur in olive oil (linseed oil might be substituted), adding in distilled oil of aniseed. London had a similar drug, *bal. sulphurous simplex* (renamed *oleum sulphuratum* in 1788 *Pharm. Lond.*), which did not include aniseed. Brookes thought *bals. sulphuris anisatum* an excellent pectoral, valuable for all chest problems, as well as for "Imposthumes and Putrefactions of the Body" and "all cold and flatulent Disorders." Alston regarded it as useful in treating internal ulcers and consumptions, but noted that some writers doubted its value. Among these was Lewis, who reported that while balsams of sulfur were recommended for coughs and consumptions, this was without fair trial. He noted also, "They are manifestly hot, acrimonious and irritating; and therefore should be used with the utmost caution. They have frequently been found to injure the appetite, offend the stomach and viscera, parch the body, and occasion thirst and febrile heats."

Neither *bals. sulphuris anisatum* nor its London variants appears in the "Dispensatory" or on any comparator list. The role played by these drugs in army practice was apparently quite limited, and the evidence suggests the same of general practice.

*Flores sulphuris:*

Flowers of sulfur (in 1788 ed. of *Pharm. Lond.*, renamed *sulphur lotum*, "washed sulfur") were simply sublimated sulfur, usually finely powdered. This was the main form in which sulfur was used medicinally. Although valued for several purposes, its primary use when

applied externally was to treat itch and other skin problems. It was often mixed with butter or lard for application. Theobald recommended a pomatum base for patients who were repelled by the smell of sulfur. Internally, it served as a laxative, diaphoretic, or expectorant. Its action was regarded as gentle, and this was reflected in miscellaneous applications, e.g. it was given to children who were thought to have worms.

*Lac sulphuris:*

Milk of Sulfur (renamed *sulphur praecipitatum* in 1788) was prepared (*Pharm. Lond.*, 1721) by boiling in water flowers of sulfur and quicklime or salt of tartar, then straining the solution and precipitating out the sulfur. It was used for the same purposes as flowers of sulfur, but Quincy considered it a superior sudorific; also, it was preferred by some for its purity. Alston, however, regarded it as different in nature from, and perhaps less useful than, pure sulfur. Lewis reported that it was much used in ointments because of a widespread belief that it was purer than even purified sulfur, but that this belief was unfounded. Quicklime was dropped from the recipe in the 1788 ed. of *Pharm. Lond.*, a move that according to Healde made the compound less white but more purgative.

Sulfur and its simple preparations are mentioned 55 times in the Wellcome sample. Flowers of sulfur is included in the "Dispensatory" and on eight comparator lists. and sulfur products in some form are found in all army lists but the first (1703). The quantities specified, however, are generally rather small, and the overall role of sulfur in army medicine appears to have been moderate, rather than large.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 215-17, and II, 467-70; Brookes, *General Dispensatory*, pp. 98, 110, 116-17, 220, 285-86; Culpeper, *Pharmacopoeia Londinensis*, p. 209; Healde, *New Pharmacopoeia*, pp. 143-45; Lewis, *New Dispensatory*, pp. 310-12; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 238-39, 251-52, 513; *Practice of the British and French Hospitals*, pp. 39-40

("bougies"), 45 ("electuary for an asthma"), 46 ("chalybeate electuary"), 48-49 ("electuary for the piles"), 65 ("cachectic pills"); Quincy, *Dispensatory*, p. 239; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 776-78; Salmon, *New London Dispensatory*, pp. 49, 173.

### ***Syrupus caryophyllorum* :**

The "clove July flower" or clove pink (*L. Dianthus caryophyllus*) grew in many English gardens. Some authorities, notably Simon Paulli (d. 1680), claimed that decoctions of the flowers were diuretic, sudorific, and cordial, and were effective against many malignant and pestilential diseases. Some valued the flower in treating cephalic and nervous conditions, e.g. vertigo, epilepsy, depression.

"Syrup of Clove-July-Flowers" was prepared (London, 1746) by steeping clove pink flowers overnight in boiling water, straining, and adding double-refined sugar. Salmon esteemed the syrup a pectoral and cordial. Significantly, however, he added that it might "be mixt with other Cordial Liquors ... to make them more pleasant," suggesting that even in the late 17<sup>th</sup> century it was often used primarily to enhance flavor. According to Parr, the main appeal of the syrup was its crimson color, rather than any strong medicinal quality.

Neither this syrup nor the clove pink is listed in the "Dispensary" or in any comparator list. The syrup is noted in *Practice* as an ingredient in "an aluminous bolus," "an electuary for an asthma," and "the Peruvian bark draught" though in each case it appears to be only a vehicle or a flavoring. The syrup or flower is mentioned 17 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 101-03; Brookes, *General Dispensatory*, p.20; James, *Medicinal Dictionary*, entry for "caryophyllus"; Parr, *The London Medical Dictionary*, I, 358-59 ("caryophyllus ruber"); *Practice of the British and French Hospitals*, pp. 37, 45, 54; Salmon, *New London Dispensatory*, p. 592; Woodville, *Medical Botany*, III, 223-25.

### ***Syrupus e meconio***

White poppies, sometimes called "British Opium," were thought to have half the potency of



Turkish opium. "Diacodion" was the popular name for syrup of white poppies (*syrupus e meconio*; renamed *syrupus papaveris albi* in 1788 ed. of *Pharm. Lond.*). It was prepared by boiling white poppy heads (earlier recipes had used black poppies) in water, then adding sugar. Quincy complained that the attendant process of clarifying the syrup reduced its power as an opiate, and Pemberton and Lewis cautioned that it was essential for the recipe to be followed precisely, or the product would not be consistent. The syrup was thought to obtund acrimonious humors and like other opiates it was used to ease pain, moderate looseness, and procure sleep. Culpeper recommended it to relieve coughing. Sydenham prescribed diacodian in cowslip water for patients recuperating from rheumatism, "to restrain the fury of the blood, for otherwise a Relapse may happen." Hooper regarded the drug as "A useful anodyne preparation which may be added with advantage to a vast variety of medicines against diseases of the bowel, coughs, &c." Considered gentle, it was often prescribed to children, though Mead cautioned against giving it to them if they suffered from smallpox or were in the early stages of measles. Perhaps because of its mildness, it was widely used, and often abused, in folk medicine. Culpeper reported, "It is an usual fashion for Nurses when they have heat their milk by exercise or strong liquor (no marvel then if their children be froward) then run for syrup of Poppies to make their young ones sleep."

*Syrupus e meconio* is listed in the "Dispensatory" of 1746, but is not included among the items for the medical chests nor is it mentioned in any of the comparator lists. White poppies are on one comparator. Diacodion appears to have played a moderate role in 18th-century army medicine, but less so late in the century, probably mirroring a decline of use in professional practice. It figures prominently in four compound drugs included in *Practice*, but it seldom appears in relevant British literature in the later period. Hamilton specifies that regimental surgeons should not include it in their chests, but rather prefer opium-based drugs. In all probability, true opium, which was considered not only more powerful but more reliable, pushed out English poppies and their products. Poppies, their water, and their syrup, appear 86 times in the Wellcome sample, but the sample favors the 17th century, and it may be that the 18th century saw a decline in reliance on the poppy in popular as well as

professional medicine.

**Sources:** Virginia Berridge, "Opium in the Fens in Nineteenth-century England," *Journal of the History of Medicine*, 34 (1979), pp. 293-97; Brookes, *General Dispensatory*, pp. 86, 217-18; Buchan, *Domestic Medicine*, p. 405; Culpeper, *Pharmacopoeia Londinensis*, p. 119; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 194; James, *A Medicinal Dictionary*, under "papaver"; Lewis, *New Dispensatory*, p. 441; Mead, *Medical Works*, pp. 243, 262; Pemberton, *Dispensatory of the Royal College*, pp. 293-94; *Practice of the British and French Hospitals*, pp. 45 ("astringent electuary"), 51 ("electuary for a looseness"), 53 ("anodyne draught"), 63 ("paregoric mixture"); Quincy, *Dispensatory*, p. 44; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 594 (under "papaver"), 794-95 (under "syrupus papaveris"); Short, *Medicina Britannica*, #251; Sydenham, *Whole Works*, pp. 41, 203, 207; Tissot, *Advice to the People in General*, p. 191; Withering, *Botanical Arrangement*, II, 553; Woodville, *Medical Botany*, III, 504.

### ***Syrupus de rhamno:***

Buckthorn (*L. Rhamnus cathartica*) was native to Britain. The bark was sometimes used medicinally, but the berries were most important. The use of buckthorn to purge dated back to Hippocrates. Syrup of buckthorn (*syrupus e spina cervina*, 1746; *syrupus spinæ cervinae*, 1788) was composed (1721 London recipe) of juice from buckthorn berries, cinnamon and nutmeg -- the spices were intended to make it more palatable -- boiled to a syrup in sugar. London added ginger in 1746 and in 1788 replaced cinnamon and nutmeg with allspice.

Culpeper recommended the syrup as a stimulant, to be used against melancholy and hypochondria, and as a hydragogue, effective against dropsy. Sydenham also thought it useful in treating dropsy, especially because unlike other hydragogues it did not harm the blood. On the whole, 18th-century writers were more circumspect. Theobald regarded syrup of buckthorn as "a good warm useful Purge," advising however that, "as it is endued with pretty acrid Powers," a small amount of opium should be mixed with the ingredients, to avoid irritating the "Membranes." Lewis characterized the

official versions as brisk purges, but added that the ancients and Rhazes had used the drug in much larger doses than was currently the practice. Withering, however, reported that the syrup "generally occasions so much sickness and griping that it is falling into disuse," and Hooper likewise observed that it was "rarely prescribed except as a drastic purge." Brookes conceded that it caused griping, but claimed that this consequence could be averted if it was taken with a warm liquid. Syrup of buckthorn was long used as a household drug, and Sir Theodore Mayerne (d. 1655) nicknamed it "the housewife's syrup."

The syrup is included in the "Dispensatory," but in no comparator. The Wellcome sample includes only four references to buckthorn or "purging thorn," suggesting that already in the 17th century it was falling out of favor in popular medicine.

**Sources:** Brookes, *General Dispensatory*, p. 220; Cullen, *A Treatise of the Materia Medica*, II, 365; Culpeper, *Pharmacopoeia Londinensis*, p. 125; Fothergill, *A New Inquiry*, pp. 152-53; Healde, *New Pharmacopoeia*, p. 59; James, *A Medicinal Dictionary*, under "rhamnus"; Lewis, *New Dispensatory*, p. 445; Lewis/Rotheram, *Edinburgh New Dispensatory*, 513; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 8; *Practice of the British and French Hospitals*, pp. 39 ("gamboge bolus"), 54 ("purging draught"), 68 ("Rufus' pills"); Quincy, *Dispensatory*, p. 335; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 759; Short, *Medicina Britannica*, #38; Sydenham, *Whole Works*, p. 391; Townsend, Joseph, *Elements of Therapeutics*, p. 421; Withering, *Botanical Arrangement*, I, 240; Woodville, *Medical Botany*, II, 312-13.

### **Tamarind:**

Tamarinds (*Tamarindus Indica*), which had been introduced into European medicine by Arab authorities, had earlier been imported from Arabia, but during the 18th century they increasingly came to Britain from the West Indies, though some were imported from Egypt and the East Indies. The fruit was often used as a mild purgative and also to quiet vomiting. It was regarded as a coolant and febrifuge. Tamarinds were sometimes used to enhance the purgative power of manna and cassia. Some

recommended them for jaundice. The tamarind was a popular thirst quencher (cf. *RP*, p. 83). During the 18th century, some of the older purgative compounds that included tamarinds, fell into disuse, though notably the lenitive electuary (q.v.) remained popular. And although earlier writers had valued tamarind as a corrective to antimonials, Lewis asserted that the opposite was true and that indeed "all vegetable acids augment their power."

It does not appear that the fruit was widely used in army practice. It is not included in the "Dispensatory," appears on only two comparator lists, and is not mentioned in *Practice*. Although sometimes used as an antiscorbutic, Van Swieten, on the basis of Lind's experiments and "experience (that best of masters)," asserted that they were inferior to oranges and lemons in this regard. Nevertheless, as a purgative the tamarind retained some popularity in the army, and Dancer felt that it (like manna, cream of tartar, qq.v., and some other drugs) was particularly appropriate to practice in the tropics, since it was a cooling purge. There are only three references to tamarinds in the Wellcome sample.

**Sources:** Alston, *History of the Materia Medica*, II, 318-19; Brookes, *General Dispensatory*, pp. 120-21; Buchan, *Domestic Medicine*, pp. 117, 150, 369n, 377; Cullen, *A Treatise of the Materia Medica*, II, 341; Dancer, *A Brief History of the Recent Expedition*, p. 48; Healde, *New Pharmacopoeia*, p. 61; Hill, *History of the Materia Medica*, pp. 451-52; James, *A Medicinal Dictionary*, under "tamarindi"; Lewis, *New Dispensatory*, p. 216; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 253; Monroe, *Observations on the Means of Preserving the Health of Soldiers*; I, 87n, and II, 185; Quincy, *Dispensatory*, p. 343; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 796-97; Van Swieten, *The Diseases incident to Armies*, pp. 138-39; Woodville, *Medical Botany*, III, 454-57; Zimmerman, *Treatise on the Dysentery*, pp. 52-64.

## **TARTAR:**

Tartar, which had been popularized by Paracelsus, was the residue scraped from wine casks. It was generally imported from the Continent, with Alston preferring the German product, and the white

more than the red, which he considered less pure. In British practice, tartar was seldom administered in its crude state, but rather in several common preparations and compound medicines, which were sometimes used as diaphoretics, diuretics, or expectorants, but more often as purgatives or emetics.

Crystals of tartar (*crystalli tartari*; when powdered, known as *cremor tartari*)

Prepared by boiling powdered tartar in water, then filtering through paper and allowing the tartar to shoot crystals. The preparation was valued as a mild purgative, diuretic, and deobstruent, and these characteristics encouraged widespread use in professional medicine. It was especially prominent in the treatment of dropsy and colic, and was joined in a considerable range of preparations, often joined to cathartics that were more brisk, apparently to moderate their action. It was valued as an aperient (some also thought it stomachic); in consequence, many people took a dose daily, prompting Rotheram to write, "there are perhaps few medicines more commonly employed." This drug was a favorite of Buchan's, and he valued the fact that it not only purged but cooled.

Emetic tartar; see under "antimonials"

Cream or crystals of tartar appear on all army lists, and the quantities noted are generally large or very large. Other preparations of tartar also appear on the lists. Tartar and its simple preparations appear 63 times in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 483-88; Brookes, *General Dispensatory*, pp. 121, 289-90; Buchan, *Domestic Medicine*, pp. 119, 150, 213n, 242, 262, 289; *Considerations on the Use and Abuse of Antimonial Medicines in Fevers*, p. 28; Healde, *New Pharmacopoeia*, p. 321; Hill, *History of the Materia Medica*, pp. 799-800; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 254; Pearson, *Outlines of Lectures on the Practice of Physic*, I, 28; Pemberton, *Dispensatory*, p. 230; *Practice of the British and French Hospitals*, pp. 47 ("electuary in the dropsy"), 50 ("nephritic

electuary"); Quincy, *Dispensatory*, p. 268; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 56; Townsend, *Elements of Therapeutics*, p. 25.

### **Tea:**

Various herbs and leaves, notably chamomile and sage (qq.v.) were drunk as teas and were staples of popular medicine. Some also held a significant place in professional practice. True tea (*L. Thea sinensis*) was listed among the materia medica during the 18th century, but was not included in any official compound drugs, being used entirely as a simple. Some 18th-century authorities questioned whether green tea and other varieties came from the same species of plant.

Hill noted that the Chinese and Japanese regarded tea as a panacea, but that they appeared to overrate it greatly, although he regarded it as moderately useful. Salmon was more enthusiastic, and Brookes thought that it served an important function as a diuretic, diaphoretic, and corroborative. Among the conditions that he recommended it for were gravel and headache. Tea was also used as a stimulant, of use in countering drowsiness, and Wesley recommended it for people with weak nerves. Parr, however, counted it among the narcotics and saw it as beneficial in promoting a sense of serenity. But he also cautioned that excessive use prompted debility, irritability, impaired appetite, and sleeplessness.

Tea is not mentioned in any of the army lists, and while it could have been purchased locally it appears to have played a very limited role in practice. It seems to have been considered mainly a dietary article, although during the 18th century it was seldom included in rations or hospital diets. Pringle, however, considered green tea to be powerfully antiseptic and consequently of use in treating putrid diseases. Bell and others asserted that it could be of use in weaning troops away from alcohol, and so pointed toward one of its main 19th-century applications in the military.

While chamomile and sage tea had a firm place in popular medicine long before 1700, true tea had not. Green tea and "tea" (unspecified; perhaps true tea) appear in the Wellcome sample only six times.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 233-37; Bell, *An Inquiry into the Causes*, p. 53; Brookes, *General Dispensatory*, pp. 122-23; Hill, *History of the Materia Medica*, pp. 420-22; Parr, *London Medical Dictionary*, II, 421-22; Pringle, *Observations on the Diseases*, pp. 295, 327; Salmon, *New London Dispensatory*, p. 108; Wesley, *Primitive Physic*, p. xvii.

### **TEREBINTHINA/TURPENTINE:**

Four different "turpentines" were listed among the materia medica in 1721, and three in 1746 and 1788. Cullen believed that the four types possessed the same medicinal virtues, but others saw marked differences among them. Hill was upset by what he saw as a tendency to interchange turpentines, regardless of origin and nature. He asserted that the term "turpentine" should be reserved for the resin of the turpentine tree (*terebenthina Chia*), which came from Chio and Cyprus, had been most commonly used by the Ancients, and was often counterfeited in the "turpentine houses" of London. This turpentine was, he reported, less acrid than the other kinds, so better for internal use. Common turpentine, on the other hand, was drawn from the pine and was mainly imported from Germany. This Hill regarded as "different from all the former Kinds in many Respects, and the least esteem'd of any." Externally, turpentine was applied, usually in ointments, to treat bruises, ulcers, and burns. It was given internally to stop hemorrhaging, and was valued as a diuretic and sudorific.

The form of turpentine that London dropped from the materia medica in 1746 was quite popular. This was *terebinthina Veneta*, so called because it was often imported through Venice, though generally it was extracted from pines growing in Germany and Switzerland, and the turpentine sold in the shops under this name was frequently drawn from New England pines or from larch trees. Most authorities regarded Venetian as the thinnest of the turpentines, though Alston thought Strassburgh turpentine was. Ter. Ven. was also thought the best diuretic (cf. *RP*, p. 171). It was used in treating many bladder and kidney problems. Mixed with egg yolk, ter. Ven was esteemed a good digestive. It was administered in enemas to relieve dysentery and ulceration of the intestines. Its oil and spirit were regarded as diuretic, pectoral, aperient, and detergent, while its resin was given in pills for gleet. Cullen, however,

complained that it had a tendency to overstimulate the system and inflame the urethra.

In the 6th ed. of the *Pharm. Edin.*, turpentine was omitted from ointments and plasters, to avoid its perceived acrimony and inconsistency.

*Oleum terebinthinae:*

Oil of Turpentine was the yellow resin that remained after common turpentine was distilled in water; a second distillation produced *oleum terebinthinae aethereum* (spirit of turpentine). Lewis noted that the latter process could be dangerous, since the fumes might cause an explosion. The two forms were used similarly, and Lewis believed them to have the same medicinal virtues; each was often taken as a diuretic and sudorific; both oils were commonly given for rheumatism, sciatica, and lumbago, though Lewis cautioned that they were seldom helpful for these and might cause bloody urine. Lewis believed that a few drops was an effective dose, but noted that often much more was given, sometimes mixed with honey. *Ol. tereb.* was often applied to wounds (cf. *RP*, p. 268) in order to counter inflammation. This application dated back to Hippocrates, as did the use of wine for the same purpose. Salmon recommended the spirit of turpentine, not the oil, as "a powerful Diuretick and Stone breaker"; the oil he esteemed an anodyne. Brookes claimed that turpentine was "prevalent in ... Fits of the Gravel, and to prevent them by expelling the Cause" (cf. *RP*, p. 137). The oil is listed in the "Dispensatory" of 1746.

*Tereb. Veneta* is not listed in the "Dispensatory" of 1746. *Oleum terebinthinae aethereum* is included in the "Dispensatory," but in no comparator list; *oleum terebinthinae* is in the "Dispensatory" and in all comparators but one. Some form of turpentine appears in 196 recipes in the Wellcome sample. When simple turpentine is referred to, it is usually unspecified, but the variety most often designated is Venetian.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 397-98; Brookes, *General Dispensatory*, p. 122;



Cullen, *A Treatise of the Materia Medica*, II, 121-26; Healde, *New Pharmacopoeia*, p. 63; Hill, *History of the Materia Medica*, pp. 705-11; James, *Medicinal Dictionary*, under "terebinthus"; Lewis, *New Dispensatory*, pp. 217-19; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 255-56, 315-16; *Medical Commentaries*, 2 (1774), p. 415; *Practice of the British and French Hospitals*, p. 57; Quincy, *Dispensatory*, p. 343; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 805; Salmon, *New London Dispensatory*, pp. 471-72; Wallis, *Art of Preventing Diseases*, p. 365; Wesley, *Primitive Physic*, p. 45; Woodville, *Medical Botany*, III, 576-78.

### ***Tinctura amara:***

The Bitter Tincture; in 1788 *Pharm. Lond.* renamed *tinctura gentianae composita*, "Compound Tincture of Gentian") was composed of gentian root, the rasped outer layer of Seville orange peel (q.v., under "orange and lemon"), and lesser cardamoms, in spirit. It first entered the *Pharm. Lond.* in 1746, and according to Pemberton the formula was intended "to provide a medicine, that may be kept any length of time, and carried to any distance"; for that reason, lemon peel had been omitted. Like other preparations of gentian (*L. Gentiana lutea*), it was mainly used as a bitter, tonic, and stomachic. Although James doubted the claims made for it in treating intermittents (he believed it might even be dangerous, because it heated), he wrote of gentian, "It deservedly stands at the Head of the Stomachic Class, as it wonderfully warms the Stomach, and excites the Appetite; and also, as it enables it the better to digest what it receives." As of the late 18th century, gentian was, according the Woodville, "the principal bitter now employed by physicians." Although it grew wild in England, the root used medicinally was imported from Germany. There were four kinds of cardamom seeds used medicinally in Britain (all imported from the East Indies), but in 1746 the RCPL reduced from three to one the varieties that it sanctioned as official. Alston was unsure whether any variety in use in his own time was the same as the cardamom that was one of the four warm seeds of Greek medicine. All of the seeds were regarded as aromatic, attenuant, diaphoretic, and carminative. Lewis regarded cardamom as a very warm and pungent aromatic that unlike pepper did not heat or inflame the bowels. Cardamom was

valued as a stomachic, stimulant, and deobstruent.

Tinctura amara is listed in the "Dispensatory" of 1746, but appears on no comparator. No "bitter tincture" is mentioned in the Wellcome sample, though a few tinctures do include gentian, which appears in 45 recipes in all.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 337-39; Brookes, *General Dispensatory*, pp. 41, 161; Healde, *New Pharmacopoeia*, pp. 16, 29, 228-29; Hill, *History of the Materia Medica*, pp. 467-70; James, *Medicinal Dictionary*, under "gentiana"; Lewis, *New Dispensatory*, pp. 106-07, 133, 412; Lewis/Rotheram, pp. 164, 246, 486; Pemberton, *Dispensatory*, pp. 84, 265; Quincy, *Dispensatory*, pp. 296-97; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 345-46, 762, 813; Theobald, *Every Man His Own Physician*, p. 55; Woodville, *Medical Botany*, III, 433-35.

*Tinctura antimonii*; see under "Antimonials"

### ***Tinctura sacra:***

The drug officially named tinctura sacra was renamed *vinum aloes* in the 1788 *Pharm. Lond.*). A similar composition, based on *hiera picra* ("The Sacred Bitter") was likewise popularly referred to as "tinctura sacra." The only ingredient that remained consistent in all 18th-century London recipes for tinctura sacra was aloes. The 1721 version also included asarum, cinnamon, zedoary, cardamom seeds, saffron, cochineal, and mountain, all of which were dropped in 1746, after Pemberton's committee sharply criticized the earlier formula. Under the new recipe, this tincture was prepared by combining succotrine aloes and canella alba (or Winter's Bark, q.v.), powdered separately, then steeping without heat in white wine for one week before the tincture was strained off. The purpose of the canella alba was primarily to mask the smell of the aloes, though it was also regarded as warm and tasty. In 1788, the London recipe was revised again, to include proof spirit, which made it stronger. Edinburgh's recipe was significantly different, including cardamom seeds, snakeroot, and cochineal.

Regardless of the recipe, however, the tincture served primarily as a purgative. In doses of 1-2

oz., it was, according to Brookes, a "very common and a very useful Purge"; in smaller doses, it was used as an alterant. Lewis considered it "a medicine of excellent service"; as an alterant, he reported, it worked slowly, but then kept the body laxative longer than did other cathartics. Healde reported that it was "long in esteem as a warm purgative." Hooper warned against its use on patients with piles.

Tinctura sacra is listed in the "Dispensatory" of 1746, but in only two comparator lists. It is almost never mentioned in 18th-century literature on military medicine, suggesting that its role in army practice was small. There are no references to a "sacred tincture" in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, pp. 176-77, 242; Culpeper, *Pharmacopoeia Londinensis*, p. 151; James, *Medicinal Dictionary*, under "hiera picra"; Lewis, *New Dispensatory*, pp. 468-69; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 855 (under "vinum aloes").

### **Tobacco:**

Some tobacco (*L. Nicotiana tabacum*) was grown in British hot-beds or grew wild in dunghills, but generally it was imported from America. All varieties were regarded as having equal medicinal value, though more or less attractive as regarded taste and smell. Quincy included tobacco in the small class of "narcotic" cathartics, which he cautioned were to be prescribed only for patients who were very strong, indolent, or maniacal. Alston considered it "a violent emetic and cathartic, and yet a narcotic anodyne." When given internally, it was intended to serve as a pectoral and vulnerary, and externally as an anodyne, discutient, and detergent. Tobacco was often given in enemas (cf. *RP*, p. 147), most often as a cathartic, though it could also serve as an emetic. Fowler promoted its use in treating anasarca. It appears seldom to have been smoked or snuffed when used medicinally, though Europeans in the tropics sometimes smoked in order to ward off fevers. A bit of leaf might be put in the nose, to induce vomiting or purging. Buchan and others also recommended that physicians who were visiting the sick first stuff tobacco up their nostrils. Chewed, tobacco was thought to be useful medicinally because it promoted salivation, kept the system regular, and cured toothache. Tobacco leaf and its oil were sometimes used to induce lethargy among patients as they entered surgery. There was some

ambivalence concerning tobacco's impact on the body, however. Fothergill asserted that it was the "favorite panacea" of the Dutch, but he had reservations about it, noting that even a small injection of it in an enema could cause extreme sickness, vomiting, and cold sweats. Alston (like Culpeper before him and Cullen after) strongly endorsed the medicinal use of tobacco, but also quoted a popular bit of doggerel:

Tobacco reek, tobacco reek, it makes me hail when I am sick.

Tobacco reek, tobacco reek, when I am hail it makes me sick.

Stahl and some other German writers valued tobacco extract as an expectorant and aperient, and throughout the 18th century the official pharmacopoeias continued to list tobacco leaf among the *materia medica*. By and large, however, the British medical profession turned against tobacco use during the century. Brookes asserted, "it is not now prescribed for inward Use." He added, "There have been so many Treatises written for and against Tobacco, as it is variously used, and so many contradictory and absurd Things said of it, that it may be passed over without being esteemed an Omission; ... we have no Room for Controversy in this Compendium."

Tobacco is not included in any army list. It may have been purchased locally as needed, but given the paucity of references to it in works on army practice it was probably not widely used. Tobacco and its products are noted as remedies or as ingredients in preparations 53 times in the Wellcome sample.

**Sources:** NLM, MS B 332 ("Observations from Dr. Duncan's Lectures"), p. 41; Alston, *Lectures on the Materia Medica*, II, 189-92; Brookes, *General Dispensatory*, pp. 76-77; Buchan, *Domestic Medicine*, pp. 80, 160; Cullen, *A Treatise of the Materia Medica*, II, 186, 190, 298, 353, 366; Culpeper, *Pharmacopoeia Londinensis*, p. 14; Fothergill, *A New Inquiry*, pp. 152-53; Healde, *New Pharmacopoeia*, p. 41; James, *Medicinal Dictionary*, under "nicotiana" Lewis, *New Dispensatory*, p. 166; Quincy, *Dispensatory*, p. 325; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 182 ("cathartics"); Woodville, *Medical Botany*, I, 162-70.

### **Turmeric:**

Turmeric (*Curcuma longa*; the root) was valued by some as a deobstruent and emmenagogue. It was widely touted as a treatment for jaundice, Brookes considering it "almost a Specific." Hoffmann was among its advocates. It was sometimes used by farriers as a deobstruent to treat yellows and other diseases of the liver and spleen (cf. *RP*, p. 253). The use of turmeric in professional practice, however, appears to have declined during the 18<sup>th</sup> century, to the point where Woodville observed, "it is now very rarely employed." Lewis reported that turmeric had a tendency to stain urine saffron, and while he did not discount the claim that it cured jaundice, neither did he endorse it.

The role of turmeric in 18th-century army medicine, as in professional practice generally, appears to have been negligible. It is not mentioned on any of the lists and although it was a seasoning and as such could have been acquired from local grocers by medical officers, it is doubtful that they did so. Turmeric is listed as an ingredient in 25 recipes that are included in the Wellcome sample.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 424-26; Brookes, *General Dispensatory*, p. 29; E. R., *The Experienc'd Farrier*, p. 221; Hill, *History of the Materia Medica*, p. 593; Lewis, *New Dispensatory*, p. 121; Salmon, *New London Dispensatory*, pp. 7, 51; Woodville, *Medical Botany*, II, 359-61.

### **Turnip:**

The root and seed of the turnip were official. Some authorities commended turnip (usually, the juice) for use against pectoral problems of all kinds, and Salmon found it effective for "all Diseases of the Lungs, Kidnies, Bladder, and Ureters," as well as quartan. Turnips were also thought anodyne, and were applied to relieve the pain associated with gout, fractures, or wounds (cf. *RP*, p. 13). They were used to treat imposthumes and chilblains and to ripen and discuss tumors. The turnip seed, according to Salmon, was "used chiefly in Antidotes, expels Poyson, Measles and small Pox, and provokes Venery." Withering wrote that while turnips were mainly a food, especially for cattle, they did have medicinal properties: "They relax the bowels, and are supposed to sweeten the blood. They are hurtful

to pregnant or hysterical women, and to those who are subject to flatulencies." It does not appear that turnips were widely employed by regular practitioners during the 18th century.

Turnips are not mentioned in any of the army lists, and while they could have been obtained in local markets they are very seldom mentioned in works on army practice. Nor does it appear that they were much used in popular medicine, since they are mentioned only 21 times in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 97; Salmon, *New London Dispensatory*, pp. 16, 95, 151; Withering, *Botanical Arrangement*, II, 708.

### ***Unguentum Aegyptiacum:***

The London version of the Egyptian Ointment was in 1746 renamed *mel Aegyptiacum* (earlier, this term had been used in reference to the "scum" of the ointment); in 1788, London renamed it *oxymel aeruginis*. It was prepared (London recipe, 1721) by mixing verdigris, honey, and vinegar, then boiling it down to the consistency of an ointment.

Also known as *aerugo aeris* (Rust of Copper), verdigris, which was used in painting as well as in medicine, was prepared by covering strips of copper with processed dregs of wine, which were highly corrosive, then scraping off the resultant rust. Verdigris was recommended by Dioscorides as an astringent and to cicatrize wounds. It was also a traditional emetic to expel poisons. By the 18th century, it was generally used externally -- Lewis reported, and condemned, its occasional use as an emetic -- mainly to clean and dry ulcers and digest fungous flesh. Its most common medicinal use was in fact in ung. Aegy., the primary applications of which were the ones noted by Buchanan: to cleanse and deterge foul sores and to keep down proud flesh (Culpeper also recommended its use on fistulas). Some practitioners also used the ointment to treat venereal ulcerations of the mouth and tonsils. Its use declined progressively, and late in the century White reported that its only remaining official application was as a component in acetum acetosum.

*Unguentum Aegyptiacum* is not listed in the "Dispensatory" of 1746 and is included in only the

comparator list dating from 1703. It does not appear to have played more than a marginal role in 18th-century army practice. There are two references to Egyptian ointment in the Wellcome sample and 29 to verdigris.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 129-30; Brookes, *General Dispensatory*, p. 340; Culpeper, *Pharmacopoeia Londinensis*, p. 184; Healde, *New Pharmacopoeia*, pp. 23, 256-57; Hill, *History of the Materia Medica*, pp. 32-33; Lewis, *New Dispensatory*, pp. 68, 447; Pemberton, *Dispensatory*, p. 301; Quincy, *Dispensatory*, pp. 176, 359; White, *Analysis of the New London Pharmacopoeia*, p. 29.

*Unguentum dialtheae*; see under "marshmallow"

***Unguentum diapampholygos*:**

Ointment of Pompholyx was prepared, according to the London recipe of 1721 (similar to the one of 1618), by macerating oil of roses, garden hemlock berries, nightshade, washed wax, ceruse (cf. entry for plumbics), and lead in vinegar, prepared pompholyx, and frankincense, then boiling the whole in several stages. The Edinburgh recipe was similar.

Pompholyx was the calx of zinc that was left behind in furnaces where copper was made into brass by calamine. A traditional healer, it was used (as "flowers of zinc") to treat gunshot wounds among British troops during the American War of Independence. Three different species of nightshade were sometimes listed among the official materia medica during the 18th century. Lewis reported that the leaves were esteemed to be refrigerant and the roots diaphoretic, but that the berries could be deadly. The frankincense commonly used in medicine was a resin that appears to have been drawn from the same tree that produced common turpentine (see under *terebinthina*). Pompholyx and nightshade were both dropped from the *Pharm. Lond.* in 1746, while ceruse and frankincense remained, and both continued to be used in several official medicines. *Ung. diapampholygos* was likewise dropped in 1746, and a consensus of authorities suggests that it was seldom employed professionally even before

that. Shaw noted that the Edinburgh version of the ointment had been greatly simplified, but added, "among us, 'tis very little used." He did believe, however, that it might be useful in treating "hot or phagedenic ulcers, that weep a saline, acrimonious or corrosive matter." Of the London recipe, which was based on the Augustane Dispensatory, Quincy observed, "It was designed for salt, hot, inflammatory Ulcers, but it is very rarely used for those or any other Purposes in the present Practice." Lewis reported that it was used to treat hot ulcers and defluxions of the eyes, "but is very rarely made use of, having for some time given place to compositions more simple, though at least equal in efficacy."

This ointment is not listed in the "Dispensatory" of 1746, and among the comparator lists it is included only in the earliest (1703). It does not appear to have played more than a marginal role in army practice. The Wellcome sample does not include any references to the ointment or to pompholyx.

**Sources:** extract of letter from Brown to John Hope, 14 Sept. 1776, *Medical Commentaries*, IV (1776), p. 238; Culpeper, *Pharmacopoeia Londinensis*, p. 185; Healde, *New Pharmacopoeia*, pp. 45, 64; Lewis, *New Dispensatory*, pp. 112, 186, 208, 219-20, 507; Quincy, *Dispensatory*, pp. 183, 341, 344, 358, 359; Shaw, *Dispensatory of Edinburgh*, pp. 188-89.

*Unguentum mercuriale*; see under "mercurials"

### ***Unguentum tutiae:***

Ointment of Tutty was prepared (London recipe, 1721) by mixing prepared tutty with calamine, burning the mixture and quenching it in plantain water, powdering, and finally mixing it into *ung. rosaceum* (q.v., under "roses"). This recipe had been simplified from the one provided in 1677. The *Pharm. Lond.* of 1746 revised the recipe again, directing that tutty be mixed into a quantity of viper fat (q.v., *vipera*; Edinburgh substituted beeswax and butter) sufficient to produce a smooth ointment. In 1788 the formula was changed yet again (perhaps because viper fat was no longer included in the materia medica); prepared tutty was to be mixed into Ointment of Spermaceti. Lewis criticized the use



of butter by Edinburgh and others, noting that the ointment prepared this way was often rancid. He also asserted that calamine was unnecessary, since tutty possessed all the necessary virtues. Quincy wrote of the ointment, "this is not very often referred to in Prescription, but it is in great esteem amongst the common People."

Tutty, an oxide of zinc, was created as a natural by-product in the production of brass, but this was quite crude, and the tutty used in medicine was usually purified by successively heating it and pouring in rose water several times. Hill believed that it should not to be identified with the cadmia or tutty of the Ancients, though some Arab writers had. He noted that in the past the supply had often been through Alexandria, but that at present it was mostly imported from Germany and Sweden. Tutty was highly valued for treating inflamed or sore eyes, because, according to Brookes, "it cleanses and dries without Corrosion or Sharpness." Hill commented, "Tutty stands foremost in the Rank of ophthalmic Remedies: It is abstergent and desiccative, but without any Erosion, whence it is of very happy Use in Ulcerations of the Parts about the Eye, either in Form of Unguent or a Collyrium." The common collyrium of tutty in rose water was, in his estimation, good for "Itchings of the Eyelids."

Neither unguentum tutiae nor tutty is listed in the "Dispensatory" of 1746 or in any comparator, but it is possible that tutty-based collyria and ointments were widely used in the army. Sloane's ointment, which included bloodstone, aloes, and pearl, as well as tutty and viper fat, appears to have been used in army hospitals of the period. The editor of *Practice* recommended applying it to slightly opened eyes, using a camel's hair pencil. Venesection, applying leeches to the temples and blisters to the nape and shoulders (to divert humors), plus giving a dose of Valerian root would, he suggested, aid efficacy. The ointment of tutty is not mentioned in the Wellcome sample, but tutty itself is included in 16 recipes.

**Sources:** Brookes, *General Dispensatory*, pp. 125, 347-48; Healde, *New Pharmacopoeia*, p. 305; Hill, *History of the Materia Medica*, pp. 87-88; Lewis, *New Dispensatory*, pp. 224-25, 511; *Practice of the British and French Hospitals*, p. 74; Quincy, *Dispensatory*, pp. 191-92.

Urine; see "dung (*stercora*) and urine"

Vinegar; see *acetum*

***Vipera:***

Viper fat and flesh had been used medicinally since Ancient times. The Ancients had regarded the flesh as nutritive, restorative, and cordial. Hill thought it could be most easily consumed in chicken broth. Alston wrote, "Vipers are antacid, very nourishing, and of easy digestion." Vipers had a reputation of being sudorific and alexipharmic, though Alston had his doubts. Viper oil had traditionally been used to discuss tumors and to revive swooners. Lemery praised *sal volatile viperarum*, but Alston thought it no better than *sal vol. c.c.* (q.v.). Vipers were thought to resist poisons, and some 18th-century writers like Theobald continued to recommend applying viper fat to snakebite (Buchan also recommended sucking out the venom). Because of the same perceived virtue, vipers were a standard component of treacles (see under *theriac Andromachi*). The fat was also included in some recipes for eye ointments (cf. *RP*, p. 249. However, medicinal use of the fat was in sharp decline by the mid-18th century, and indeed London dropped it from the materia medica in 1746 (although it was included in *ung. Tutiae*; q.v.). This may have been because lard had replaced it, as well as other fats, but viper fat also had a tendency to quickly turn rancid and putrefy. Nevertheless, the main reason for the fall was a growing sense in the profession that the viper was of almost no value to medicine. Lewis wrote that viper flesh was nutritious, but that tinctures and wines received no virtues from it, and Rotheram asserted that claims made for its medicinal value were exaggerated. Parr went still further, writing, "the supposition of its virtues is a mark only of the credulity of the ancients, and of their blind implicit followers."

No part of the viper is included in any army list, though some compounds containing the flesh or fat are. It is seldom mentioned in army medical literature. There are four references to vipers in the Wellcome sample, and one to snake skin, variety unspecified. The sample includes a number of recipes

to remedy snakebite.

**Sources:** Alston, *Lectures on the Materia Medica*, II, 513-18; Buchan, *Domestic Medicine*, p. 349; Cullen, *A Treatise of the Materia Medica*, II, 281; Hill, *History of the Materia Medica*, pp. 826-30; Lewis, *New Dispensatory*, pp. 224-25; Lewis/Rotheram, *The Edinburgh New Dispensatory*, p. 262; Mead, *Medical Works*, p. 32; *Practice of the British and French Hospitals*, p. 74 ("Sir Hans Sloane's unguent for the eyes"); Parr, *London Medical Dictionary*, II, 494; Theobald, *Every Man His Own Physician*, p. 5.

### ***Vitellum ovi*/eggyolk:**

The white, yolk, and shell of the hen's egg (*Ovum gallinaceum*) were official, but it was the yolk that was most used in professional medicine during the 18<sup>th</sup> century, and that mainly as a medium (cf. *RP*, nn. 208, 284). Salmon recommended a caudle consisting of eggyolk, sugar, wine, and spices, claiming that it was effective in treating flux and gonorrhoea (cf. *RP*, pp. 173, 292).

Eggs for army use would have been purchased locally, and for this reason they do not appear on any army lists. Eggs (part unspecified, yolk, white, shell), almost always from hens (stated or implied), appear in 338 lists or recipes in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 85; Healde, *New Pharmacopoeia*, p. 42; *Practice of the British and French Hospitals*, pp. 49 ("electuary against the gravel and stone"), 50 ("nephritic electuary"), 57 ("turpentine clyster"); Quincy, *Dispensatory*, p. 352; Salmon, *New London Dispensatory*, p. 227.

### **VITRIOL:**

Three forms of vitriol were official in 18th-century Britain. *Vitriolum Romanum* (Roman vitriol; renamed *vitriolum caeruleum* [blue vitriol] in 1746 ed. of *Pharm. Lond.* and *cuprum vitriolatum* ["vitriolated copper"] in 1788 ed.) was primarily imported from Cyprus and Hungary (nicknames reflected these origins) and was not mined, but was crystallized from sulfurous water through

evaporation. It had a heavy copper content. This form of vitriol was used in Greek medicine. *Vitreolum album* (white vitriol) was a salt mined in Germany, especially at Gostar. at various sites in England (e.g., Deptford) and also imported. Authorities debated how it differed from green vitriol, and what accounted for its whiteness, though most ascribed it to an admixture of zinc. *Vitriolum viride* (green vitriol; also known as copperas) was mainly mined in southern England and was sometimes called English vitriol. All three forms were used in compounding official drugs, and some recipes did not specify which was to be used, but green vitriol, from which sulfuric acid was derived, was the most important. Vitriol was also used as a simple. In 18th-century British practice, it was sometimes administered internally, as an emetic (though Lewis, among others, regarded it as dangerously violent), tonic, or astringent, and Wesley recommended it for combating ague. Probably more often, however, it was applied externally. It was a common escharotic, and was also used to remove warts and to reduce hemorrhoids and proud flesh and to stop hemorrhaging.

*Elixir vitrioli:*

Elixir of Vitriol was listed only in the *Pharm. Edin.* and was prepared by digesting for three days a mixture of oil of vitriol and rectified spirit of wine, then adding cinnamon, ginger, and peppermint, and finally filtering. It had been adapted from the more complex *elixir vitrioli Mynsichti* ("Mynsicht's Elixir of Vitriol," named for Adrian von Mynsicht, its supposed developer; cf. emetic tartar, under "antimonials"), of which Salmon had written, "there is scarcely a more noble and efficacious Stomack, in the whole republick of Medicine." Quincy also considered it an excellent stomachic, useful especially in the wake of debauches. It appears to have been quite a popular drug, and it was a favorite of Wesley's, who valued it not only as a stomachic, but for treating coughs and asthma. It was listed in the "Dispensatory" -- both in the general list and in the list of drugs for medicine chests -- and in most later comparator lists. Theobald saw it as useful for any "Disorder proceeding from too lax a State of the Solids. This Medicine will sometimes avail, when all others have proved entirely ineffectual." Besides being

administered itself, it was used to acidulate medicines that were given to patients with putrid or low conditions, and it was often given to assist the bark. Mynsicht's Elixir was last included in the *Pharm. Lond.* in the 1721 ed., being then based on Bate's recipe and including 12 ingredients. James thought it "improperly crouded" with ingredients that were just marginally useful and sated the menstruum, preventing it from properly absorbing the more active components (he noted that this was often a problem in elixirs). Pemberton regarded some of the ingredients as not only unnecessary but "even ridiculous," and the 1746 ed. included a simpler recipe, for a drug now named *elixir vitrioli acidum*.

#### *Oleum vitrioli:*

Oil of vitriol, also known as strong spirit of vitriol (*spiritus vitrioli fortis*; renamed *acidum vitriolicum* in 1788 ed.) or colcothar – although this term was also applied to any reddish calx of vitriol – this was prepared (London method; *Pharm. Lond.*, 1746) by distilling calcined vitriol for three days in a furnace, then further, in a sand heat; weak spirit of vitriol, which was also used medicinally, was likewise derived in this process. Despite its corrosive nature, the oil (sulfuric acid) was widely used in medicine, either by itself (diluted) or in compounds, both internally and externally. It was valued as a pectoral and a diuretic, and some authorities deemed it a good stomachic and febrifuge. Fever patients often received it in juleps, which were intended to cool them and quench thirst. Oil of vitreol is listed in the "Dispensatory" of 1746 and in several comparator lists. In one form or another, it was a staple of army practice, and the active ingredient in many compositions.

#### *Sal vitreoli:*

Sometimes called "gilla of vitriol," the London version of sal vitrioli was renamed *zincum vitriolatum purificatum* (Purified Vitriolated Zinc) in 1788. It was white vitriol dissolved in water, then crystallized. Sometimes it was necessary to first purify the vitriol of

copper. Salt of vitriol was regarded as a mild, yet sure, emetic, and Healde commented, "It is one of the quickest in operation of those emetics which are esteemed safe."

*Spiritus vitrioli*; see above, *oleum vitrioli*

*Vitriolum Martis*; see under "chalybeates"

Vitriolum Romanum is listed twice in the "Dispensatory" of 1746 and in all but two comparator lists.

**Sources:** Alston, *Lectures on the Materia Medica*, I, 201-09; Brookes, *General Dispensatory*, pp. 129, 148-49, 163, 182-83, 296-97, 301; Healde, *New Pharmacopoeia*, pp. 6, 23, 179-80; Hill, *History of the Materia Medica*, pp. 129-33, 136-38; James, *Medicinal Dictionary*, under "tinctura"; Lewis, *New Dispensatory*, pp. 226, 272-73, 430; Lewis/Rotheram, *Edinburgh New Dispensatory*, p. 152; Pemberton, *Dispensatory*, pp. 57-58, 189-90, 193, 265-66, 280-81; Quincy, *Dispensatory*, pp. 240, 244-45, 356; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 286, 776 (under "sulphas cupri"); Salmon, *New London Dispensatory*, pp. 379, 516; Theobald, *Every Man His Own Physician*, p. 4; Theobald, *Medulla Medicinae*, p. 58; Turton, *Medical Glossary*, p. 293; Wesley, *Primitive Physic*, pp. 30, 39-40, 68, 73, 78, 149.

*Vitrum ceratum antimonii*; see under "antimonials"

### **Walnut:**

In the 1721 ed. of *Pharm. Lond.*, the bark, fruit, and shell of the walnut (*L. Juglans regia*) were listed among the materia medica. All were dropped in 1746, but the 1788 ed. included the unripe fruit. Shaw believed green walnut husks to be particularly efficacious, but Salmon cautioned that the green nut itself caused headaches and hurt the stomach and lungs. Lewis reported that the fruit was similar

in virtues to the almond (q.v.) and that the shell was astringent, but that, although the latter was used by dyers, "neither are employed in medicine." Nevertheless, the unripe walnut was considered by some to be effective as a vermifuge, and Healde reported that a watery extract prepared from it was used in this way, especially on children. Green walnuts were also used as a purgative and emmenagogue. Salmon accounted the walnut a mild emetic, but added that it was "chiefly used to expel Wind in the Cholick and Stone, to cure Diarrhoea's and Fluxes" (cf. *RP*, p. 289). Walnuts were traditionally eaten to promote the digestion of fish.

Walnuts are not included in the army lists, and while they may have been acquired locally it does not appear that they played more than a marginal role in military medicine. Walnuts are included in 58 recipes in the Wellcome sample, among them a walnut water commonly known as the "water of life."  
**Sources:** Healde, *New Pharmacopoeia*, p. 35; James, *Medicinal Dictionary*, under "nux"; Lewis, *New Dispensatory*, p. 144; Quincy, *Dispensatory*, p. 317; Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 423 (under "juglans"); Salmon, *New London Dispensatory*, pp. 21, 67, 124, 134; Shaw, *Dispensatory of Edinburgh*, p. 66n.

### ***Water parsnip:***

Although well known in popular medicine, water parsnip (*Sium sisarum*; *Sium nodistorum*) was dropped from the materia medica recognized by London in 1721, only to be restored in 1788. It was indigenous to Britain, often growing in rivers and ditches. The expressed juice of its herb was given in milk or other liquor to treat scrofula or scurvy (cf. *RP*, p. 201). It was also sometimes used as a lithontriptic, diuretic, and emmenagogue. Withering may have aided its return to respectability in the profession by reporting in an article that various skin problems had been cured by it.

Water parsnip is not listed in the "Dispensatory" of 1746 or in any comparator list. Its place in 18th-century army practice appears to have been negligible. It is mentioned only once in the Wellcome sample.

**Sources:** Healde, *New Pharmacopoeia*, pp. 57-58; Parr, *London Medical Dictionary*, II, 354, under

"sium"; Salmon, *New London Dispensatory*, pp. 86-87; Woodville, *Medical Botany*, III, 494.

Whey; see under "milk"

### **WINES and SPIRITS:**

Wine had been accorded a high place in medical practice by the Greeks and was a standard in medieval British practice. In 18<sup>th</sup>-century Britain, four grape wines were routinely stocked in shops as menstrua and for other medicinal purposes, these being mountain (*Vinum album Hispanicum*), canary or sack (*V. Canarium*), Rhenish (*V. Rhenanum*), and port (*V. Rhubrum*). Medicinally, wines were generally used to: counter debility and dejection (though it was recognized that wine was sedative and depressive in large quantities); strengthen the stomach and enhance appetite (this especially held of red wines); warm the body and encourage perspiration; promote blood flow, quicken the circulation, and raise the pulse. Wine was the preeminent cordial in British medicine. It was a common -- perhaps the most common -- vehicle for administering drugs. Red wines were considered astringent, while whites were regarded as mildly laxative. Many authorities encouraged people to drink wine in order to ward off ague and malignant diseases. Wine was considered antiseptic, and it was widely given to patients who were suffering from, or were thought at risk for, putrid conditions like gangrene. Claret, Madeira, and port were often used in Britain to combat typhus, especially to counter debility and low pulse and to stimulate appetite. That wine was so widely used was of concern to some writers. Bell complained, "there is no remedy in the materia medica prescribed so frequently as wine, with so little attention to the circumstances which ought to direct or forbid its use, or to regulate the quantity in which it is employed." The abuse of wine, especially white, was thought to promote gout, calculus, and other health problems. Hooper warned that sweet wines became ascescent on reaching the stomach.

Spirits were often rubbed on to relieve cutaneous problems; Wesley recommended an application of strong rum to treat the itch. Taken inwardly, Brookes asserted, spirits were stomachic, tonic, and restorative, and useful in treating such problems as lethargy, apoplexy, and palsy, as well as



common fatigue and anxiety. On the other hand, he warned that excessive consumption of spirits agitated the humors and destroyed "the Balsamic Parts of the Blood," which in turn damaged the solids and prevented them from performing their normal functions, causing want of appetite and damaging the viscera and liver. He also noted that drunkenness was habit-forming, and that excessive drinking promoted the very lethargy that was combated by "Spirits taken moderately, and more out of Necessity than for Pleasure." Culpeper cautioned that young people and others with hot constitutions should not imbibe spirits, since they were heating. Prior to the 1780's, army medical authorities, including Pringle, tended to endorse the medicinal use of spirits and lauded a liquor ration as prophylactic. Late in the century, however, writers on army medicine came increasingly to see the consumption of spirits as dangerous.

*Spiritus vinosus rectificatus:*

Rectified spirit of wine was prepared by repeatedly distilling, over a gentle heat, a spirit (both London and Edinburgh prescribed brandy), to the point where it contained 95% alcohol, 5% water, and had a specific gravity (as specified by the RCPL) of 835; the Edinburgh process included an extra step, in which salt of tartar was added, then distilled out. The spirit was sometimes applied externally to strengthen the vessels, and was therefore used as a styptic. If given internally in small doses, diluted, it could, according to Lewis, "brace up the fibres, raise the spirits, and promote agility," but he added that in large quantities it could cause palsy, apoplexy, or even death. Perhaps the main use of rectified spirit was as a menstruum.

*Spiritus vinosus tenuior:*

Proof spirit was prepared by adding distilled water to rectified spirit, so that the end result, as directed by London, contained 55% alcohol and 45% water, and had a specific gravity of 930; the Edinburgh recipe called for mixing equal parts rectified spirit and water. Lewis stressed the importance of providing a consistent product. Proof spirit was intended to dissolve

both resin and volatile oil, as did rectified spirit, but also gum and salts, as did water. It was the standard medium for tinctures, and along with vinegar (q.v., "acetum"), water (often heated), and rectified spirit, it was one of the four official menstrua of 18th-century medicine.

*Vinum emeticum*; see under "antimonials"

**Sources:** Bell, *Inquiry into the Causes which Produce, and the Means of Preventing Diseases among British Officers, Soldiers, and Others in the West Indies*, p. 30; Brookes, *General Dispensatory*, p. 153; Culpeper, *Pharmacopoeia Londinensis*, p. 101; James, *Medicinal Dictionary*, "vinum"; Kopperman, "The Cheapest Pay," pp. 461-63; Lewis/Rotheram, *The Edinburgh New Dispensatory*, pp. 245-46, 261; Quincy/Hooper, *Quincy's Lexicon-Medicum*, pp. 207 ("claret"), 762, 864; Wesley, *Primitive Physic*, pp. 46, 108.

### **Winter's Bark:**

Winter's bark (*cortex Winteranus*) was named after Captain William Winter, who reputedly discovered it near the Straits of Magellan during a voyage in 1567 or in 1578-79, and used it to treat scurvy in his crew. During the 18th century, the original bark was increasingly replaced by another, *canella alba*, which was often called "Winter's Bark" and had the same virtues as the former. By 1746, the RCPL was equating *canella alba* with Winter's Bark, though Lewis (as well as John Fothergill and Cullen) continued to insist that the two were different, the latter tasting "much warmer and more pungent." Increasingly, those who distinguished between the two favored *canella alba* medicinally. During the 18th century, the drugs still served as antiscorbutics, but were more valued as stomachics, cordials, and sudorifics, and were used to treat such problems as visceral obstructions and stomach disorders. According to Woodville, *canella alba* was most often used as an aromatic, making nauseating drugs more palatable.

*Cortex Winteranus* is listed in the "Dispensatory" of 1746 and in three comparators. *Canella alba*

is not listed. Winter's bark is included in four recipes in *Practice*, but references to it in army medical literature are few. There are two references to it, and none to canella alba, in the Wellcome sample.

**Sources:** Brookes, *General Dispensatory*, p. 132; Buchan, *Domestic Medicine*, pp. 112, 288-89, 304n; Cullen, *A Treatise of the Materia Medica*, II, 144; Lewis/Rotheram, *Edinburgh New Dispensatory*, pp. 264-65; Monro, *Observations on the Means of Preserving the Health of Soldiers*, II, 186n; Parr, *London Medical Dictionary*, I, 335; *Practice of the British and French Hospitals*, pp. 46 ("chalybeate electuary"), 51 ("electuary in the rheumatism"), 52 ("stomachic and antiscorbutic electuary"), 58 ("bitter infusion with steel"); Quincy/Hooper, *Quincy's Lexicon-Medicum*, p. 162 ("canella alba"); Woodville, *Medical Botany*, II, 318-21.

### **Wood decoction:**

A drug known as the wood decoction (*decoctum lignorum*) was official only in *Pharm. Edin.*, which directed that it be prepared by combining of guaiacum wood and stoned raisins (qq.v.) in spring water, boiling down., then adding shavings of licorice (q.v.) and raspings of sassafras wood and finally straining and pouring off the clear liquor. Sassafras was much esteemed by Boerhaave. It was imported from America, esp. Virginia and Brazil. A sudorific and diuretic, it was often used to treat venereal disease.

It appears that during the 18th century wood decoction was mainly applied as a sudorific. Earlier, it had been thought by some to be a specific for venereal disease, and while Sydenham considered it ineffective it continued to be used in this way. Brookes recommended drinking at least 1 qt. per day to treat venereal disease, but also catarrh, obstructed viscera, rheumatism, gout, leprosy, and palsy. Lewis considered the decoction useful in any "cold phlegmatic habits" and a good assistant for mercurial or antimonial alteratives, because it kept the patient warm.

This decoction is not included in any army list and appears to have been little used in military or professional practice. Monro did, however, report that it was useful in treating palsy -- significantly, a "cold" problem. Cost may have been a factor in keeping army use down. Hamilton thought the

decoction to be appropriate for officers, since they paid for their medicines. There is no reference to a "wood decoction" in the Wellcome sample, nor to any preparation similar to it in composition. Sassafras is mentioned in 81 recipes, quite a high number for a medicinal so recently introduced in Britain.

**Sources:** Brookes, *General Dispensatory*, pp. 109, 198-99; Buchan, *Domestic Medicine*, pp. 191n, 271; Hamilton, *Duties of a Regimental Surgeon Considered*, I, 198; James, *Medicinal Dictionary*, under "sassafras"; Lewis, *New Dispensatory*, pp. 391-92; Monro, *Observations*, II, 144; *Practice of the British and French Hospitals*, p. 67 ("mercurial pills"); Sydenham, *Whole Works*, p. 252.

## ***APPENDIX C-2: BUCHANAN'S USE OF DRUGS***

[Drugs marked with an asterisk (\*) are discussed in the footnote that accompanies the initial reference to them in *RP*. On all other drugs, see entries in app. C-1. "FP" will be the shorthand designator for the concluding portion of this appendix, "formulas and prescriptions noted by Buchanan"; references to FP are intended to direct the reader to particular formulas mentioned by Buchanan, e.g. "FP-a-1" refers to the first entry under the heading for formulas that were apparently created or used by Buchanan. Articles of diet are included in this section only when they are modified to serve a medicinal purpose, e.g. scorbutic whey; different forms of simple drugs are listed together, e.g. powdered opium with opium; so are varieties, e.g. white vitriol under vitriol heading; Items are listed only in cases where they play a medicinal role; e.g. the reference to spirit of hartshorn (*spiritus cornu cervi*) on *ms. p. 85* is listed, since the spirit is used medicinally (as a sudorific), but the use of the item in Buchanan's experiments on gall (*p. 63*) is not listed. Classical references to medicinal items -- most, though not all, occurring in Hippocratic prescriptions -- are not listed. Provided that Buchanan notes them in his text, individual ingredients in compound drugs are listed in the table below. The part and purpose of the component will be discussed to the extent possible, but Buchanan's aim and assessment can be judged only in terms of the compound, since this, rather than the ingredients, is what he prescribed and evaluated.

In suggesting orders of probability, I have used the following criteria:

- A. In characterizing "JB's assessment of value," I have assumed that if he recommends use of a drug that he has tried when treating a given condition, he does so because he has perceived it to work; e.g., when he writes (*p. 123*) that "if the Uvula be relaxed gargle with Brandy & Vinegar or Aq: Alum," I take this to imply that he has found these remedies to be useful. It is, however, possible that he is merely citing advice that he has heard or read.
- B. I note Buchanan as the prescriber unequivocally only if he states this clearly in his journal. If he notes that the patient or patients in a given case were troopers in the Blues

and were treated by medical personnel, I cite him as the “apparent” or (if the usage is less clear) “probable” prescriber

Name	ms. page	simple or compound (component in compound)	prescriber or user	internal or external	disease, symptom, or condition	intended effect or purpose	JB's assessment of value
<i>acetum/</i> vinegar	37,	compound		.		vehicle	see popular R 1
	53,	mixed with water gruel	hospital	internal	diet in smallpox	acidulation; perhaps medicinal aims	n.m.
	85,	mixed with water gruel	appar. JB	internal	inflammatory fever	acidulating gruel; drink is appar. to promote sweat	drink is "an excellent medicine at this time"
	123,	mixed with brandy	JB	in mouth	relaxed uvula	gargle	appar. gargle is effective
	177,	applied with water	"some use" (not JB)	external	paraphimosis	relaxing prepuce	n.m.
209,	applied with brandy	"some use" (not	external	bruises	reduce swelling;	n.m.	

<i>Aethiopsis mineralis</i>	197,	in substance	JB	internal	scurvy	appar. purgation; perhaps also healing sores	appar. success (an early component in JB's therapy)
	233,	in substance	appar. farriers	internal	worms in horses	vermifuge	n.m.
	251	in substance	appar. farriers	internal	swollen legs (in horses)	appar. a cathartic	n.m.
Albermarle R̄	315	ointment		external	to treat horses that had hair rubbed off by trusses	"to make the hair grow in 24 hours"	"I never remember any thing of its good effect"
alum	37,	mixture	troops	internal	ague	cure	see popular R̄ 2
	245	ingredient in "Sharpwater"	unclear	in mouth	canker (in horses)	cure	see "Sharpwater"
angelica	183	powdered, applied in substance	prob. JB	external	venereal buboes	ripen bubo, prior to excision	implies success



aniseed	253	compound					see “Markham’s Balls”
* <i>antemet-icum nostrum</i>	62	compound	prob. JB	internal	“yellow fever”	control vomiting	effective “in some measure”
apple (rotten, roasted)	211	applied in substance	troops	external	black eyes	unclear; perhaps to soothe	no assessment
<i>aqua aluminosa</i>	123	taken alone	prob. JB	in mouth	relaxed uvula	to brace uvula	implies success
* <i>aqua benedicta</i>	201	taken with <i>pil. merc. nost.</i>	JB	internal	scurvy	to cure	implies success; combination taken when patient can no longer tolerate scorbutic juices
* <i>aqua cichorum menthae</i>	frag.	in $\mathbb{R}$ for administering rhubarb					see FP-b-14
* <i>aqua fortis</i>	19	in $\mathbb{R}$ for ointment			to extinguish mercury		see <i>unguentum nostrum ad scabiem</i> ; FP-b-1
<i>aqua hordeum</i> /barley water (or gruel)	143, 173	gruel with currants mixed with egg yolk	JB JB	internal injection into urethra	costiveness chordee	laxative purpose not stated	implies success implies success

<i>argentum vivum</i>	19,	in R̄ for ointment				base	see <i>unguentum nostrum ad scabiem</i> ; FP-b-1
	192	in pills (R̄ not noted)	hospital	internal	venereal disease	introducing mercury (to cure)	focus of mercurial course that “seldom faile of a cure”
artichoke	133	decoction, in water or small beer	appar. folk remedy	internal	jaundice	“by some esteemed a specific in this disorder”	“I never had occasion to use”
asafetida	295,	given in a glass of strong wine	JB	internal	weakness and depression of recuperating soldiers	tonic, antidepressant	“proved a good medicine”
	315	in R̄ for ointment				precise purpose unclear	see Albemarle R̄
<i>auxungia porcina</i> /lard	19,	in R̄ for ointment				excipient	see <i>unguentum nostrum ad scabiem</i> ; FP-b-1
	315	in R̄ for ointment				appar. excipient	see Albemarle R̄

<i>balsamum Locatelli</i>	247,	applied in substance	appar. JB	external	excoriated eyelashes	to heal	“heals them”
	255	applied in substance	appar. JB	external	lips sore and blistered from sun	to heal	“soon cured”
<i>balsamum sulphurous anisatum</i>	125,	JB often added laudanum	JB	internal	coughs	pectoral	“a good medicine in old habituale coughs”
	127,	in R̄ for capsule	JB	internal	coughs	pectoral	“a favorite with our Men”; JB does not express opinion on value see FP-b-3
<i>balsamum traumaticum (balsam universale)</i>	205,	compound; JB covered it with digestive	JB	external	lacerated shin	dressing	JB “commonly” dresses with it, suggesting his endorsement
	208,	applied with feather	unclear	external	cut horse-tail	dressing	implied endorsement
	269		unclear	external	slight wounds	dressing; by implication, standard	JB expresses no opinion

<i>balsamum terebinthinae</i>	239	compound	appar. JB	external	whitlows	dressing	no opinion, but the fact that this is the only dressing noted by JB may suggest approval
basilicon	253	compound; JB applies with <i>unguentum Aegyptiacum</i>	JB	external	cracked heels (of horses)	dressing, digestive	JB considers it “cleaning and healing”
bay	203	in poultice, with milk	“old women”	external	ulcer	heal	though women think it “infallible remedy,” failed when tried by officer in Blues
becabunga	199	compound juice					see “Scorbutic juices”
blea-berry, bilberry	285	simple	troops	internal	dysentery	cure, perhaps specific	men “found them of great service in stopping the flux”; JB offers no opinion
<i>bolus ad rheumatis-mus nostrum</i> with opium	121, 299	compound	appar. JB	internal	rheumatic fever	cure	“always removed” complaints

<i>bolus laxans noster</i>	137	compound, adminis- tered with marshmal- low tea	unclear	internal	gravel	laxative	no opinion, though JB notes that in treating gravel “the body should always be kept open”
box	233	cut small, served with oats	prob. farriers	internal	worms (in horses)	vermi- fuge	remedy “is much esteemed,” but JB offers no opinion
bran	253	mixed with flowers of sulfur and antimony	prob. farriers	internal	greased horses	cathartic	“scours and cleans the body”

brandy	7,	applied alone	troops	external	bruised shins	heal	“cured” problem
	9,	appar. drunk alone	troops	internal	colds, gripes	appar. cure	no assessment
	25,	bark mixed in	appar. JB	internal	ague	prob. used only as vehicle, though perhaps for medical benefit	bark effective
	40,	drunk alone	popular	internal	ague	touted as “infallible remedy”	mistakenly not taken; no JB assessment

brandy	51,	mixed with sugar into “common drink” of patients	popular	internal	smallpox	to enhance flavor; perhaps a cordial	JB does not assess this, but notes that patients “did well” on regimen
	123,	gargled with vinegar	uncertain	in mouth	relaxed uvula in quinsy	brace uvula	implied approval
	177,	used with oil	appar. JB	external	paraphimosis	unclear	no assessment
	187,	deflagrated with <i>merc. precip. ruber</i> ; used as pills	unclear	internal	venereal eruptions	appar. just a vehicle	positive assessment of pills
	209,	applied in substance	troops	external	bruises	heal	no assessment
	209,	fomentation, with water	unclear	external	bruises	unclear	“a good fomentation”
	213,	applied with bandage and compress	French	external	sprains	unclear	no assessment

brandy	248,	mixed with milk and water	JB	external	excoriated eyelashes; perhaps sore eyes	appar. soothing, healing	“had I concealed it as a nostrum, it might have passed for a fam-ous Eye water”
	249,	mixed with water	“custom with some”	external	smarting eyes	soothe	no opinion, but JB prob. positive, as with preceding
	268,	alone, or mixed with <i>sal. Mart.</i> or <i>sachar. Saturn.</i>	appar. JB	external	wounds	styptic	“just as good” as Eaton’s Styptic
	273,	added to fomentation of milk and water	JB	external	contusions	unclear	in confined area, preferable to fomentation of herbs, which has strong odor
	284,	applied as wash and on lint	French	external	wounds	cleanse	no opinion
289,	burnt brandy mixed with diascordium  mixed with	unclear	internal	dysentery	vehicle for diascordium	brandy preferable to French gin	



butter	175,	fomenta- tion, with small beer, fat broth					popular R --
	229,	mixed with roasted onion	JB	in ear	boils in ear	vehicle; perhaps also used as emol- lient	implied success
	325	mixed with <i>merc. prec.</i> <i>ruber</i>	troops	external	hair/scalp vermin	kill vermin	no opinion

calomel	17,	alone, in small dose	appar. JB	internal	obstinate itch	appar. cure through mercury	aftds. purged; implied success
	133,	appar. given with <i>pil. cocc.</i>	“much in use” (un- clear by whom)	internal	jaundice	calomel prob. to enhance cathartic value of <i>pil. cocc.</i>	no comment
	163	given with <i>pil. cocc.</i>	unclear	internal	gout	to speed cathartic action of <i>pil. cocc.</i>	patient “briskly purged”
	171,	“calomel purges”	JB	internal	gonorrhoea	cathartic	initiates JB treatment
	173,	given after manna and salts	JB	internal	gonorrhoea	appar. as specific, though perhaps also as laxative	given to officers (men think it weak); “made a cure in three weeks time”
	187,	alone, in small dose	appar. JB	internal	venereal eruptions	as spe- cific cure	effective over extended period; causes slight

camphor	29,  85,  173,  293	in R̄  small amt. in <i>ther.</i> <i>Androm.</i>  JB compound  “camphor- ated bolus- es” much used	JB  JB  prob. JB	  internal  internal	  inflam- matory fever  slow fever	  combin- ation a sudorific  appar. intended to stimu- late	see FP-a-1  JB appar. feels this useful as sudorific, but warns against forcing large sweats too soon  see FP-a-5  no appraisal
candle-wax	251	melted wax mixed with oil	officers	external	sunburnt face	appar. soothe and heal	“a good Liniment”
<i>cera alba</i>	19	compound nostrum	JB				see <i>unguentum nostrum ad scabiem</i>

<i>ceratum lapis calaminaris</i>	239,	compound, applied alone	JB	external	burns and scalds	healing opened blisters	JB reports success
	255	applied alone	appar. JB	external	sore feet	appar. to heal ex- coria- tions between toes	no assessment
cerecloth, “searcloth”	211- 15	encased limb	troops	external	sprains	to heal	JB doubts value
chalybeate water	31	drunk	unclear	internal	equine ague	cure	horse cured by water and bark
chamomile	211,	fomenta- tion of flowers in warm milk	JB	external	black eyes	prob. soothe, perhaps heal	no opinion, but note that he “often” uses this suggests approval
	247,	flowers in warm milk	JB	external	sore eyes	appar. soothe	prefers to “com- mon eye-waters”
	inter- leaf 1 & 2, 297- 98,	tea	popular	internal	slow fever	unclear, though c. tea a common remedy for fever	patient recovered, consuming only this and whey, being also blistered

cherry water	62	infused with sheep dung				c. water perhaps just for flavor and as vehicle	see entry for dung
cinnabar	171	fumigant	hospital	external	venereal disease	heal buboes	JB unimpressed, but notes viru- lence of case
cinnamon	61	cinnamon water	Scottish folk remedy	internal	smallpox	cordial	no opinion
<i>conserva absinthii</i>	29	compound				vehicle; perhaps active purpose as well	see FP-a-1

<i>conserva rosarum</i>	99,	given each morning with whey	JB	internal	inflam- matory fever	prob. tone stomach; whey as laxative	JB has “seen weake people re- cover strength wonderfully, & ascribe their re- covery to this simple remedy”
	127,	in com- pound	popular				see FP-b-3
	165,	given with warm milk	unclear; perhaps Flemish	internal	consump- tion	some thought <i>con. ros.</i> cured phthisis	no opinion
	211	used alone	troops	external	black eyes	heal	no opinion
<i>cortex cascarillae</i>	frag.	given alone	Degner	internal	dysentery	astrin- gent	no opinion

<i>cortex Peruvianus</i> /[Peruvian] bark	25-43,	“I think it best in Substance” (p. 29); gin, wine, or brandy as vehicle; included in one R̄ (see FP-a-1); also (p. 31), in plaster, for localized ague; opiates given with bark if it purges (p. 43)	generally JB; some references imprecise	internal, except for plasters	ague	specific	of ingested bark: “if the disease once form into a regular Ague, I am certaine it will cure and nev-er saw it faile” (p. 29); does credit report of failure (p. 39); plasters used on local ague “with success” (p. 31)
	59,	with milk and sugar	popular (Scottish nurses)	enema	smallpox	unclear; perhaps as as-tringent	no opinion
	97,	in sub-stance or tincture, given in wine	JB	internal	inflam-matory patients, in recu-peration	treating fever and chill	“removes” prob-lem, preventing relapse

<i>c. Peruv.</i> , extract	285	given alone	JB	internal	dysentery	counter mortifi- cation of bowels	“often succeeded well”
<i>crocus metallorum</i>	233	given alone	farriers	internal	worms (in horses)	vermi- fuge	no comment
cummin	253	in R̄	farriers				see FP-b-11
currant jelly	59	unclear; perhaps alone, per- haps com- bined with honey of roses and green tea	popular (Scottish nurses)	in mouth	smallpox	wash mouth, perhaps heal sores	no comment
*Daffy's Elixir	161	alone	officer	internal	gout	cathartic	no comment
* <i>decoctio febris amarus Fuller</i>	27,  29	given with sal am- moniac  in com- pound R̄	hospital  JB	internal	ague	decoc- tion served as bitter	drug given when bark failed; “I have often seen it succeed”  see FP-a-1



<i>*decoctio serpentaria</i>	63,	appar. alone	unclear	internal	“yellow fever”	prob. as stimulant, possibly also as diaphoretic	no comment
	64,	appar. alone	unclear	internal	“yellow fever”	same as preceding	no comment, though patient recovered
	293	appar. alone	unclear	internal	slow fever	appar. as stimulant	“the chief medicine” in this course, but no opinion on value
<i>decoctio simarubae</i>	frag.	with gum tragacanth or gum Arabic	Degner	internal	dysentery	treating gripes	no opinion

<i>decoctum album</i>	11,	rhubarb and <i>pil.</i> <i>Mathiae</i> in <i>decoc. alb.</i> (with gum Arabic)	JB	internal	gripes and looseness	<i>decoc.</i> <i>alb.</i> a vehicle; also, prob. to correct loose- ness	this mixture “completed the cure”
	192	appar. given alone	hospital	internal	venereal disease	to check gripes & loose- ness	no opinion, but this and gum Arabic were pa- tients’ “ordinary drink” for this purpose
◆ <i>decoctum diascordium</i>	51,  192	in R̄  although <i>decoc.</i> <i>diascord.</i> was an opiate, given with additional opium	appar. JB  hospital	  internal	  venereal disease	  to check gripes & loose- ness	see FP-a-2  no opinion

<i>decoctum nitrosum</i>	62, 83	simple R  JB specifies Edinburgh version; appar given with sugar (or manna, if patient costive)	JB  appar. JB	internal	inflammatory fever	unclear, but prob. given as a febrifuge & possibly as a laxative	see FP-a-2  JB appar. sees value of this application, describing drug as “an excellent medicine & a neat form”
diagrydium	231	R	unclear; perhaps JB				see FP-b-7
<i>diapente</i>	253	R	appar. farriers				see FP-b-11
diascordium	252, 281, 289	R  given in burnt gin  given in burnt brandy (French gin poor)	appar. hospital  appar. JB  uncertain	internal  internal	dysentery  dysentery	control gripes  appar. for dysentery (gripes not mentioned)	see FP-b-10  “seldom failed of removing the grieps”  no appraisal
digestive, unspecified							

dung	62,	sheep dung infused in cherry water	popular (nurses)	internal	smallpox	promote eruption	no opinion
	209	cow dung and soap in milk	unclear, but appar. not JB	external	bruises	appar. to relieve pain & swelling	“an excellent poultice”
diuretics, unspecified							
elderberry rob	125	in R̄	appar. troopers				see FP-b-11
elder buds/flowers	49,	boiled in milk	appar. JB	external	smallpox	prevent pitting	implied approval
	189,	in pottage	troopers	in mouth	venereal eruptions	wash mouth, while in mercuri- al course	no comment
	211,	fomenta- tion of flowers in warm milk	JB	external	black eyes	prob. to heal, dis- perse blood	appar. positive; JB “often” uses this fomentation
	247	boiled in milk	unclear	external	sore eyes	prob. soothe	no comment

<i>electuarium lenitivum</i>	173, 231	in R̄  in R̄	JB  appar. JB				see FP-a-5  see FP-b-11
<i>elixir salutis</i>	159, 235	in simple R̄  given alone or in <i>enema com. nost.</i> , q.v.; perhaps with <i>tinc. sacr.</i> (text ambiguous)	officer  JB	internal or in enema	cholic	cathartic	see FP-b-5  JB considers <i>elix. salut.</i> a “warm” purgative
<i>elixir vitrioli</i>	95	appar. given alone	appar. JB	internal	inflammatory fever, recuperative stage	enhance appetite	this elixir is “proper to whet the appetite-”
<i>emplastrum defensivum</i>	219	applied alone	prob. JB	external	fracture	unspecified, but prob. to inhibit inflammation	no comment

<i>emplastrum diachylon cum gummis</i>	179,	applied alone	JB	external	venereal buboes	appar. to ripen	no comment, but since JB applies it “so soon as they appear” suggests approval
	227	applied alone	appar. JB	external	boils	appar. to ripen	no comment, but context suggests JB has much experience with this
<i>enema commune nostra</i>	143	applied alone	JB	enema	costiveness	laxative	no comment, but positive on general course
	235	applied alone, or with <i>elix. salut.</i> or <i>tinc. sacr.</i> (perhaps both; text ambiguous)	JB	enema	choleric	cathartic	no comment
eyewaters	247	appar. used alone	farriers	external	sore eyes	unspecified; prob. to soothe	JB has “no great dependence” on them, for vitriol content causes pain
fenugreek	253	in $\mathfrak{R}$	farriers				see FP-b-11

fig tea	121	given alone	JB	in mouth	quinsy	wash, perhaps to retard suppura- tion	no comment, but since he washes mouth “often” with this tea, re- petitive use sug- gests approval
<i>flores sulphuris</i>	15,	taken in warm milk or treacle	prob. JB	internal	itch	prob. specific cure	JB notes itch “declined daily,” but does not credit this per se
	251,	given with <i>sal prun.</i> , in oats	farriers	internal	greased legs (in horses)	prob. a laxative; perhaps diuretic	no comment
	253	given with antimony in bran	farriers	internal	greased legs (in horses)	cathar-tic	“scours & cleans the body”
fomentations							
frogs	165	swallowed whole	troopers	internal	consump- tion	appar. specific	no comment on efficacy
garlic	155	appar. eat- en alone	hospital	internal	anasarca	unclear	no comment on this; patient died

gin	9,	appar. drunk alone	troopers	internal	colds and gripes	appar. cure	no assessment
	19,	drunk alone, burnt	troopers	internal	gripes	appar. cure	no comment, but this treatment had failed in cases seen by JB
	25,	drunk with bark	JB	internal	ague	prob. just a vehicle	bark effective
	137,	mixed with <i>ol. tereb.</i>	troopers	internal	gravel	prob. a diuretic	“too hot occasion- ing bloody urine”
	179,	drunk alone, appar after <i>emp. di- ach.</i> used	troopers	internal	venereal buboes	promote suppura- tion	“makes them drunk & does not answer the intention”
	279,	diascordi- um mixed into burnt gin	JB	internal	gripes, purging, nausea	as vehi- cle; per- haps also for gripes	JB uses for “compleating the cure”
281	same	JB	internal	gripes	same	mixture “seldom failed of remov- ing the grieps”	



green tea	59	mixed with honey of roses & currant jelly	Scottish nurses	in mouth	smallpox	wash mouth, appar. heal sores	no comment
groundsell seeds	37	taken in warm water or beer	troopers from Essex	internal	ague	taken be- fore fit, to cure	JB tried rem- edy,"but never with Success"; it nauseated; only a weak sudorific

gum Arabic	11,	in <i>decoc. album</i> , q.v.					
	89,	given in patients' common drink	JB	internal	inflammatory fever	to treat strangury from blister	implies repeated use, positive impression
	171,	given in marshmallow tea	JB	internal	gonorrhoea	to treat hot urine	JB associates cures with this treatment, i.a.
	192,	given as common drink, vehicle not specified	hospital	internal	venereal disease	to treat gripes & purging from mercurial course	no comment
	frag.	dissolved in <i>decoc. simarubae</i> , q.v.					

<i>gum guaiacum</i>	125,	in R̄	“many” use, but appar. not JB				see FP-b-11
	159,	in R̄	appar. JB				see FP-b-6
	161,	appar. alone	officer	internal	gout	unclear	no comment
	171	in electu- ary with rhubarb in <i>tereb.</i> , q.v.	JB	internal	gonorrhoea	laxative	followed by wine, this keeps body open; components not assessed
	192	in pills, other in- gredients unspecified	hospital	internal	venereal disease	prob. complet- ing cure after sal- ivation	no comment on this treatment, but “seldom faile of a cure” in gen- eral course
<i>gum tragacanth</i>	frag.	dissolved in <i>decoc.</i> <i>simaru-bae</i> , q.v.					
<i>helenium</i>	253	in Mark- ham’s Balls	farriers				see FP-b-11

<i>hordeum/</i> barley/barley water	143,  173,	barley gruel with currants  eggyolk, q.v., injected with barley water	JB	internal	costive- ness	laxative	appar. approval
hot applica- tions, unspec.							
<i>hydrargyrus</i> <i>depuratus</i>	199	in R̄	used “by some”				see FP-b-8
incarnatives, unspecified							
<i>infusum</i> <i>Hispanicum</i> <i>Fuller</i>	107,  113	appar. given alone  taken with <i>pil. pect.</i> <i>nostr.</i>	JB  prob. JB	internal  internal	pleuretic fever  pleuretic fever	pectoral  pectoral	“an excellent medecine”  no comment, but the only pectoral noted in this regimen

ipecacuanha	21,	appar. given alone	prob. JB	internal	gripes & purging	emetic, given for nausea	no comment
	73,	appar. giv- en alone	JB	internal	inflam- matory fever	emetic, given for nausea emetic	“I commonly use Ipecacoan:”
	77,	given alone, wine after vomit	JB	internal	inflam- matory fever	emetic, given for nausea	JB “seldom” gives more than 1/2 dr.
	279,	given at bedtime, with opium appar. giv- en alone	JB	internal	gripes & purging	emetic, given for nausea prob. emetic, given for nausea	part of successful treatment; also used in hospital small doses; JB implies that the medicine he used in this case was preferable “good success”
	282,	6 gr., giv- en in wine	allies	internal	gripes & purging	bloody stools emetic, given for nausea	
	289,	appar. giv- en alone	JB	internal	bloody flux	emetic	
	frag.		Degner	internal	dysentery		

Irish slate	209	drunk in spruce beer	troopers	internal	bruises	unclear	no opinion; JB “never used” this
jalap	79,	appar. given alone	appar. JB	internal	inflammatory fever	cathar-tic	given “if the case require a sudden operation”
	171,	appar. given alone	JB	internal	gonorrhoea	cathar-tic	“the common purge”
	173, 231	appar. given alone	appar. JB	internal	gonorrhoea	appar. cathar-tic	brisk, “seldom attended with grieps”
James’s Fever Powders	in-ter-leaf, 297-98	appar. given alone	JB does not report giving it	internal	slow fever	appar. given as febrifuge	failed as febrifuge; sometimes purged; caused retching
<i>lac ammoniacum</i>	107	given with <i>oxymel scil.</i>	appar. JB	internal	pleuretic fever	expectorant	combination is “of great service in promoting expectoration”
<i>lac sulphuris</i>	231	in ℞	appar. JB				see FP-b-8
<i>lapis calaminaris</i>	247,	in simple ℞	apothecaries				see FP-b-9
<i>lapis contrayerva</i>	83-85,	mixed into drinks or given in powder	appar. JB	internal	inflammatory fever	sudori-fic	no comment, but appar. JB commonly uses it
	117	mixed into warm punch	prob. JB	internal	fever with eruptions	sudori-fic	promotes a “breathing sweat”

<i>lapis medicamentosus</i>	205	appar. used alone, vehicle unspecified	prob. JB	injection into urethra	venereal ulcers in urethra	prob. to heal	“dried the run-ning some measure but did not cure it”
laudanum	125-27,  233,  327,  345-47	small qty. mixed into <i>bals. sul. ani-sat.</i> , q.v. In simple R̄ appar. given alone, 120 gtt.  unspeci-fied mixture including lg. qty. of laudanum	prob. JB  appar. JB  JB	internal  internal	fits  pain after child-birth	sopori-fic  ano-dyne	see FP-a-9  patient “upon recovery found himself greatly refreshed”  no comment on analgesic value, but patient “not in the least Sicke during the passage”

lemon, lemon juice	31,	lemon eaten with peel	troopers	internal	ague, recuperant stage	appar. to a-void or moderate fit to take	no comment
	41-43,	slice eaten	JB	internal	ague	off taste of bark	JB's own case; no indication of disappointment
	81,	sm. qty. lemon or orange juice and <i>sal prun.</i> added to sage tea	JB	internal	fever	relieve thirst; other intentions not specified	"a pleasant & gently sudorifick" drink
	105,	lemon or orange juice added to bran tea; cf. licorice in R̄	JB	internal	pleuretic fever	juice is to relieve thirst	successful thirst-quencher; cf. bran tea
	199,		unclear (J treating officer, but R̄ may be popular)				see FP-a-8



licorice, licorice juice	105,	two uses: (1) sliced licorice added to bran tea;	JB	internal	coughs in pleuretic fever	licorice is prob. to enhance flavor, quench thirst, quiet cough	see bran tea
	105-07	(2) licorice juice, taken at bedtime	JB	internal	coughs in pleuretic fever	quiet cough, moisten throat	“this is one of the best pectorals”
limewater	141	saponaceous pills, q.v., mixed in					
<i>*linimentum ad ulcera venerea nostra</i>	177	appar. applied alone	JB	external	chancres	removal	nostrum capable of “dissolving them insensibly without pain & have been often surprized at its good success”
<i>linimentum arcae</i>	284	appar. applied with olive oil	Hanoverian hospital	external	wounds	digestive	“their common Digestive”; no comment

* <i>linimentum commune nostra</i>	259	appar. applied alone	prob. JB	external	insect bites	prob. calm itch, promote healing	when liniment rubbed in, “all complaints ceased”
* <i>linimentum volatile nostrum</i>	121,	applied alone, after fomenting affected region	prob. JB	external	rheumatic pains	appar.relieving pain	no comment, but this appears to be a common treatment by JB, implying his approval
	211,	appar. applied alone	prob. JB	external	sprains	unclear	liniment will “answer the purpose with proper bandage &c:”
	221,	appar. applied alone	prob. JB	external	bruised ankle and instep	prob. to loosen up area	affected area “always remained thick & stiff”
	239,	appar. applied alone	JB	external	blisters from burns and scalds	unclear; perhaps to relieve pain	no comment, but this is the only remedy JB notes for preparing blisters for lancing
	305	appar. applied alone	prob. JB	external	lumbago	prob. to relieve pain	no comment

*liniment, unnamed	247	℞	apothecaries				see FP-b-11
linseed	105,	linseed tea, sweetened with sugar candy	unclear	internal	pleuretic fever	calm cough	no comment
	171,	linseed tea with <i>sal</i> <i>prun.</i>	JB	internal	gonorrhoea	appar. to relieve hot urine	no comment; one of several drugs for this problem

manna	47,	“a few Drams” alone	JB	internal	constipation during smallpox	cathartic in obstinate case	no comment, but implied reliance
	61,	appar. given alone	Scottish nurses	internal	smallpox	cathartic	“the common purge”
	62,	simple R̄	JB				see FP-a-2
	79,	mixed with <i>sal cath. amarum</i>	JB	internal	inflammatory fever	cathartic	combination given “if the case require a sudden operation”
	83,	mixed with <i>decoc. nitros.</i>	JB	internal	inflammatory fever	manna is sweetener, laxative	manna used only “if the body be costive”
	137,	appar. given alone	JB	internal	gravel	laxative	a “common method” to keep body open
	143,	in ptisan	JB	internal	costiveness	laxative	implies success
	173,	appar. given alone	JB	internal	gonorrhoea	laxative	manna or salts are “the common method with officers”

Markham's Balls	253						see FP-b-11
marshmallow tea	89,  137,  171	appar. given alone  mixed with <i>bol. laxans</i> <i>nost.</i>  mixed with gum Arabic	JB  prob. JB  JB	internal  internal  internal	inflammatory fever  gravel  gonorrhoea	to treat strangury from blister  laxative  laxative	implied endorsement  a "common method" to keep body open  one of several laxatives used in "cure"; JB appar. approves of all
* <i>martis</i> <i>Ludovicus</i>	frag.	in R̄	Degner				see FP-b-15
mastic	191	pledget daubed with mastic "&c:."	appar. JB	external	nodes and exostoses	dressing after affected bone is rasped	appar. endorses

<i>mel/honey</i>	127,	water gruel sweetened with honey	appar. JB	internal	coughs	honey a flavor- ing, but also pec- toral	combination “the best Supper & an excellent remedy”
	137,	mixed into green tea	appar. JB	internal	gravel	honey perhaps only to sweeten	JB values combi- nation as a dilu- ter, but no com- ment on honey
	143,	mixed into water gruel	JB	internal	costive- ness	honey sweet- ens, per- haps purges	JB endorses laxa- tive course, reference to honey as laxative
	177	fomenta- tion with warm milk	popular “with some” (unclear if used by JB)	external	swelled testicles	appar. to soothe, ease pain	“greatly asswages pain”

<i>mel rosarum/</i> honey of roses	59,	appar. given alone	Scottish nurses	in mouth	smallpox	washes mouth, perhaps heals eruptions	no comment
	255,	acidulated with <i>spir. vit.</i>	prob. JB	in mouth	mouth sores	to heal	implied endorsement
	284	appar. applied alone	Dutch hospital	external	wounds	cleanse	“their chief detergent”

mercurials, unnamed or as a class	151,	unclear	unclear	internal	dropsy	unclear; perhaps cathartic	no comment; course of treat- ment failed
	170,	appar. giv- en alone	JB	internal	venereal disease	emetic	since disease ma- lignant, JB gave large doses
	185,	unclear	“some” prescribe	“internal mercuri- als”	venereal buboes	prob. as specific cure of disease; caustic removes buboes	no opinion
	193,	appar. giv- en alone	JB				see FP-a-6
	197	unclear	JB	internal	scurvy	cathartic	to initiate treatment
<i>mercurius corrosivus/ mercurius sublimatus corrosivus</i>	17,  193,	boiled in spring water  in R̄	troopers  JB	external	itch	cure	“too corrosive”  see FP-b-11
<i>mercurius dulcis</i>	203	sm. amt. in <i>ung. dia- pam.</i> , q.v.					



<i>mercurius precipitatus albus</i>	197	in simple R	appar. JB				see FP-a-7
<i>mercurius precipitatus ruber</i>	187	deflagrated with brandy, made into pills	JB	internal	venereal buboes & blotches	cure	JB reports successful use
mustard	155	appar. given alone	hospital	internal	anasarca	to heat	patient died; no comment on use of mustard
nutmeg	37,	grated, mixed with alum & sugar, drunk in vinegar	Irish troopers	internal	ague	cure; part of nutmeg unclear	treatment often failed & men had recourse to bark
	279	given mornings with rhubarb & opium	JB	internal	gripes & purging	cure; nutmeg prob. astringent, to tone stomach	JB makes no comment on nutmeg, but implies drug is useful, promotes cure

<i>oleum lini</i>	127,	appar. given alone	troopers	internal	coughs	cure	favored by troops, but JB finds it rancid and foul-smelling unless fresh
	frag.	appar. given alone	Degner	in enema	dysentery	treating gripes	no opinion, but states that Degner prefers this to other oils
ointment of verdigris	253	appar. applied alone	farriers	external	cracked heels (horses)	to heal	“too sharp, rather fretting than healing”
<i>oleum olivarum</i>	103,	appar. applied alone after fomentation	JB	external	pleuretic fever	appar. soothing affected parts	no opinion, but appar JB’s common practice
	284	mixed with <i>lint. Arc.</i> , q.v.					

<i>oleum terebinthinae</i>	137,	drunk in gin, q.v.					
	211,	mixed with <i>spir. vin.</i> , prob. applied alone	troopers	external	sprains	prob. to heal	no opinion
	225,	rubbed in alone	troopers	external	chilblains	prob. to heal	no opinion
	227,	sole dressing after fomentation	JB	external	chilblains	unclear	no opinion; overall treatment just partly successful
	268	appar. sole dressing	appar. JB	external	wounds	to humor patients	JB thinks this and other dressings unnecessary
onion	137,	boiled & roasted; prob. drunk	prob. popular, not JB	prob. internal	gravel	unclear; perhaps diuretic or folk remedy	no opinion, but JB notes this re-remedy is "much esteemed"
	229	roasted, mixed with butter	JB	in ears	boils	appar. soothe, promote suppuration	implied success

opiates, unspecified or as a class	21,	large doses, appar. alone	appar. JB	internal	gripes after flux	to cure	implied success
	43,	given with bark	appar. JB	internal	ague	to retard purging	given if bark is proving purgative
	75,	given with warm water	JB	internal	inflammatory fever	appar. calmative, soporific	drug is a mild emetic; JB implies that he uses this in other cases
	79,	“a large opiate” given after warm water & oil	appar. JB	internal	cramps, purging	cure	treatment successful
	247,	“gentle opiate” given with a warm drink	appar. JB	internal	rheumatic complaints	prob. to relieve pain, promote sleep	no opinion
	249,	taken at bedtime, appar. alone	appar. JB	internal	fevers during march	soporific	“opiate the best cordiale, procuring a good nights rest”
322	unclear	appar. JB	internal	fevers after battle	soporific	along with bleeding, “the best	

opium, opium pill	53,	pill at bedtime	hospital	internal	smallpox	soporific given if patient restless	no comment
	233,	in R̄	prob. JB				see FP-a-9
	279,	given with ipecacuan- ha at bed- time	JB	internal	gripes & purging	opium appar. as soporific	repetition and positive assess- ment of treatment suggests approval of opium role
	281,	in R̄	JB				see FP-b-10
	293,	in large doses	JB	internal	slow fever	prob. calma- tive & sudorific	positive assess- ment
	301- 03,	large doses (to 2 gr.) given "with something warm"	JB	internal	rheuma- tism	soporific with su- dorific virtue ai- ded by warm drink	"a good night's rest was always procured & sweats promoted"
327	"large do- ses," ap- par. given alone	JB	internal	fits	soporific	positive assess- ment	

opodeldoch	215-17	appar. applied alone	officers	external	sprains	appar. healing	“much in esteem by the Officers for themselves & horses”
oranges	47-49,	sucking China oranges	prob. JB	internal	smallpox	wash mouth & throat, tone stomach	positive assessment
	81,	added to sage tea, q.v.					
	83,	sucking oranges	prob. JB	internal	inflammatory fever	quench thirst	“greatly quenches”  cf. bran tea, lemon
105	orange or lemon juice added to bran tea						
<i>oxymel scilliticum</i>	107	given with <i>lac ammon.</i> , q.v..					
* <i>pilula asafetida</i>	329	taken in wine	JB	internal	melancholy	anti-depressant	implied success

<i>pilulae cocciae minores</i>	79,	appar. given alone	prob. JB	internal	inflammatory fever	laxative	useful, but appar. slow acting
	133,	given with calomel, q.v.					
	163	given with calomel, q.v.					
<i>pilulae Matthaei</i>	11	combined with rhubarb	appar. JB	internal	gripes & purging	to calm bowel	integral in JB "cure"
<i>*pilula mercurial nostra</i>	185,	appar. given alone	JB	internal	venereal eruptions	to heal	"the best I know"
	201,	combined with <i>aqua ben.</i> , q.v.					
	203	appar. given alone	prob. JB	internal	leg ulcers	to heal	"of great use"

<i>*pilula pectoral nostra</i>	113,	taken with <i>inf. Hisp. Fuller., q.v.</i>					
	167,	appar. giv- en alone	prob. JB	internal	consump- tion	prob. re- duce cough, assist lungs	JB considers general regimen to be useful; no comment on this pectoral
	195	appar. giv- en alone	unclear	internal	cough	relieve cough	no comment
<i>*pilula resinos nostra</i>	171	appar. giv- en alone	JB	internal	gonorrhoea	unclear; perhaps to treat gleets	no comment
<i>*pilula stomatica nostra/stomach pills</i>	97,	appar. giv- en alone	JB	internal	inflam- matory fever, recupera- tive stage	laxative	pills “answer ... purpose” of keeping body laxative
	133	washed down with <i>tinc. amar.</i>	appar. JB	internal	jaundice	cure	“always succeeded”
plantain	314	leaves ap- plied	German servants	external	broken skin of horses	to heal	“proved a good dryer and healer”



pomatum	197,  251,	in simple R  applied alone	appar. JB  officers		external	sunburnt face	prob. to soothe, heal	see FP-a-7  no comment
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poultices	7,	composi- tion unspe- cified	JB	external	lacerated shins	prob. heal	no comment
	13,	composed of white bread and milk or turnip	prob. JB	external	lacerated shins	heal	“easily cured”
	175,	bread and milk mix	troopers	external	phimosis	prob. soothe, loosen prepuce	no comment
	203,	bay leaves (q.v.) in boiled milk					
	205,	composi- tion unspe- cified	JB	external	lacerated shins	prob. heal	no comment
	209,	cow dung in milk; see under dung					
	225,	composi- tion unspe- cified	prob. JB	external	broken ankle	prob. relieve swelling	no comment

	331,	composi- tion unspe- cified	hospital	external	undefined illness	appar. to soothe	did not relieve pain
prune	53,	appar giv- en alone	unclear	internal	smallpox	laxative	no comment, but JB approves of purgative course in smallpox
	79,	infusion of senna with prunes	prob. JB	internal	inflam- matory fever	laxative	infusion purges; strong endorse- ment of purgative course
ptisan, laxative	145	composi- tion unspe- cified, but prob. of senna or manna, qq.v.	JB	internal	prolonged constipa- tion	cathartic	failed to relieve, but an enema succeeded
<i>*pulvis ad extrahens salivam nostra</i>	123	appar. giv- en alone	JB	internal	quinsy	sialo- gogue	JB “always” uses this “to make them <b>slabber</b> ”
<i>*pulvis pleureticus</i>	113	unclear	Flemish drug	internal	pleuretic fever	unclear	no opinion
raisin	127	in R̄, appar. giv-en alone	troopers				see FP-b-3

<i>raphani radix/ radish</i>	155,	ingested, appar. alone	hospital	internal	unspeci- fied di- sease	appar. to heat	no comment on this, but treat-ment failed
	199	in R̄	appar. JB				see FP-a-8
<i>rhababarum/ rhubarb</i>	11,	given with <i>pil.Math.</i> , q.v.					
	171,	with <i>gum guaiac.</i> , q.v., mixed into <i>tereb. Ven.</i>					
	233,	given in broth or gruel	prob. JB	internal	cholic	laxative	this “gentle purge ... compleat the cure”

	279,	given with nutmeg	JB	internal	gripes & purging	prob. a laxative	part of success-ful treatment
	282,	appar. given alone, alternative- ly to ipe- cacuanha, q.v.					
	293,	appar. tak- en alone, after vomit	dissector	internal	to prevent infection	prob. a laxative	dissector clean- sing system
	frag	appar. giv- en alone	Degner	internal	dysentery	prob. a laxative	Degner called rhubarb the “Divine mede- cine”; preferred it in tincture
<i>rhababarum,</i> tincture of	frag.	in R̄, taken alone	Degner				see FP-b-14
<i>rob sambuceum</i>	125	in R̄, ap- par. taken alone	appar. popular				see FP-b-3
rue	55	in nosegay	popular in England	smelled	smallpox	prevent infection	no opinion

<i>saccharum album/sugar/sugar candy</i>	37,	mixed with alum (q.v.) & nutmeg; served in vinegar					
	51-53,	in R̄	uncertain				see FP-b-2
	59,	mixed with milk & sm. amt. bark	Scottish nurses	given in enema	smallpox	unclear	no comment
	105,	linseed tea (q.v.), sweetened with sugar candy					
	171,	simple R̄	JB				see FP-a-3
	292	with egg-yolk in brandy, q.v.					
<i>saccharum Saturni</i>	268	in brandy, q.v.					

saffron	59	in bag soaked with sack; squeezed into drink	English nurses	internal	smallpox	bring out eruptions	no comment; this is associated with "hot method," which JB opposes
sage tea	81,  87	with lemon, orange, & <i>sal prun.</i> added  steam from tea	JB  JB	internal  inhaled	inflammatory fever  headache in fever	relieve thirst  relieve by discharges	"pleasant & gently sudorifick especially if a little wine be added which is necessary as a Cordiale"  "instant relief of the Patient"
St. John's Wort	315	in R̄	Albemarle				see R̄, Albemarle
sal ammoniac	29	in R̄	JB				see R̄, JB, #--
<i>sal catharticus amarus</i>	79	with manna or jalap mixed in; followed and corrected by water gruel or small beer	JB	internal	inflammatory fever	cathartic; manna & jalap are also laxative	given "if the case require a sudden operation"
<i>sal Martis</i>	268	in brandy, q.v.					

<i>sal prunellae</i>	81,	in sage tea, q.v.					
	83,	alone or mixed	JB	internal	inflam- matory fever	see next column	“the most universal medecine in this case, mixed in all drinks or given in powders, is one of the best febrifuges”



	171,	appar. mixed with jalap, q.v.					
	249,	drunk with water	prob. JB	internal	fevers	unclear; perhaps a dia- phoretic	no comment
	251,	given to horses, mixed with <i>flor. sul.</i> , q.v.					
	257,	drunk with water	unclear	internal	fevers	quench thirst	no comment
	345	drunk with wine	unclear	internal	rheuma-tic & pleuretic com- plaints	unclear; perhaps diaphor- etic & thirst quen- cher	no comment
sal tartari	frag.	in R̄	Degner				see FP-b-16

<i>sal volatile cornu cervi</i>	63,  113,  209	appar. given in spermaceti, q.v.  unclear; given alone or perhaps with <i>ther.</i> <i>And.</i>  appar. given in spermaceti, q.v.	prob. JB	internal	pleuretic fever	sudorific	successful
<i>sal volatile oleosum</i>	159,  161	in R̄  appar. taken alone	officer  officer	internal	gout	unclear	see FP-b-7  no comment
saline saponaceous medicines, unspecified	62	given with cathartic	JB	internal	“yellow fever”	prob. laxative	combination “sufficiently opening,” but treatment failed
salt	253	dissolved in alum water or white vitriol, qq.v.					
salts, unspecified	173	appar. given alone	prob. JB	internal	gonorrhoea	laxative	laxative course effects a cure

<i>sapo Castillion</i>	301	toasted, powdered, & given 1/2-1 dr. in milk, whey or small beer	“used by some” (appar. not JB)	internal	rheuma- tism	unclear; perhaps laxative	“a favorite medecine ... much commended in the Gravale & jaundice”
saponaceous medicines, unspecified	105,	unclear	unclear	internal	pleuretic fever	unclear	“of great service”
	141,	in pills, with lime- water	appar. not JB	internal	gravel	diuretic, perhaps specific	“a favourite with some”
	151,	unclear	prob. JB	internal	dropsy	prob. diuretic	course failed to cure or relieve this case
	167,	unclear, but lg. qties, used	hospital	internal	consump- tion	prob. diuretic	no comment, but JB commends only seton
	209,	poultice of soap, milk, and dung, q.v.					
	293	unclear	hospital	internal	dysentery proceed- ing to dropsy	prob. diuretic	

savine	233	cut small in oats, fed to horses	prob. farriers	internal	worms, in horses	vermi- fuge	no comment
◆scorbutic juices/plants	199,  201	℞  appar. the same as last	prob. JB				see FP-a-9
scorbutic whey	201	no speci- fics on use					“a good Medecine as diet Drink” (observation after JB left army)
senna	53,  79,  113,  133,  143	usage, etc., same as for prune, q.v.  mixed with <i>sal cath.</i> <i>amara</i> , q.v.  drunk as tea  drunk as tea  given in ptisans, q.v.	unclear   unclear	internal   internal	pleuretic fever  jaundice	laxative; perhaps also coolant  laxative	the “common medicine” of army women & children ill with this fever; no assessment  contributed to cure

snail	165	usage, etc., same as for frogs, q.v.					
snakeroot	298	given in infusion	unclear	in enema	slow fever	prob. a stimu- lant	“immedeate good effect”
spermaceti	63,  209	appar. with <i>sal vol. c.c.</i> mixed in  appar. with <i>sal. vol. c.c.</i> mixed in	prob. JB  JB	internal  internal	“yellow fever”  bruises	sudorific  prob. to disperse blood	appar. promoted sweat, though treatment failed to cure  implied approval, since JB “often” prescribes this
spirits, unspecified							
<i>spiritus cornu cervi</i>	85,  303,  frag.	mixed with sack whey  in R̄  in R̄	officers  hospital  Degner	internal	inflam- matory fever	sudorific (prob. both compo- nents so intended)	no comment on potential, but JB thinks common dose (tsp. or less) too small  see FP-b-14  see FP-b-17

<i>spiritus natri dulcis</i>	83	30 gtt. in draft of negus	prob. JB	internal	inflammatory fever	quench thirst; prob. also as febrifuge	JB commends it (appar negus) for aroma, “extremely agreeable to the sick”; no comment on <i>spir. nit. dulces</i>
<i>spiritus vini Gallicus/gin</i>	51, 211	in R̄ in dressing	prob. JB prob. JB	external	bruised toes	prob. disperse blood	see FP-b-2 “of service here”
<i>spiritus vini rectificatus</i>	209, 213, 268	appar. applied alone applied with bandage & compress applied with dressing	troopers French prob. JB	external external external	bruises sprains wounds	prob. retard swelling prob. retard swelling see next column	men use promptly, but not as much as brandy (cf.), which is cheaper; JB does not comment, but prefers <i>lint. vol. nostr.</i> , q.v. no comment spirit is often unnecessary; used to placate soldiers

<i>spiritus vitrioli</i>	255	acidulates <i>mel rosarum</i> , q.v.					
spruce beer	209	drunk with Irish slate, q.v.					
strengthening plaster	211- 13,	appar. ap- plied alone	unclear	external	sprains	to pro- tect dur- ing heal- ing	“I have no esteem for them” (i.e. of shops); JB may mollify troopers by applying; some army sur-geons “make good Strengthen-ing plaisters”
	313	applied af- ter warm oil	farriers	external	sprains (in hor-ses)	protect during healing	despite all reme- dies, cure re-quires “long time & much rest”
<i>succus antiscorbuticus cum chalybis</i>	197	prob. taken alone	officer	internal	scurvy	to cure	no comment, but patient improved through regimen
<i>succus catechu</i>	frag.	prob. given alone	Degner	internal	dysentery	astrin- gent	no comment
<i>succus liquiritia</i>	127	prob. given alone	JB	internal	coughs	relieve cough	JB often substi- tutes <i>troch. c. bech. nigr.</i>
<i>succus mar- rubium album</i>	233	prob. taken alone	appar. popular, not JB	internal	worms	vermi- fuge	no comment; “es- teemed by some as a Specifick”

<i>succus porrum</i>	151	prob. taken alone	“greatly esteemed by the Flemish”	internal	dropsy	prob. specific	in an army trial (not by JB), it “had no visible operation or good effect”
<i>syrupus caryophyllata</i>	276	in R̄	unclear				see FP-b-13
<i>syrupus e meconio/ diacodion</i>	61	prob. used alone	Scottish nurses	internal	smallpox	prob. analgesic, soporific	“much used when the complaints begin”; no assessment of value
<i>syrupus de rhamno</i>	155, 231	in R̄ in R̄	hospital prob. JB				see FP-b-5 see FP-b-8
<i>syrupus roseus solutivus cum sena</i>	61	prob. given alone	Scottish nurses	internal	smallpox	laxative	a “common purge,” but no appraisal
tamarind	83, 275	held in mouth in ptisan	prob. JB prob. JB	in mouth internal	inflammatory fever wound	quench thirst prob. as laxative	“greatly quenches thirst” no comment, but soldier recovered
tartar	77-79	alone, to 6 gr., followed by wine	JB	internal	inflammatory fever	emetic	JB prefers jalap, because tartar may adhere in stomach, causing prolonged nausea



<i>tartarum emeticum</i>	153,	in R̄	used by “some” (not JB)				see FP-b-5
	155	in R̄	hospital				see FP-b-4
<i>terebinthina/ turpentine</i>	172,	mixed with <i>gum guaiac,</i> q.v., & <i>rhab.</i>					
	208,	mixed with eggyolk; followed by <i>tinc. myrrhae</i>	appar. farriers	external	cut horse’s tail	heal	this is the first dressing in successful treatment
	284,	mixed with eggyolk  in R̄	Dutch hospital	external	wounds	cleanse	the “chief detergent” of Dutch  see FP-b-15
	315		Albe-marle				

<i>theriac</i> <i>Andromachi</i>	21,	taken with warm drink	appar. JB	internal	gripes after flux	prob. a calma- tive	“the best medecine”
	85,	sm. amt. camphor mixed in; taken with warm punch	JB	internal	inflam- matory fever	sudori-fic	JB uses it “com- monly ... & gen- erally succeeds well”
	113,	unclear whether given alone or with <i>sal</i> <i>vol. c.c.</i>	JB	internal	pleuretic fever	sudori-fic	assists natural in- clination to sweat
	125,	in R̄	“some” use (ap- par. not JB)				see FP-b-3
	276,	in R̄	unclear				see FP-b-13
	281,	in R̄	JB				see FP-b-13
	281,	mixed with burnt claret	JB			prob. calm	JB has had “good success” with it,
	282			enema	tenesmus	bowel, tone lower	but men resist use, “having a foolish

theriac plaster	frag.	appar. applied alone	Degner	external	fevers during dysentery	prob. diaphoretic	no comment
<i>tinctura amara</i>	133	used to wash down <i>pil. stom. nostr.</i>	prob. JB	internal	jaundice	<i>tinc. amara</i> prob. given as stoma-chic, not just vehicle	combination “always succeeded” when sufficiently used; no comment on <i>tinc. amara</i>
<i>tinctura antimonii</i>	303, frag.	in R̄ in R̄	hospital Degner				see FP-b-14 see FP-b-17
<i>tinctura sacra</i>	159, 235	in simple R̄ given alone or in <i>enema com. nost.</i> , q.v.; perhaps with <i>elix. salut.</i> (text ambiguous)	appar. officer JB	internal or enema	cholic	cathartic	see FP-b-6 JB considers <i>tinc. sacra</i> a “warm” purgative
<i>tinctura vitriolum</i>	frag.	in R̄	Degner				see FP-b-17

<i>tinctura myrrhae</i>	208	mixed with turpentine in egg yolk	appar. farriers	external	cut horse's tail	in dressing to heal; myrrh prob. intended as a vulnerary	no comment on tincture, but tails usually heal quickly
<i>tinctura myrrhae cum aloes</i>	133	taken in wine, in 30-40 gtt. dose	JB	internal	jaundice	laxative	"a useful medicine ... never attended with any fever or dangerous Symptom"
tobacco, tobacco smoke	145,  147,  207	appar. used alone, except for vehicle  tobacco smoke  leaf, applied alone	JB  appar. JB  troopers	enema  enema  external	costiveness  extreme constipation  lacerated shin	cathartic  cathartic  heal	JB has "seen Tobacco Clysters succeed when all other means failed"  trooper nearing dead was "presently relieved" after failure of other remedies  users reported cure

<i>trochisci bechici nigri</i>	107,	no ref. to actual use					JB considers it “one of the best pectorals”
	127	appar. given alone	JB	internal	cough	relieve cough	JB often uses it in place of <i>succ. liq.</i>
turmeric	253	in R̄	farriers				see FP-b-12
turnip	13	mixed with bread for poutice	JB	external	badly lacerated shins	heal	troopers “were easily cured”
<i>turpethum minerale</i>	173,	in R̄	JB				see R̄, FP-a-6
	177,	perhaps not joined to other drugs	JB	internal	swelled testicles	emetic	“of great use”
	187,	given as pills	appar. JB	internal	venereal eruptions	heal	JB thinks them effective, but men upset that pills were small & operated subtly
	192	perhaps alone	hospital	internal	venereal fluxing	emetic	necessary to bring salivation in some cases

<i>unguentum. Aegyptiacum</i>	181,  253	appar. ap- plied alone  sm. amt., with basili- con, q.v.	JB	external	venereal buboes	“if foul at bot-tom” when lanced	no comment, but appar. JB made frequent use of this
<i>unguentum citrinum</i>	199	appar. ap- plied alone	officer	external	scurvy	appar. to heal sores	no comment; one of many remedies used by patient
<i>unguentum dialtheae</i>	103,  175,  349	appar. ap- plied alone  applied alone  applied alone	appar. JB  farrier  unclear	external  external  external	pleuretic fever  phimosis  sores on bruised shins	appar. to relieve pain in region  prob. to soothe, loosen prepuce  prob. to soothe, heal	no comment; one of various reme- dies  no comment; man discharged after 2 years, still with condition  no comment
<i>unguentum diapom- pholygos</i>	203	sm. amt. <i>merc. dul.</i> mixed in	appar. JB	external	ulcers on legs	to heal, in stub- born cases	“a good healer”

<i>unguentum mercuriale/ mercurial ointment</i>	15,	appar. ap- plied alone	prob. JB	external	itch	to cure	no comment
	124,	appar. ap- plied alone	JB	external	swollen parotids, during colds	to dis- perse swelling	no comment, but this a common application by JB
	173,	appar. ap- plied alone	JB	external	chordee	prob. to soothe, perhaps cure	“is of use”
	175,	appar. ap- plied alone	prob. JB	external	phimosis	to soothe & loosen prepuce	no comment
	181,	appar. ap- plied alone	appar. JB	external	venereal buboes	soften, aid heal- ing	no comment, but appar. com-mon usage by JB; applied after lancing, if edges are “hard and callous”
	185,	appar. ap- plied alone	appar. JB	external	venereal eruptions	prob. to heal	“should be used ... with prudence”
	189- 91,	appar. ap- plied alone	troopers	external	scabs on scalp, af-	to re- move,	apply too much “from seeing its

	325	appar. applied alone	troopers	external	scalp vermin	applied to hair, to kill vermin	no comment
<i>unguentum nostrum ad scabiam</i>	17- 19	℞	JB				see FP-b-1
<i>unguentum pomatum</i>	197	in ℞	officer				see FP-b-8
<i>unguentum tutiae</i>	247	appar. applied alone	prob. JB	external	excoriated eyelashes	soothe & heal	“heals them”
<i>*unguentum. volatilis nostrum</i>	217,	appar. applied alone	unclear	external	luxation	prob. soothe replaced elbow, reduce swelling	joint “did well”
	249,	appar. applied alone	prob. JB	external	legs swollen from time in saddle	reduce swelling	no comment
	301	appar. applied alone & covered with flannel	prob. JB	external	rheumatism	reduce swelling & pain in knees	appar. positive assessment



urine	211	fresh urine with soap	“some” use	external	bruises	prob. soothe, heal	JB claims use “not without good reason”; possibly he tried it
	253	wash, appar. used alone	prob. JB	external	cracked heels (horses)	prob. soothe, heal	no comment; other remedies also used
	256	appar. used alone	foot soldiers	external (bathe feet)	sore feet after march	prob. soothe	no comment, but implies this is a common practice
vinegar whey	inter-leaf #2, 297-98	drunk with emetics	unclear	internal	slow fever	perhaps just vehicle, but prob. to acidulate & purge	combination was one of the “universal medicines” given in this outbreak
<i>vipera</i>	247-49	in R̄	sold by London apothecaries				see FP-b-11

<i>vitellum</i> <i>ovi</i> /eggyolk	173,	simple R	JB				see FP-b-5
	208,	mixed with <i>terebinthina</i> , q.v.; followed by <i>tinc.</i> <i>myrrhæ</i>					
	284,	mixed with <i>terebinthina</i> , q.v.					
	292	beaten with sugar, served in brandy	JB	internal	dysentery	see next column	some see it as “an infallible remedy,” but JB recommends it only as a “nourishing cordial” for recuperants

vitriolum/ vitriol	177,	<i>vit. Rom.</i> , applied alone	prob. JB	external	chancres	to re- move	no comment; JB may prefer <i>lint. ad ulcera ven. nost.</i> , q.v.
	181,	<i>vit. Rom.</i> , applied alone	appar. JB	external	venereal buboes	to re- duce proud flesh	implication that this is a standard application by JB
	245,	“Sharpwa- ter”: mixed with alum, q.v., water & vinegar					
	247,	eye waters; “chiefly made of white Vit- riol”	farriers	in eyes	inflamed eyes	to relieve	JB seldom uses; finds them “too sharp, smarting & making pain”
	253	wash, with white vitri- ol & salt	prob. JB	external	cracked heels (horses)	to heal	no comment; one of several washes

<i>vitrum ceratum antimonium</i>	281, 282	in R  unclear	JB  JB	  internal	  dysentery	  to cure	see FP-b-12  allied surgeons are not aware of it & some British surgeons do not use; “the good success” JB has may come from “persisting in its use”
walnut	289	inner pith; given in brandy	English folk remedy	internal	dysentery	specific	while “esteemed infallible” by some, British surgeon found it no more effective than brandy
water parsnip	201	juice; tak- en in warm milk	“old woman”	internal	scurvy	specific	patient “recovered dayly, continued well many Years”

wood decoction/ wood drink	192	given in mercurial course, “Grand Cure”	hospital	internal	venereal disease	prob. to promote warmth, perhaps sweat	no comment on decoction, but Grand Cure “seldom” fails to cure
	193	given with mercurials for exten- ded period	prob. JB	internal	nodes & exostoses	same as preced- ing	long-term use benefits "old Venereals" & those "much ema- ciated" from mercurial saliva- tions

## 2. Formulas and prescriptions noted by Buchanan

### a. Buchanan's preparations

#1 (p. 29): "Take  $\frac{1}{2}$  oz. of the finest Peruvian bark, powdered, 6 gr. flowers of sal ammoniac, 3 gr. camphor and enough conserve of absinth to make a bolus; one quarter to be taken every hour, washed down with Fuller's bitter decoction" (for ague)

#2 (p. 62): "Decoction of nitre (Edinburgh recipe) and 1 oz. manna." (cathartic for yellow fever patients)

#3 (p. 171): "Sal prunella and white sugar, in the same quantities, as much as is required." (treatment for hot urine of gonorrhoea patients)

#4 (p. 173): "In egg yolk with barley water." (medium to mix mercurial ointment for injection to treat chordee)

#5 (p. 173): "Take 4 gr. turbith mineral and 6 gr. each of calomel and camphor and as much lenitive electuary as is necessary to make a bolus." (for chordee)

#6 (p. 193): "Take 2 dr. mercurial ointment and mix with  $\frac{1}{2}$  scr. corrosive sublimate." (to treat venereal excrescence)

#7 (p. 197) "One oz. pomatum and 1 dr. white precipitate of mercury" (to soothe skin in scurvy)

#8 (p. 199): "Take 4 parts of the leaves of nasturtium and mix with 2 parts of equal quantities of becabunga and horseradish and 2 oz. of newly picked wild radish; express the juice according to art;

of which let him take 4 spoonfuls with 1 spoonful lemon juice, 10 gr. vitriol martis, and 2 oz. of a generous Rhenish wine; to be taken every morning on an empty stomach, and whey to be drunk freely 4 times a day." (antiscorbutic)

#9 (p. 233): "Take up to 2 gr. purified opium or up to 50 drops liquid laudanum."

#10 (p. 281): "Six gr. *Vitrum ceratum antimonii* and ½ gr. *Theriac Andromachi* to make a pill to be taken in the morning. An opium pill should be taken at bedtime." (bloody flux)

#### **b. Formulas acquired from others**

#1 (p. 19): [army recipe for *unguentum nostrum ab scabiem*] "Extinguish 1 oz. quicksilver with 50 drops of aqua fortis; add 1 lb. lard <and 2 oz. white beeswax>; mix according to art." (remedy for itch)

#2 (pp. 51, 53) [note: this may have been Buchanan's preparation, but his wording suggests otherwise; it was given to men outside his care] "Concoct 1 oz. diascordium with a sufficient quantity of boiling water to makes 2 lbs.; stirring, add 4 oz. deflagrated brandy and sweeten to taste with white sugar; 3 spoonfuls to be taken every third hour and an opium pill every night at bedtime." (for smallpox patients)

#3 (p. 125) [note: this was "a favourite medecine with many" and may have been a popular remedy; whether Buchanan used it is unclear] "Take 2 scr. powdered guaiacum gum and ½ gr. elderberry rob, to make a bolus taken at bedtime." (for quinsy)

#3 (p. 127) [note: Buchanan's observation on this remedy, "private Receipts are common, & the following is a favorite with our Men," suggests that he did not create this formula, though he may have

adopted it] "Take 2 oz. each of conserve of red roses and pulp of raisins of the sun with 40 drops of balsam of sulfur and aniseed. Mix capsules in the size of a nutmeg to be taken at bedtime." (treatment for cough)

#4 (p. 153) ["a favourite Hydragogue with some"]: "Take 3 gr. tartar emetic [app. C-1, under "tartar"] and 3 oz. of the best manna [app. C-1] dissolved in 10 oz. of common water. Two spoonfuls to be taken every 2 hours until the bowels move." (for dropsy)

#4 (p. 155) [hospital recipe]: "Take 2 oz. of syrup of buckthorn and ½ dr. tartar emetic and mix with 10 oz. common water; 2 spoonfuls to be taken every 2 hours until the bowels move." (purgative for anasarca patient)

#5 (p. 159) "Equal amounts of the sacred tincture and the elixir of health, a small quantity." (purge for gout)

#6 (p. 159) [note: according to Buchanan, patient was "advised the following medicine"; unclear by whom]: "Take 1 oz. of powdered gum guaiacum and 4 oz. of oily salt of vitriol; mix, and extract a tincture over 4 days, shaking frequently, then let the clear liquid be poured out and kept for use, 60 drops to be taken twice a day on sugar." (to prevent fits of gout)

#7/8 (p. 231) [possibly Buchanan's formulas]: "Take 1 oz. lenitive electuary, 3 dr. diagyrdium, 1 dr. syrup of buckthorn, according to requirements to make an electuary. To be taken in the size of a nutmeg twice a day. Alternatively, 1 oz. of the best manna, 2 oz. lenitive electuary and 2 dr. of milk of sulfur to taken as an extra." (laxative electuaries for piles)

#9 (p. 247, 249): "Mix equal parts of *lapis calaminaris* and prepared tutty with 2 dr. viper oil."



(ointment for sore eyes)

#10 (p. 252) "Mix 1 oz. Peruvian bark with 2 dr. diascordium boiled in up to 2 lbs. of water with sugar to make it palatable. Take 3 oz. every 3 hours." (cured rheumatic fever)

#11 (p. 253) "Take 2 oz. each of powdered cummin seed, aniseed, fenugreek, diapente, helenium, licorice, flowers of sulfur, and turmeric, ½ pound honey as required to make a mash, etc." (Markham's Balls; used here to relieve swollen legs of horses)

#12 (p. 276) [source of recipe unclear] "Take ½ oz. of Theriac Andromachi, 2 oz. powdered Peruvian bark, and Syrupus caryophyllorum, as required, to make an electuary. A nutmeg-sized dose to be taken every 3 hours." (treatment for fever associated with gunshot wounds)

#13 (p. 303): "Take equal quantities of *vinum emeticum*, *tinctura antimonii*, and *spiritus cornu cervi*; make an electuary; 80 to 100 drops." (hospital sudorific, used in rheumatism)

#15 (p. 315): "Rx. hogs lard lb.i. Turpentine, St. John's wort, Assafoetida aa oz.i. make into an Oynt." (Albemarle's ointment to restore hair to horses' hucklebones that had been rubbed raw)

#14 (Degner): "Take ½ oz. rhubarb, 1 dr. salt of tartar, mentholated chicory water, ..." (to purge dysentery patients)

#15 (Degner): "Take tincture of antimony with prepared spirit of hartshorn, tincture of vitriol, and *Martis Ludovicus*, small quantities of each." (a tonic in dysentery)

## ***BIBLIOGRAPHY***

### **MANUSCRIPT SOURCES**

#### British Library:

Additional 6861 (Pringle-Mitchell correspondence)

Additional 38,710 (War Office correspondence, June-Dec. 1703)

Additional 41,151 (Townshend Papers: Orderly books, Flanders)

#### Church of Jesus Christ of Latter-Day Saints:

International Genealogical Index

#### Clements Library, University of Michigan, Ann Arbor:

Germain Papers

#### Guildhall Library, London:

Records of the Society of Apothecaries, Freedom Books

#### National Army Museum, London:

Cumberland's orderly book, Dec. 1745-June 1747

#### National Library of Medicine, Bethesda, Maryland

MS B 332 ("Observations from Dr. Duncan's Lectures")

MS B 357 ("Relect Edinburgh 1768" on spine)

#### Public Record Office, London

Probate 11

State Papers 41

War Office 27

War Office 64

Staffordshire Records Office, Stafford:

D685 (records of Stafford General Infirmary)

Parish register for St Mary's, births and burials 1760-1801

Parish register for St Mary's, marriages 1754-1787

Wellcome Library for the History & Understanding of Medicine, London

Ms. 76\*; Ms. 142; Ms. 397\*; Ms. 655\*; Ms. 674\*; Ms. 1071; Ms. 1162\*; Ms. 1330\*; Ms. 1417\*; Ms. 1445\*; Ms. 1590\*; Ms. 1710; Ms. 1859\*; Ms. 1981\*; Ms. 2040\*; Ms. 2088; Ms. 3171; Ms. 3614; Ms. 4048; Ms. 4051; Ms. 4054; Ms. 4055; Ms. 4056; Ms. 4382; Ms. 4887      [\*superseded cataloguing numbers; see App. C-1]

John Hawkins journal (Ms. 2788)

John Buchanan, "Regimental Practice. or A Short History of Diseases common to His Majesties own Royal Regiment of Horse Guards when abroad (Commonly called the Blews)" (RAMC 1037)

Windsor Castle

Cumberland Papers

## CLASSICAL WORKS

Caesar. *The Civil Wars*. trans. A. G. Peskett, The Loeb Classical Library , London: William Heinemann; New York: The Macmillan Co., 1914.

Catullus, Tibullus and Pervigilium Veneris. *Catullus, Tibullus and Pervigilium Veneris*. trans. F. W. Cornish et al. The Loeb Classical Library, London: William Heinemann; New York: The Macmillan Co., 1912.

Celsus. *De Medicina*, trans. W. G. Spencer, The Loeb Classical Library; Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1960 [1935]. 3 vols.

Cicero. *De Senectute, De Amicitia, De Divinatione*. trans. William A. Falconer. The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1953 [1923].

----- *Tusculan Disputations*. trans. J. E. King. The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1950 [1927].

Claudian. *Claudian*. trans. Maurice Platnauer. The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1956 [1922]. 2 vols.

Dioscorides. *The Greek Herbal of Dioscorides*, trans. John Goodyer, ed. Robert T. Gunther. Oxford: Oxford Univ. Press, 1934.

[Flavius Vopiscus et al.] *The Scriptores Historiae Augustae*. trans. David Magie, The Loeb Classics.

London: William Heinemann; New York: G.P. Putnam's Sons, 1932. 3 vols.

Hippocrates. *The Genuine Works of Hippocrates Translated from the Greek with a Preliminary Discourse and Annotations.* trans. Francis Adams. New York: William Wood & Co., 1929. 2 vols. in 1.

Hippocrates. *Hippocrates.* trans. and ed. W. H. S. Jones (vols. 1-2, 4), E. T. Withington (vol. 3) and Paul Potter (vols. 5-6). The Loeb Classical Library. London: William Heinemann, Ltd; New York: G. P. Putnam's Sons, 1923-31; Cambridge, Mass.: Harvard Univ. Pr.; London: William Heinemann Ltd, 1988. 6 vols.

Hippocrates. *Magni Hippocratis Medicorum omnium facile principis, opera omnia quae extant.* trans. Anutio Foesio. Francofurti, 1621.

Hippocrates. *Oeuvres complètes d'Hippocrate.* trans. and ed. Emile Littré. Amsterdam: A. M. Hakkert, 1973-89 [1839-61]. 10 vols.

Horace. *Horace: The Odes and Epodes.* trans. C. E. Bennett, The Loeb Classical Library. Cambridge, Mass.: Harvard University Press; London: William Heinemann Ltd, 1968 [1914; revised, 1927].

Horace. *Horace. Satires, Epistles and Ars Poetica.* trans. H. Rushton Fairclough, The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1955 [1926].

Justinus [Marcus Junianus]/M. Juniani Justini. *Epitoma historiarum Philippicarum. Pompei trogi.*

- Accedunt prologi in Pompeium trogum.* ed. Otto Seel. 2nd. ed. Stuttgart: B. G. Teubneri, 1985.
- . *Justin, Cornelius Nepos and Europius*, trans. John Selby Watson. London: G. Bell and Sons, Ltd., 1910.
- Juvenal and Persius. *Juvenal and Persius.* trans. G. G. Ramsay. The Loeb Classical Library, rev. ed. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1965 [1918].
- Livy. *Livy.* trans. B. O. Foster, A. C. Schlesinger et al. The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1967 [1924]. 14 vols.
- Lucan. *Lucan.* trans. J. D. Duff. The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1957 [1928].
- Lucretius. *De Rerum Natura.* trans. W. H. D. Rouse. The Loeb Classical Library. rev. ed. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1937 [1924].
- Martial. *Epigrams.* trans. Walter C. A. Ker. The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd., 1968 [1919]. 2 vols.
- Ovid. *The Art of Love, and Other Poems.* trans. J. H. Mozley, The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd., 1957 [1929].
- . *Ovid's Fasti.* trans. (Sir) James G. Frazer. The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd., 1967 [1931].

- . *Heroides and Amores*. trans. Grant Showerman. The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1971 [1914].
- . *Metamorphoses*. trans. Frank J. Miller. The Loeb Classical Library. London: William Heinemann Ltd.; Cambridge, Mass.: Harvard Univ. Press, 1960 [1916].
- . *Ovid, with an English Translation*. trans. Arthur L. Wheeler. The Loeb Classical Library. Cambridge, Mass., Harvard Univ. Press; London: William Heinemann Ltd, 1953 [1924].
- Pindar. *Odes of Pindar, With Several other Pieces in Prose and Verse, Translated from the Greek. To which is Prefixed a Dissertation on the Olympic Games*. Trans. and introd. Gilbert West. London: R. Dodsley, 1749.
- Pliny [the Elder]. *Natural History*, trans. W. H. S. Jones, The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1951. 10 vols.
- Pliny [the Younger]. *Letters*. trans. William Melmoth. The Loeb Classical Library, rev. ed. London: William Heinemann; New York, Macmillan Co., 1915. 2 vols.
- . *Pliny: Letters and Panegyricus*. trans. Betty Radice. Loeb Classics. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd., 1969. 2 vols.
- Sallust. *Sallust*. trans. J. C. Rolfe. The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd., 1965 [1921].
- Seneca. *Ad Lucilium Epistolae Morales*. trans. Richard M. Gummere, The Loeb Classical Library.

- London: William Heinemann Ltd.; Cambridge, Mass.: Harvard Univ. Press, 1934 [1917]. 3 vols.
- Suetonius. *Suetonius*. trans. J. C. Rolfe. The Loeb Classical Library. Cambridge, Mass.: Harvard U. P.; London: William Heinemann, 1914. 2 vols.
- Tacitus. *The Histories*. trans. Clifford H. Moore et al. The Loeb Classical Library. Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1968 [1914]. 5 vols.
- Terence. *Terence*. trans. John Sargeant, The Loeb Classical Library. London: William Heinemann Ltd.; New York: G. P. Putnam's Sons, 1926 [1912].
- Valerius Maximus. *Memorable Doings and Sayings*. Trans. and ed. D. R. Shackleton Bailey. Cambridge, Mass.: Harvard Univ. Press, 2000. 2 vols.
- Vegetius [Flavius Vegetius Renatus]. *Epitoma Rei Militaris*. trans. Leo F. Stelton, American University Studies, series XVII. New York, Bern, Frankfurt am Main, Paris: Peter Lang, 1990.
- Velleius Paterculus. *Compendium of Roman History*. trans. Frederick W. Shipley, The Loeb Classical Library. London: William Heinemann; New York: G. P. Putnam's Sons, 1924.
- Virgil. *Virgil*. trans. H. Rushton Fairclough, The Loeb Classical Library, rev. ed. (Cambridge, Mass.: Harvard Univ. Press; London: William Heinemann Ltd, 1957 [1916]. 2 vols.
- Xenophon. *Cyropaedia*. trans. Walter Miller. The Loeb Classical Library. London: William Heinemann; New York: The Macmillan Co., 1914. 2 vols.



**WORKS PUBLISHED 1500-1820, RELATING TO MEDICINE, SURGERY, AND PHARMACEUTICALS**

Abercromby, David. *De variatone, ac varietate pulsus observationes*. London: Samuelis Smith, 1685.

Aikin, John. *Observations on the External Use of Preparations of Lead, With Some General Remarks on Topical Medicines*. 2nd ed., corr. London: Joseph Johnson, 1772.

Alanson, Edward. *Practical Observations on Amputation, and the After-Treatment: to Which is Added, An Account of the Amputation above the Ankle with a Flap: The whole illustrated by Cases*. 2nd ed., enl. London: Joseph Johnson, 1782.

Alexander, William. *Experimental Essays on the Following Subjects: I. On the External Application of Antiseptics in Putrid Diseases. II. On the Doses and Effects of Medicines. III. On Diuretics and Sudorifics. To Which is Added, Observations of the External Use of Tincture of Cantharides*. 2nd ed., corr. London: Edward and Charles Dilly, 1770.

Allen, John. *Dr. Allen's Synopsis Medicinae: or, a Brief and Geneeral Collection of the Whole Practice of Physick*. New ed., rev. and enl. London: J. Pemberton and W. Meadows, 1730. 2 vols.

Alston, Charles. *Lectures on the Materia Medica: Containing The Natural History of Drugs, Their Virtues and Doses: also Directions for the Study of the Materia Medica; and An Appendix on the Method of Prescribing*. comp. John Hope. London: Edward and Charles Dilly; Edinburgh: A. Kincaid and J. Bell, 1770. 2 vols.

Anderson, James. *A Few Facts and Observations on the Yellow Fever of the West Indies: By Which It is Shewn, That There have Existed Two Species of Fever in the West-India Islands.* Edinburgh: William Mudie [etc.], 1798.

Astruc, Jean. *A Treatise on the Diseases of Women; In Which it is Attempted to Join a Just Theory to the Most Safe and Approved Practice. With a Chronological Catalogue of the Physicians, who have written on these Diseases.* London: J. Nourse, 1762-67. 3 vols.

-----.. *A Treatise of the Venereal Disease, in Six Books; containing An Account of the Original, Propagation, and Contagion of this Distemper in General. As also of the Nature, Cause, and Cure of all Venereal Disorders in particular, whether Local or Universal.* trans. William Barrowby. London: W. Innys and R. Manby, C. Davis, and J. Clarke, 1737. 2 vols.

Baglivi, Giorgio. *De praxi medica ad priscam observandi rationem revocanda. Libri duo. Accedunt dissertationes novae.* Leiden: Fredericum Haring, 1704.

-----.. *Opera omnia medico-practica, et anatomica.* 8th ed. Leiden: Anisson & Joannis Posuel, 1714.

-----.. *The Practice of Physick, Reduc'd to the Ancient Way of Observations. Containing a Just Parallel between The Wisdom and Experience of the Ancients, and The Hypothesis's of Modern Physicians. Intermixed With many Practical Remarks upon most Distempers.* London: Andrew Bell et al., 1704.

Baker, (Sir) George. *An Essay, Concerning the Cause of the Endemial Colic of Devonshire, Which was read in the Theatre of the College of Physicians, in London, on the Twenty-ninth Day of June,*

1767. London: J. Hughs, 1767; repr. n.p., Delta Omega Soc., 1958.

Ball, John. *The Modern Practice of Physic: or a Method of judiciously Treating the Several Disorders incident to the Human Body*. London: A. Millar, 1760. 2 vols.

Barker, John. *An Essay on the Agreement betwixt Ancient and Modern Physicians: Or a Comparison Between the Practice of Hippocrates, Galen, / Sydenham, and Boerhaave, in Acute Diseases. Intended to Shew, What the Practice of Physick, in such Distempers, ought to be*. London: G. Hawkins, 1747.

Beddoes, Thomas. *Observations on the Nature and Cure of Calculus, Sea Scurvy, Consumption, Catarrh, and Fever: Together with Conjectures upon Several Other Subjects of Physiology and Pathology*. Philadelphia: T. Dobson, 1797.

Bell, Benjamin. *A System of Surgery*. 1st American ed. Worcester, Mass.: Isaiah Thomas, 1791. 4 vols.

Bell, John. *An Inquiry into the Causes which Produce, and the Means of Preventing Diseases among British Officers, Soldiers, and Others in the West Indies*. London: J. Murray, 1791.

Berdoe, Marmaduke. *An Essay on the Nature and Causes of the Gout, With a Few Conjectures on the Probability of Its Cure*. Bath: S. Hazard, 1772.

Black, William. *An Historical Sketch of Medicine and Surgery: From their Origin to the Present Time; and of the Principal Authors, Discoveries, Improvements, Imperfections and Errors*. London: J. Johnson, 1782.

Blackall, John. *Observations on the Nature and Cure of Dropsies, and Particularly on the Presence of the Coagulable Part of the Blood in Dropsical Urine; To Which is added, an Appendix, Containing Several Cases of Angina Pectoris, with Dissections, &c.* 1st American, from the 3rd London ed. Philadelphia: James Webster, 1820.

Blair, William. *The Soldier's Friend: or, The Means of Preserving the Health of Military Men.* London: Murray, 1798.

Blane, (Sir) Gilbert. *Observations on the Diseases of Seamen.* 2nd ed., corr. London: Joseph Cooper, 1789.

Boerhaave, Herman. *Boerhaave's Aphorisms: Concerning the Knowledge and Cure of Diseases.* 3rd ed. London: W. Innys et al., 1755.

Brocklesby, Richard. *Oeconomical and Medical Observations, In Two Parts, From the Year 1758 to the Year 1763, inclusive: Tending to The Improvement of Military Hospitals, and to The Cure of Camp Diseases incident to Soldiers.* London: T. Becket and P. A. De Hondt, 1764.

Bromfield, William. *Chirurgical Operations and Cases.* London: T. Cadell, 1773. 2 vols.

Brookes, Richard. *The General Dispensatory: Containing a Translation of the Pharmacopoeias of the Royal College of Physicians of London and Edinburgh; together with that of the Royal Hospital at Edinburgh.* 2<sup>nd</sup> ed., enl. London: J. Newbery [etc.], 1765.

----- *The General Practice of Physic; Extracted chiefly from the Writings of the Most Celebrated Physicians, and The Medical Essays, Transactions, Journals, and Literary Correspondence of*

*the Learned Societies in Europe.* 3rd ed. London: J. Newbury, 1758. 2 vols.

Brown, George. Extract of letter from Brown to John Hope, 14 Sept. 1776. *Medical Commentaries*, IV (1776), pp. 236-39.

[Brown, John.] *The Elements of Medicine; or, a Translation of the Elementa Medicinae Brunonis.* New ed. Philadelphia: T. Dobson, 1790

[Bruce, Alexander.] *An Inquiry Concerning the Cause of the Pestilence, and the Diseases in Fleets and Armies: In Three Parts: With an Appendix containing Some Facts taken from History, the Works of Physicians, &c. relating to the Subject.* Edinburgh: S. Bladon, 1759.

Bryce, James, *An Account of the Yellow Fever: With a Successful Method of Cure.* Edinburgh: W. Creech [etc.], 1796.

Buchan, William. *Domestic Medicine; or the Family Physician: Being an Attempt to render the Medical Art more generally useful, by shewing people what is in their own power both with respect to the Prevention and Cure of Diseases. Chiefly calculated to recommend a proper attention to Regimen and Simple Medicines.* 2nd American ed. Philadelphia: Joseph Cruikshank, 1774.

----- *Observations concerning the Diet of the Common People: Recommending a Method of Living Less Expensive and More Conducive to Health, than the Present.* London: A. Strahan, 1797.

Burton, John. *An Essay towards a Complete New System of Midwifery, Theoretical and Practical, together with the Descriptions, Causes, and Methods of Removing, or Relieving the Disorders*

- peculiar to Pregnant and Lying-In Women, and New-Born Infants.* London: James Hodges, 1751.
- Cadogan, William. *A Dissertation on the Gout, and All Chronic Diseases, Jointly Considered: As proceeding from the same Causes; What those Causes are; and A rational and natural Method of Cure proposed. Addressed to all Invalids.* 10th ed. London [repr. Boston: Henry Knox]: 1772.
- Carr, Richard. *Dr. Carr's Medicinal Epistles Upon Several Occasions: Done into English, as a Supplement to the Explanations of Sanctorious's Aphorisms* Trans. John Quincy. London: William Newton and J. Phillips, 1714.
- *Epistolae medicales variis occasionibus conscriptae.* London: Stafford Anson, 1691.
- Castro, Rodrigo de. *Medicus-politicus: sive, De officiis medico-politicis tractatus, quatuor distinctus libris: in quibus non solum bonorum medicorum mores ac virtutes exprimuntur, malorum vero fraudes & imposturae deteguntur, verum etiam pleraque, alia circa novum hoc argumentum utilia atque iucunda exactissime proponuntur.* Hamburg: Bibliopolio Frobeniano, 1614.
- Champney, Thomas. *Medical and Chirurgical Reform Proposed, from a Review of the Healing Art, throughout Europe, particularly Great Britain* (London: J. Johnson [etc.], 1797.
- Chevalier, Thomas. *Observations in Defence of a Bill Lately Brought into Parliament, for Erecting the Corporation of Surgeons of London into a College; and for Granting and Confirming to Such College Certain Rights and Privileges: Including a Sketch of the History of Surgery in England.* London: J. Johnson and J. Debrett, 1797.

Cheyne, George. *An Essay of Health and Long Life*. London: George Strahan; Bath: J. Leake; 1724.

Cleghorn, George. *Observations on the Epidemical Diseases in Minorca. From the Year 1744 to 1749.*

*To Which is Prefixed A short Account of the Climate, Productions, Inhabitants, and Endemial Distempers of Minorca.* annotated by Benjamin Rush. Philadelphia: F. Nichols, 1809.[note: earlier ed. Also used?]

Cochrane, Thomas. "Observations on the Use of Cold Bathing in the Cure of Tetanus, communicated in a Letter from Mr Thomas Cochrane Surgeon at Nevis, to Mr John Balfour Surgeon in Edinburgh." *Medical Commentaries*, III (1775), pp. 183-87.

*Considerations on the Use and Abuse of Antimonial Medicines in Fevers, and Other Disorders.*  
London: John Murray, 1773.

Cross, John. *Sketches of the Medical Schools of Paris: Including Remarks on the Hospital Practice, Lectures, Anatomical Schools, and Museums, and Exhibiting the Actual State of Medical Instruction in the French Metropolis.* London: Callow, 1815.

Cullen, William. *First Lines of the Practice of Physic*. New ed. from the last British ed., corr. and enl.  
Worcester, Mass.: Isaiah Thomas, 1790. 3 vols.

----- *Synopsis and Nosology, being an Arrangement and Definition of Diseases.* Hartford: Nathaniel Patten, 1792.

----- *A Treatise of the Materia Medica.* New York and Philadelphia: J. Cruikshank et al., 1789. 2 vols.

Culpeper, Nicholas. *Pharmacopoeia Londinensis: or, the London Dispensatory. Further Adorned by the Studies and Collections of the Fellows, now living at the said Colledg. Being that Book by which all Apothecaries are bound to make up all the Medicines in their Shops.* London: Peter Cole, 1666.

Dancer, Thomas. *A Brief History of the Recent Expedition against Fort San Juan, So far as it Relates to the Diseases of the Troops; together with Some Observations on Climate, Infection and Contagion; and Several of the Endemial Complaints of the West-Indies.* Kingston: D. Douglas & W. Aikman, 1781.

Degner, Johann Hartmann. *Historia medica de dysenteria bilioso-contagiosa.* Utrecht, 1738.

Dickinson, Caleb. *An Inquiry into the Nature and Causes of Fever; with a Review of the Several Opinions concerning the Proximate Cause, as Advanced by Different Authors; and Particularly as Delivered from the Practical Chair in the University of Edinburgh. Including Some Observations on the Existence of Putrefaction in the Living Body, and the Proper Method of Cure to be Pursued in Fever.* Edinburgh: C. Elliot; London: C. Robinson, 1785.

Diemerbroeck, Ysbrand van. *Tractatus copiosissimus de peste.* Geneva, 1721. 2 vols.

*The Dispensatory of the Royal College of Physicians in Edinburgh.* trans. and annot. Peter Shaw. London: William and John Innys, 1727.

Dunne, Charles. *The Chirurgical Candidate; or, Reflections on Education: Indispensable to Complete Naval, Military, and Other Surgeons.* London: Samuel Highley, 1808.



"E. R." *The Experienc'd Farrier: Or, a Compleat Treatise of Horsemanship. In Two Books; Physical and Chyrurgical.* 2nd ed., enl. London: W. Whitwood and A. Feltham, 1691.

Falconer, William. *A Dissertation on the Influence of the Passions upon Disorders of the Body: Being the Essay to Which the Fothergillian Medal was Adjudged.* Introd. John Coakley Lettsom. London: C. Dilly, etc., 1788.

----- *Observations on Dr. Cadogan's Dissertation on the Gout and all Chronic Diseases.* 2nd ed. Bath, 1771.

----- *Observations respecting the Pulse; Intended to Point out with Greater Certainty, the Indications which it Signifies; Especially in Feverish Complaints.* London: T. Cadell, jr., and W. Davies, 1796.

Ferriar, John, and W[illiam] Simmons. *Medical Histories and Reflections.* Warrington: W. Eyres; London: T. Cadell, 1792-98. 3 vols.

Fordyce, (Sir) William. *A New Inquiry into the Causes, Symptoms, and Cure, of Putrid and Inflammatory Fevers.* 2nd ed. London: T. Cadell [etc.], 1774.

Fothergill, A[nthony]. *A New Inquiry into the Suspension of Vital Action, in Cases of Drowning and Suffocation.* Bath: S. Hazard, 1795.

Fowler, Thomas. *Medical Reports of the Effects of Blood-letting, Sudorifics, and Blistering, in the Cure of the Acute and Chronic Rheumatism.* London: J. Johnson, 1795.

Fuller, Thomas. *Pharmacopoeia Domestica: or, the Family Dispensatory. With Remarks on the Compositions, and An Explanation of their Virtues. Designed for the Use of Physicians in the Country* London: W. Innys & R. Manby, 1739.

----- *Pharmacopoeia extemporanea; or, A Body of Medicines, Containing a Thousand Select Prescripts, Answering Most Intentions of Cure. To Which are Added, Useful Scholia, a Catalogue of Remedies, and Copious Index. For the Assistance of Young Physicians.* 5th ed. London: W. Innys and R. Manby, 1740.

Gardiner, John. *An Inquiry into the Nature, Cause, and Cure of the Gout, and of Some of the Diseases with which it is Connected.* Philadelphia: William Spotswood, 1793.

Gerard, John. *The Herball; or, General Historie of Plantes.* Rev. and enl. Thomas Johnson. London: A. Islip [etc.], 1636.

Gibson, William. *The Farrier's New Guide: Containing, First, The Anatomy of a Horse ... Secondly, An Account of all the Diseases incident to Horses, with Their Signs, Causes, and Methods of Cure.* 7th ed. London: J. Osborn & T. Longman, 1731.

Gooch, Benjamin. *The Chirurgical Works of Benjamin Gooch.* new ed. London: J. Johnson, 1792. 3 vols,

Gordon, Robert. "A remarkable Case of Deafness cured by Salivation." *Medical Commentaries*, III (1775), pp. 80-82.

Grainger, James. *An Essay on the More Common West-India Diseases; and the Remedies which that*

*Country itself produces, To which are added, Some Hints on the Management, &c. of Negroes.*  
London: T. Becket and P. A. De Hondt, 1764.

Grant, William. *Observations on the Nature and Cure of Fevers.* 3rd ed. London: T. Cadell, 1779.  
2 vols.

Gregory, John. *Elements of the Practice of Physic.* [*The Works of the Late John Gregory, IV*].  
London: A. Strahan and T. Cadell; Edinburgh: W. Creech, 1788.

----- *Observations on the Duties and Offices of a Physician; and on the Method of Prosecuting  
Enquiries in Philosophy.* London: W. Strahan and T. Cadell, 1770.

Hales, Stephen. *A Description of Ventilators: Whereby Great Quantities of Fresh Air May with Ease  
be conveyed into Mines, Goals [sic], Hospitals, Work-Houses and Ships, In Exchange for their  
Noxious Air* London: W. Innys, R. Manby, and T. Woodward, 1743.

----- *A Friendly Admonition to the Drinkers of Gin, Brandy, and Other Distilled Spiritous Liquors:  
With an Humble Representation of the Necessity of Restraining a Vice So Destructive of the  
Industry, Morals, Health, and Lives of the People.* 6th ed. London, F. & C. Rivington, 1800.

Hamilton, Robert. *The Duties of a Regimental Surgeon Considered: With Observations on His  
General Qualifications; And Hints relative to a More Respectable Practice, and Better  
Regulation of that Department. Wherein are interspersed many Medical Anecdotes, and  
Subjects discussed, equally interesting to every Practitioner.* London, J. Johnson et al., 1787.  
2 vols.

Hammick, S[tephen], Jr. "Summary of the late Dr. GEACH'S practice in low fever." *Contributions to Physical and Medical Knowledge, Principally from the West of England*. Ed. Thomas Beddoes. Bristol: Biggs & Cotter, 1799. pp. 377-87.

Harrison, John. *A Short Comparative View of the Practice of Surgery in the French Hospitals: With Some Remarks on the Study of Anatomy and Midwifery. The Whole Endeavouring to prove, That the Advantages to Students, in these Professions, are greater in London, than at Paris*. London: Jacob Robinson, 1750.

Hartman, George. *The True Preserver of Health: Being a Choice Collection of Select and Experienced Remedies for all Distempers incident to Men, Women and Children. Selected from, and Experienced by the most Famous Physicians and Chyrurgians of Europe. Together with Excellent Directions for Cookery*. 2nd ed., enl. London: T. B., 1684.

Heister, Laurence. *Medical, Chirurgical, and Anatomical Cases and Observations*. trans. George Wirgman. London: J. Reeves [etc.], 1755.

Heysham, John. *Observations On the Bills of Mortality, In Carlisle*. Eds. for 1780, 1781, Carlisle, 1781-82

Hill, John. *A History of the Materia Medica: Containing Descriptions of all the Substances used in Medicine; their Origin, their Characters when in Perfection, the Signs of their Decay, their Chymical Analysis, and an Account of their Virtues, and of the several Preparations from them now used in the Shops*. London: T. Longman [etc.], 1751.

Hoffman, Friedrich. *Fundamenta Medicinae*. Trans. and introd. Lester S. King. London: Macdonald;

New York: American Elsevier inc., 1971.

-----. *Opera omnia physico-medica denuò revisa, correcta & aucta, in sex tomos distributa*. Geneva: fratres de Tournes, 1740. 6 vols. In 3.

-----. *A System of the Practice of Medicine: From the Latin of Dr. Hoffman*. trans. William Lewis, rev. Andrew Duncan. London: J. Murray, 1783. 2 vols.

Home, Francis. *Medical Facts and Experiments*. London: A. Millar; Edinburgh: A. Kincaid and J. Bell, 1759.

Hunter, John [d. 1809]. *Observations on the Diseases of the Army in Jamaica; And on the Best Means of Preserving the Health of Europeans, in that Climate*. London: G. Nicol, 1788.

Hunter, John [d. 1793]. *A Treatise on the Blood, Inflammation, and Gun-Shot Wounds, by the Late John Hunter. To which is Prefixed a Short Account of the Author's Life, by his Brother-in-Law, Everard Home* Philadelphia: Thomas Bradford, 1796. 2 vols.

-----. *A Treatise on the Venereal Disease*. Philadelphia: Parry Hall, 1791.

Huxham, John. *An Essay on Fevers*. Introd. Saul Jarcho. Canton, Mass.: Science History Publications [Eatson Publishing Intl.], 1988; repr. of 3rd [1757] ed.

-----. *Observationes de aere et morbis epidemicis, ab anno M DCC XXVIII ad finem anni M DCC XXXVII.* London: Joannes Hinton [etc.], 1739-52. 2 vols.

-----. *Observations on the Air and Epidemic Diseases From the Year MDCCXXVIII. to MDCCXXXVII. inclusive; Made by Dr. Huxham, at Plymouth: Together with a Short Dissertation on the Devonshire Colic. Translated from the Latin Original, and now Published with the Doctor's Approbation.* London: J. Hinton and Henry Whitfeld, 1759-67. 2 vols.

Jackson, Robert. *An Outline of the History and Cure of Fever, Endemic and Contagious; More Expressly the Contagious Fever of Jails, Ships, and Hospitals; the Concentrated Endemic, Vulgarly the Yellow Fever of the West Indies. To Which is Added, an Explanation of the Principles of Military Discipline and Economy; With a Scheme of Medical Arrangement for Armies.* Edinburgh: Mundell & Son; London: T.N. Longman and Murray & Highley, 1798.

-----. *A Systematic View of the Formation, Discipline, and Economy of Armies.* London: for the author, 1804.

-----. *A Treatise on the Fevers of Jamaica: With Some Observations on the Intermitting Fever of America, and an Appendix, containing Some Hints on the Means of Preserving the Health of Soldiers in Hot Climates.* Philadelphia: Robert Campbell, 1795.

James, Robert. *A Medicinal Dictionary; Including Physic, Surgery, Anatomy, Chymistry, and Botany. In all their Branches relative to Medicine. Together with a History of Drugs; An Account of thir Various Preparations, Combinations, and Uses; And An Introductory Preface, tracing the Progress of Physic, and explaining the Theories which have principally prevail'd in all Ages of the World.* London: T. Osborne, 1743-45. 3 vols.

Jeans, Thomas. *A Treatise on the Gout, Wherein is Delivered a New Idea of it Proximate Cause, and Consequent Means of Relief; Written with a View to Excite to Excite Further Research into the*

- Nature, and to Lessen Patient Reserve in the Treatment of that Disease.* Southampton: T. Cadell, 1792.
- Jervey, William. *Practical Thoughts on the Prevention and Cure of the Scurvy, Especially in the British Navy.* London: J. Nourse [etc.], 1769.
- Johnstone, James. *An historical dissertation concerning the malignant epidemical fever of 1756.* London, 1758.
- Kirkland, Thomas. *An Inquiry into the Present State of Medical Surgery: Including the Analogy betwixt External and Internal Disorders.* London: J. Dodsley, 1783-86. 2 vols.
- La Condamine, Charles. *The History of Inoculation.* New Haven: T. & S. Green, 1773.
- Latham, John. *On Rheumatism, and Gout; A Letter Addressed to Sir George Baker, Bart.* London: T. N. Longman, 1796.
- Latta, James. *A Practical System of Surgery.* Edinburgh: G. Mudie & Son [etc.], 1795. 3 vols.
- Lee, Samuel. *A Proper Reply to the Serjeant Surgeons Defence of Their Conduct at Chelsea Hospital.* London: W. Owen, 1754.
- Leigh, John. *An Experimental Inquiry into The Properties of Opium, and its Effects on Living Subjects; With Observations on its History, Preparations and Uses. Being the Disputation which gained the Harveian Prize for the Year 1785.* Edinburgh: Charles Elliot; London: G.G.J. and J. Robinson, 1786.

Lempriere, William. *Practical Observations on the Diseases of the Army in Jamaica, as They Occurred between the Years 1792 and 1797; on the Situation, Climate, and Diseases of that Island; and on the Most Probable Means of Lessening Mortality among the Troops, and among Europeans in Tropical Climates.* London: T. N. Longman and O. Rees, 1799.

Le Pois, Charles. *Selectiorum observationum et consiliorum.* noviss. ed. Leiden: Cornelii Boutestein and Joh. Arnoldum, 1714.

Lewis, William. *The Edinburgh New Dispensatory: ... Being an Improvement of the New Dispensatory by Dr. Lewis.* ed. John Rotheram. 3rd American ed., from the 4th Edinburgh ed. Walpole, N.H.: D. Carlisle, for Thomas & Andrews, 1796.

-----. *The New Dispensatory: .... Intended as a Correction, and Improvement of Quincy.* London: J. Nourse, 1753

Liger, Charles Louis. *A Treatise on the Gout.* London: R. Griffiths, 1760.

Lind, James. *An Essay on Diseases Incidental to Europeans, in Hot Climates, with the Method of Preventing their Fatal Consequences.* 1st American ed., from the 6th London ed. Philadelphia: William Duane, 1811 [1768].

-----. *Lind's Treatise on Scurvy: A Bicentenary Volume containing a Reprint of the First Edition of A TREATISE OF THE SCURVY by James Lind, M.D. with Additional Notes,* ed. C.P. Stewart and Douglas Guthrie. Edinburgh: Edinburgh Univ. Press, 1953.



*The London Practice of Physic: For the Use of Physicians and younger Practitioners, wherein The Definition and Symptoms of Diseases are laid down, and the present Method of Cure. With the Dpses of Medicine now given. Also, an Index; and a Table for Computing the Quantity of Purgatives, Opiates, and Mercurials in the Compositions of the London Dispensatory.* Dublin: James Williams, 1770.

MacBride, David. *An Historical Account of a New Method of Treating the Scurvy at Sea: Containing Ten Cases, Which shew that this destructive DISEASE, may be easily and effectually CURED, without the Aid of fresh Vegetable Diet.* London: A. Millar and T. Cadell, 1767.

----- *A Methodical Introduction to the Theory and Practice of Physic.* London: W. Strahan [etc.], 1772.

McLean, Hector. *An Enquiry into the Nature, and Causes of the Great Mortality among the Troops at St. Domingo: With Practical Remarks on the Fever of that Island; And Directions, for the Conduct of Europeans on Their First Arrival in Warm Climates.* London: T. Cadell and W. Davies, 1797.

McClurg, James. *Experiments upon the Human Bile: And Reflections on the Biliary Secretion. With an Introductory Essay.* London: T. Cadell, 1772.

Manning, Henry. *Modern Improvements in the Practice of Physic.* London: G. Robinson and J. Murray, 1780.

Mason, Simon. *The Nature of an Intermitting Fever and Ague Consider'd: m Wherein is Explain'd, the Cause of Each Succeeding Symptom, and Their Periodical Returns: With the Best and Most*

*Rational Method of Cure.* London: J. Hedges, 1745.

Mead, Richard. *The Medical Works of Richard Mead, M.D.* new ed. Edinburgh: Alexander Donaldson and Charles Elliot, 1775 [repr. New York: AMS Press, 1978].

*The Medical Register For the Year 1783.* London: Joseph Johnson, [1783]

Millar, John. *Observations on the Management of the Prevailing Diseases in Great Britain, Particularly in the Army and Navy; Together with a Review of that of Other Countries, and Arithmetical Calculations of the Comparative Success of Different Methods of Cure.* London: J. Millar, 1779.

Milman, Francis. *An Enquiry Into the Source from whence the Symptoms of the Scurvy and of Putrid Fevers, Arise; And into the Seat which those Affections occupy in the Animal Oeconomy: With a View of ascertaining a more just Idea of Putrid Diseases Than has generally been formed of them.* London: J. Dodsley, 1782.

Monro, Donald. *An Essay on the Dropsy, and Its Different Species.* 3<sup>rd</sup> ed. London: A. Millar et al., 1765.

-----. *Observations on the Means of Preserving the Health of Soldiers; And of Conducting Military Hospitals. And On the Diseases incident to Soldiers in the Time of Service, and on the same Diseases as they have appeared in London.* 2nd ed. London: J. Murray and G. Robinson, 1780. 2 vols.

Moore, James Carrick. *An Essay on the Materia Medica: In Which the Theories of the Late Dr. Cullen*

*are Considered; Together with Some Opinions of Mr. Hunter, and Other Celebrated Writers.*  
London: T. Cadell, 1792.

----- *A Method of Preventing or Diminishing Pain in Several Operations of Surgery.* London: T. Cadell, 1784.

Moore, John. *Medical Sketches: In Two Parts.* 1st American ed. Providence, R.I., Carter & Wilkinson, 1794.

Moseley, Benjamin. *A Treatise on Tropical Diseases; on Military Operations; and on the Climate of the West-Indies.* 2nd ed., enl. London: T. Cadell, 1789.

*Observations on the State of the Dispute Between A Physician and An Apothecary, concerning a Prescription of Sydenham, in which A Vindication of this Author's Character as a Scholar, is attempted; And His Method of curing the Dysentery by injection of Milk and Venice Treacle, is confirmed by Facts and Experience.* London: W. Johnston and B. Thorn, 1765.

Pearson, George. *Outlines of Lectures on the Practice of Physic.* London, 1789-92. 2 vols.

Pearson, George. *Arranged Catalogues of the Articles of Food, Drink, Seasoning, and Medecine; for the Use of Lectures on Therapeutics and Materia Medica.* London: Wilson and Company, 1801.

Pechlin, Johann Nicolaus. *Observationum physico-medicarum libri tres, quibus accessit, Ephemeris vulveris thoracici & in eam commentarius.* Hamburg: Libraria Schultziana, 1691. 2 vols in 1.

Pemberton, Henry. *The Dispensatory of the Royal College of Physicians, London: Translated into English with Remarks, &c.* 2nd ed. London: T. Longman and J. Nourse, 1748

Percival, Thomas. "Extract of a Letter from Dr Percival to Dr Duncan, on the External Use of Preparations of Lead." *Medical Commentaries*, 3 (1775), pp. 199-205.

*Pharmacopoeia Londinensis of 1618: Reproduced in Facsimile.* introd, George Urdang. Hollister Pharmaceutical Library, no. 2 (Madison: State Historical Society of Wisconsin, 1944).

Plenck, Joseph James. *A New and Easy Method of Giving Mercury, to Those Affected with the Venereal Disease: To Which is Annexed a New Theory of the Action of the Metal on the Salivary Glands.* Trans. William Saunders. London: E. and C. Dilly, 1767.

*The Practice of the British and French Hospitals: Viz. The Edinburgh, Military, and Naval Hospital, /L'Hotel Dieu, La Charite, and Les Invalides. Containing A select Body of useful and elegant Medicines For the several Disorders incident to the Human Body; with Practical Remarks on each Prescription.* 2nd ed. London: R. Baldwin, 1775.

Pringle, John. *Observations on the Diseases of the Army, in Camp and Garrison: In Three Parts: With an Appendix, Containing some Papers of Experiments, Read at several Meetings of the Royal Society.* 2nd ed., corr. and enl. London: A. Millar et al., 1753.

Quier, John, et al. *Letters and Essays on The Small-Pox and Inoculation, The Measles, The Dry Belly-Ache, The Yellow, and Remitting, and Intermitting Fevers of the West Indies. To Which are Added, Thoughts on the Hydrocephalus Internus, and Observations on Hyatides in the Heads of Cattle.* London: J. Murray, 1778.

Quincy, John. *The Dispensatory of the Royal College of Physicians in London: With Some Notes relating to the Manner of Composition, and Remarks on the Changes made in most of the Officinal Medicines, from their first Prescribers down to the present Practice*, 2nd ed. London: J. Bettenham et al, 1727.

----. *Lexicon Physico-Medicum: Or, A New Physical Dictionary, Explaining The Difficult Terms used in the several Branches of the Profession, and in such Parts of Philosophy as are introductory thereunto. To which is added, Some Account of the Things Signified by such Terms. Collected From the most eminent Authors, and particularly those who have wrote upon Mechanical Principles*. London: Andrew Bell, William Taylor, and John Osborn, 1719.

----. *Quincy's Lexicon-Medicum. A New Medical Dictionary; Containing an Explanation of the Terms in Anatomy, Physiology, Practice of Physic, Materia Medica, Chymistry, Pharmacy, Surgery, Midwifery, and the Various Branches of Natural Philosophy connected with Medicine. Selected, Arranged, and Compiled, from the Best Authors*. ed. Robert Hooper. Philadelphia: E. & R. Parker, M. Carey & Son, and Benjamin Warner, 1817.

Ramazzini, Bernardini *De Morbis artificum Bernardini Ramazzini diatriba: Diseases of Workers. The Latin Text of 1713*. trans. and ed. Wilmer Cave Wright. Chicago: Univ. of Chicago P., 1940.

----, and Luigi Cornaro. *L'art de conserver la santé des princes ... et Les avantages de la vie sobre*. Leiden, 1724.

Ranby, John. *The Method of Treating Gunshot Wounds*. 2nd ed. London: Robert Horsfield, 1760.

-----, and (Sir) Caesar Hawkins, *The True Account of all the Transactions before the ... Commissioners for the Affairs of Chelsea Hospital, as Far as Relates to the Admission and Dismission of Samuel Lee, Surgeon*. London: J. & P. Knapton, 1754.

*Regulation for Improving the Situation of Regimental Surgeons and Mates, and for the Better Management of the Sick, in Regimental Hospitals*. Dublin, 1797.

Reide, Thomas Dickson. *A View of the Diseases of the Army in Great Britain, America, the West Indies, and on Board of King's Ships and Transports, from the Beginning of the Late War to the Present Time. Together with Monthly and Annual Returns of the Sick, and Some Account of the Method in Which They were Treated in the Twenty-Ninth Regiment, and the Third Battalion of the Sixtieth Regiment*. London: J. Johnson, 1793.

Relph, John. *An Inquiry into the Medical Efficacy of a New Species of Peruvian Bark, Lately Imported into this Country under the Name of Yellow Bark: Including Practical Observations Respecting the Choice of Bark in General*. London: James Phillips, 1794. [83-9, #4]

Remmett, Robert Butler. "Dissertatio medica inauguralis, de Opii Usu in morbis inflammatoriis"  
[review] *Medical Commentaries*, 2 (1774), pp. 20-26

Rigby, Edward. *An Essay on the Use of the Red Peruvian Bark in the Cure of Intermittents*. London: Joseph Johnson, 1783.

Ring, John. *Reflections on the Surgeons' Bill*. London, 1798.

Robertson, Robert. *Directions for Administering Peruvian Bark* London, 1799.

Robinson, Nicholas. *An Essay on the Gout, and all Gouty Affections Incident to affect Mankind. Comprizing The various Natures, Symptoms, and Causes, thro' every Branch and Stage of the Disease; demonstrating, in the clearest Manner, that the Air, Diet, and Exercise, when rightly adjusted, are Remedies the most sovereignly efficacious, both to assuage the gouty Pains, and relieve the Disease, under all its various Changes.* London: Edward Robinson [1755].

Rollo, John. *Observations on the Diseases which Appeared in the Army on St. Lucia, in December, 1778; January, February, March, April, and May, 1779. To Which are Prefixed, Remarks Calculated to Assist in Ascertaining the Causes, and in Explaining the Treatment, of Those Diseases. With an Appendix, Containing a Short Address to Military Gentlemen, on the Means of Preserving Health in the West-Indies.* 2nd ed., rev. Barbadoes and London: Charles Dilly, 1781.

Rowley, William. *Medical Advice, for the use of the Army and Navy, in the Present American Expedition: Intended for the Perusal of Private Gentlemen as well as Medical Practitioners.* London: F. Newbery, 1776.

Rush, Benjamin. *Directions for Preserving the Health of Soldiers.* Lancaster, Pa.: John Dunlap, 1778.

Russell, Richard. *Oeconomia naturae in morbis acutis et chronicis glandularum* London, 1755.

----- *The Oeconomy of Nature in Acute and Chronical Diseases of the Glands.* London: J. and J. Rivington, 1755.

Salmon, William. *Pharmacopoeia Londinensis: Or, the New London Dispensatory. In Six Books.*

*Translated into English for the publick Good, and fitted to the whole Art of Healing. Illustrated with The Preparations, Virtues and Uses of all Simple Medicaments; Vegitable, Animal and Mineral: Of all the Compounds, both Internal and External; And of all the Chymical Preparations now in Use.* London: Thomas Dawks, 1678.

Santorio Santorio [Sanctorius Sanctorius]. *Aphorismi de medicina statica.* Leipzig: Joann. Michael. Ludov. Teubner, 1762.

Santorio Santorio. *Medicina Statica: Being the Aphorisms of Sanctorius, Translated into English with large Explanations. Wherein is given A Mechanical Account of the Animal Oeconomy, and of the Efficacy of the Non-Naturals, either in bringing about or removing its Disorders: Also with an Introduction concerning Mechanical Knowledge, and the Grounds of Certainty in Physick.* trans. and ed. John Quincy. London: William Newton, 1712.

Saunders, William. *Elements of Physic: For the Use of Gentlemen Who Attend Lectures on that Subject.* [London], 1790.

Sharp, Samuel. *A Treatise on the Operations of Surgery, With a Description and Representation of the Instruments Used in Performing them: To which is Prefix'd an Introduction. On the Nature and Treatment of Wounds, Abscesses and Ulcers.* 5th ed. London: J. and R. Tonson and S. Draper, 1747.

Short, Thomas. *Medicina Britannica: Or a Treatise on such Physical Plants, as are Generally to be found in the Fields or Gardens in Great-Britain.* Reprint of 3rd (London) ed. Philadelphia, B. Franklin, 1751.



Sims, James. *Observations on Epidemic Disorders, with Remarks on Nervous and Malignant Fevers*. London: J. Johnson and G. Robinson, 1773.

Smith, E. *The Compleat Housewife: Or, Accomplish'd Gentlewoman's Companion. Being A Collection of upwards of Six Hundred of the most approved Receipts*. London: R. Ware et al., 1750.

Spilsbury, Francis B. *Every Lady and Gentleman Their Own Dentist, as Far as the Operations will Allow: Containing the Natural History of the Adult Teeth and Their Diseases with the Most Approved Methods of Prevention and Cure, etc. to Which is Added, Dentition, and Treatment of Children at That Period*. London: Barker, 1791.

Sprengell, [Conrad Joachim]. "Observations on Dr. Eaton's Styptic." *Philosophical Transactions of the Royal Society of London*, 33 (1724-25), pp. 108-14.

Stevenson, William. *Considerations on the Dangerous Effects of Promiscuous Blood-letting*. Newark, 1783.

"Sur la maniere d'arrester les hemorrhages, qui viennent après de membres coupés," *Histoire de l'Académie royale de sciences*, 1733. Paris: Impr. Royale, 1735. pp. 30-32.

Sutherland, Alexander. *Attempts to Revive Antient Medical Doctrines*. London: A. Millar, 1763. 2 vols. in 1.

Swediaur, François Xavier. *Practical Observations on Venereal Complaints*. 3rd ed. New York: Samuel Campbell, 1788.

Swieten, Gerard van. *The Diseases incident to Armies. With the Method of Cure.* Philadelphia: R. Bell, 1776.

Sydenham, Thomas. *The Whole Works of that Excellent Practical Physician, Dr. Thomas Sydenham: Wherein not only the History and Cures of Acute Diseases are Treated of, after a New and Accurate Method; But also the Shortest and Safest Way of Curing Mose Chronical Diseases.* Trans. John Pechey. 6th ed., corr. London: R. Wellington, 1715.

Theobald, John. *Every Man His Own Physician. Being a complete Collection of efficacious and Approved Remedies for every Disease incident to the Human Body. With Plain Instructions for their common Use.* 10th ed. London: W. Griffin; repr. Boston: Cox and Berry, 1767.

----- *Medulla Medicinae Universae: or, A New Compendious Dispensatory. Compiled at the Command of His Royal Highness the Duke, For the Use of the Military Hospital Abroad, during the late War. By the King's Physicians and Surgeons, the Surgeon-General, and Apothecary-General, to the Army.* 6th ed. Dublin: Alexander Ewing, 1765.

Tissot, Samuel. *Advice to the People in General, with Regard to their Health: But particularly calculated for those, who are the most unlikely to be provided in Time with the best Assistance, in acute Diseases, or upon any sudden inward or outward Accident. With A Table of the most cheap, yet effectual Remedies, and the plainest Directions for preparing them readily.* Trans. J. Kirkpatrick. 4th ed. rev. Philadelphia: John Sparhawk, 1771.

----- *Essay on Bilious Fevers; or, The History of a Bilious Epidemic Fever at Lausanne, in the Year MDCCLV.* London: D. Wilson and T. Durham, 1760.

Townsend, Joseph. *Elements of Therapeutics; or a Guide to Health; being Cautions and Directions in the Treatment of Diseases. Designed Chiefly for the Use of Students.* 1st American ed. Boston: David Carlisle, 1802.

Trotter, Thomas. *Observations on the Scurvy: With a Review of the Opinions lately Advanced on that Disease and a New Theory Defended.* 2nd. ed. London: T. Longman, 1792

Tulp, Nicolaas. *Observationes medicae.* 6<sup>th</sup> ed. Leiden: Georgium Wishoff, 1739.

Turner, Daniel. *The Art of Surgery: In Which is Laid Down such a General Idea of the Same, as is Founded upon Reason, Confirm'd by Practice.* London: C. Rivington [etc.], 1722.

----- . *Syphilis: A Practical Dissertation on the Venereal Disease.* 4th ed., rev. London: J. Walthoe [etc.], 1732.

Turton, William. *A Medical Glossary: In which the Words in the Various Branches of Medicine are Deduced from Their Original Languages; Properly Accented, and Explained.* London: J. Johnson, 1797.

Underwood, Michael. *A Treatise upon Ulcers of the Legs; in which Former Methods of Treatment are candidly examined and compared, with One more Rational and Safe: Proving That a perfect Cure may generally be effected more certainly, without Rest and Confinement, than By the Strict Regimen in Common Use.* London: J. Mathews, 1783.

Walker, Sayer. *A Treatise on Nervous Diseases; in Which are Introduced Some Observations on the Structure and Functions of the Nervous System; and Such an Investigation of the Symptoms and*

- Causes of These Diseases as may Lead to a Rational and Successful Method of Cure.* London: J. Phillips et al., 1796.
- Wallis, George. *The Art of Preventing Diseases, and Restoring Health, Founded on Rational Principles, and Adapted to Persons of Every Capacity.* New York: Samuel Campbell, 1794.
- Weber, Philipp. *Thermarum Wisbadensium descriptio. Complectens antiquitatem et utilitatem harum thermarum.* Oppenheim: Hieronymi Galleri, 1617.
- Wesley, John. *Primitive Physic: or an Easy and Natural Method of Curing Most Diseases* 21st ed. Philadelphia: Prichard & Hall, 1789.
- White, Robert. *Analysis of the New London Pharmacopoeia: Explaining the Nature, Principles, Elective Attractions, Qualities, Uses, and Doses of the various Preparations and Compositions contained therein; and particularly calculated for the Use of the Junior Students.* Newmarket: T. Cadell, 1792.
- White, William. "Observations on the Medical Virtues of Lead." *Medical Commentaries*, 3 (1775), pp. 72-80.
- Whytt, Robert. *An Essay on the Virtues of Lime-Water in the Cure of the Stone.* Edinburgh: Hamilton, Balfour, and Neill, 1752.
- *Physiological Essays containing, I. An Inquiry into the Causes which promote the Circulation of the Fluids in the very Small Vessels of Animals. II. Observations on the Sensibility and Irritability of the Parts of Men and other Animals; occasioned by M. de Haller's late Treatise*

*on these Subjects* 3rd ed. Edinburgh: John Balfour, 1766.

Wilson, Andrew. *Rational Advice to the Military, When Exposed to the Inclemency of Hot Climates and Seasons*. London, 1780.

Withering, William. *A Botanical Arrangement of British Plants: Including the Uses of Each Species in Medicine, Diet, Rural Economy and the Arts. With an Easy Introduction to the Study of Botany*. 2<sup>nd</sup> ed. London: G.G.J. and J. Robinson [etc.], 1787-92. 3 vols.

Woodall, John. *The Surgeon's Mate or Military & Domestique Surgery*. London: Rob. Young, 1639.

Woodville, William. *Medical Botany: Containing Systematic and General Descriptions, with Plates, of all the Medicinal Plants, Indigenous and Exotic, comprehended in the Catalogues of the Materia Medica, as Published by the Royal Colleges of Physicians of London and Edinburgh: Accompanied with a Circumstantial Detail of Their Medicinal Effects, and of the Diseases in which They have been Most Successfully Employed*. London: James Phillips, 1790-94. 3 vols.

Young, George. *A Treatise on Opium, Founded upon Practical Observations*. London: A. Millar, 1753.

#### **OTHER PUBLISHED PRIMARY SOURCES**

Aleyn, Charles. *The Battailles of Crescey and Poictiers: under the Fortunes and Valour of King Edward the Third of that Name, and His Sonne Edward Prince of Wales, Named the Black*. 2<sup>nd</sup> ed., enl. London: Thomas Knight, 1633.

Anderson, Peter John, comp. *Fasti Academiae Mariscallanae Aberdonensis: Selections from the Records of the Marischal College and University MDXCIII-MDCCCLX* (Aberdeen: New Spalding Club, 1898.

*The Army List of 1740*. Sheffield: Sir W. C. Ling & Co., Ltd. [for the Society for Army Historical Research], 1931.

*Army Lists: 1756, 1763, 1767, 1768*

*Biographia Britannica: or, The Lives of the Most Eminent Persons Who have Flourished in Great Britain and Ireland, from the Earliest Ages, down to the Present Times*. London: W. Innys [etc.], 1747-66. 6 vols. in 7.

Bouquet, Henry. *The Papers of Henry Bouquet*, vol. I, ed. S. K. Stevens, Donald H. Kent, and Autumn L. Leonard. Harrisburg: The Pennsylvania Historical and Museum Commission, 1972.

Buchanan, George. "George Buchanan's *Elegies* and *Silvae* Translated, with Introduction and Commentary." trans. and ed. David Henry Sabrio, unpub. Ph.D. diss., Univ. of South Carolina, 1980.

Carte, Thomas. *A General History of England*. London: printed for the author, 1747-55. 4 vols.

Chalmers, Alexanders, ed. *The General Biographical Dictionary: Containing an Historical and Critical Account of the Lives and Writings of the Most Eminent Persons in Every Nation; Particularly the British and Irish, from the Earliest Accounts to the Present Time*. New ed., rev. and enl. London: J. Nichols and Son et al., 1812-17. 32 vols. in 16.

*The City and Court Register*: 1744, 1746.

Cooper, John Gilbert. *The Life of Socrates: Collected from the Memorabilia of Xenophon and the Dialogues of Plato*. London: R. Dodsley, 1749.

Darwin, Erasmus. *The Letters of Erasmus Darwin*. ed. Desmond King-Hale. Cambridge: Cambridge Univ. Press, 1981.

*Gentleman's Magazine*: 1749, 1751, 1755, 1767.

Grose, Francis. *Military Antiquities respecting a History of the English Army from the Conquest to the Present Time*, 3rd ed. London: L. Stockdale, 1812. 2 vols.

Hughes, Thomas. *A Journal by Thos. Hughes for His Amusement, & Designed only for His Perusal by the Time He Attains the Age of 50 if He Lives so Long (1778-1789)*. ed. R. W. David. Cambridge: Cambridge Univ. Press, 1947.

Johnston, William, comp. *Roll of Commissioned Officers in the Medical Services of the British Army who Served on Full Pay within the Period between the Accession of George II and the Formation of the Royal Army Medical Corps, 20 June 1727 to 23 June 1898, With an Introduction Showing the Historical Evolution of the Corps*. Harry A. L. Howell, ed. Aberdeen: Aberdeen University Press, 1917. Repr. in A. Peterkin, William Johnston, and Robert Drew, *Commissioned Officers in the Medical Services of the British Army 1660-1960*, vol. I. [Publications of the Wellcome Historical Medical Library, Historical Monograph Series, no. 14.] London: The Wellcome Historical Medical Library, 1968. 2 vols.

*Journal of the Campaign on the Coast of France, 1758.* London: J. Townsend, 1758.

Leland, Thomas. *The Life and Reign of Philip King of Macedon, the Father of Alexander.* 2nd ed.  
London: E. Johnston, 1775. 2 vols.

*London Magazine.* 1751, 1752.

Montaigne, Michel de. *The Essays of Montaigne.* Trans. John Florio, introd. J. I. M. Stewart. New  
York: The Modern Library, n.d.

Montesquieu, Charles Louis de Secondat, Baron de. *Reflections on the Causes of the Rise and Fall of  
the Roman Empire,* 2nd ed., enl. London: W. Innys [etc.], 1752. 2 vols.

Napier, (Sir) Charles James. *The Life and Opinions of General Sir Charles James Napier, G.C.B.* ed.  
(Sir) W. Napier. London: John Murray, 1857. 4 vols.

Oinophilus, Boniface. *Ebrietatus Encomium: or, The Praise of Drunkenness; wherein is Authentically,  
and Most Evidently Proved, the Necessity of Frequently Getting Drunk is Most Ancient,  
Primitive, and Catholic. Confirmed by the Example of Heathens, Turks, Infidels, Primitive  
Christians, Saints, Popes, Bishops, Doctors, Philosophers, Poets, Free Masons, and Other Men  
of Learning in All Ages.* (London: E. Curll), 1723.

Parker, Robert. *Memoirs of the Most Remarkable Military Transactions from the Year 1683 to 1718.  
Containing a Very Particular Account of the Several Battles, Sieges, &c. in Ireland and  
Flanders during the Reigns of K. William and Q. Anne.* Dublin: Geo. and Alex. Ewing, 1746.



Pereira, Benito. *Commentarium et disputationum in Genesisim*. Coloniae Aggripinae, 1601.

Peterkin, Alfred, comp., *A List of Commissioned Medical Officers of the Army: Charles II. to Accession of George II. 1660 to 1727*; repr. in Peterkin, Johnston, and Drew, *Commissioned Officers* Aberdeen: Aberdeen University Press, 1925. Repr. in A. Peterkin, William Johnston, and Robert Drew, *Commissioned Officers in the Medical Services of the British Army 1660-1960*, vol. I. [Publications of the Wellcome Historical Medical Library, Historical Monograph Series, no. 14.] London: The Wellcome Historical Medical Library, 1968. 2 vols.

Rollin, Charles. *The Roman History from the Foundation of Rome to the Battle of Actium: That is, To the End of the Commonwealth*. rev. ed. Dublin, R. Reilly, 1743. 16 vols.

Sallengre, Albert Henri de. *L'Eloge de L'Yvresse*. La Haye: Pierre Gosse, 1714

Salmon, Thomas. *The Universal Traveller; or, A complete description of the several nations of the World* London: R. Baldwin, 1752-53. 2 vols.

*Scots Magazine*, 1767

Smollett, Tobias George. *A Complete History of England, from the Descent of Julius Caesar, to the Treaty of Aix la Chapelle, 1748*. 2nd ed. London, J. Rivington [etc.], 1758-60. 11 vols.

Thompson, James. *The Seasons*. ed. James Sambrook. Oxford: Oxford Univ. Press, 1981.

Wallis, P. J. and R. V., comps. *Eighteenth Century Medics (Subscriptions, Licences, Apprenticeships)*. 2nd ed. Newcastle-upon-Tyne: Project for Historical Biobibliography, 1988.

## SECONDARY SOURCES:

Ackerknecht, Erwin H. "The End of Greek Diet." *Bulletin of the History of Medicine*, 45 (1971), pp. 242-49.

Arber, Agnes. "From Medieval Herbalism to the Birth of Modern Botany." *Science Medicine and History: Essays on the Evolution of Scientific Thought and Medical Practice written in Honour of Charles Singer*, ed. E. Ashworth Underwood. London, New York, Toronto: Oxford University Press, 1953, I, 317-36.

Arthur, (Sir) George. *The Story of the Household Cavalry*. London: Archibald Constable & Co. Ltd., 1909. 2 vols.

Ball, Gene V. "Two Epidemics of Gout." *Bulletin of the History of Medicine*, 45 (1971), pp. 401-08.

Berridge, Virginia. "Opium in the Fens in Nineteenth-century England." *Journal of the History of Medicine*, 34 (1979), pp. 293-313.

*Biographie universelle, ancienne et moderne, ou Histoire, par ordre alphabétique, de la vie publique et privée de tous les hommes qui se sont fait remarquer par leur écrits*. Paris: Michaud, 1811-28. 52 vols.

*Biographisches Lexikon der hervorragenden Ärzte aller Zeiten und Völker*, ed. Franz Hübner et al. München, Berlin: Urban & Schwarzenberg, 1962. 5 vols.

- Boog Watson, William N. "Thomas Robertson, Naval Surgeon, 1793-1828." *Bulletin of the History of Medicine*, 46 (1972), pp. 131-49.
- Burnby, Juanita G. L. *A Study of the English Apothecary from 1660 to 1760*. [Medical History, supp. no. 3.] London: Wellcome Institute for the History of Medicine, 1983.
- Bynum, William F. "Treating the Wages of Sin: Venereal Disease and Specialism in Eighteenth-Century Britain." *Medical Fringe & Medical Orthodoxy 1750-1850*. ed. W. F. Bynum and Roy Porter [The Wellcome Institute Series in the History of Medicine] (London, Sydney, Wolfeboro: Croom Helm, 1987), pp. 5-28.
- Campbell, Douglas J. "The Venereal Diseases." *The History and Conquest of Common Diseases*, ed. Walter R. Bett (Norman: University of Oklahoma Press, 1954), pp. 178-88.
- Cantlie, (Sir) Neil. *A History of the Army Medical Department*. London and Edinburgh: Churchill Livingstone, 1974. 2 vols.
- Carmichael, Ann G., and Arthur M. Silverstein. "Smallpox in Europe before the Seventeenth Century: Virulent Killer or Benign Disease?" *Journal of the History of Medicine and Allied Sciences*, 42 (1987), pp. 147-168.
- Chalian, William. "An Essay on the History of Lockjaw." *Bulletin of the History of Medicine*, 8 (1940), pp. 171-201.
- Churchill, Edward D. "The Pandemic of Wound Infection in Hospitals: Studies in the History of Wound Healing." *Journal of the History of Medicine*, 20 (1965), pp. 390-404.

- Coley, Noel G. "'Cures without Care.' 'Chymical Physicians' and Mineral Waters in Seventeenth-Century English Medicine." *Medical History*, 23 (1979), pp. 191-214.
- Cooter, Roger. "Bones of Contention? Orthodox Medicine and the Mystery of the Bone-Setter's Craft." *Medical Fringe & Medical Orthodoxy 1750-1850*, ed. W. F. Bynum and Roy Porter. [The Wellcome Institute Series in the History of Medicine.] London, Sydney, Wolfeboro: Croom Helm, 1987. pp. 158-70.
- Corcos, Alain F. "Jean Astruc (1684-1766) on Old Age: A Man of his Times?" *Clio Medica*, 18 (1983), pp. 141-53.
- Crellin, J. "Dr James's Fever Powder." *Transactions of the British Society for the History of Pharmacy*, I (1974), pp. 136-43.
- Cuppage, Francis E. *James Cook and the Conquest of Scurvy*. Contributions in Medical Studies, 40. Westport, CT, and London: Greenwood Press, 1994.
- Curran, William S. "Dr. Brocklesby of London(1722-1797). An 18th-Century Physician and Reformer." *Journal of the History of Medicine*, 17 (1962), pp. 509-21.
- Curth, Louise Hill. "The Care of the Brute Beast: Animals and the Seventeenth-century Medical Market-place." *Social History of Medicine*, 15 (2002), pp. 375-92.
- Curtis, Edward E. *The Organization of the British Army in the American Revolution*. New Haven and London: Yale University Press, 1926.

Davis, Audrey B., and Jon B. Eklund. "Magnesia Alba before Black." *Pharmacy in History*, 14 (1972), pp.139-46.

*Dictionnaire des sciences médicales: Biographie médicale.* ed. A. J. L. Jourdain. Paris: C.L.F. Panckoucke, 1820-25. 7 vols.

*Dictionary of National Biography.* ed. (Sir) Leslie Stephen and (Sir) Sidney Lee. New York: Macmillan Co.; London: Smith, Elder & Co., 1908-09. 22 vols.

Ditchfield, P. H., and William Page, eds. *The Victoria History of Berkshire.* vol. III. London: St. Catherine Press, 1923.

Evans, William Charles. *Trease and Evans' Pharmacognosy.* 13th ed. London, Philadelphia: Balliere Tindall, 1989.

Fischer-Homberger, Esther. "Hypochondriasis of the Eighteenth Century -- Neurosis of the Present Century." *Bulletin of the History of Medicine*, 46 (1972), 391-401

Fortescue, (Sir) John. W. *A History of the British Army.* 2<sup>nd</sup> ed. London: Macmillan and Co., Ltd., 1910-30. 13 vols. in 19.

French, Roger K. *Robert Whytt, The Soul, and Medicine.* London: Wellcome Institute, 1969.

Gelfand, Toby. *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the 18th Century* [*Contributions in Medical History*, no. 6] (London and Westport, Conn.: Greenwood Press, 1980.

Gibbs, F. W. "Boerhaave and the Place of Chemistry in Medicine." *Chemistry in the Service of Medicine*. ed. F. N. L. Poynter. London: Pitman Medical Publishing Company Ltd., 1963), pp. 27-42.

Goldwater, Leonard J. *Mercury: A History of Quicksilver*. Baltimore: York Press, 1972.

Gray, Ernest A. "John Hunter and Veterinary Medicine." *Medical History*, 1 (1957), pp. 38-50.

Haggis, A. W. "Fundamental Errors in the Early History of Cinchona." *Bulletin of the History of Medicine*, 10 (1941), pp. 417-59, 568-92.

Haller, John S., Jr. "The Use and Abuse of Tartar Emetic in the 19th-Century Materia Medica." *Bulletin of the History of Medicine*, 49 (1975), 235-57.

Hartnett, John C. "The Care and Use of Medicinal Leeches in 19th Century Pharmacy and Therapeutics." *Pharmacy in History*, 14 (1972), pp. 127-38.

Herbert, Charles. "Coxheath Camp, 1778-1779." *Journal of the Society for Army Historical Research*, 45 (1967), pp. 129-48.

Howard, Philip. *The Black Watch (Royal Highland Regiment) (The 42<sup>nd</sup> Regiment of Foot)*. London: Hamish Hamilton, 1968.

Howell, H. A. L. "The Story of the Army Surgeon and the Care of the Sick and Wounded in the British Army, from 1715 to 1748." *Journal of the Royal Army Medical Corps*, 22 (1914), pp. 320-34, 455-71.

- Hultin, Neil C. "Medicine and Magic in the Eighteenth Century: The Diaries of James Woodforde." *Journal of the History of Medicine and Allied Sciences*, 30 (1975), pp. 349-66.
- Hume, Edgar Erskine. "Francis Home, M.D. (1719-1813). The Scottish Military Surgeon Who First Described Diphtheria as a Clinical Entity." *Bulletin of the History of Medicine*, 11 (1942), pp. 48-68.
- Hunter, Irvine J. "Syphilis in the Illness of John Hunter." *Journal of the History of Medicine*, 8 (1953), pp. 249-62.
- Irving, James. "A Concise View of the Progress of Military Medical Literature in this country; being a chronological arrangement of Authors, with Critical Remarks on their Works." *Edinburgh Medical and Surgical Journal*, 63 (1845), pp. 285-302; 64 (1845), pp. 83-98, 115-29, 375-89; 65 (1846), pp. 34-39.
- Jarcho, Saul. "The Correspondence of Cadwallader Colden and Hugh Graham on Infectious Fevers (1716-1719)." *Bulletin of the History of Medicine*, 30 (1956), pp.195-212.
- G. A. Kempthorpe, "The Expedition to Cartagena, 1740-1742," *Journal of the Royal Army Medical Corps*, 64 (1935), pp.
- Keevil, John, Christopher Lloyd, and Jack L. S. Coulter. *Medicine and the Navy 1200-1900*. Vols. I (Keevil), III (Lloyd and Coulter). Edinburgh and London: E. & S. Livingstone Ltd., 1957-63.
- King, Lester S. *The Road to Medical Enlightenment 1650-1695*. London, Macdonald; New York,

American Elsevier, Inc., 1970.

Kopperman, Paul E. "The British Army in North America and the West Indies, 1755-1783: A Medical Perspective,," *British Military and Naval Medicine, 1630-1800*, ed. Geoffrey Hudson. The Wellcome Series in the History of Medicine. Amsterdam and Atlanta: Rodopi, 2007), pp. 51-86.

----- "The British High Command and Soldiers' Wives in America, 1755-1783." *Journal of the Society for Army Historical Research*, 60 (1982), pp. 14-34.

----- "'The Cheapest Pay': Alcohol Abuse in the Eighteenth-Century British Army," *The Journal of Military History*, 60 (1996), pp. 445-70.

----- "The Drive toward More Moderate Therapies in British Medicine, 1750-1800." *Proceedings of the 37<sup>th</sup> International Congress on the History of Medicine* (2002), pp. 266-74.

----- "Medical Services in the British Army, 1742-1783." *Journal of the History of Medicine and Allied Sciences*, 34 (1979), pp. 428-55.

----- "'Venerate the Lancet': Benjamin Rush's Yellow Fever Therapy in Context." *Bulletin of the History of Medicine*, 78 (fall 2004), pp. 539-74.

le Strange, Richard. *A History of Herbal Plants*. New York: Arco Publishing Co., Inc., 1977.

Lilienfeld, Abraham M. "Ceteris Paribus: The Evolution of the Clinical Trial." *Bulletin of the History of Medicine*, 56 (1982), pp. 1-18.



Long, Esmond R. "The Decline of Tuberculosis, with Special Reference to Its Generalized Form." *Bulletin of the History of Medicine*, 8 (1940), p.--- A History of Pathology. New York: Dover Publications, Inc., 1965 [1928].

McBride, William M. "'Normal' Medical Science and British Treatment of the Sea Scurvy, 1753-75." *Journal of the History of Medicine and Allied Sciences*, 46 (1991), 158-77.

Maehle, Andreas-Holger. *Drugs on Trial: Experimental Pharmacology and Therapeutic Innovation in the Eighteenth Century*, Wellcome Institute Series in the History of Medicine. Amsterdam and Atlanta: Rodopi, 1999.

Malgaigne, J. F. *Surgery and Ambroise Paré*. trans. and ed. Wallace B. Hamby. Norman: Univ. of Oklahoma Press, 1965.

Maloney, Gilles, and Winnie Frohn Villeneuve. "Présentation d'une concordance du corpus d'Hippocrate." *Hippocratica: Actes du Colloque hippocratique de Paris*, ed. M. D. Grmek. Paris: Éditions du Centre National de la Recherche Scientifique, 1980. pp. 357-70.

Moorat, S. A. J., comp. *Catalogue of Western Manuscripts on Medicine and Science in the Wellcome Historical Medical Library*. Vol. II (mss. written after 1650). London: The Wellcome Institute of the History of Medicine, 1973. 2 parts.

Munger, Robert S. "Guaiacum, the Holy Wood from the New World." *Journal of the History of Medicine*, 4 (1949), pp. 196-229.

Murphy, Edward L. "Malingering." *The History and Conquest of Common Diseases*, ed. Walter R. Bett

- Norman: Univ. of Oklahoma Press, 1954. pp. 286-309.
- Neuburger, Max. "Some Relations between British and German Medicine in the First Half of the Eighteenth Century." *Bulletin of the History of Medicine*, 17 (1945), 217-28.
- Packe, Edmund. *An Historical Record of the Royal Regiment of Horse Guards, or Oxford Blues*. London: William Clowes, 1834.
- Paton, W. D. M. "The Early Days of Pharmacology, with Special Reference to the Nineteenth Century." *Chemistry in the Service of Medicine*, ed. F. N. L. Poynter (London: Pitman Medical Publishing Company Ltd., 1963. pp. 73-88.
- Porter, Roy. "I Think Ye Both Quacks': The Controversy between Dr Theodor Myersbach and Dr John Coakley Lettsom," *Medical Fringe & Medical Orthodoxy 1750-1850*, ed. W. F. Bynum and Porter [The Wellcome Institute Series in the History of Medicine]. London, Sydney, Wolfeboro: Croom Helm, 1987, pp. 56-78.
- , and G. S. Rousseau. *Gout: The Patrician Malady*. New Haven and London: Yale University Press, 1998.
- Rather, L. J. *Mind and Body in Eighteenth Century Medicine: A Study Based on Jerome Gaub's De regimine mentis*. Berkeley and Los Angeles: University of California Press, 1965.
- Riese, Walther. "Philosophical Presuppositions of Present-Day Medicine." *Bulletin of the History of Medicine*, 30 (1956), 163-74.

Risse, Guenter B. *New Medical Challenges during the Scottish Enlightenment*. The Wellcome Series in the History of Medicine. Amsterdam and New York: Rodopi, 2005

----- "Typhus' Fever in Eighteenth-Century Hospitals: New Approaches to Medical Treatment." *Bulletin of the History of Medicine*, 59 (1985), pp. 176-95.

Rolleston, Humphry. "Medical Aphorisms, Chiefly in English." *Bulletin of the History of Medicine*, 10 (1941), pp. 544-67.

Roos, Anna Marie. "Luminaries in Medicine: Richard Mead, James Gibbs, and Solar and Lunar Effects on the Human Body in Early Modern England." *Bulletin of the History of Medicine*, 74 (2000), pp. 433-58.

Rosen, George. "Sir William Temple and the Therapeutic Use of Moxa for Gout in England." *Bulletin of the History of Medicine*, 44 (1970), pp. 31-39.

Salzman, L. F., ed. *The Victoria History of the County of Warwick*, vol. VI (London: Oxford Univ. Press, 1965.

Shelley, Harry S. "Intravesical Destruction of Bladder Stones." *Journal of the History of Medicine and Allied Sciences*, 19 (1964), pp. 46-60.

Sigerist, Henry E. "Ambroise Paré's Onion Treatment of Burns." *Bulletin of the History of Medicine*, 15 (1944), pp. 143-49.

----- "Laudanum in the Works of Paracelsus." *Bulletin of the History of Medicine*, 9 (1941), pp.

530-44.

Singer, Dorothea Waley. "Sir John Pringle and His Circle." *Annals of Science*, 6 (1949), pp. 127-80.

Smith, Virginia. "Physical Puritanism and Sanitary Science: Material and Immaterial Beliefs in Popular Physiology, 1650-1840." *Medical Fringe & Medical Orthodoxy 1750-1850*, ed. W. F. Bynum and Roy Porter. [The Wellcome Institute Series in the History of Medicine]. London, Sydney, Wolfeboro: Croom Helm, 1987. pp. 174-97.

Sonnedecker, Glenn. *Emergence of the Concept of Opiate Addiction*. Madison: American Institute of the History of Pharmacy, 1962-63.

Stevenson, Lloyd G. "A Note on the Relation of Military Service to Licensing in the History of British Surgery." *Bulletin of the History of Medicine*, 27 (1953), pp. 420-27.

Townshend, C. V. F. *The Military Life of Field-Marshal George First Marquess Townshend 1724-1807*. London: John Murray, 1901.

Tubbs, F. "John Atkins, an 18th century naval surgeon," *British Medical Bulletin*, 5 (1947), pp. 83-84.

Waller, John C. "'The Illusion of an Explanation': The Concept of Hereditary Disease, 1770-1870." *Journal of the History of Medicine and Allied Sciences*, 57 (2002), pp. 410-48.

Wangensteen, Owen H. and Sarah D. *The Rise of Surgery: From Empiric Craft to Scientific Discipline*. Minneapolis: University of Minnesota Press, 1978.

Watson, Gilbert. *Theriac and Mithridatium: A Study in Therapeutics* [Wellcome Historical Medical Library, *Publications*, n.s., 9.], London: Wellcome Historical Medical Library, 1966.

Webb, Henry J. "English Military Surgery during the Age of Elizabeth." *Bulletin of the History of Medicine*, 15 (1944), pp. 261-75.

Williams, Cyril. *The Staffordshire General Infirmary: A History of the Hospital from 1765*. [Stafford:] Mid-Staffordshire General Hospital, 1992.

Wiltshire, John. *Samuel Johnson in the Medical World: The Doctor and the Patient*. Cambridge, New York: Cambridge University Press, 1991.