Neurasthenia

(Nervous exhaustion)

A review of the origin and growth of the term, of the comparative frequency of the disease, and of its chief clinical forms, classifications, symptoms, diagnosis, prognosis, explanatory theories, and treatment.

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Introductory Review

It cannot be said that the morbid condition termed neurasthenia has not been sufficiently considered in this country, yet when we take a broad view of the subject, and observe how profitably and creditably it has been handled and developed abroad, we may be excused for regretting the hostility so much exhibited, in recent years, against its consideration and development at home. This hostility is not easily accounted for; but as it exists, and as it is somewhat painful to feel oneself in the minority, and as it has exercised a blighting influence upon the growth of general knowledge upon the subject, it may be well to place ourselves outside its influence, before attempting a resume in detail of the causes, symptoms, clinical forms, theories etc of the malady. Perhaps the best way of doing this is to take as broad a view of the development of the subject as our space will permit. This is all the more necessary, since it does seem as if Beard's position when he first introduced the term, and the state in which he then found the subject have not been properly understood, and as a result obscure, distorted, and narrow notions have

often occupied the place of the clearer, better formed and broader notions, which undoubtedly accompanied the introduction of the term.

For some time previous to his first public lecture on the subject in 1869,[1] Beard had found it a matter of necessity, in describing, recording and studying cases, to employ the term neurasthenia, to express the morbid state that was then commonly indicated by the more indefinite phrase nervous exhaustion. It is important for us to observe that he did not then claim to have discovered any new morbid state, but simply finding the subject very much in the air, he felt himself, on account of his position as lecturer on nervous diseases in the University of New York, influenced to a special study of those commonly known under the above mentioned phrase. It is necessary to note also the assistance which he acknowledged in his first lecture as received from others. Maudsley's writings, in particular seem to have exercised a very suggestive influence upon Beard's train of thought. In his work on the Physiology and Pathology of Mind published in 1867, Maudsley felt obliged through the views therein advocated, to take into special consideration all that related to the functional activity and the nutrition of the nerve cells, and probably no better timed study of these conditions could have come into Beard's hands. It supplied him with an abundance of very clearly expressed physiological

1 The Boston Med. and Surg. Journal, 29th April, 1869; Vol. lxxx p. 317

reasons for the support of the position which he took up, and it is to such a groundwork more than to anything else — more even than to Beard's own development of the subject — that we must give the credit when we contemplate the unshakeable nature of Beard's conception. Physiological facts concerning the nerve cells were practically as far advanced then as they are at the present day, and it may safely be asserted that, even with the enormous impulse which the term neurasthenia has given to investigations in this direction, nothing finer has since been written concerning the various causes which affect the functional activity of the cells of the spinal cord, and those of the higher nerve centres." It is there clearly pointed out that the nerve cell is no inexhaustable fountain of force, but must take in from one quarter what it gives out in another; and that if due time be not allowed and proper material be not supplied for the development of its highly vital structure by the assimilation of matter of a lower quality, then notwithstanding the best innate constitution deterioration must ensue. The power of vitiated blood to act injuriously or as a direct poison upon the nerve cells was fully recognised; as was also the fact that a deficiency of blood supply, or of material in it fitted for the nutrition of the nerve, is to the extent of its existence a cause of degeneration or instability of nerve element. The injurious

" Maudsley Phys. and Path. of Mind 1867 p. 76

influence exerted by the persistent existence of excentric irritation was also clearly unfolded. The interest of such a study for us at the present time lies in the fact, that there is not a single one of all the causes mentioned by Maudsley, which has not within the past 12 years been worked up into a new theory to stand as an explanation of the morbid condition, and form now the nuclei of the numerous attempts made, mainly in Germany, to account for the disease. But perhaps a greater interest lies in the fact that Maudsley's clear and suggestive study enabled Beard to form as advanced a conception as we are likely to arrive at for a long time to come, and which, expressed in the term neurasthenia, is simply unassailable, because all our modes of physiological and pathological reasoning support it.

Another to whom Beard acknowledged indebtedness, in his first lecture, was professor Austin Flint, who in the first edition of his practice of Medicine published in 1865 had applied to the same condition of the nervous system the term nervous asthenia, and to whom the propriety of considering the condition as a functional affection and the name, were suggested by his colleague Prof. Fordyce Barker. Dr. Flint described the morbid condition as a common one, especially in large cities and closed a brief but fine sketch of the subject and its treatment by saying that it represented a class of cases with which every physician was familiar[1].

1 Flint's Practice of Med. first edit. Page 640

There was thus to begin with no more than the introduction of a new term. But it was a term with a charm about it, and was in every respect what Kraft-Ebing in his recent work on Neurasthenia rightly calls a fortunate one. After its introduction came naturally the elaboration of the morbid condition denoted by it; but here the work to be gone through was enormous, and is indeed not yet completed. Scattered through general works or special monographs, in all languages, there existed a series of morbid forms, generally very ill defined, but considered as morbid entities, and carefully but with difficulty kept apart under such designations as "irritable weakness", "the nervous state", "the English malady", "the vapours" etc.; all of which are but different forms of the same morbid entity. Each Language has a more or less extensive list of such, and to bring these together, to set in relief the features which they possess in common, to demonstrate the fundamental identity of all these forms, and to present them as a well marked nosological group, was the work accomplished by Beard. But he discovered no newly developed condition of the nervous system: all was well known and well described before his time. The visceral forms of neurasthenia which Dr Playfair[1] dwelt so much upon in 1886, and which he maintained, that no clear or intelligent description could be found previous to the time when Dr

[1] B.M.J. 1886 Vol II p. 853

Weir Mitchell, Erb, and others had drawn attention to the subject, was certainly fully and well described by Sandiew in the 4th Edit of his Man. de pathol. et de clinique Med. in 1873, and probably in the earlier editions as well; and even of the form which it seems the peculiar merit of Charcot to have described so well, there is in Whytt's Nervous disorders Pub. in 1765, p. 374, a case reported so exactly in Charcot's style, that it could stand as a model for such.

All Beards labours on the subject, however, passed almost unperceived till he published his important treatise in 1880. This work came as a kind of surprise upon the profession. It was then that the striking descriptions and the new terms with which it abounded gave rise to the impression that a new disease — the result of our advanced civilisation, of steam and electricity, and the ferocious struggle for life which is said to characterise the present time — had developed among us. Dr Bowes was one of the first in London to lecture upon the subject (B.M.J. 1880 Vol 1 p. 649), and a little later in an address delivered before the Section of Psychology at the Ann. Meet. of the B.M. Ass. in 1880, Dr Crichton Brown[1] informed his hearers that "Newrotic affections seemed to be increasing and multiplying on every hand and that according to Dr Beard, an American physician, an entirely new state of the nervous system — a morbid nervousness unknown to the ancients or the fathers of

[1] B.M.J. 1880 p. 265 Vol. II

Medicine — had developed among his countrymen during the last half century. Well it became the fashion to think that this was so, and many were the speculations concerning the causes. Dr. Crichton Brown was of opinion that they might be summed up under:—

I The increasing complexity of the nervous system:
II The increasing complexity of life.

Neural development he said is still going on in the brain, and he considered it as not impossible that that organ is still increasing in size. Such an opinion may be quite in harmony with the ideas of those evolutionists, who as Dr. Clouston remarks have pictured the man or the woman of the 30th Century, as a hairless, legless creature with a big brain and little else; but will scarcely satisfy those who seek to read the future with assistance derived from a study of the past. Professor Cleland "says that: Neither the structure nor the intellect of Man surpass now the perfection that it had reached in ancient Egypt and Greece; though the lapse of time had proved sufficient for variations and degenerations"; but according to Dr. Crichton Brown Neural development and brain size are increasing at such a rate, as at least to give ground for new diseases within half a century. Hurried speculations of this kind did the subject a great deal of harm.

In 1881 Dr. Playfair having read Weir Mitchell's

1 Evolution, Expression and Sensation &c.

little work on Fat and Blood, hastened to bring the ideas thus acquired before the profession (1), and contributed a paper on the subject to the Lancet. A second paper followed within 6 months (2) and in 1882 he delivered an address upon "the systematic treatment of Hysteria and certain allied forms of neurasthenic disease" to the Medical Section of the B.M. Ass. Ann. Meet. at Worcester (3)

His views of the subject and his method of treatment aroused, however, very powerful opposition, and in 1886 Sir Andrew Clark roundly denounced the whole Matter, the treatment as much as the term, and summed up a very vigorous paper thus:

Returning to my immediate purpose I sum up these observations in saying that the term neurasthenia is unscientific, inaccurate and misleading; that the descriptions given of it do not include a clear, concise or distinct account of genuine nervous exhaustion, and do include a mob of incoherent symptoms borrowed from the most diverse disorders; that for a malady thus constituted and containing antagonistic conditions, no rational principles of treatment are possible, that in the heterogeneous assemblage of disordered states ascribed to neurasthenia there may be discovered a group of coherent and distinctive symptoms

1 Lancet 1881. Vol. i p. 857.
2 " " Vol. ii p. 991.
3 B.M.J. 1882. Vol. ii p. 319.

arising out of mere and sheer nervousness, and that the general treatment proposed for Neurasthenia, and applied to this group of symptoms would probably prove unsuccessful and possibly disastrous" (1)

Sir Andrew Clark was not the first to bring this kind of reproach against the term and the treatment. In 1885 Arndt (2) had referred to the subject in very similar terms: "Neurasthenie hier, neurasthenie dort. Neurasthenie aller wege! Ganz verschiedenartige Dinge werden zusammengeworfen, sehr gleichgültige Vorgänge mit sehr bedeutlichen in ein und denselben Topf geworfen, und in Folge dessen durch ein häufig unangebrachtes Verfahren nur geschadet." (2)

However Dr Playfair may have been able to overlook such expressions by Arndt, it was not possible to do so with those of Sir Andrew Clark. He evidently felt it as pretty severe upon what he had been advocating for the previous four years, and first of all sought to justify his position by an attempt to induce the collective investigation committee to embrace the subject in the field of their inquiries. But the committee decided that the subject was not yet ripe for investigation by their methods, and expressed the fear that many cases would now be classed and treated as Neurasthenia, which certainly had no right to the term. (3)

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1 Lancet Vol i p. 2 1886

2 Die Neurasthenie. Ihr Wesen, Ihre Bedeutung und Behandlung p. 1

3 B.M.J. 1886 Vol ii p 1000.

In 1888 Dr. Gowers seemed to give the subject the last touch by declaring in his Work then published on Dis. of the Nervous Sys. (Vol II p. 959) "that there was no more justification for regarding Neurasthenia as a definite Malady, to be distinguished from others and seperately described, than there is for adopting a similar course with regard to debility among general diseases. ----- And that when neurasthenic patients seek advice there are generally symptoms of nerve disturbance definite enough to bring the case into some special category. The use of the word he admitted to be useful, or convenient, when the patient suffers from so many functional disorders that it is difficult to find any one sufficiently prominent to afford a designation. It does seem, however, as if Dr. Gowers did not treat the subject with his well known originality, and this way of dismissing it from any special description and referring the reader of his work for information concerning it to his sections on Neuralgia, headache, Cephalic sensations, hysteria and hypochondriasis, is do like a similar chapter in Landolt's Work on Accomodation and Refraction, in which Presbyopia is similarly dismissed, as to prejudice the reader who knows both. Dr. Gowers really made the diagnosis of Neurasthenia impossible to the general practitioner; for before the term could be applied one must first confess inability to bring the case into any special category; and as it was held that in such cases there were generally symptoms of nerve disturbance sufficiently definite in character to allow this, therefore

the term neurasthenia became the sign of a weak or imperfect diagnosis

Thus a very intolerable sort of position was created for those who believed in the existence, and especially in the great frequency, of the morbid condition. Eight years had been spent in a war of words, and with no progress from a diagnostic point of view. It was necessary to tackle the subject in a different way, and this was done with somewhat like startling rapidity.

Charcot, a perfect master in the art of clinical displays, now took up the subject. For a long time he had been especially observant of a certain class of patients — Sufferers from a particular form of headache (Céphalée en forme de casque) — and he recognised these patients again among the neurasthenics of Beard. This led to investigations, and the manner in which he conducted these was well calculated not only to make a great impression in favour of the wide spread existence of the disease, and of its well defined features, but also to refute much of what had been advanced in London. His patients were brought into the theatre and publicly examined. Shorthand notes, of questions, answers, and the remarks made by prof. Charcot thereon, were taken and these were afterwards published. Case after case was thus examined and commented upon, and reported, till the repitition of the story became really monotonous. But it was magnificiently done.

aided by the material contained in the wards of his great hospital he was able to exhibit almost every phase of the malady. In the clinical pictures, which he drew, the most prominent and ever returning features of Neurasthenia were grouped in the foreground. His skill made it impossible to overlook them, or to allow of them being referred to allied affections such as hysteria or hypochondria. To Charcot belongs the credit of having made the diagnosis of neurasthenia easy and certain. He joined hands with Beard over the subject, to whom he gave all praise for the work done, and seemed ever ready to exhibit with pleasure by means of this or that patient, "le tableau clinique que le regretté Beard of new York, a eu le grand mérité de degager du chaos de l'ancien nervolisme, et qui a fait penetrer dans le cadre de la clinique neuropathologique ou il occupe actuellement une large place legitimement conquise".

Nor did Charcot consider the disease a new one: "Est ce donc qu'il s'agirait la d'une Maladie nouvelle développée sous l'influence de nouvelles conditions d'existence? Je n'en crois rien, messieurs. Pour ma part la maladie date de loin, je pense, et rien n'est changé a son regard. C'est nous qui avons changé en apprenant a reconnaitre ce que nous autrefois passait inaperçu."[1]

The chief thing to remark about this time

1 Polyclinique du Mardi, 24th Jan. 1884.

is the falling of eminent specialists, abroad, into line with Beard. Perhaps it might be more correctly put by saying that specialists were now rapidly coming up with Beard, and effacing the enormous start which 20 years of unperceived work upon a sound physiological basis had given him. But however that may be Charcot now identified himself thoroughly with Beard, and in France true neurasthenia is often defined as the Charcot-Beard conception of the disease, while Gower's conception is made to do duty as an example of an very different kind.

The rapidity with which the following monographs thereafter appeared in France indicate the interest which Charcot's Lectures excited. Bouveret's treatise was published in 1890, Levillain's work in 1891, and Mathieu and Vigouroux's in 1893. They all wrote under the title "Neurasthenia." Charcot was not, however, the first in France to write upon the subject, the first published work on Neurasthenia was by Huchard in 1882.

In Germany the subject was taken up with as great enthusiasm as in France. Von Krafft-Ebing says that Beard's work appeared as a revelation to the profession there (Nervosität und Neuras. Zustände, page 34). In 1885 Arndt's work on Neurasthenia was published; but the peculiar terms which he created, and with which he filled his work, probably prevented it from becoming popular. Ziemssen, in 1887,

contributed a monograph to the subject (Die Neurasthenie und ihre Behandlung, Leipzig); but it did not attract much attention, and has dropped so much out of sight that it is very difficult to convince medical booksellers in Germany that such was ever published. Indeed there was a somewhat unaccountable delay in getting out a satisfactory work on the subject. During this time Beard's own treatise, as a translation, did considerable service and ran through 3 editions in 9 years. Two years later a translation of Gouvrets "La Neurasthénie came to its assistance (1892) Müllers monograph then appeared in 1893. Löwenfelds in 1894, von Krafft-Ebings in 1895, and Binswanger's — the last and bulkiest of them all at the close of 1896.

It might now be said that all this being so, the subject scarcely requires being placed in a better light, nor is it very possible to feel oneself in the minority. The author Beard is held in the greatest esteem, his term neurasthenia received with the greatest favour, and numerous monographs have been written under it by physicians of the greatest eminence. Unfortunately this is true abroad only. A reissue of Beard's treatise, after his death, gave a reviewer in the first vol. of the Lancet for 1890 (p 551) an opportunity of criticising the work very adversely, and of asserting that Beard's work will never take a high place in the literature of nervous diseases — this of a book which was so readily translated into French, ran through so many editions in Germany, and which

was reissued here! Surely that is not impartial criticism. But dislike against the term and indifference to the subject by those in Authority are often manifested, and are very apt to mislead the profession, generally, as to the importance of the subject for a long time to come. In 1894 Dr. Althaus at a discussion before the Clinical Society of London (B. M. J. Vol I p 1446) expressed his dislike to the term, because it had "unpleasant associations"; and in the same year Dr. Savage in opening a discussion on Neurasthenia and its Treatment at the Ann. Meet. of the B. M. Ass. (B.M.J. p 522) replying to his own question as to what he knew upon the subject replied "Nothing, I have not even lectured on it". That is exactly the evil in this country. No one even cares to lecture on it. Unpleasant associations have grown about the term, and so its consideration is tacitly avoided by those whose duty it is to do so. A glance at any of our Medical Catalogues will show that we possess no proper Monographs on the subject, and, till quite recently, even foreign Monographs could not be found in our best libraries in a sufficiency to give a satisfactory idea of what it all meant.

Comparative frequency of the disease

It is still very necessary in entering upon a detailed consideration of neurasthenia to guard against the reproach of seeing it everywhere. Such reproach has as we have seen, been pretty freely expressed in England: in Germany, Arndt brought a similar kind of complaint against the advocates of the subject: "Neurasthenie hier, neurasthenie dort, Neurasthenie allerwege! In France this tendency has been more pleasantly ridiculed thus: "Tout individu qui prend femme ou tabac qui est charitable ou passionné est un neurasthénique" Such warnings are very necessary, but they may intimidate too much, and it is perhaps sufficient to have them expressed so strikingly Dr Goodhart in introducing his Harveian Lectures on the Neurotic element in disease to the Harveian Society of London in 1892, (The Lancet Vol I p 124) anticipated such criticism as much as possible by stating, that he argued from the conviction which had been forced upon him by looking through his notes of cases which he had seen, and his experience of many years, by which he came to the conclusion that the maladies which owe their origin to a faulty action of the nervous system, are of more frequent occurrence in practice, than are even Phthisis, heart disease, Bright's disease or organic hepatic disease. von Krafft-Ebing (Nervosität und Neurasthetische Zustände, p. 35) supports this opinion of Goodhart very strongly

"Man vergesse nicht dass die Zahl solcher Kranker heutzutage Legion ist und weit die Ziffer der Herz-, Leber- und anderer Krankheiten vegetativer Organe übersteigt".

These for the General Practitioner are observations of extreme importance, and cannot be too widely known; while their multiplication on every hand bear testimony to the one sided clinical advance of the past 40 years. Charcot was one of the first to express a wish for more definite information in the form of statistics, and his pupils ever anxious to distinguish themselves in the eyes of their master, applied themselves with considerable zeal to the subject. But it is evident that till the conceptions which authorities have differ less, statistics are comparitively useless. It will be more profitable to note how our notions of the prevalence of the disease have extended themselves.

At first Neurasthenia was thought to be almost exclusively an American disease. This was however soon disproved everywhere, and then a new notion arose, namely that it was a disease of the educated and higher classes. In 1886 Dr Playfair (C.M.J. Vol. II, P. 853) declared it to be "a disease chiefly of the cultured classes", and in 1892 Dr Goodhart elaborated this idea somewhat, and was of opinion that the differences such as exists between the lower animals and Man, exists and are seen in a similar if less marked Way, between the lower and upper grades of society. Such differences, Goodhart considers, explain why the "upper classes" are more the prey

of neurotic affections. In the literature of functional nervous diseases there is much to support the seeming truths of such assertions. Indeed all through the literature of the subject we find Mankind more sharply divided into classes - the higher and the lower — than almost anywhere else. I can scarcely think of a single recorded case which does not refer to the proverbial "Lady of wealth and importance", or to the similar Person "high in office" or "of some rank" or it may be "the distinguished savant". The interesting points in the illnesses of such are detailed with wonderful minuteness, and so finely commented upon as to make the study of such one of the most delightful ways of acquiring a knowledge of the subject. But now we are told that the lessons to be derived from such cases do not admit of application to all men, and we are led to infer that the relations of such to the lower classes is about the same as the incidents of fiction are to those of actual life.

Can it be so? Are the upper classes more subject to neurotic affections than the lower? Charcot, evidently in reply to Dr. Playfair, in 1889, shows case after case to prove that such affections are not the exclusive privilege of the great ones of the earth, but that they also exercised their power over the working classes everywhere[1]. He found that even the vagabonds of Paris suffered from such diseases, and learned when he wished to keep an interesting case of

[1] Lecons du Mardi 1889, p. 256

such in view, viz: to question the patient closely about name address etc., or the person was apt to misinterpret the interest thus taken in him and absent himself accordingly. Strümpel in the latest edition of his Lehrbuch der speciellen Pathologie und Therapie (10th Edit. 1896 p. 606) has objected against the idea that neurasthenia is specially a disease of the "educated and higher classes" and says that it is to be found also among the uneducated and the lower classes, though it expresses itself in somewhat different forms. It is instructive to think why Strümpel should find it necessary to say so, so late as 1896. It is a proof of the extent to which the erroneous notion yet prevails. Now, however, that we have come so far right it is possible that we may yet go further, and it might soon be possible to prove that nervous disorders really prevail more among the lower classes than the higher. Hecker[1] in his extremely interesting account of the great epidemics of nervous disorders which appeared from the year 1027 up till our own times, points out, again and again, that it was the lower grade of society which showed itself most susceptible to such disorders; and thus through a period of over 800 years distinctly demonstrated that it, and not as Dr. Goodhart's assertion would make us believe the higher class, "is more easily the prey of morbid sensations, of morbid thought, of morbid action".

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1 Die Grossen Volkskrankheiten des Mittelalters, von J. F. C. Hecker, Herausgegeben von Dr. A. Hirsch Berlin 1865. p. 124-185

Another matter to be considered is the extent to which neurasthenia prevails in the country as compared with cities. The French believe that "La neurasthenie est rare, en effet, chez les habitants des campagnes"; and in 1891 a reviewer of Dr. Levillain's "La Neurasthénie (B.M.J. 1891 Vol II p 432) took note of the occasion to remark that "the Highlander and the agrarian Irishman are free from the disease". This seems certainly a fairly safe kind of assertion to make, for specialists who are also authorities on the subject are not likely to visit the Highlander and the agrarian Irishman to investigate the truth of it; and one indeed wonders by what means the assertion was attained to. But is it so? Is there on the face of it any reason for believing such a statement? Might it not turn out as the result of careful observation that neurotic affections and neurasthenia in particular, might be just those from wh. the Highlander and the agrarian Irishman do suffer? For seven years I had an opportunity of attending to this matter, and in one of the healthiest of West Highland Parishes, I could in a population of 950, count 23 well marked cases of neurasthenia. Along with this, I could at any time put my hand upon well marked cases of "Mere Neuroses", hysteria, hypochondria, Migrane, epilepsy, Catalepsy, Graves disease, Paralysis agitans, idiotcy, and insanity in many forms; all in a population of 950; and where such existed so plentifully, is it at all likely or conceivable that neurasthenia, which is now admitted to be the king of them all, does not? A statement that it is absent from such

places is nothing more than a mere assertion. Of the small remote highland parish of which I write neurasthenia was indeed the most common disease complained of; after it came naturally the more closely related neuroses, and last of all came the various organic diseases: giving in seven years 2 cases of organic heart disease, 1 case of Bright's disease, no case of organic liver disease, and no case of phthisis.

Finally, it would seem that the only place now in which neurasthenia is not to be found, is in our hospitals. Dr. Playfair (B.M.J. 1886 vol ii 853) thinks that herein is to be found the reason why the disease has been overlooked. Such patients he had never seen except in private practice, "and as most of our systematic writers have drawn their experience from their clinical wards it is not surprising that the disease should have been only partially recognised." It does indeed seem strange that as one walks through the wards of our large hospitals, or observes the crowds which flock to the various out patient departments in connection with them, that neurasthenia is lost sight of. An occasion favourable to the purpose of paying some attention to this matter occurred to me. This is what I found. There were no examples of neurasthenia in the Medical wards; the term was not contained in the clinical manuals which I consulted, and its use in conversation I found considered to unnecessary and objectionable, that it was expedient to let it drop. This being so in the medical wards, it can readily be understood that in the various departments, general and special, which stood in some

relation to them, neurasthenic cases were not found. In one dispensary where I notated over 5000 cases of consultation for skin affections the term was never required, and in a hospital for skin affections which I attended for 3 months, watching every patient, the result was the same. In spite of prolonged attendance in Eye hospitals, and certainly having been present at many more consultations, there never was a single reference to neurasthenic asthenopia, nor did a more extensive acquaintance with ear, nose, and throat diseases furnish me with a single case of neurasthenia. From a perusal of the writings of Dr. Playfair, Graily Hewitt and others, it might have been expected that in the departments for diseases of women a different result would have been found. This was not so. One clinic for out patients of this kind I visited regularly for 2 Months, another for 3 months, without seeing any such cases. At a third clinic for diseases of Women I was more fortunate; for during 6 Months regular observation, during which I had every opportunity of carefully inquiring into all cases presenting themselves, I found 2 cases of well marked neurasthenia. It is however necessary to add that these were not at first admitted to be such, later on a step in that direction was made by diagnosing them as hystenia.

As a matter of fact to see such cases in hospital practice one must go abroad. In Professor Krause's Clinic for nose and throat diseases I have got as fine demonstrations of neurasthenia as one could possibly wish for.

This did not hold though of all the clinics; but where such was not found, the reason was very apparent. In Professor Martin's clinic, where Major gynaecology was chiefly exhibited during the post-graduate course, the subject was not referred to; while in Professor Veit's clinic where Minor gynaecology was taught, and where there was a very large flow of Patients of the "lower grade", Neurasthenic cases were common, and sometimes attracted attention to themselves, and gave Prof. Veit an opportunity of commenting upon them, by their accounts of the distress in which examinations set them, and of the sleeplessness, headaches, mental depression etc. which they suffered from some time afterwards; and which made them afraid of another examination. In Professor Oppenheim's Post-graduate Course on Nervous diseases, Neurasthenia, as might have been expected, held a very conspicuous place.

The question naturally arises are such Patients so very rare about our own hospitals and dispensaries, as would seem to be the case from the foregoing observations? I think not. We seem rather to interest ourselves so much in diseases presenting well marked objective symptoms, that the pursuit of those presenting only subjective symptoms, is disagreeably tame, and as Binswanger[1] puts it: "Aus dieser geringschätzung der subjectiven Krankheitsäusserungen entsteht die abneigung, ja der Widerwille, sich mit diesen "wissenschaftlich" nicht genauer

1 Die Pathologie und Therapie der Neurasthenie, Jena 1896, p. 2

fassbaren Krankheitsmerkmalen zu beschäftigen und das Gesetzmässige in ihnen aus der Summe der Einzelbeobachtungen zu erforschen. It suits my purpose perfectly to be able to transcribe such an opinion from Binswanger; for it can easily be understood that when such holds true in Germany, where the prevailing conception of neurasthenia makes the subject infinitely more interesting to them than our prevailing conception makes it to us, then the censure contained in it must apply still more to us than to the profession in Germany.

There is something repellent about these symptoms offered us by neurasthenia. They are not in our usual line of thought. We have so long also, contented ourselves with vague conceptions and off hand diagnoses of such conditions as hysteria, hypochondria, etc., that it is not easy to get out of the rut, and when such cases present themselves at times when we are more pressingly engaged with our more accustomed objective work, well, time is often wanting for their proper investigation. As a matter of fact seeing and hearing are much easier than thinking, and there is much more pleasure in using the opthalmoscope, the laryngoscope, the nasal and aural specula, or the lens in skin affections, than in sitting full of impatience trying to direct a neurasthenic's story into a comprehensive form. The same holds true of gynaecological work. By the bimanual method it is so easy to ascertain the size, consistence, and position of the uterus, the ovaries, broad ligaments, sacro uterine ligaments etc, all at once,

that it is annoying, especially when time is pressing, to have to forego our usual methods, and wait upon a patient's story. Or again compare the time required to run over heart, lungs, abdomen etc., with that required to estimate carefully the functional and nutritional condition of the nervous system. In such considerations will, I think, be found the reason why neurasthenia is so seldom found among the crowds which flock to our dispensaries. This much is certain, that when one retires from the observation of dispensary and hospital work into general practice, neurasthenics once more become a very numerous and very important class of patients. This fact taken along with the observations made in foreign clinics, makes it very probable, that as soon as time can be spared for the subject, then those connected with our large hospitals and the dispensaries associated with them, will teach us more about the subject than they have done in the past.

Etiology

When we begin the consideration of the causes of neurasthenia we are once more face to face with the fact that there is very little, if indeed anything, new to be found in recent works on the subject. The conception which we have formed of neurasthenia has, it must be said, brought our reasonings concerning the causes which tend to weaken the nervous system into a more connected train, but that is about all.

At the present time, the cause which has received most attention is overwork. Exhaustion is so natural a result of exertion, that its rapid almost immediate appearance, its uncommon depth and its prolonged or permanent duration in neurasthenics, which is so characteristic for the disease, make us look almost involuntarily for the action which has left such well marked traction. In 1887 Ziemssen[1] furnished very striking examples of neurasthenia being produced by overwork, and since then the subject has been very thoroughly worked out. Indeed many writers consider it to be the key of the whole matter. Mathieu[2] writes: "La cause elementaire de la neurasthénie c'est le surmenage

1 Die Neurasthenie und ihre Behandlung p. 5

2 Neurasthénie (epuisement nerveux) 2nd Ed. p. 15

the systeme nerveux. All the ordinary ways by which the nervous system can exhaust itself are thus fully considered, as well as all the less apparent ways. As e.g. in positions of responsibility it is not the work but the worry that destroys the nervous system. In intellectual labour there does not seem to be much danger if one has been properly trained to such, but if anyone untrained to such, suddenly takes up a full going course of it, such as may be found in our Universities, and not only seeks to do it well, but seeks also to do it better than all others, there is great danger of neurasthenia resulting, and in consequence a spoiled future. The future exists for those who know how to work. In domestic life, which is very fertile in the causes which produce neurasthenia, it is not so much the labour required to maintain an establishment that is to be feared, as the numerous little vexations which often accompany it, and which weaken, not so much by themselves as by the thought of how many are to come, and from which Death alone can release. Montesquieu, the author of Spirit of Laws, has in his, less better known, "Persian Letters" (letter 115) given a wonderfully vivid description of what domestic discomfort may be, and what was true then is no doubt as true at the present day. Then overwork and worry in social matters and in morals need also to be considered. While over-sexual indulgence receives probably more blame than it deserves.

There is such a uniformity of opinion

among authorities concerning the evil effects of overwork, that there is no need to dwell here upon it. Of one form of overwork, however, there is not the same unanimity. Mathieu considers that overwork of the muscular system has not been demonstrated as a cause of Neurasthenia (Neurasthénie 2nd Edit. p. 271), and an opinion to this effect as late as 1894 requires some attention. To the existence of such an idea we may perhaps find the answer of the other, that Neurasthenia is rare in the country. As a matter of daily observation, excessive muscular labour has long been attended to by me as a cause of neurasthenia. Here, for example, is a case of a boy giving as good an instance of the spinal form as ever I saw. His business was to run with milk from a milk cart to customers. This involved a good deal of stair climbing, and when one terrace of houses on a country road was thus supplied, instead of being asked to mount the cart and get driven to the next, he was expected to hold on behind so as to help him in running as fast as the horse, between the places to be served. His master kept very quick horses and the runs were very sharp. A better method for daily exhausting the spinal nerve cells could scarcely be imagined, and as a matter of fact in about 6 Months they became totally unable to furnish even a very moderate flow of nervous power. The legs looked perfectly healthy, but there was a feeling of continual weariness in them, and if the lad was obliged to run, total exhaustion ensued, and they became quite powerless. He had to change this work for a

different kind where he had to stand by a machine and hand material from it to a barrow beside him: the legs in this form of employment got very little to do and steadily improved, so that in 3 months he was quite better.

A coachman, whose master liked to be carried swiftly along by a pair of the biggest and most powerful ~~pair of~~ coach horses he could get matched, consulted me about weariness and feebleness in his arms, which increased to powerlessness if he had to exercise them long. He was perfectly aware of the fact that overwork was the cause, and fought by every means he could think of to keep his arms fit for the work of the season. But the disease progressed. The spinal ganglionic cells seemed to become less and less fit to supply the required power: exhaustion began to appear more and more quickly when he had to use his arms in driving, till his Master at last noticed his feebleness, and as the coachman was a big powerful well built man, the why of such helplessness was asked. He had to confess that the horses were too strong for him, and asked to be allowed to get a pair less strong-headed; but the Master preferred to change the man. Here the characteristic features of neurasthenia ~~were~~ appeared after exertion:- exhaustion rapid in appearance, uncommon in depth, prolonged in duration; and as the arms became capable for work again in the course of an hour or two, if rested, it was not possible to view the disturbed function as due to an organic derangement.

A very similar form of neurasthenia is common among farm servants who work at farms where the milking is uncommonly heavy. In them however it is very often associated with neuritis, the ulnar nerve being most commonly so affected.

A much more general form of neurasthenia is of frequent occurrence among men who have to work along with machinery. The various kinds of grinding mills which have to be "fed" by workers, illustrate what I refer to here. When work begins, such a machine is started at a certain speed, and is constantly furnished with sufficient steam to keep it going so. So long as it is fed with material in proper quantities it goes at a uniform rate, if the supply falls off the mill becomes empty, and the steam whirls it round more quickly, to prevent which the workman has to hurry up. Sometimes the workmen is too conscientious, and finding that he cannot keep up with the machine in working hours, devotes large portions of his meal hours to preparing his work, so as to have all right and handy. A conscientious workman of this sort, very rarely, even when fatigued, stays off work for a morning, and so it is merely a matter of time till he becomes a well marked case of neurasthenia. The gastric form of the disease is that from which he usually suffers, and often there is very severe gastrodynia, which appears with great regularity about the same time every day, except Sundays or holidays.

Such cases are as a rule, I am afraid,

not well understood. The dyspepsia which is present is treated in the usual way, and the fact, that a certain quantity of work, sufficient to fatigue, can cause gastrodynia of an extremely severe kind, is overlooked. Dr. Graves in his System of Clinical Medicine, Published in 1843, (p. 575) is the only author, so far as I am aware, who supports me in this matter. In a case of Gastrodynia, which he therein reports, he says of his patient: "Walking, particularly after dinner, is apt to produce pain with eructation of wind, and a walk long enough to fatigue him considerably never fails to bring it on". What Dr. Graves found true of this patient is very commonly true of conscientious Working Men — Muscular work long enough continued to fatigue them brings on an attack of Gastrodynia.

With the prominence which is given to overwork as a cause of neurasthenia, it may seem somewhat extraordinary to seek to accuse indolence, want of exertion of body or mind, or aversion to toil, as a cause of the same disease. Dr. Crichton Brown (B.M.J. 1880 Vol. II, p. 265) is the only one who has touched upon this idea, so far as I know. He puts it thus: "The brain steeped in idleness may degenerate as well as the brain that is worn and frayed with excessive toil". The celebrated Philosopher Kant, in the last words he spoke to us, in a little work entitled "Von der macht des Gemüthes durch den blossen Vorsatz seiner Krankhaften Gefühle Meister zu sein" dwelt upon this very subject. I feel it necessary to transcribe

here a sentence or two of what he wrote; for without such support I fear the idea entertained here, so much is it in apparent antagonism to that usually advanced, would be untenable; and yet some of the purest forms of neurasthenia I have seen, i.e. Neurasthenia free from irritability, were undoubtedly due to indolence and excessive care. Kant here deals with the deceitfulness of the idea which leads us to seek long life and health in abundant ease and plenty of sleep.

"Lange oder (wiederholt, durch Mittagsruhe) viel Schlafen ist freilich eben so viel ersparnis am Ungemache, was überhaupt das Leben im Wachen unvermeidlich bei sich führt; und es ist wunderlich genug, sich ein langes Leben zu wünschen um es grösstentheils zu verschlafen. Aber das worauf es hier eigentlich ankommt, dieses vermeinte mittel des langen Lebens widerspricht sich in seinem Absicht selbst. Denn das wechselnde Erwachung und wiedereinschlummern in langen Winternächten ist für das ganze Nervensystem lähmend, Zermalmend und in täuschender Ruhe Kräfteerschöpfend".

This opinion by Kant is quite in harmony with the most advanced physiological teaching of the present day; but has not yet received proper application to the explanation of neurasthenic conditions. In 1824, Dr Hufeland wrote a preface to the above little work by Kant, and touched this matter with considerable firmness. He said: "Yes, I do not say too much if I affirm that the greatest part of our tedious nerve diseases, and so called Spasms, are no

other things than indolence and inactivity of spirit, the consequences of languid yielding to bodily feelings and influences. Dr. Hufeland quotes Pinel in support of this statement, who says that "he saw by the general and passionate excitement which the French revolution caused, a crowd of men who had been for years ill and feeble become sound and strong, and that particularly the ordinary nerve troubles of the better and more leisured classes totally disappeared".

This form of neurasthenia, it need scarcely be said, is not found among the working class. For its production the quietness of a country life, remote from the excitement of cities, with a certain ease of circumstances and ~~some~~ misleading notions are required. I have often watched with the greatest interest the behaviour of such people. Inclined by their own thoughts and feelings, and ever kept up to the fullest application of their principles in this matter, by the warnings of near and anxious relatives, who see in the appearance of a drop of sweat on the forehead the possibility of an attack of cold, they attain to a perfection in caution that is simply wonderful. Nerve force is thus gradually reduced to the lowest quantity necessary for the fulfilment of the extremely quiet round of daily duties. From want of exercise the life in the nerve cell becomes feeble. Unknown to the individual the condition is precarious in the extreme, and the appearance of some trifling disease — a mild form of diphtheria or of influenza, is that of a deadly foe. One

such patients, for example, consulted Dr. Beatson about a small tumour in the breast, and he advised her to come to Glasgow and have it removed. Upon returning home from the neighbouring town, where the consultation had taken place, she sent for me, and without knowing that Dr. Beatson had seen her I gave her mother the same diagnosis and the same advice. The whole matter was as simple as it could be imagined, and she was doubly assured that the danger was trifling. She was in her usual health when the diagnosis and advice were given, yet she never rose from the bed on which she was examined: her strength declined daily and in 8 days she was dead.

An uncle of this patient gave me a shock. He had been troubled with wandering pains in the abdomen for about a week, evidently brought on by seeking to assist in the thinning of a field of young turnips, when the usual labourers was scarce, and the work was behind. He stopped such unusual work so soon as he felt that he was not quite well, and took more care of himself. Ordinary applications removed the pains, but they returned from time to time. The pulse, temperature and respiration were normal all the time and otherwise he was quite sound. Being called to see him one morning about 3 a.m. I found him unusually weak, and administered some brandy as the handiest stimulant. As he seemed to revive somewhat and inclined to sleep I went with his sons into the next room for about 20 minutes.

Returning then I found him sleeping comfortably. It was a fine summer morning, the sun was shining straight into the room and while still listening to the breathing I turned for a moment to look out. My feeling may be imagined when I heard him saying "It's getting awfu dark, pull up the blind" and I turned to see the man dying: dead before I could get his sons from the adjoining room.

A brother took ill with diphtheria. The disease was present in a very mild form. Very young and very old had suffered from it, but in no case had there been any cause for anxiety at any time. But this brother, a fine, big, strong looking man, sank from the first, and never gave reasonable hopes of recovery. A cousin who suffered from Graves disease — an illness closely allied to neurasthenia — took ill with influenza. The disease was very prevalent at the time and her attack was considered to be so light that medical advice was not sought. The next morning she was found dead in bed.

Dr. Playfair has defined a Neurasthenic as a person whose nervous system, from some cause or other shock, overwork, mental strain and so on, actually has broken down --- and is incapable of fulfilling the ordinary duties of life. These Neurasthenics may be defined as persons whose nervous systems have been so weakened or reduced by indolence or excessive care, and so on, that they have become incapable of resisting the ordinary diseases

of life. But indeed such diseases as we have mentioned are not always necessary to bring about the fatal end. A simple uncomplicated neurasthenia of this kind may become more and more marked till at last the functional weakness of the nervous system is such, that some morning, when the weather is colder than usual, life flickers out.

Elderly country clergymen and retired business-men are apt to suffer from this form of neurasthenia. The former are unfortunately apt to cling very tenaciously to the deceitful idea, that great care can prolong life. With them the maxim rules "It takes longer to rust out than to wear out", and they are not ready to admit that others can see farther than themselves. They are therefore very inaccessible to advice from those about them, and distant specialists, unacquainted with them, can scarcely advise for the best. To such Hauts words; since they convey neither advice nor reproach, but are simply words of wisdom ought to be made known: "In old age to nurse one's self or to allow one's self to be nursed for the mere sake of saving one's strength, by the avoidance of what is incommodious (e.g. the going out in disagreeable weather) or in general the transference of work to another which one could perform for himself, and this in order to lengthen life, such care causes exactly the opposite viz., an early senility and shortening of life"

Malnutrition as a cause of neurasthenia has been more fully recognised in this country, perhaps, than abroad; and such authorities as T. Clifford Allbutt, Granby Hewitt, Goodhart, and Playfair, have explained its evil influences upon the nervous system very fully. The success of the Weir Mitchell system of treatment, or as it is often termed in Germany the Mitchell-Playfair Cure, also gives great support to the view that malnutrition of the nervous system underlies many cases of neurasthenia. Yet it is still doubtful whether, after all, malnutrition as a cause of neurasthenia has received sufficient acknowledgment. In its consideration more than in that of any other cause, is to be found the explanation as to why people living in healthy country surroundings can develope neurasthenia. In such circumstances it obtains, as one would naturally expect, mainly among the poorer of the people. Where the bread is not too plentiful in a family, one or other of the parents is very apt to give up his or her share of the regular meals to the others. These people are often also strengthened in such an unphysiological mode of living by false notions received from a source where one would least expect to find such — the pulpit. The warnings often uttered therein against selfishness, and the exhortations to self-denial are frequently taken too much to heart by a certain section of our hard working population, which is characterised by this that it seldom goes to excess in anything but in hard work. They are non-smokers, abstainers, if not

in name yet in fact, and rarely if ever indulge in holidays or social recreations. Their regular mode of living causes them to form the bulk of our clerk going working class, and when they listen to exhortations to industriousness and take such to heart, in what can they still practise it but in pennywising their share of the daily meal? It is not in the case of high spirited girls alone that a distaste for indulgence is deemed a merit rather than otherwise, it is a notion which prevails largely among the better disposed of our working population, and it is the often overlooked cause of many an obstinate case of indigestion, which no regulation no new restriction in diet seems capable of influencing for good. There is indeed nothing more easy than to beget an indifference to food, and out of this soon grows a distaste for food. The evil results of fuel soon become apparent: the nervous centres deteriorate and become impressionable, the feeling of well being is lost; most of the other organs are in a condition of general weakness, the stomach has lost the power of digesting a full meal and, never receiving such, it gradually shrinks till the ability to take a hearty or full meal is totally lost. In the functional nervous disorders of children malnutrition of the nerve centres demands also more attention than is usually given to it. Indeed in general practice there are few things worth more than strict attention to proper nutrition in children, and in young rapidly growing people. In this matter it is extremely interesting to note all through Hecker's history of the great epidemics of Nervous disorders in the

Middle Ages, how he ever mentions the periods of wretchedness and want which always preceeded such outbreaks. As one reference to such may be mentioned here, his consideration of the "Ursachen des St Veitstanz" p. 153 of his "Volkskrankheiten des Mittelalters". Dr Hirsch's edit. Berlin 1865.

It is probable that Beard's observation regarding alcohol inebriates not usually experiencing all the symptoms of nervous exhaustion, may find its explanation in the above remarks on Malnutrition. Those who are selfish enough, and otherwise disposed to go to excesses of that kind, are not likely to fall into habits of unselfishness in regard to their daily food, neither from motives of non-indulgence being specially meritorious nor from higher ideals of duty to others.

Accidents of all kinds are very often followed by neurasthenic symptoms. As a rule the symptoms are not those of neurasthenia alone, but consist of a combination of those characteristic of hysteria and neurasthenia. Dr Oppenheim considers such cases in his work on Nervous diseases under a distinct heading and under the special term "traumatic Neuroses", and his views on the matter have given occasion to much discussion; the majority of specialists opposing his notions and contending that there is no special traumatic neurosis. Pure neurasthenia may, however, follow upon an accident, and of such Charcot has in his Lecons du Mardi Vol. 1888-89 p. 298 recorded a very fine case. In such cases

Mental shock plays a very important part and may indeed be the only injury received. Such cases are common. A young woman, for example, went in among some machinery at which she worked in a mill, to clean it while it was stopped. While there it was set agoing, and her position became thus suddenly one of extreme danger. Her cries caused the machinery to be soon stopped and she escaped without a scratch; but ever since — over a period of 8 years, she had suffered severely from a combination of hysteria and Neurasthenia. Railway accidents furnish regularly such cases in large numbers, and it is through such that the subject has received its most careful consideration

Many other causes are mentioned commonly as capable of producing neurasthenia. The abuse of tea, coffee tobacco, morphia, cocain etc.; various general diseases as influenza, typhoid fever, pneumonia etc., and local diseases especially when very chronic. The relation between chronic local diseases and neurasthenia is very well expressed in the following observation by Professor Krauke to his post-graduate students of Nose and throat diseases in 1894: "When you find reflex troubles arising from disturbances in the nose, examine the case carefully and you will find that they have a Neurasthenic ground upon which they develope". The patient was a country clergyman with a stupid, nervous manner. He suffered from polypi and a displaced septum, which caused irritation of the nasal mucus membrane, and he complained much of a

Weak memory, and severe headache beginning in the right temple and passing backwards along the side of the head to the occiput. The value of such a pithy remark to the General practitioner is simply incalculable and may well be contrasted with Dr Grimby Hewitts remarks upon reflex troubles in Chronic uterine disease. Dr Hewitt (Br. M.J. 1886 Vol. 1 1056) said exactly the same thing as Dr Roberts, but being unwilling to use the term Neurasthenia on account of the disfavour into which it fell after Sir Andrew Clark's attack in the beginning of the same year, he had to use more indefinite phrases such as Malnutrition of the nerve centres, functional disease of these Centres and so on. Where the terminology is hesitating and indefinite no decided or definite notion can be conveyed.

Forms and classifications

Few diseases are so richly provided with symptoms as neurasthenia and before the more important of these are considered in detail, it may be well to look at some groups of them as they present themselves in the better known clinical forms of the disease.

The spinal form may show itself as the simplest of all, especially when all appearances of "spinal irritation" or neuralgia in the extremities are wanting, and nothing but a high degree of weakness is felt in the legs after exertion. The following is the finest example of such I have met with, and it possesses the peculiarity that it ended fatally. The patient, (R[illegible]-46) had absolutely nothing to complain of, but total loss of power after exertion. The first time he suffered from it was after a journey of about 90 miles by driving, steamer and rail. He arrived at his journey's end all right, and performed the business which he had undertaken; but the next morning he had no power in his legs, and had to be carried into a cab to be conveyed to the boat, and from the boat into the train which took him home. Having reached home, and rested himself, the power returned to his legs. Similar attacks now followed upon any unusual exertion and this condition went on for about 4 years. The first time I saw him in one of these periods of helplessness he was lying on his back in bed and greeted me quite cheerily as usual. I was astonished to find the legs and arms as powerless, and as flaccid, as we usually find

the limbs of the affected side in an attack of apoplexy. The powerless position of the legs in the bed was somewhat uncomfortable, to ease which he got the heels pushed up close to the hips, in which position they were steadied on each side and mechanically fixed. The arms were not quite so bad, yet though they were also placed in an easy position close to his body and his right hand convenient to his face, he could not move it to brush a fly from his face, which was tormenting him very much while we were conversing, and wh. I watched till at his request his wife brushed it away. The breath sounds were so feeble that they could not be heard by auscultation, and what alarmed me more was that the pulse beat only 49 to the minute and the heart sounds were almost imperceptible. The bowels were confined and I was informed that at such times it was no use giving purgatives, for they did not work till strength returned to the rest of the body, and then, if taken too freely, they were apt to cause profuse diarrhoea. He was quite cheerful under all this: he had had many such attacks and knew that this one would pass also, and as a matter of fact he was quite well next day. The urine was normal: the heart and lungs I examined after causing him to take a brisk walk up a hill, and found them all right. He was a brother of the woman who died under the idea of having to go through an operation, cousin to the woman who suffered from Grave's disease and his father had for years suffered from Paralysis Agitans. No trace of hysteria could be discovered, and as the abnormal condition came after exertion and went after rest, it was evident that no organic disease was

in operation. At first it required a journey of 80 miles to cause this condition of exhaustion, but shorter journeys soon began to have the same effect. Driving 12 miles to the nearest town became insufficient and had to be given up; then was driving 2 miles to church; then sitting in his trap while attending a funeral; then walking up one of the hills on his farm or a walk along a level road for ½ a mile or so. Very interesting towards the close of his illness was the fact that a hearty meal seemed to require all his strength during the act of digestion, and consequently his limbs became for some time quite powerless. I watched him for over 3 years and often pointed out to his friends the close resemblance between him and the electric eel. When the Indians, it is said, want to cross a river in which these animals abound, they first drive horses into the river that the eels may discharge their electricity upon them, after which the eels lie helpless upon the surface of the water and can be fished out with impunity. So I showed them it was with my Patient: let him expend his strength in this, that or the other way, and he had to lie helpless in bed till more was slowly formed. Even sustaining a colder temperature than usual began to exhaust him, and I was not astonished at being asked to drive over one very cold morning in February, about 6 a.m., to see him. I never saw any living thing so limp. It was necessary to lay the head and body perfectly flat on the bed, and steady the head with the face upwards. Thus lying he talked to those about him till life flickered out. Such a case may well be termed one of <u>progressive</u> Neurasthenia.

Another very common form of neurasthenia is the gastric. In the case just recorded the patient's stomach was remarkably good, but any unusual exercise of it, such as the digestion of a full, heartily taken meal, often caused total loss of power in the legs and arms. The opposite takes place here; full exercise of the legs and arms such as is required in walking and in most forms of manual labour, induces atonic dyspepsia with its feeble pulse, cold feet, flabby tongue, loss of appetite, flatulence, eructations, discomfort and heaviness during digestion, depressed spirits and sluggish action of the bowels. But severe attacks of gastrodynia are also very common, as a result of excessive muscular exercise, working men having very often to get through the last hour of their day's work, in extreme distress from the gastric pain. This returns so regularly on working days and is so decidedly absent on Sundays and during holidays, that they themselves usually draw attention to this peculiarity, and so make the relation of the gastrodynia to the expenditure of muscular strength visible.

One of the worst cases of this kind which I ever attended was in a woman æt. 40. She was a dreadful worker. She created more work for herself and got through it too, than would have been sufficient for three. Attending to a business, to the letting of a portion of her house and the boarders thus acquired, to a dairy and to ordinary domestic duties, she would be up at 5 a.m. and never to rest before 11.30 p.m., with scarcely a pause for meals. Previous to becoming my patient she had suffered severely from "gastric neuralgia" evidently caused by business worries and bad debts. Her strength had been so much reduced

that when a change to her mother's was considered advisable, she had to be carried out of the house into a carriage. Here rest and freedom from business worries worked wonders upon her wasted form; and she often preferred lovingly to the new health and delight she felt entering her being, as in her rambles about her old home she felt the sunshine around her, and listened to the songs of the birds. In a short time she returned a strong healthy woman, and finding the business which she had conducted abandoned, she kept it for about 3 years. Being however of an extremely energetic temperament she had by this time again increased her spheres of activity, till they were too much for her system. The gastric neuralgia returned, but at first so regularly every day about 12.30 that she could take a dose of an antineuralgic mixture to ward off the pain. Thus she went on fighting the disease for about 4 years, her daily life ever full of work, well directed and well done. She disliked to complain, and when her stomach gave her great pain or she had no special appetite, she went without food. For four months she lived upon a little arrowroot and cold water taken three times a day, and felt astonished that under such care her stomach did not improve. Within the last 18 months of her life her strength gave way almost totally and her emaciation became extreme; nothing could subdue her restless desire to work and her determination to get well. Often have I observed her when she should have been resting in bed, stealing in the quiet hours of an afternoon, during a good day, down the hedgerow of one of her fields, evidently feeling the pleasant sunshine and the song of the Birds which had formerly

done her so much good; but such exertions never failed now to bring on the pain in the stomach. When put to bed and kept there for a day or two the pain left her and she felt quite well. Indeed the variation in her symptoms were the presence or the absence of pain, and thus again depended upon activity or inactivity. She died about 6 months after I left the district and the cause of death was certified as "indigestion"

The cerebral form of neurasthenia is characterized by weakness of one or more of the mental powers. Of the intellectual powers, simple apprehension may be so seriously weakened that an individual, who looks the picture of health, may stand before a door which he has just locked, and be absolutely incapable of grasping the fact that he has done so. He has shot the bolt so that he could hear it going into its place, he shakes the door with his hand, pushes it with his knee or foot, and sees with his eyes that it is immovable, and yet the mind cannot grasp the fact that it is locked so as to let him turn from it satisfied. Or the weakness may not be so great, the mind may be able to perceive and take hold of the matter so long as it is before it, so long as the ears, the hands and feet, the eyes, can again and again demonstrate that it is so. But if the individual leaves the spot, and a few minutes afterwards seeks to remember if it be so, seeks to recollect the various proofs concerning it, then a new mental weakness is felt. The memory will not work at all or only with pain and difficulty, and if the attention be strongly

directed to the matter so as to force the memory to work, mental pain and confusion ensue, and finally, total prostration puts an end to all further effort. For an hour or two the unfortunate sufferer may have to remain in the quietness of a darkened room. The sounds of the street if they can reach him torture his sensitive nerves almost to the verge of madness, and it is with the greatest difficulty that he can keep his place on a cozy so as to get if possible a short sleep. If this can be got he wakens up fresh and able for mental exertion again, and for a period proportionate to its intensity.

It is important to observe that the social powers of the mind may suffer as seriously as the intellectual. The degree of tenderness to which one can attain, and which one can exhibit towards a beloved being, as well as the strength of gratitude which can be felt towards the creator, and the firmness and brightness of religious feelings, are dependent upon the condition in which the nervous centres, subservient to the production of these affections, find themselves. Here indeed we tread upon delicate ground. When disorders of the affections, or of the religious feelings show themselves, we are all too ready to think that insanity lies that way, and indeed in the present state of opinion upon such matters, one might very well be considered mad who would allow such alterations to appear before an unthinking public. It does seem criminal to be wanting in affection and gratitude towards beings who are deserving of such, and to whom they are due; and to these weaknesses in the social powers of the mind are usually concealed. But

the neurasthenic often feels the loss of such very keenly, and if he sees that the doctor understands his case will as readily and as sadly complain of their loss, as of that of the powers of perception, attention and memory. With the loss of the affections there is commonly an weakened or lost interest for things in general. The desire for variety, for amusement, for news, for business may be absent. A mother may bitterly complain that she can take no interest in anything about her, neither in the welfare of her family nor in her household duties. When to these defects we add the loss of self control and the ready irritability which characterize neurasthenia, and the ease with which the most trifling incidents of every day life can thereafter bring the unfortunate sufferer from the disease into a perfect fury, we have need of little more to enable us to picture the state of misery into which the neurasthenic may drift. Professor Oppenheim was in the habit of asking his neurasthenic male patients, who were married, if they were living with their wives, and the number of answers which he received to the effect that bad temper on the part of the neurasthenic had forced the wife to leave him was very suggestive.

Instead of advancing any more cases illustrative of the various forms of neurasthenia, it will probably be more advantageous to give a view of the classifications of the various forms, which the most eminent authors have considered necessary. These taken mostly in the order of their appearance, will also indicate how common is the use of the term abroad, and the uniformity which prevails concerning its chief forms:

Beard. — Cerebrasthenia
Myelasthenia
Gastric Neurasthenia (nervous dyspepsia)
Sexual "
Traumatic "
Hemineurasthenia
Hystero-Neurasthenia

Bouveret. — Neurasthénie cérébro-spinale
" Cérébrale — cérébrasthénie
" Spinale — Myélasthénie
" Aiguë
" Héréditaire
" Jeunisse
" Génitale
Hystéro-neurasthénie traumatic

The above two classifications are wanting in unity. Beginning as we do by classifying the forms according to their symptomatology,

etiology is accepted as a basis before they end. Levillain ought to evade this reproach by giving two classifications, the one comprehending all the clinical varities, the other the etiological. They are:

I Variétés cliniques

Forme cerebro-spinale commune

Hémineurasthénie

Cérébrasthénie

Myélasthénie

Neurasthénie cerebro-gastric et cerebro-cardiaque

Névrose gastrique

Neurasthénie sexuelle de Beard

II Variétés étiologiques

Neurasthénie traumatique

Hystero-neurasthénie

Neurasthénie héréditaire

Neurasthénie femmine

Neurasthénie mâle et ouvrière

Mathieu's classification is very appropriate to the purpose in hand, its leading classes giving an important and very practical view of the subject. He explains it thus: "Three circumstances are to be specially considered, because their existence or their absence, immediately furnish certain important facts concerning the etiology of the neuropathic state, and concerning its probable evolution:

A. The neurasthenia is simple, free from all well marked signs of degeneration and not accompanied by any other neurosis

B. Neurasthenia accompanied by well marked signs of degeneration.

C. To the neurasthenia are superadded the signs of one or of several different neuroses — the most frequent example being hystero-neurasthenia

The first class, simple neurasthenia, furnishes the following forms, according to whether its chief symptoms are located in the nervous, or in some of the other systems:

Système nerveux	{	Neurasthenia cérébro-spinale
		" Cérébrale
		" Spinale
		" Périphérique
Appareil digestif		" dyspeptique
Appareil Circulatoire		" Cardiaque
" Génito-urinaire		" Génitale

"It must be remarked also that to each of these varieties the term light or serious should be added, if one wishes to have a just idea of the diverse possibilities. The intensity of the malady being an important element of which it is always necessary to give an account" (p. 98)

Bloeq (Gaz des Hôpit. No 46, 1891) seeking to simplify matters as much as possible had proposed the following: —

A Neurasthenia without excessive predominance of any combination of symptoms. Neurasthénie générale

B Neurasthenia with predominance of a combination of symptoms holding particularly:

a) the cerebral system: Neurasthénie cérébrale
b) the spinal system: Neurasthénie spinale
c) the sympathetic system: Neurasthénie sympathique
d) the peripheral system: Neurasthénie périphérique

Pitres, seeking also for the simplest possible classification took, exclusively, the localisation of the morbid trouble for his arrangement, and described only six forms:—

1 Cérébrale
2 Spinale
3 Neuralgique
4 Cardialgique
5 Gastro-intestinale
6 Génitale

The resemblance of all the classifications advanced by French authors to Beard's arrangement is very remarkable. In 1885 Arndt (Neurasthenie p 104-171) proposed a classification in harmony with his own particular views upon the subject, and described 6 forms: the neurasthenia of infants, of childhood, of boy and girlhood, of puberty, of maturity, and of old age. When

German authorities again took up the subject the classifications proceeded again upon the lines laid down by Beard. Löwenfeld e.g. in 1894 gives this: a) Cerebrasthenia

b) Spinal neurasthenia

and a Cerebro spinal form of neurasthenia

c) Sexual neurasthenia

d) Hereditary neurasthenia

e) Traumatic neurasthenia (p 236-263)

In 1895 Krafft-Ebing gives this: (p 161-201)

1 Cerebrasthenia

2 Spinal or myelasthenia

3 Gastro-intestinal neurasthenia

4 Neurasthenia cordis and Vasomotor

5 Sexual neurasthenia

a Sexual neurasthenia in the male

b " " " " female

Binswanger's Classification (1896) is:

1) neurasthenia with predominating psychichal disturbances:

a) the hereditary form;

b) the acquired intellechial eschaustion;

c) the hyperalgchic form.

2) the motor form of neurasthenia:

a) with predominant symptoms of irritation;

b) the paretic forms.

3) the dyspeptic,
4) the angio-neurotic,
5) the sexual form of neurasthenia.

Concerning the forms of neurasthenia enumerated in all the classifications given, it may be said that the unanimity among authorities is strong evidence for the necessity of such; yet it must be admitted that it is impossible always to sharply divide them from each other. The prevailing conception of neurasthenia, which is that of a general disease of the nervous system having its seat sometimes more in this organ or system, sometimes more in that, but ever at the same time giving evidences of its influence over the whole body, is against the possibility of this. Nor does the anatomical and functional relations which exist between all the organs of the body permit this. Yet the fact that all authors have found it necessary to give a spinal and a cerebral form of the disease show that even here, where the anatomical and functional relationships is of the most intimate kind, the nervous exhaustion may fall almost exclusively upon one or the other part. The sexual form of spinal neurasthenia is a fairly good example of this, on the one hand, as is it the mental powers are not necessarily impaired, and the most intense degrees of it may be present, without marked involvement of nervous function elsewhere, (Loewenfeld Neur. p 250)

While in cases of pronounced cerebrasthenia, the functions of the body may be little or not at all decreased. As Lowenfeld says (p 241) "such patients can march continuously, climb hills, row, ride, and devote themselves to other forms of bodily activity, and that very free physical exercise may indeed act decidedly for good upon the general health." So close indeed may the weakness be confined to even one portion of the cerebrum that cases occur in which "with great reduction in the power for mental work, the sleep may be perfectly undisturbed".

Such pure forms are however rare. In pronounced forms of Cerebrasthenia brought on by intellectual overwork, Muscular weakness is usually present; and the working Man who has exhausted himself by over Muscular exertion of arms, legs, and body, generally shows not only sexual and Gastric neurasthenia as a consequence, but is apt to complain much of weakened memory, of impaired power of attention, and of the loss of the social powers.

Symptomatology

Even the slightest glance over the classifications here chosen as examples of such will prepare the mind for the fact, that neurasthenia has an extraordinarily extensive symptomatology; and the ever varying clinical pictures which may result are due to the numerous ways in which the different organs in the body may, either singly or two or more together, be effected in their functions. The chapter on Symptomatology has indeed always been a most difficult one to write, and when written scarcely ever free from reproach. Beard's section, in his work, takes up 80 pages on the symptoms of Neurasthenia, and a reviewer of his efforts, in the Lancet for 1891 Vol I P551 refers to it thus: "It is diffuse, wordy and without any attempt at scientific arrangement". Sir Andrew Clark criticised it with his usual vigour and said: "When the symptoms set forth as characteristic of neurasthenia are carefully examined it will be seen that they constitute an assemblage of incoherent indications of disorder, borrowed more or less freely from inchoate forms of insanity and from almost every disease of the nervous system; that they are not characterised by any definite disorder, that divisions of them belong to the most diverse disorders,

and that published with some parade as coherent and conclusive evidence of nervous debility they exhibit defects of observing, reflecting, and Critical powers, unpardonable in those who court or claim the attention of the profession". The value of such criticism however, and its apparent vigour and freshness, are miserably reduced when we know that it is merely a repetition of what Arndt had written 8 months earlier, and Sir Andrew Clark has only the doubtful honour left, of being about the only one who accepted Arndt's opinions almost without reflection.

Without doubt the richness of symptoms which characterise so general a disorder of the nervous system as Neurasthenia, is very apt to be confusing, and it became necessary to get them properly classified. This was a task which owing to the genius of their language came perhaps more naturally to French Authors than to others, and it has been beautifully finished. The symptoms are now arranged into three lines and Mathieu (Neurasthenie p 92) has placed each thus: In the first line stand the leading features of the disease, some of which we may always expect to find when the disease is present. These are: Headache, giddiness, sleeplessness, Muscular weakness, spinal irritation, and gastro-intestinal disorders. In the second line are to be found certain symptoms which present themselves when we examine carefully the various organs, and the third line is composed of objective symptoms.

This last line of symptoms is the weakest and Mathieu left its existence in some doubt, its most important sign being the translation of the muscular strength into figures by the use of the dynamometer. Charcot always used the dynamometer in his clinical demonstrations; but while the idea involved in its use is helpful, the indications furnished can be got as readily and as reliably from an ordinary hand grip. Prof. Oppenheim has however given a better account of the objective symptoms in Neurasthenia (Lehrbuch der Nervenkrankheiten p 687) and he arranges them so:

1) Increased tendon reflexes.
2) Increase of the mechanical irritability of muscle, and increase of the power mechanical irritability of nerve.
3) Abnormal irritability of the nervous system of the heart and palpitation, as well as the other objective appearances of neurasthenia cordis.
4) Vasomotor and secretory disturbances.
5) Tremors – vibratory and fibrilary.

It is not to be expected, however, that these objective symptoms can be discovered in every case

The second line of symptoms is of greater value: it supports the first, but is not necessary for the establishment of the diagnosis. It consists of more or less ill defined and often transient appearances of disease, depending largely upon individual peculiarities and clinical circumstances, which are found by passing system after system through an examination, and analysing

carefully the state of their functions.

In the nervous system after finding disturbances of the intellectual and social powers of the mind, characterised by weakness of the memory, the attention, and the Will; irritability of character, melancholy and Morbid fears; we may pass on to find disturbances of its motor functions and disturbances of sensation. As examples of the motor troubles we may find Paralyses of the upper or lower limbs, or of both; and the various neuroses peculiar to certain trades or professions. The type of this latter group is Writer's Cramp, but derangements of a similar kind are met with in connection with other occupations, such as among pianoforte players, violinists, telegraphists, tailors, sempstresses, milkmaids, engravers, fencers, etc. Pitres (Semaine Medicale 1892 p200) has drawn special attention to tremor as a sign of neurasthenia — tremblement neurasthénique. It exists in 2/3 of all cases and is similar to that of exophthalmic goitre or the so called aleschistic tremor. Its oscillations are short, rapid and vibratory, and they are most marked after prolonged exertion or intense emotion. Other motor troubles exist, though perhaps less frequently, such as cramps without apparent cause, rythmic spasms of the neck, tongue and asophagus, also that peculiar form of instability in the erect posture, known as "astasie-abasie

Concerning the reflexes, those of the skin — the abdominal, cremasteric and glutial are often distinctly exaggerated. The tendon reflexes may be so increased that

tapping the patellar tendon may throw the whole limb into the air, and ankle clonus may show signs of increase also (Lowenfeld Neurasthenia p 171).

Sensation is almost always disturbed. Headache and backache form, indeed, two of the leading features of the disease; but pains may locate themselves anywhere, in any of the organs or in any part of the periphery. Sensitiveness to changes in the weather is very often observed. Few neurasthenics can bear the heat of summer well, and during its hottest months such patients are often quite run up. It is to be noted also that neurasthenics react very readily to medicines, and often most intensely to electrical treatment; an almost imperceptible current often producing such disagreeable feelings that the patient for long afterwards cannot even feel himself in the presence of the instrument without discomfort. This is a matter which too enthusiastic advocates for electricity in neurasthenic conditions should ever remember. Hedley (Lancet 1895 Vol 1 p1381) by way of making a beginning with this form of treatment passed the weakest perceptible faradic current through his own body, and with his hand administered, for one or two minutes to the patients forearm, the mildest of labile applications. The patient (a doctor) was asked to return again next day, but did not come again for a week, and then only at the request of his medical adviser. He then explained that although he was "no worse" and quite convinced that the electrization was as mild as it possibly could be, "still the exquisite sensitiveness of his organisation

was such, that he had felt pricks and stingings and sensations ever since". Whytt in his work on Nervous disorders published in 1765 relates a similar case. The individual referred to was "a paralytic patient in the Edinburgh Royal Infirmary, who felt a remarkable uneasiness through his whole body, when it was charged with the electrical fluid, by means of a wire held in his hand, altho' there was no shock given him, nor any sparks drawn from him" - page 114. I feel sure that Neurasthenics might be saved a great deal of their comfort, if not actual injury, if their statements in such matters were received with less doubt. Abnormal sensitiveness in the eye is not an imaginary evil, but is, as Beard remarks, as real as small pox or measles, and quite as much worthy of professional study and consideration.

Disturbances of the special organs of sense are frequent. The extreme sensitiveness of the nervous for loud tones and noises is fairly well known; but the torture which the neurasthenic suffers from such, and from our innumerable street noises, is indescribable. Hearing is, on the other hand rarely reduced, and that, too, mainly in traumatic cases. Goodhart remarks that of 20 cases taken from his note book simulating Ménière's disease on account of noises in the ears being associated with giddiness and faintness, only one had evidence of ear disease, but all the others were "very nervous persons".

In the eye Beard has noted a passively venous congested condition of the conjunctiva, associated with

dimness of vision. This condition is now known as Neurasthenic asthenopia. It is characterised by feelings of fatigue and pain coming on quickly in any attempt to do fine work such as sewing etc. In some cases the fatigue is the more prominent feature, in others pain and irritibility. When the latter is the case it is frequently referred to by german authors as the "irritable eye der Engländer.

The disorders of taste and smell do not offer much worthy of special notice. The abnormalities of taste are mostly perversions, but the so called galvanic taste in the mouth after galvanization of the head and neck is to be mentioned. According to Lowenfield (page 152) this may last for hours or even a day or more, and may be so intensive that it is not displaced by the taste of foods taken into the mouth. The sense of smell is often sharpened. Bonveret relates a case of a girl who at a considerable distance could tell by smell all the dishes which were being prepared in the kitchen. Some patients complain of certain odours being very disagreeable such as their own perspiration. I have been unable to detect anything abnormal about the smell of the perspiration complained of, nor could I find that the sense of smell was altered in regard to any other thing, and one is obliged to assume in such cases, that just as abnormalities in the perception of different tones is considered as evidence of disease in fibres of different lengths in the basilar membrane of the cochlea, so certain fibres in the nerve of smell which correspond with such odours, as are complained of as being too intense, are in a state of hypersensitiveness.

The symptoms associated with the cardiac form of neurasthenia often require most careful consideration. In the case of the "irritable heart" there may be greatly increased frequency and force, and a very distressing, irregular palpitation; or the action of the heart may be abnormally weak and slow, deceiving the general practitioner not infrequently to the diagnosis of that most obscure of organic diseases "fatty heart". Such an error of course includes a very gloomy prognosis and I have known two practitioners of high reputation in consultation, Making this mistake, and confining the patient as a consequence to the house, or at least "never to go out without an attendant". Treating such a patient as a Neurasthenic speedily brought about improvement, and the ability to afterwards dance heartily at a ball, and enjoy vigorous walking exercises during the following summer months, with nothing but good, dispelled the last touch of fear from the patients Mind; and strengthened the assurance given, that there was nothing organically wrong. The importance of these functional disturbances of the hearts activity does not seem to be sufficiently recognised. Löwenfeld (page 195) found such troubles in more than one half of all neurasthenic cases.

In the peripheral portion of the circulatory apparatus functional troubles are very common, and the red spot appearing on the neck as the patient is first observed in the consulting room, and spreading from this over the side of the neck and face, often points to the diagnosis. This was a feature of the disease much attended to by professor

Oppenheim when exhibiting cases of neurasthenia.

The troubles in the respiratory system do not, as a rule, appear to urgent as those in the circulatory. Beard has noted softness, faintness, want of courage, and clearness of tone as characteristic of the neurasthenic voice. In 1888 Dr. McBride (B.M.J. 1888 Vol II, 1116) showed an unusual form of laryngeal neurosis. The patient was a young man believed to be suffering from paresis of the crico-thyroid muscle due to neurasthenia. The patient's voice approached the falsetto, but when proper tension was applied to the cords by mechanical adjustment from without of the thyroid and cricoid cartilages, imitating the action of the crico-thyroid muscle, normal voice resulted. Goodhart is of opinion (Lancet 1892 Vol I p. 179) that the condition known as clergyman's sore throat is that of a very mild catarrh on the one hand, and a want of nerve force on the other. A case treated by me recently began as a glossodynia which gradually shifted backwards till it rested in the larynx. Here the pain was so great that taking it along with hoarseness of voice her physician diagnosed "cancer" and sent her off to a specialist. She was afterwards treated by two specialist for catarrh of the larynx, but without any good. After careful examination I concluded that the pain in the throat was due to neurasthenia, of which she was generally a typical case, and under the treatment directed against this condition she steadily improved. When she came to report

hersely, which she did weekly, the interior of the larynx was painted with a weak solution of nitrate of Silver, and the catarrh disappeared rapidly leaving the voice normal in tone.

A neurasthenic patient of mine caught a very stubborn cough in a curious way. At the end of an unusually hard day's work he was in my consultating room and heard a curious kind of neurotic cough, extremely persistent, and very like the barking cough of puberty, by the manner in which it repeated itself and in the apparent want of exertion by the patient in its production. Upon returning home he was attacked by a cough very similar in sound, but most violent in production, and so persistent that for three nights he could get neither rest nor sleep. There was nothing in the respiratory tract to account for it, and neither drugs nor strong efforts of the will availed anything. Just as it seemed necessary that he should try the effect of a change of air and a holiday the cough disappeared.

The neurotic nature of Spasmodic asthma is now well recognised, but till recently this was not so, and too much attention was directed to its diathetic relationships, and to the possible existence of organic disease located in the respiratory, generative, and digestive organs, as possible sources of reflex irritation.

Functional disorders of the sexual organs are extremely common in neurasthenics. Charcot says:— "En général les neurasthéniques sont anaphrodisiaes".

It can scarcely be otherwise. Anything indeed which takes the edge of the nervous system, or otherwise claims too much of its energy is sure to have such an effect; and it is unjust to assume, so frequently as it is the custom to do, that sexual feebleness is the result of previous sexual excess or abuse. Chaucer puts this matter in a lighter vein, and in my opinion in a truer light than many Medical men. He writes:—

"These children of Mercury and of Venus
Been in her working full contrarious.
Mercury loveth wisdom and science,
And Venus loveth riot and dispence.
And for her divers disposicioun,
Ech falleth in others exaltacioun.
And thus, God wot, Mercury is desolate
In pisces wher Venus is exaltate,
And Venus falleth wher Mercury is reysed."

Lothergill (physiological factor in diagnosis p. 146) mentions how all intense anxiety abolishes sexual power, and tells that many of the Lancashire Mill owners during the cotton famine of 1862, when face to face with ruin, fell ill and lost all sexual appetite. The clinical picture, however, usually drawn by Medical authors of what is known as sexual neurasthenia is a period of excitation followed by reduction and then impotence with spermatorrhoea, and signs of prostatic irritibility. In the female there is, perhaps,

more of an irritable weakness and menstrual troubles are exceedingly common

Neurasthenia may thus cause trouble in every organ of the body, and here is perhaps the place to consider some of the symptoms a little more closely than can be done by enumerating them. The various morbid fears from which the neurasthenic suffers have been very variously criticised; many authors fighting shy of them, but others as boldly attacking them, and by Sir Andrew Clark they were stigmatised "as an assemblage of incoherent indications borrowed more or less freely from incipient forms of insanity and paraded as coherent and conclusive evidences of a state of nervous debility". There has perhaps been too much work expended upon the description of these, and certainly too little upon their explanation.

The neurasthenic may in every direction be restrained in action by fears of various kinds. The best known of these is agoraphobia — the fear of open spaces. When an individual so affected comes to an open space over which he requires to cross, he is seized with a great dread at the sight of it. With this dread there is compression of the breast, palpitation, an outbreak of cold sweat and the limbs become unable to move him from the spot; but if even a child takes the patient's hand and accompanys him across the open space the fear vanishes with all the other symptoms. Or the attack may only present itself in the absence of a favourite

walking stick, and not be felt when it is in the hand. Other morbid fears are ashtophobia, claustrophobia, monophobia mysophobia Pantophobia and the like. These all do most certainly owe their existence to mental impairment, but such impairment is not of the nature of insanity. An individual affected by one or the other of these fears is no more insane than is the neurasthenic who having locked a door stands unable to leave it, because he cannot feel that the transaction is finished to his satisfaction. His mind cannot grasp the fact as it is usually grasped, and this stoppage in his mental operations leaves him undecided. He stands before the door, he sees that it is locked, he heard the bolt shooting into its place, he pushes and shakes it so as to feel that it is locked, as a rational being he calls everything possible to the assistance of his enfeebled perceptive powers, but in vain, and what is more natural and less insane than from instinct and from a sense of duty to stand by and wait. But in the waiting, and by the effort the mind becomes feebler. His notions of time and space become disturbed. It is necessary to keep the hand upon the door to be sure that it is within reach, or it will seem to leave him, to recede away into unending space: ages seem to have passed since he put his hand to the matter, and ages will pass before he can finish it. And so he stands helpless; but let a child give him the necessary assurance, or let him find some new trick by which he can prove the matter such for example as not taking the usual way of pushing with the hand or the

foot but with the knee. The last touch is thus given to the transaction and he takes his leave satisfied.

The disturbances to which the neurasthenic's ideas of time and space are liable have not been sufficiently attended to. Oppenheim (Nervenkrankheiten p 697.) says of some of his neurasthenic patients, that along with the other feelings of fear which afflict those suffering from Agoraphobia when they come to such an open place, there is an appearance as if the space extended itself indefinitely ("als dehne sich der Raum ins Unendliche"); but I am not aware that any Writer on the subject has noted that the same kind of disturbance may be experienced by the neurasthenic concerning notions of time. When in the ordinary course of things we do not measure time, for some more or less definite object which occupies our attention, by our watch or the clocks around us, we unconsciously do so by a natural measure such as the succession of our thoughts; for we always judge the time to be long or short in proportion to the number of perceptions and ideas that have passed during that interval. But the natural measuring of time is an obscure subject, and the following common observations may perhaps better indicate my meaning. An uninteresting conversation appears long because it furnishes a slow train of perceptions; a walk through a barren country appears long because it offers few objects for the perceptive powers to exercise themselves upon; it is a very ordinary observation that the time of seperation between lovers is intolerably long,

because there is only one idea in the mind — the time of meeting again; but in the neurasthenic, who has lost the power of perception, and in whose mind an idea cannot be formed, the measure of time is also lost; it extends itself in the same way as an open space before his mental view; may, worse still, the past vanishes into distance as much as the future; and retreat is cut off so that he must stand indefinitely where he is.

This extraordinary general weakness of mind is the source of much that seems peculiar in neurasthenia, and it is little wonder that the resulting symptoms often look like "incoherent indications of inchoate forms of insanity". In all the morbid fears we can recognise three stages in their production: first, general weakness of mind; secondly, doubt; and thirdly, fear. A neurasthenic arrives at an open space and from habit attempts to form notions concerning the relations of things in general to his passage; but he can apprehend nothing of all he sees, even time and space elude his mental grasp, the space stretches itself out indefinitely before him, if he looks to one side then the time which has elapsed since he glanced at the other appears immeasurably long, ideas of doubt and danger arise instinctively, and the morbid fear is formed.

Or again, the neurasthenic may be suffering severely from headache, and the expressions of pain may not only be very distressing, but very disagreeable owing to a sort of idiotic tone about them, as if he himself did not quite understand them. If the patient is observed closely he

looks like a person playing a part in which he is not very well instructed, and in which he is not very deeply interested. If kept in observation for some time he may now and again be noticed stealing glances towards those about him, evidently to see what impression he is making. There are in fact attempts to learn objectively what amount of pain he is really suffering: his own mental weakness being unable to form any conception of it. But let the doctor catch but one such stolen glance, but one moments suppression of expressed pain in order to observe the effect produced upon those around, and the patient is henceforth stamped as a hypochondriac. Arndt indeed in his work on Neurasthenia p. 63 calls hypochondria a cardinal symptom of the disease (Die hypochondrie ist ein cardinal-symptom der Neurasthenie) and Ziemssen (p 13) mentions Arndt in this matter approvingly. Other authors have not however imitated them in this respect, and as for myself, the speed with which 10 grains of quinine with 1 grain of powdered opium, converted my patient from a seeming hypochondriac of unusual depth and cunning, to an individual extremely grateful for total relief from pain, was very instructive.

Even the reproach of giving themselves too much up to self observation is not so much deserved by Neurasthenics as it is unthinkingly thought to be. Indeed they have not the power for sustained observations; but their subjective symptoms are so real, have lived so long in them, and formed and formed such an inseperable part of their daily life

that very ordinary efforts suffice for them to give these feelings characteristic expression. In no other way can we explain how the neurasthenic is able to furnish us with such full and such correct information concerning his condition — information which as Löwenfeld remarks no doctor could draw up better (die kein Arzt besser zu Stande bringt). One such patient consulted me recently. His first words were characteristic and to the point. He wished my assistance, because he was afraid that he was going to be afraid that night. He had no idea that this fear of being afraid (phobophobia) had been described by Beard, ridiculed by Sir Andrew Clark, and that examples of it formed part of post-graduate courses on the Continent. He came to get assistance and came sharply to the point because he knew what he wanted. It was late in the evening and after a few words I asked him to call next morning. Next morning he presented himself again, this time as characteristically as before. In his hand he held a slip of paper — the length and rather less than half the breadth of this sheet — and on it he had brought a few notes of his case. Did he know that Charcot had long ago described him, as "l'homme aux petits Papiers" and that his slip of paper "containing a few notes of his case" was a most valuable diagnostic sign? And when I looked at his slip of paper I found every item as characteristic, and the whole an amazing epitome of Neurasthenia. How can we explain such exactness, such a wonderful condensation of a subject! Here was a condition, within the mouth, which I

had found best described by Schech in his Work on "Die Krankheiten der Mundhöhle und der Speicheldrüsen"; there again was an item referring to a condition about the anus, and had I not observed this very condition described by König in his Lehrbuch der Speciellen Chirurgie I am afraid I could not have appraised it properly. Again, here is the "polyuria" to which Oppenheim first directed my attention and on further examination the urine exhibited that hyperacidity which caused Vigouroux to write his special monograph on the subject – "Neurasthénie et Arthritisme". Was this all an effort of the imagination on the part of the patient? One item in the paper was not quite clear: "For last six or seven years intense itching at intervals in passages leading into ears with fluid discharge (at times) therefrom" this did not seem to agree with neurasthenia, and indeed seemed out of harmony with the rest of his synopsis. Was this an imaginary evil? On examination with Mirror and Speculum, well marked eczema was found in both of the external auditory canals and there were large, well defined, chalky deposits in both tympanic membranes. The discovery of this condition of the ears only strengthened the diagnosis and he stood revealed as a well marked example of what is known as the lithaemic form of Neurasthenia. Such is the way in which cases of diseased self-observation are apt to unfold themselves, when analyzed with patience and a knowledge of the subject.

In contrast when we meet l'homme aux petits papiers, where he is a rarer individual than in French con-

consulting rooms, two factors can always be discovered which accounts for his notes of his case. To begin with he has been at a great many doctors already and found them evidently unable to catch on to his story, or too busy to give his case patient consideration; and so experience advises him to prepare these few notes which he hopes will by their coherence have time and attract attention. He is also the more disposed to this course, as his own well known sense of mental feebleness makes him feel that he is otherwise apt to unfold his case very defectively. Further he anticipates the dissatisfaction which he will probably feel when the consultation is over. When he leaves the consulting room the weakness of his memory, especially that more active part of it termed recollection, deprives him of the satisfaction of knowing whether he has explained his case fully, and it is only by holding the notes in his hand, by looking them over with his eyes, by repeating them in his ears, that he can attain to any feeling of satisfaction from the interview — a satisfaction which all other Patients can enjoy without effort or assistance of any kind, but which the Neurasthenic can only enjoy when forewarned by experience he brings, and takes with him, his notes of his case. When Neurasthenics intend leaving the ship with the doctor, they often take a copy of it for their own use.

Sleeplessness is one of the cardinal symptoms of Neurasthenia, yet Patients do not complain often, so much of that as they do of the enormous crowds of ideas which

fill the mind during the sleepless hours. Neurasthenics are above all things extremely rational in their treatment of themselves. Far from being prone to diseased self-observation, it is a thing which is shunned by day as interfering with their pleasure or their business, and by night as interfering with their sleep. When they lie down to sleep every effort at thinking or observing is suppressed, and the mind is put into the quietest possible condition. But it is a matter of common observation that this is just the condition of mind most favourable to the reproduction of former mental experiences, and very often the idea or thing which could not, during the day, be recollected by the greatest effort of the mind, now by the action of spontaneous memory steals into the mind. This often occurs just as the patient fancies he is falling asleep, and in a short time he is rudely dragged back to consciousness; other things or ideas gradually associate themselves with the first, and finally the mind is simply teeming with such. This does not however by itself constitute all the evil. When ideas are thus drawn into the sphere of consciousness, by involuntary Memory, they are usually very vivid and a quiet hour or two in the middle of the night in perusing and arranging them, would not be unprofitable nor indeed lost or neglected by many. But the unfortunate neurasthenic has not the power to do this. The usual course of the mind when healthy is to proceed from the simple ideas, which thus fill it, to the formation of general notions, and to still further proceed to the elaboration of the conclusions to be drawn by reasoning from

these. But the impaired mental powers cannot compass so much. Each former mental impression thus reproduced feels more like a sore spot on the brain, and when these are felt to be simply innumerable the torment endured is indescribable. The good which a dose of Bromide of potassium does here is often wonderful and extremely instructive.

But even in sleep the neurasthenic is not free from distress. His mental feebleness still makes itself felt, and as a result his dreams are often painful and very fatiguing. Charcot in his clinical demonstrations always drew attention to such dreams. In one of his cases e.g., the patient was ever being pursued by menacing animals, dogs and cats, which wished to bite him. Or again the patient in his dreams was seeking to accomplish a certain task, but thousands of unforseen obstacles reared themselves in the way before him, the time seemed to pass and never, to his great despair, could he attain to the so much desired end. These patients feared above all things to fall asleep. It is much the same in all cases. One of my patients, who does not require to work by day, spends her whole nights in labour. Ever is she at the well drawing water for the preparation of the morning meal, but never can she finish this in time, and the despair and anxiety which she suffers from the thought that she will be behind in her duties is simply maddening, and she awakens in the morning seriously exhausted.

In these dreams the two most prominent

features are characteristic of neurasthenia: The ground tone of the dream is one of mental depression and its course is marked by mental weakness. The imagination is woefully feeble, wanting in strength and power of flight, even in rapidity — contrasting markedly with the power usually exhibited by it in dreams. To bring out this contrast it might be well to compare them for an instant, by drawing attention to some well known dreams. In, for example, Cleopatra's dream by Shakespeare, extreme wonder and delight and the ability to feel these are indicated:-

Cleopatra.

I dreamt there was an Emperor Antony;
O such another sleep, that I might see
But such another man!
His face was as the heavens; and therein stuck
A sun and moon, which kept their course, and lighted
The little O o'the earth.
His legs bestrid the ocean, his reared arm
Crested the World. (Ant. & Cleop. Act 5 Sc. 3)

The pleasure indicated here is as wonderful as is the powerful flight of the imagination and the course it takes.

Take as examples indicating the heights of sublimity to which the imagination can attain in sleep, and the power, rapidity, and even critical ability, which it may display on certain occasions there are perhaps none on record finer than those recorded in the 7th and 8th Chapters of the book of Daniel. The dreams are real dreams and the author was

Perhaps the greatest Statesman of his age. In them the dreamer was unconsciously seeking answers to certain far reaching lines of thought which daily occupied his attention; and the mental strength in sleep is apparent, not only in the rapid transition from object to object and the manner in which these multiply and crowd upon one another, but in the still greater power shown by bending all to the service of the idea which prevailed at the start. Nor must the unusual relevancy of these dreams to this subject be overlooked. As Dennich relates, at the end of his second dream he fainted, and was sick and unfit for business for certain days: symptoms which point to an attack of acute neurasthenia due to mental overwork. A finer example of the exhausting influence of dreams does not, probably, exist.

Diagnosis

The diagnosis of neurasthenia is commonly thought to be easy, and there is much in the literature of the subject which tends to support this notion. Paul Julius Möbius in his "Diagnostik der Nervenkrankheiten p. 401 opens his chapter on Neurasthenia by saying that as a rule it offers no diagnostic difficulties, but years of experience in general practice, and consequent knowledge of what does and what does not furnish difficulties in diagnosis, does not permit a ready agreement with this opinion. There is not here, however, either time or space to enter into details of all the diseases with which Neurasthenia may easily be confounded.

Generally speaking it has to be distinguished from Organic diseases on the one hand, and among neuroses from hypochondria and hysteria on the other. Binswanger has recently (neurasthenia p. 45) insisted upon the necessity of differentiating more sharply between it and hysteria, than it has hitherto been the custom to do, and advises that henceforth every symptom in doubtful cases which does not without ambiguity speak for hysteria must be assigned to neurasthenia: — "Wir müssen uns freilich daran gewöhnen den Begriff der Neurasthenie und Hysterie schärfer zu fassen und letzterer Krankheit nur die Fälle zuzuweisen, welche die typischen, psychischen, und somatischen Merkmale der Hysterie unzweideutig erkennen lassen."

The same rule may be laid down for differentiating accurately between Neurasthenia and hypochondria; so, when we remember how vague our conceptions of these diseases still are, the task presented in the diagnosis cannot be considered an easy one.

In heart affections, from the view point of the prognosis which is often so urgently requested, serious difficulty is often encountered. We must be ready to decide between Nervous tachycardia and true angina pectoris, or acute dilatation, or even undeveloped Grave's disease. In nervous tachycardia there is much to make the diagnosis of fatty heart perhaps the safer one, and the functional nature of the disease, when it occurs in middle aged people, is often extremely difficult to prove. The permanently slow Pulse, which is worse in the early morning after perhaps a night of disturbed rest from tormenting dreams or annoying cough; the feeling of oppression at the heart, after a short walk or some little extra exertion in the house leading on to Prostration, palpitation, dyspnoea etc.; the fainting condition into which the patient may sink and in which she may remain for a long time, are all apt to call up notions of atheroma of the coronary arteries or extensive changes in in the cardiac fibres. Fatty heart may be the cause of such symptoms, but its positive detection by our present means of diagnosis is very difficult, and Post mortem examinations are rarely available in such cases. Perfect recovery from such conditions is rare, yet the amount often achieved by such means as freedom from worry, good feeding, regular exercise, and perhaps a long holiday, is

Much greater than can possibly be conceived of from a heart degenerated to the extent of being the cause of such symptoms.

And when neurasthenia may thus perplex the practitioner in a region, such as the cardiac, where he is so well acquainted, may it not be expected to do this still more when he has to follow it through less familiar regions, such as the eye, the ear, the nose, the throat, and the uterine system, and even through the nervous system. The diagnosis for example between dementia paralytica and Neurasthenia may for years be an impossibility. The difficulties indeed can only be overcome in many cases by having extensive Medical knowledge at command, and in every case there is only one sure way of diagnosing the disease, and that is by having such a perfect acquaintance with diagnostic methods, that we are able to exclude all the related forms of neuroses, and all cases of disease due to a definite pathological lesion. Such fulness of knowledge is however a commodity which, it will probably be admitted, medical education in the past has not made too common. When it is remembered also that organic disease may exist along with neurasthenia, and that rare analytical ability may then be required to appraise each correctly, we cannot think so lightly of the diagnosis as Möbius and others would advise us to do.

In the lighter cases of neurasthenia an error in diagnosis may easily occur by judging too hastily from the appearance, and the absence of all symptoms of disease

while the Patient is being examined. Neurasthenics look younger and fresher than their years would lead us to expect, and during what is to them a Period of rest, or a holiday, they consequently look better and healthier than the normal individual. Beard (p. 104) has directed attention to this youthful appearance in Neurasthenia; but it has not been sufficiently dwelt upon, that when a Neurasthenic enters a consulting room he is at his best, and has nothing abnormal to show. That is which the Neurasthenic reacts, and which consequently differentiates him from the Normal individual, is work. How does he bear up against ordinary or a little extraordinary exertion? The answer to such a question comes clear and unhesitatingly — "they are not what they used to be". They become used up more readily. In their Periods of exhaustion however they prefer privacy and quietness, and rarely consult a Medical man during such. They wait till they have recovered, and then as they contrast more than favourably with the normal individual it is little wonder that their disease is often overlooked.

Prognosis

The Prognosis in neurasthenia is extremely variable. Much depends upon the form of the disease. In cases of hereditary neurasthenia a perfect cure cannot be expected. Generally however there is no danger to life. Beard indeed appears disposed to allow that neurasthenia is favourable to the lengthening of life. Such patients, he says, "look young for the same reason that they live long." This opinion however has been too freely accepted. It can scarcely be doubted that Dr. Playfair, by his method of treatment, saved the lives of many, who were just at the brink of the grave. In the New York Medical Record for 1898 p. 546, Dr. Landon Carter Gray Mentions 3 cases in which the diagnosis of neurasthenia was made, and in all of which weakness progressed and terminated fatally: The autopsy in these cases it may be added failed to explain death. From my own practice I have already mentioned two cases in which the patients were under my observation for years. They were diagnosed as neurasthenic from the first, continued observation and innumerable examinations did not alter this diagnosis, and in both weakness progressed till it ended in death.

Of the less serious cases some examples may be adduced to exhibit the common course and termination of the disease: and as Dr. Winslow in his work on obscure diseases

of the Brain and Mind, published in 1860, has furnished us with a considerable number of such; a few of them may be here considered.

A clergyman who in consequence of continuous overwork broke down so completely that there was complete loss of memory, dull heavy headache, great depression of spirits, and vitiated condition of general health, was enjoined to complete quietness and repose of brain and mind, and improved decidedly in the course of a few weeks. Then after several months holidays abroad, and a course of tonic treatment, he returned quite restored in mind and body.

More tedious was the case of a confidential traveller for a large commercial house, who after having occupied a position of great trust and increasing anxiety for a continuous Period of 15 years, had during the last 6 Months of it undertaken extra Evening work. His Memory became greatly impaired, and it required nearly twelve Months treatment before he entirely recovered the use of it again. Strychnine with iron and Quinine were the drugs employed, with cod liver oil. The shower and, eventually, the douche bath to the Spine are credited in this case as of evident service.

Still more protracted was the case of a Member of the bar, who from experience became convinced that his Mental impairment was due to overwork, and who after a relapse placed himself unreservedly in Dr. Winslow's hands, and agreed to do as advised. He was kept for a period of two years from all anxious and severe mental occupation, and by the end of that

time his mental powers had rallied to a surprising extent: had in fact become, according to his own impression, more vigorous than they were prior to his attack of illness.

Such cases are not only valuable, since they are recorded with great clearness and the means employed, with the time required for a cure, mentioned with great exactness; but they are also extremely interesting as examples of how the past-generation of practitioners viewed and treated such before the new term "Neurasthenia" was introduced by Beard, and before the advent of new methods for its cure. The time mentioned as required for a cure agrees with what is necessary still. A serious case of mental breakdown from overwork requires still from 6 – 18 Months for a cure, and provided that no hereditary taint of a marked kind exists, such may be safely promised. The mental powers carefully cared for during such a period, may indeed become stronger than ever, and even all that was acquired by the mind previous to its breakdown perfectly retained.

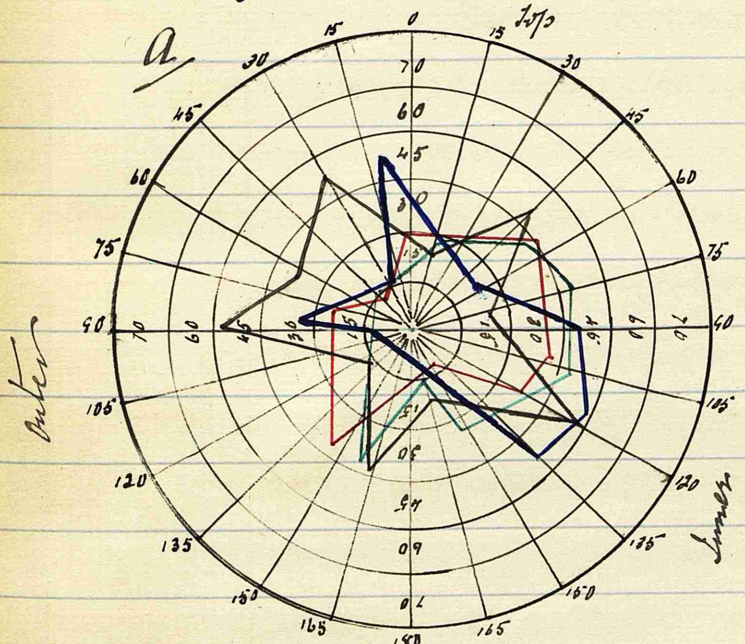
There are however exceptions to this the usual course. Tottergill in his work on Indigestion and Biliousness gives several, of which the following from Page 106 may be taken as an example. The gentleman was a returned East Indian. He came of a healthy stock, was a well nourished person, and took a very high place in the examination for the East Indian Civil Service; continued his labours; took one thing after another, far outstripping all his competitors: with what result? this! His digestive apparatus became so thoroughly disordered that he was compelled

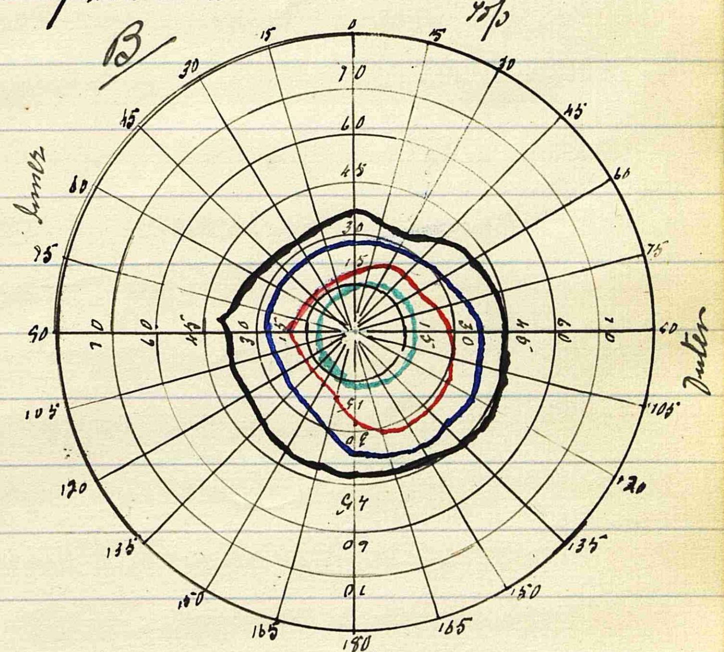
to retire from duty, to come home to England, to do nothing. A confirmed dyspeptic, his bodily comfort destroyed, his prospects clouded darkly, crippled in the race for life; he has to sit helplessly looking on while his old competitors diminish the space between him and them, and then overtake him; after that, see them going onwards leaving him hopelessly behind.

Dr. Thacham in an address read at the Annual Meet. of the B.M. Ass. in 1885 (B.M.J. Vol II p. 435) observed that "nearly all the symptoms of neurasthenia show their neurasthenic origin by ceasing for a time". This can scarcely be admitted to be so in cases of simple neurasthenia; and neither a study of cases nor our conceptions of the disease permit such a notion. The course of simple neurasthenia towards a cure is slow, patients never recover suddenly as they do in hysteria, ~~Neurasthenia~~, and they are influenced by suggestion only to the extent that such by occupying the mind with pleasant anticipations, prevents it from exhausting itself by persistently worrying for a cure. Cases of Hystero-neurasthenia are, however, very apt to show marked fluctuations. Such Patients are extremely inconstant. One day they seem capable of sustaining and performing more than an individual in the best of health, and the next the mere burden of existence is simply insupportable. It is necessary to be very well acquainted with the individual before a prognosis is given. Where there is a marked hereditary taint the disease may transform itself into a pure psychosis, of which Melancholia is the most common example. Suicide, unfortunately, is too common a termination

The prognosis in traumatic cases is always serious, and where a possible claim for compensation exists, demands very special consideration. Traumatism may produce a pure neurasthenia and of such Charcot has recorded a very fine example in his Leçons du Mardi 29th Jan. 1889. But as a rule such cases are strange assemblages of symptoms belonging to Neurasthenia and hysteria, with, in severe cases, symptoms of related neuroses and psychoses present in varying proportions. To such varying groups of symptoms, following upon injury, Oppenheim had given the name traumatic Neurosis, a term which gave occasion to even sharper and more personally expressed difference of opinion in Berlin, than did the introduction of the term Neurasthenia in London. Dr. Oppenheim had to defend himself against such authorities as professors Schultze, Leyden, Seligmüller, and Mendel. Dr. Schultze opened the battle by declaring (Neurolog Centralbl. 1889 No. 13) that many of the appearances given as characteristic of traumatic Neurosis were for him not objective enough, and that the number of simulated cases was very great. The following year at the International Medical Congress in Berlin he formulated a thesis (Lancet 1890 Vol II p. 1470) as follows: Traumatism produces various psychoses and neuroses, but there is no special traumatic neurosis: (2) No reliance can be placed on those symptoms said to be characteristic of traumatic Neurosis - namely contraction of the field of vision and disturbance of sensibility. (3) Simulation is common. (4) No objective criteria have as yet been found to distinguish simulation from genuine cases. Professor Oppenheim, who based his opinions

on experience, and who wished to defend them with this, felt himself disarmed by Prof. Mendel who entered into the discussion which followed, with the remark, "that he had had opportunities of examining the larger portion of Oppenheim's patients and had thereby come to a different opinion". This remark by Mendel allowed Professor Seeligmüller to take up a more severe role, and gave apparent ground to his charge against Oppenheim, which was to the effect, that he had undertaken his examinations too lightly and had overlooked the simulation. The result of the whole was a careful review of the matter by Oppenheim (1) in which the question of simulation was specially considered. As the contraction of the field of vision is considered by him of great diagnostic value, he illustrated his defence with two figures to make this point clearer - the one a case of simulated contraction, the other such contraction as is ordinarily met with in Neuroses :—





A. Simulated field of vision B. contracted field of vision.

1. Die traumatischen Neurosen mit besonderer Berücksichtigung der Simulationsfrage.

Out of reference, probably, to Professor Hirschberg's opinion that in neurotic contraction of the visual field, as the vision even in the apparently defective part is not quite lost, hatching cannot be employed in the illustrations, Dr. Oppenheim has not employed this method, as Charcot always did, and so the illustrations are not quite so telling as they might be. The thick dark line marks the limits of vision for white, while the blue, red, and green lines, which I have made use of instead of the more or less interrupted dark lines in the lithograph, show the limits of vision for these colours respectively.

To represent a simulated field of vision Dr. Oppenheim took individuals whose vision was perfectly normal, and asked them to imagine that they could deceive him, and to feign bad vision. Out of such attempts a concentrically contracted field of vision never came; but a condition represented in the fig. a. where there is not the least similarity with a concentric contraction of the field of vision; but a quite irregular grading through each of them of white, blue, red, and green, with sector like contractions which have never been found in cases of neurosis. This symptom therefore retains its value as an objective one in cases of traumatic neuroses, and points to the hysterical part in the compound forms of disease — hystero-neurasthenia, which usually results from accidents. Taken along with other objective signs such as increased frequency of the hearts action, the anaesthesia, the involvement of the sympathetic which betrays itself by a redness, which spreads over the half of the face by every excitation,

and the psychical anomalies which go with these, we could in a given case, with no knowledge of his history, come to the conclusion that they were the results of some form of injury.

Oppenheim is of opinion that simulation is rare, Schultze believes that it is common, and Wendt is of the same notion, while Seligmüller believes that it exists to about 25% of all cases of traumatic neuroses. But Oppenheim while maintaining that simulation is rare admits that exaggeration is more common. There is a fine distinction here, and one which in ordinary language is not usually observed. Probably no schoolboy, who has got a holiday through some mild nervous disorder, and who himself introduced the idea of a holiday, but feels so soon as he has got it, that part of his account was exaggerated, and some of the illness simulated for the sake of consistency; and probably before the day is over is quite ashamed of himself. On the West coast of Africa, in the Congo region, where high temperatures 105°–106° were common in Malarial fever, strong men when the temperature was so high, were apt to babble, and if this were even accompanied with restlessness, or a desire to insist upon getting out of bed, and along with that of doing something, still they felt as if they were only giving way to a notion, and playing at being delirious. I remember Dr Gairdner examining a head case in the Wards of the Western Infirmary. There was a question as to whether delirium had been present, and the father of the boy related that he had been sleepless, restless, and talkative, and indeed difficult to keep in bed. But

during the relation the boy frequently interrupted it. He insisted that he always knew what he was saying and doing; but that he had exaggerated in speech and simulated in action without thinking that they would afterwards take such a serious view of the matter. He saw to his astonishment that in spite of his explanations Dr. Gairdner put him down as having been delirious. I know a Gentleman who about 12 years ago received £50 as compensation for a shake received in a railway accident. Though much frightened at the time and for some time disinclined for business, still he has a half feeling that only by slight exaggeration, and the necessary simulation, did he get the £50. He is still ashamed of this, and does not observe that he has never been the same man since, and attributes the loss of his business, some years ago, to bad times. A labouring Man — one of the roughest of his type, to whom the daily toil among his companions was a recreation, varied only by an occasional fit of drinking on a Saturday, fell from a railway Waggon. As it was during working hours and he was somewhat tipsy at the time, he had only one notion in his head, and that was to get the trifling wound he had received dressed, and get back to work as soon as possible for he feared to lose his job. On returning to work, after 3 days' absence, he sought to make amends for his fault by earnest labour; but after about a couple of months the man's whole character had changed. Formerly a sound sleeper he now lay awake the most of the night, formerly he never looked at newspapers, now he thumbed over its articles and actually learned to read better

during his sleepless hours; formerly he never slept in the morning, now he was in danger of losing his place for such neglect of duty; formerly always ready in tackling his work, now he was ever unready, and the shifts to which this put him, seemed characterised by cunning and deceit. In consultation concerning his health his untrained mental faculties let him appear as a simulator of the simplest kind and his accounts of his health appeared exaggerations. If such accounts are here correctly expressed, there is no real difference between exaggeration and simulation as Oppenheim would lead us to infer. Exaggeration in speech requires simulation in appearance, and we can scarcely imagine them separably. What they refer to is a psychical anomaly, and where this anomaly is so striking as to have quite changed the nature of the individual, its appearance with the above mentioned objective symptoms should only clench rather than throw doubt upon the diagnosis. Simulation therefore should be looked for as a leading symptom of a traumatic neurosis: its presence makes the prognosis more serious, its absence causes it to be more hopeful. When found, the objective symptoms are not to set down as of no legal binding force or validity because associated with it, and it is likely to be appraised by a careful consideration of the individual's past character. An impartial consideration of the whole matter leads irresistible to the conclusion, that in the past, medical men guided by good intentions and a bad psychological training, have by their decisions in such cases, often assisted to acts of horrid injustice and cruelty.

Explanatory Theories.

Since Neurasthenia has become a nosological entity many attempts have been made to explain its nature, and the mass of theories which have been advanced to this end are now much more difficult to understand, than anything else about the disease. The nature of the condition is pretty evident to the practical mind at first sight, and its own history of overwork or of malnutrition etc. of the nervous system, stands out so clearly in most cases, that simple exhaustion of the nervous system with the molecular and chemical changes of which it is the expression, might be deemed a sufficient notion of the matter. Like some of the cases recorded by Winslow, patients come and tell us that they have been overworking themselves, and we accept this simple explanation of their vitiated condition as sufficient. Dr. as Fothergill remarks: "we observe to a friend how thin you are getting, and receive for answer the reply "Yes I have been a good deal worried of late, I have a lot of work; and I have a good deal on my mind". In conversation this simple explanation, which throws the whole condition back upon the nervous system, is unhesitatingly accepted; but it is altogether different when a person begins to write upon it. In short the exactness which Bacon attributes to the habit of writing is distinguished by its absence. "Almost from the beginning of medicine" says Mathieu (p. 133) "there

has been a tendency to subordinate nervousness in general (and with the same coup the neurasthenia contained in its groups) to a certain number of functional troubles of the digestive apparatus and its annexes, or to some lesion of the abdominal organs" Whytt in 1765 gave a very fine illustration of how to do this. There, in his consideration of Nervous Atrophy, under which term he really considered the neurasthenia of Beard and Charcot, he takes special care to inform the readers "that while the symptoms deserve the term thus given, yet he would not be thought by this to insinuate that the disease proceeds from a diminished secretion of the animal spirits or from their vitiated quality". The influence of the stomach" he continued "is greater in the animal economy than is perhaps generally imagined. It not only contributes to the digestion of the aliment, but the whole system is either invigorated or affected with a languor according to the different disposition of its nerves. By proper food the nerves of the stomach are gratefully stimulated and the whole body is thence enlivened and strengthened so that besides its use for nutrition food in the stomach becomes on account of its stimulus altogether necessary in some delicate nervous people, for keeping up the strength of the body and the due exercise of all its functions." In this curious and hesitating way was the stomach then dragged in to explain the symptoms of nervous atrophy – a term the resemblance of which to neurasthenia is very apparent and which might again be well used as

a very fitting designation for those cases of progressive Neurasthenia which go on to a fatal termination, and in which the diminished secretion of the seminal Spirits is the source of the symptoms.

In our own day it is perhaps French authors who seek most to give an abdominal origin to nervous symptoms. Bouchard in his "Leons sur les auto-intoxications dans les Maladies, 1887" has sought in a somewhat new looking form to reproduce Galens explanation of hypochondria, and sees, especially in dilatation of the stomach and in the stagnation of various fluids which lie therein an inexhaustable source of continuous intoxication of the organism. Others again, Hayem and Winter, seek to explain Neurasthenia by a vitiation of the general nutrition due to dyspepsia which allows of the formation of abnormal albuminoid products. This explanation may also be led back to Galen. Beau (Traité de la dyspepsie p. 24) has attempted an explanation by supposing that the semilunar ganglia in the epigastric plexus are primarily involved, an idea which can be traced back to Van Helmont, and of which Whytt probably made use in his explanation of Nervous Atrophy.

Almost every organ in the abdomen has had consideration devoted to it in this respect. At one time draggings upon the Mesentery or displacements of the liver or kidney have been chiefly accused (Glenard), and at another the System which seemed to dispute most the place for a bad preeminence, with the digestive, in this respect was the genital. In women it is not uncommon

to find, along with neurasthenic symptoms, chronic disease of the uterus or its appendages, and a few years ago so strong was the tendency to regard the latter as the chief offender in neurotic affections that the unfortunate sufferers incurred frightful dangers at the hands of surgeons. These dangers were more real than is perhaps generally supposed, and so recently as 1893 Dr. Playfair[1] strongly protested against such operations in cases of nervous diseases in women, such as neurasthenia advanced hysteria and the like. He had seen cases in which the operation had been actually performed without one iota of benefit accruing, and he mentions others in which the patients not having courage to submit to the operation were cured by systematic treatment. In one case he was informed by the father of a young lady, who was abroad for her health, that the principal surgeons in a certain continental city who had seen her, had advised the removal of the uterus as the only way to a cure. Dr. Playfair immediately wired that the operation was on no account to be permitted and the patient was brought back to London where under systematic treatment she was well in six weeks.

In France, Charcot in 1887 had vigorously denounced operations for the cure of neurotic affections, especially removal of the ovaries, and thereby defended himself against an idea which had gone abroad that he considered the ovaries as the cause of hysteria. He also in his lectures constantly ridiculed the idea that in neurasthenia we have an affection originating in the

1 Clinical Journal Vol. I p. 201.

stomach: "The stomach plays its own part as does the head and the legs, but the participation of the stomach is not necessary, and we may see cases in which the stomach is not in the least affected, and which present all the other symptoms characteristic of Neurasthenia." (1) Or again he remarked on the occasion of a woman relating the condition of her stomach at the end of her report: "Cette fois elle met les choses à leur place. C'est la tête qui commence, l'estomac ne vient qu'après. Plus logique que beaucoup de Médecines qui font provenir tous les phenomenes nerveux nevrasthéniques de l'estomac" (Leçons du Mardi 1888 p. 518.).

Levillain in his "La Neurasthenie" a work written under the inspiration of Charcot, and reflecting his views, had elaborated the above opinions and has shown that studied theories of abdominal chemistry are not required to explain the origin of the disorders, and that we have only to consider physiological exhaustion. It may, in short, be said that in France the attempt to subordinate neurasthenia to dyspepsia had failed.

It may be best to just briefly mention some of the other theories in the order of their appearance so as to bring us up to date. According to Beard there is an impoverishment of nerve strength, a waste of tissue in excess of repair. This is exactly what we have seen Maudsley saying:— "The nerve cell is no inexhaustible fountain of force etc. Arndt is of opinion that as all the influences which go to produce the condition affect the nutrition of the

1 Leçons du Mardi 1887 p. 32.

of the nervous system; so we have as anatomico-pathological cause of neurasthenia a more or less extensive atrophy of it. "Die Neurasthenie ist der Ausdruck einer Hypotrophie des Nervensystem" he says, and considers this a very good translation of Beard's idea on this point, with which idea he expresses full approval. It seems however, from his context as if he were rather translating Whytt, who is the only other author so far as I know that uses the term nervous atrophy. The tendency of Dunds expressed views is to make us think more of exhaustion in the adult, that of Arndt's is to make us think more of an embryonic type of a nervous system in the more or less otherwise mature individual: - "The nature of the disease" he says, "is want and imperfection of the nerve substance. The nervous system is small while its individual parts have remained thin and slender, it is unripe because it has remained in a more or less foetal or embryonic condition. The ganglionic cells are inconsiderable, have only short and not much branched protoplasmic processes, or the protoplasmic processes may be absent, thus forming the so-called apolar cells. They appear undeveloped, because they are not in themselves properly differentiated, and are therefore more or less blended with their surroundings in the brain or Spinal cord, i.e. with the nervous ground substance. The nerve fibres are strikingly fine, their medullary sheaths delicate, and in transverse section look punctuated; because their soft substance has not that fluidity which it ought to possess, and does not ooze out in the well known drop fashion. In parts the nerve fibres are totally absent, and in their

place is found a neuroglia like tissue similar to that which forms the matrix from which they originate. This however is the case, as said in Paris only particularly in the sympathetic "nervous system"[1].

Such a conception seems at first sight a little fantastic, and it would probably be impossible to furnish satisfactory evidence of the existence of the features enumerated; yet that some such condition of the nervous system agreeing more or less with it forms the basis of the hereditary form of neurasthenia, at least, cannot be doubted. It is rich also in therapeutical indications of a constant kind, and is a much needed stepping stone to the ultimate conception of all, that alterations in the chemical constitution of the nerve elements determines at last the functional behaviour of the nervous system. Such notions have, however, been much ridiculed, so that it may be well to point out that they are not so much out of harmony with our most recent ideas of the minute structure of the nervous system. At the Croonian Lecture for 1894 Professor S. R. Cajal reasoning from observed facts "compared the cerebral cortex to a garden full of innumerable trees, the pyramidal cells, which in response to healthy cultivation can increase the number of their branches, strike roots over a wider area, and even produce more varied and exquisite fruits[2]. When such a conception can be scientifically imagined as the result of healthy

1 Die Neurasthenie (Nervenschwäche) p. 110

2 Raymon y Cajal, "Proc. Roy. Soc." 1894; Lancet March 17th 1894; B. M. J. 1894 p. 543; and "Les Nouvelles Idées sur la Structure du System Nerveux" 2nd Edit. Paris 1895, p. 78-79.

Cultivation, its opposite can legitimately be deduced from antagonistic circumstances.

Disorders of nutrition having been accepted to account for the origin of the disease, various theories were now advanced to explain these. As is well known the nervous system is given up to the generation, transfusion and propagating of nervous impulses, and in order that it may carry on these important works to the best advantage, it is relieved of much of the labour that falls upon each physiological unit of the amoeba. The necessary food is not only prepared for it from the raw material, but also brought to it, and no system requires a more abundant or more continuous supply than the nervous (Foster). The sudden deprivation of blood, as when the heart ceases to beat for but a second will cause unconsciousness. It is not wonderful, therefore, that the arterial system should fall under the suspicion of furnishing defective supplies, and in an article "Über die Schwankungen in der Entwickelung der Gehirngefässe und deren Bedeutung in physiologischer und Patogenetischer Hinsicht"[1] Löwenfeld, in 1887, sought to prove this. To make the matter clear he took the trouble of examining a considerable number of brains, in order to ascertain what are the relations which exist between the width of the brain arteries to the brain weight on the one hand, and to the development of the arterial system collectively on the other. By different individuals he discovered that important

1 Archiv. für psychiatrie und Nervenkrankheiten, Band. XVIII Heft. 3 S. 819.

variations may be found. Reckoning from 100 gr. of brain weight the relative width of the vessels may vary from 1 – 1.8. He concludes therefore that a favourable development of the arteries tends to greater brain power, and that defective development of the vessels of the brain produces brain power. In his work on Neurasthenia and Hysteria published in 1894 he sums up the matter in large type thus: "Defective development of the brain vessels establishes therefore a disposition to all the diseases which appear as a consequence of nerve exhausting, or nutrition disturbing influences, above all to neurasthenia and hysteria (page 33).

In 1895 Meynert[1] came to the same conclusions, and developed them as an explanation of the well known "irritable weakness" which is so prominent a feature of the disease. The subcortical portions of the nervous system can be more easily supplied with nutrition than the cortical, and thus the subcortical may be strong while the cortical are weak: By such a condition being established, the controlling influences of the hemispheres is weakened or lost, and appearances of irritability ensue. In "irritable weakness" according to Meynert the weakness and the irritability inhabit different portions of the nervous system: "The cortical organs are the seat of the weakness, the subcortical organs the seat of the irritability. This leads the weakness back to the blood supply. He, however, introduced another

[1] Wiener Klinische Wochenschrift p. 523, 1895.

factor into his explanation of the disturbances of nutrition. Viz., a disturbance in the molecular nutritive attraction of the nerve elements by which they are unable to take from the surrounding plasma what they require. This is no new idea. In 1867 Maudsley wrote: "Not only may an excess of irritability be a defect in the nature of the ganglionic cells, but this may be defective also by reason of a great insensibility of nature, and a want of powers of assimilation".

Krafft-Ebing[1] is of opinion "that as the majority of neurasthenics look healthy and well nourished and in general eat and digest well, that the supposed disorders of nutrition in the nerve cells must be a fine one; some sort of a trophic disturbance by which they are capable of producing only worthless chemical products from the nutritive material. If" as he says "we accept with Virchow, Wundt, and others that the ganglionic cells in the central nervous system take by molecular nutrition their nutritive material from the surrounding plasma, so it is understandable that this nutritive chemical performance will be imperfect if the ganglionic cells by original abnormal structure (Arndt) have less attractive power; or otherwise by too great functional demands are worn out, exhausted, and functionally unfit for the work of nutrition; or lastly, if insufficient or worthless material from disturbances in the circulation or poverty in the blood is offered to them (anaemia, toxic exogenous stuffs)".

By putting the matter as above, von Krafft-Ebing covers

1 Nervosität und Neurasthenische Zustände, Wien, 1895, p. 38

a good deal of ground, and brings many views together, so as to show how they may all work to the same end — the production of a nutritional disease. The first portion of his theory explains well those cases of neurasthenia among strong, healthy looking dwellers in the country, who eat and digest well. But it might be well to dwell a little more fully upon the material which the blood has to offer them than he does. The chemical energy of the nerve cell is derived from the material taken into the body and carried to the cell by the circulation. But the atoms thus taken to the nerve cells may in the first place be insufficient in quantity, or if sufficient, they may be inert, and though taken up by the cell quite incapable of advancing its nutrition, or they may be in sufficient quantity and capable when taken up of promoting the healthy functions of the nerve cells, and lastly, they may be injurious such as are found in alcohol lead etc. and lead to abnormal functional and nutritional conditions. The character of the nerve force depends upon the nature of the food taken into the system

Rowalewsky's theory[1] is mentioned by most writers as worthy of special attention. He proceeds from the facts that by long continued irritation by mechanical or electrical stimulation of the peripheral nervous system, the nerve cells are subjected to an over irritation, which reveals itself by structural changes, such as coagulation necrosis, and the formation of vacuoles. From such observations he seeks to prove that by over exertion the nerve

1 Centralbl. f. Nervenheilkunde und psychol. 1890 p 241.

cells suffer on the one hand a material defect in their protoplasm, and that on the other, by continuous activity and imperfect recovery, there occurs a heaping up of the products of decomposition, and thus a form of auto-intoxication arises. The ganglionic cells during their activity can neither take in material to repair its losses, nor find time to free itself from the products of tissue changes, and so deterioration results from inanition on the one side, and poisoning on the other. To the partial auto-intoxication thus produced, Kowalewsky is of opinion that another frequently associates itself - a general, in consequence of a collection in the blood, of products of insufficient oxidation and regressive metamorphosis (leukomaines), a collection which injures the nervous system partly directly, and partly indirectly, by impoverishing the blood of its nutritive materials as e.g. in the arthritic diatheses. Kowalewsky also believes himself justified in the opinion that the poisoning of the nervous system of the parents with leukomaines and ptomaines could be accepted as an explanation of hereditary neurasthenia. He says: "In certain cases of hereditary neurasthenia well marked visible changes of the central nervous system form the basis, in others the disease explains itself through arrested development of particular elements (arrest), but in the great majority of the cases it is established upon inherited abnormal chemical composition of the central nerve elements, in consequence of the poisoning of the organism of the parents with leukomaines and ptomaines."

The experiments of Anfimow and Ladowsky upon

which Kowalewsky had built his theory in 1890, were again in 1892 the subject of investigation by Hodge[1]. He noted in the cells of the spinal ganglia and in the brain of English Sparrows, Pigeons and swallows, that after fatigue the nucleus became distinctly smaller in size, its outline irregular, its reticulum darker when stained, the protoplasm shrunken, the angle of the sheath of the nerve cell become fewer, and the Perivascular lymph spaces enlarged. These appearances were induced by prolonged electrical stimulation, and recovery took place in a varying length of time: 5 hours of electrical stimulation requiring about 24 hours rest.

Mann's researches in 1894 led to the following conclusions:- I, Activity of nerve cells causes swelling of nuclei and of nucleoli; II, Fatigue in the nerve cells causes diminution in the bulk of the cell, and shrivelling of the nucleus.

Since the Croonian Lecture by Professor Ramon of Cajal in 1894 the above indicated facts concerning the Nerve cells have not the same importance as an explanation of the condition in Neurasthenia, and the centre of interest seems now shifted from the nerve cell to the material in which its fibres originate. Formerly when we wished to get the simplest possible idea of nervous action, we pictured to ourselves, in reflex action, an impression passing up one nerve, through a nerve centre, and down another nerve to reach a terminal organ, which was thus set in action. Now we must take into consideration that a certain amount of intermediate substance must be passed through by the

1 Journal Morph., Boston Vol. III p. 95

impression, which travels down the periphery, before it can reach the fibres which are to convey it to the terminal organ," and in order that this journey may be prosperous, it is very clear that this intermediary substance must be in a normal condition" (Wolter, "Das Wesen und der Behandlung der Neurasthenie" 1894 p 11). Formerly also we thought that the nerve cells were the sources of the nerve energy, and just a little over three years ago while standing in one of our largest hospitals, watching incessant jerkings in a choreic patient, I asked the Physician, who had the case in his care, and who was standing by, "Where can all that nerve force be produced? His answer was, "in the nerve cell". About 3 months later Gowers was proclaiming in his address on the dynamics of life: that we can no longer think of the nerve cells as the sources of nerve energy. They are the vital elements in the machine, but they have nothing to do with its dynamics. Into the protoplasm of the cell pass the fibrils which conduct nerve energy; through it they course unbroken; from it they pass, contiguous, as elements of the axis-cylinder of a nerve fibre"[1].

Thus then has the neuroglia, a substance which was formerly looked upon as a connective tissue only, and useful merely as bedding for the nerve cells, suddenly sprung into a position of the highest importance; a substance whose condition must be considered in all nervous action; the source of all nerve energy. The transition is sudden, and almost bewildering, for we know practically nothing about this spongy grey substance: substantacular tissue, or neuroglia, beyond that it has hitherto derived its chief interest in practical Medicine by producing

1 Gowers. The dynamics of Life. London 1894. p. 47-48

gliomatous tumors

This new idea as to the source of nerve energy is a welcome one. Hitherto it has been very difficult to be satisfied in certain matters. It was not easy to understand how even material injury to certain cells by overwork, and the starvation and heaping up of products of decomposition which they at the same time suffered from, should affect other nerve cells, so seriously, as to deprive them of power. Thus, continued over exertion of the intellectual centres not only weakened the special centres, but also used up the energy required for muscular life, as well as that required for the processes of nutrition. We have seen over muscular exertion not only producing simple loss of appetite, but atonic dyspepsia, and Gastrodynia as well; and in the Spinal neurasthenic, whose case I have recorded, an extra exertion of the stomach would often leave the patient so powerless in the limbs, that from the table at which he had sat down, lively and cheerily, with some friends, he had often to be carried to bed. It was difficult to explain these conditions while we were ruled by the idea that each cell made its own nerve energy, and while we thought that the Protoplasmic processes were only rootlets for the absorption of food for the purposes of the cell. But now that we have arrived at the idea that these Protoplasmic processes are merely conductors, that the function or influence of the nerve cell is only nutritional, and that the source of the nerve energy is the Spongy grey substance, which forms a web so extensive that all the nerve cells are imbedded in it, so we have attained to a more satisfactory idea of the above

mentioned mixtures of the different forms of Neurasthenia. The sub-acute attacks also, in which the patient after mental exertion becomes limp from muscular weakness, unable to walk about, so exhausted that even rest in a chair is too great an exertion, and only a position of full extension upon a sofa or bed gives relief, and to which darkness and quietness are much desired adjuncts, find their best explanation in the idea, that the source of nerve energy is one and undivided. It is the only explanation, also, which is at all sufficient for those acute cases where, in addition to the above mentioned symptoms of the sub-acute, we may have a high temperature, and all the appearances of an intermittent fever, as the result, in a neurasthenic individual, of over Mental exertion or of over Muscular exertion. Cases "simulating Malaria intermittens", first described by Beneke, and of which Krafft-Ebing had in his recent work on Nervosität und Neurasthenische Zustände p. 44 recorded a very interesting example, are probably not so rare as would appear from the literature of the subject; as I have had two such in my own practice

Treatment

The literature relating to the treatment of nervousness is very interesting reading for the general practitioner. Going back through generations he ever finds the common drugs, those in which he to day must still trust, again and again asserting their worth and faithfulness and he comprise from the study strengthened in confidence as to their real merit. The same may be said of the various adjuncts commonly employed. Hence with all the appearances around us of having advanced, we find that we have scarcely moved, nor are there any reliable signs that we are likely to. The matter was as well understood, and the drugs employed in its treatment as well handled and as widely combined with other remedies, at least 150 years ago as they are at the present day.

In 1765 Whytt refined the general intentions in the cure of nervous disorders to the two following:

i To lessen or remove those predisposing causes in the body which render it peculiarly liable to nervous ailments.

ii To remove or correct the occasional causes, which especially in such as are predisposed produce the numerous train of nervous, hypochondriac or hysteric symptoms.

For the cure as far as that was possible of the delicacy of the nervous system he enumerated the following

remedies: bitters, bark, steel, the cold bath, air, aliment, exercise, and amusements, as a first line of treatment. In a second line were kept various remedies intended to check this or that uneasy symptom which might require consideration while the first gained the necessary time to produce their full effect. Of these opium took a leading place and after it came hyoscyamus, camphor, castor, quassia, asafoetida, etc. He further thought it necessary to acquaint every patient "that without a long perseverance in a course of Medicines diet and exercise no great or lasting benefit can be expected."

In Winslow works again, on Obscure Diseases of the Brain and Mind published in 1860, we get a view of how clearly and vigorously these conditions were recognised and grappled with. In short, Physical debility was generally recognised to be associated with a depressed state of the nerve and Vital force, impoverished state of the blood, and impaired state of the nutrition of the brain. For such, a stimulating plan of treatment, generous diet, Cod-liver oil, iron, strychnine, quinine, arsenic, minute doses of Phosphorus, the Shower bath, electricity etc., were the remedies recommended and judiciously administered.

Drugs in these methods of treatment took the first place, some being especially praised. By Wyett bark and steel with cold water bathing were strongly recommended for their strengthening powers, but he also mentions others very favourably and confidently, and in

particular opium, by means of which he cured a fine case of neurasthenia after it had been abandoned, by distinguished Physicians in Italy, as incurable (p. 376). By Winslow Arsenic is thought worthy of special mention in affections of the brain and nervous system particularly if associated with states of vital depression

Binswanger at the end of 1896 (Die Pathologie und Therapie der Neurasthenie) may be compared in his methods with Whytt and Winslow, and more particularily with the former with whom he seems to differ in certain striking points. Whytt found a little claret once or twice a day upon an empty stomach an excellent strengthener, and often found himself the better of such after having been indisposed, or suffering from a weak stomach, hot palms, languor, or sweating upon motion. He therefore recommended it to others. Opium also was highly recommended and, generally, drugs held a prominent place in his intentions; without a long course of which, no great or lasting benefit could be expected. Binswanger in a sort of declaration manages to bring these points (perhaps unconsciously) into contrast with his own. After having expressed himself against the use of alcohol in his plan of cure he proceeds to say: "What I have said here of alcohol holds more acutely of morphia. I advise most emphatically against the use of this drug in the treatment of neurasthenia. I have for many years, on principle, refused to give morphia even in cases where attacks of the severest pain imperiously demanded the most energetic treatment. I have

always succeeded with psychical treatment, electrical, hydro- and mechano-therapeutic procedures, in association with harmless drugs. In this declaration of his plan psychical measures take the first place and "harmless" drugs the last, and, with the other remedies pushed in between, the cure is encompassed by making both ends meet. The psychical remedy is suggestion, and an example of its use is this: a prescription of this composition is given: ℞ Tinct. Chinae Compositae

Tinct. Rhei Vinosa

Tinct. Nucis Vomic. āā

or of this ℞

Tinct. Chinae Compositae 15

Tinct. Valerianae 15

Tinct. Nucis vom. 5 M;

and when the medicine is made up it is to be labelled "the stomach-drops" or "the sedative-drops" according to the suggestive intention with which it is ordered. Simple teas and faith are regarded as capable of working miracles occasionaly, and deception in such cases is not only permissible, but in the interest of the patient is an act of piety. (ein frommer Betrug) p. 431.

The "harmless drugs" recommended are enumerated thus in the order of their usefulness and consequent frequency of exhibition: Arsenic, iron, malt extracts and cod liver oil, Phosphorus, Strychnine, Quinine, and some new drugs such as somatose and nutrol. Further, for the

treatment of the irritability are recommended: Bromides, Phenacetin, and suppositories of opium and Belladonna with cacao butter, as:

℞ Op. pur 0.1
Extr. Belladonna 0.03
But. Cacao 2.5.
ut. fiat Suppositi.

He takes leave to doubt the reputation which Valerian had enjoyed, of old, as a sedative; but as we have seen he includes it in his prescriptions, and labels such "sedative-drops"

For the relief of pain are recommended: Salicylic acid and the salicylates, Antipyrin and Salipyrin, Migränin, Phenacetin, Lactophenin, Antifebrin, Analgen, exalgen, euphoren tolypal as well as neurodin. The last five however are not considered indispensible as they possess no well marked advantages over their predecessors

As sleep producers Sulphonal is mentioned first as the most frequently prescribed then come trional Chloral-amid, amylenhydrat and paraldehyd.

When we compare the above lists of drugs with those recommended by Wyatt and Winslow, we naturally look for the "harmless drugs" which distinguishes Binswanger's plan of treatment, and which, judged by his declaration, seems to dispense with drugs on account of the superior efficacy of psychical remedies. The drugs he enumerates are those, with few exceptions, and these certainly not harmless e.g. Sulphonal and antifebrin, which have been in use for generations. "Harmless drugs" if we can use such

a term without suggesting evil against our most reliable and best known drugs, do not form a special feature of the list; and it must be confessed, a feeling arises in the mind that Binswanger is, probably unconsciously, seeking to practise suggestion upon the reader. In fact but for one or two new drugs of which Bromide of potassium and Phenacetin are the best examples, the remedies relied upon at the present day are those enumerated by Wyatt, and the study being then entertained that by a proper application of the remedies then at command, their efforts would be successful, more than compensated for the absence of suggestion from their plan of treatment and gave a finer zing to their endeavours.

Stümpel in the last edit. (10th) of his "Lehrbuch der Speciellen Pathologie und Therapie" Page 604-617, Vol III, gives a better idea of psychical treatment. He says that as in hysteria so also in neurasthenia the psychical treatment is to be named in the first line; but it is to be differently administered in the latter disease. The neurasthenic requires consolation. His words are: "Wie bei der Hysterie so ist es auch bei der Neurasthenie die psychische Behandlung in erster Linie zu nennen. Doch muss die hier in andrer Weise geschehen als bei der ersteren. Die Neurastheniker bedürfen des Trostes" (p. 613).

With such an explanation the subject of psychical treatment is placed correctly and usefully before the profession. Nothing distinguishes the neurasthenic more than the anxious desire he has to get well, to become again the man

he used to be; and between this intense desire, and his grief that he is not the man he used to be, we have present a state of the emotions in the highest degree unfavourable to a cure. Such may be soothed and kept in check by comforting and honest assurances, and time thus gained to allow other remedies such as drugs diet etc. a fair chance of succeeding in the work before them, namely, the changing of the chemical constitution of the nerve elements from the abnormal condition which expresses itself in functional disorder to that which is characterised by normal function. So far such patients are influenced by suggestion, but no farther. Between subjective good and objective good they distinguish sharply and unhesitatingly. Often have I watched, and ever with interest, those, in the interest of the patients, allowable attempts by house Physicians at imposition. Having administered an injection of Morphia and received grateful acknowledgments, Water had been on future attempts employed in order to elicit the same. But the joke never seemed to come off properly, and the experimenter seemed the only one imposed upon; for invariably he turned from the patient feeling that he had not been clever enough. To this extent he deceived himself. He was really dealing with an antagonist too discriminating for even his best attempts. The good, bad, or indifferent effects of drugs is noted by neurasthenics as readily as changes in the weather, and with as much real critical ability as we have seen them noting their symptoms. Seven years Practice in a country district where I had to dispense all my own drugs, gave me sufficient opportunities of convincing myself on that point.

Other plans and remedies which have been advocated for the cure of Neurasthenia since it was introduced to the notice of the Profession by Beard's Monograph in 1880 may now be mentioned. Dowsie in 1880 took up the matter early enough, and in an address to the Medical Society of London (B.M.J. Vol I, p. 691) in that year, recommended the use of iron, arsenic, phosphorus, and Strychnine with Galvanisation or Faradisation. To Iron however he gave the first place. In his opinion "it acts by exciting and stimulating the brain, then leaves it in a state of thoroughly favourable to repair". There was nothing new in this.

Early in 1881 Dr. Playfair introduced the plan of treatment now known as the "Mitchell-Playfair Cure", and the good effects often derived from this method have been widely recognised — more so abroad than at home. Against some of the severest forms of the disease it is often wonderfully efficacious and has undoubtedly saved many lives. It is not however always the most fitting plan of treatment, and is indeed in its full application required by very few; nor is it always successful in those where its application has been considered advisable. It occupied public attention very fully for a number of years after its introduction, but was probably much abused, and lost in credit after Sir Andrew Clark's denunciation of it in 1886.

In 1892 Dr. Goodhart in his Harveian Lectures, Lancet 1892 Vol I p. 124, attempted to form a Method

of treatment on very different lines. Dr. Playfair had expressed the opinion, in his remarks on the systematic treatment of hysteria and certain allied forms of neurasthenic disease," that very few of such cases "can be preached into health". Goodhart evidently thought otherwise and the elaboration of this idea formed the nucleus of the above named lectures, which were afterwards published in book form and have thus become widely spread in this country. He would have adopted neurasthenia as the most fitting term for his lectures, he said, but feared that by inviting his audience to listen to him on such a subject he would be limiting their vision to views of Massage and Stuffing — a thing which he had no wish to do. Having thus disposed of "Massage and Stuffing" he sought to make a distinct impression against the use of drugs, and to this end directed all his energy. "I want to insist" he said "that the highest position we can take is to cure people by advice rather than by drugs." The use of these was considered rarely necessary, and more frequently than not their exhibition was not needed, "when to give them was quackery. Yes! when to give them is poison"

Dr. Goodhart's ideas seem reflected in the plan of treatment proposed in the following year (1893) by M. de Fleury, before the French Association for the advancement of the Sciences. (La Semaine Med. 1893, p. 387) "A neurosis" says Dr. Goodhart "is best treated by the cold shade of neglect"; and M. de Fleury in his plan expressed the conviction that while for symptoms of enervation valerianate of ammonium is preferable to the bromides, yet; "the better plan is to abstain altogether from medicines".

This flight into that ideal future of Medicine "when we will ask people pay us for the use of our brains and not for so many ounces of physic" and when Neuralgic pains will be satisfactorily treated by telling the Patients "that they must learn to bear them"; when Patients are to be treated to so much instruction in "elementary physiology" or "Moral Education" as their case seems to demand, was somewhat sharply interrupted by Gowers, who in an address on Neurology and the Specialties (Lancet 1893 Vol I p 915) says concerning "functional and "nutritional" disorders: "In both of these the beneficial influence of drugs appears to me to be beyond question. They need to be chosen with judgment, changed with discrimination, and employed with perseverance. Given these conditions I have been surprised at the amount of good that has been done in affections commonly looked upon as intractable — relief, arrest, and restoration. With each successive year's experience it seems to me greater and more distinct and to elicit more gratitude from the Patients to whom it is applied."

Certain methods for the cure of Neurasthenia by the injection of animal fluids have been proposed. The idea originated in Brown-Séquard's experiments which he first made known in June 1889 (Semaine Med. 1889. p. 190.). In these he sought to demonstrate that the debility due to old age is the result of a decrease of functional power in the testicles, and proposed for its

relief the injection, subcutaneously, of an extract procured from the testicles of animals. The application of such a cure for neurasthenia arose from confusing the debility of this disease with that of advanced age, and thus neurasthenia seemed specially suited for experimenting upon. The results were however very satisfactory and so much might have been expected from the fact not infrequently observed of neurasthenics suffering from depression and exhaustion while the testicles are burdened, enlarged, and sore, from the presence of too much testicular secretion.

In February 1892, about 3 years after Brown-Séquard's first communication on the value of testicular juices, M. Constantin Paul proposed before the French Academy of Medicine (Semaine Med. 1892, p. 64) a new cure for Neurasthenia, by the injection subcutaneously of extracts of nerve tissue. Gradually bringing his work in this direction into precise form he published his results in the July number of the Gaz. des Hopit. 1892, and these seemed truly wonderful. In this country the subject was taken up by Dr. Althaus who contributed a paper on it to the Lancet for 1893 Vol II P. 1376. The remedy seems in Dr. Althaus' hands to have given very similar results to those obtained by M. C. Paul, and the conclusion was arrived at "that in conditions purely functional good results may be obtained from these injections without any other active treatment." The physiological effects of these injections in persons of average health were said to be: "chiefly feelings of increased nervous energy and buoyancy, and greater capacity for physical and

intellectual exertion without much subsequent exhaustion".

The idea in both methods was "that one might find in the animal tissues a sort of essence of virility, a leucomaine tonic capable of producing in extremely feeble doses an effect as great for good, as morbid ptomaines can produce for evil". The good, however, became less and less apparent, and the evil more and more so, till at last it became very evident that such methods are extremely dangerous. Vigouroux in his work, Neurasthenia et Arthritism p. 85, Mentions 3 accidents as having occured through such injections. Two of these were by the testicular liquid; in the one case the patients life was in danger for several days, and in the other an intoxication was induced which ended in death within 48 hours. The third accident was through the cerebral substance, which injected into the walls of the abdomen determined a phlegmon of long duration. But even the good effects are doubtful. I have never found them in disease: and as for the physiological effects, after carefully preparing the extracts myself so as to be confident of their purity, I have injected doses up to 10 times the strengths recommended, without being conscious of any effect.

Electricity has been much resorted to as a cure for neurasthenia in various modes of application. For the insomnia of Neurasthenia Hedley (Lancet 1893 Vol. I, p. 1391 has strongly recommended it, and has described fully and clearly how he applies it in such conditions, and the results. His patient I am, however,

afraid was not a pure Neurasthenia as the little would lead us to believe. As a local application for long existing Spermatorrhea Löwenfeld is of opinion that it is always indicated, and says that in non gonorrhoeal cases it seldom fails To attain this end he says one must be prepared to continue the treatment in obstinate cases for several months (Neurasthenia p. 664-5). But against such a continuous use of it Binswanger strongly objects, and advises instead, that if by weak and easily excited patients such procedure does not show good speedily it is to be given up. "Every year" he adds "I see a great number of patients whose urethras along with other ill usage have been subjected to several months treatment with the catheter electrode without success. The heaped up local treatment has rather furnished new food for the hypochondriacal notions and have thoroughly and finally convinced the patients of the hopelessness of their sexual weakness" (p. 423)

There can be no doubt that electricity whether applied generally or locally is to many extremely disagreeable, and the dose may easily be overreached. It is well to remember that as a rule adults bear very small doses in comparison with children. I have seen a strong healthy man surprised to discover that his child could handle, with indifference, electrodes which he could not touch with the tips of his fingers even for an instant without suffering disagreeable sensations for an indefinite period afterwards: As a boy he had also on an occasion demonstrated that he could handle the electrodes of such a battery

in action, also with indifference, and the accidental discovery of this alteration in his nervous system came as a real surprise to him. It is well to bear such a case in mind, when we are tempted, for the sake of forcing a cure, to employ stronger applications than the patient finds comfortable. Besides it is very possible that the good effects usually ascribed to electricity are mostly due to suggestion. Electricity lends itself most readily to the production of psychical effect. In Dr. Hodges case there were probably another influence at work; the patient was gently aroused and interested by day and his sleep consequently promoted by night.

The treatment of nervous disorders by cold baths has always been a favourite with the profession. Wyth, page 364 says: "Nothing perhaps strengthens the nervous system more sensibly or gives a greater spring to all the vessels than cold bathing ..... It is enough for some people to go into the cold bath 3 or 4 times a week; but as it tends to make people thinner those who are too plump may use it daily". In all modern works the consideration of hydro-therapeutics is fully dealt with, but it is just questionable whether in neurasthenia it acts as beneficially as in other neuroses, in which want of nerve energy and ready exhaustion are not the chief feature. I am thinking of my neurasthenic patient who as the disease progressed suffered from attacks of paralysis when exposed to cold for a certain time either by sitting in church or in his trap. The years during which I was therefore obliged to advise him against

cold, as much as against over exertion in other forms, has made me observant of the action of cold upon others. In health most people are very sensible of the strength giving and refreshing influences of the cold bath and readily come to enjoy them from time to time if not continually. But I have never yet found the neurasthenic who thanked me for such. The cold bath, if one has to go into it really extracts so much energy that it rarely does good except during a holiday, when, except in very severe cases, it should never be omitted; but those who while suffering from the disease must remain at business will find that an extra half hours rest in the morning, just at the period when they are most inclined to sleep, is infinitely more valuable. If this half hour is exchanged for the cold bath and the necessary drying and rubbing the patient may indeed and often does find such exercise very pleasant at the time, but he goes to begin the business of the day <u>exhausted.</u> Since the neurasthenic is often very miserable and feels quite done up in the morning, but that will pass, and his best plan is not to force things too early in the day. Bathing the arms, or the lower limbs for about 30 seconds as advised by Charcot. (Leçons du Mardi 1887, P. 26) is sufficient. A full bath is a luxury to be enjoyed only when the patient after his accustomed period of rest can go back to bed for another hour or two. Beard has observed that even Turkish and Russian baths do harm in a considerable number of instances, and this not so much from any fault in the principle, as from the way in which they are abused. He was never willing to let

very nervous Patients take them unless they were closely watched to see that they did not remain in too long and become exhausted (Neurasthenia p. 219.).

The most recent of all cures proposed for Neurasthenia is the climatic. A judiciously chosen change of climate is in itself a good thing, and when to this is joined the influence of altitude upon the composition of the blood, particularly in increasing the number of the red blood corpuscles, it is evident that the processes of nutrition can be thereby favourably affected. Rothe in a pamphlet "Zur klimatischen Behandlung der Neurasthenie", in 1896, goes very thoroughly into this subject. He seeks to place this idea on a scientific basis and finds this in a consideration of the enormous blood supply which the brain receives in comparison with the rest of the body and in the observation first made by Viault upon the increase of red blood corpuscles in high climates. Viault's observation was supported by the investigations of Egger and Miescher, Wolff and Köppe, of Jarmtowski and Schröder, and from these Rothe draws "the incontestable result", "that with the ascent from the sea-level, along with the well known decrease in atmospheric pressure and moisture, there is a steady increase in the number of the red blood corpuscles in the healthy as well as in the unhealthy and indeed from about 5 000 000 at the sea-coast to about 5 760 000 at a height of 440 M above the sea-level. — Friedrichroda — and to 7 000 000 at a height of 1900 M above the level of the sea — Arosa —. By the descent the decrease

takes place regularly till the original number is reached - sometimes quicker so that fewer hours or days are required to return to the proportion corresponding to the altitude"

Gravitz attributes this enormous increase in the red blood corpuscles to the thickening of the blood caused by the greater dryness of the atmosphere, the increased frequency and depth of the respiration and the consequently increased water loss which the body thereby suffers. But Rothe lets himself on the side of those who oppose such an explanation, and takes the opportunity of referring to the expressed views of Winternitz, who sees in climatic, hydrotherapeutic and other influences, a state of affairs favourable to the setting free of the enormous numbers of red blood corpuscles which ordinarily lie quiet, and to a certain extent latent, in bone marrow and in the spleen, but under the new conditions become mobile and are drawn into the general circulation from which they retreat again to their place of rest on the cessation of the influences at work".

In such a fashion Rothe seeks to place his idea upon a scientific basis and reasons steadily to the conclusion: "that in climate we possess an extremely valuable remedy, capable of influencing, in a remarkable manner the composition and the distribution of the blood, of acting as a special stimulant upon the reflex relations which exist between the skin and the brain, strengthening to the vessels of the brain, invigorating to the stream in the blood and lymph vessels, thereby improving the general nutrition of the nervous system and by the beneficial

results thus obtained passing the functional ability of the whole body. If to the influence of climate is associated suitably to the end in view, and properly chosen with regard to the patient, the necessary and health promoting dietetic, hydriatic, and electrical remedies there are few cases, but which, if not quite cured in the course of time, will at least show themselves capable of improvement." (p. 13).

In order that the review here undertaken might be made fairly comprehensive it was necessary to give the climate cure mention along with others, and it seems to be less open to the objection of being easily overdone. Binswanger, Leuwen, warns against the sending of elderly patients into high climates, if they suffer from vertigo and appearances of cerebral congestion, or if any suspicion of sclerosis of the arteries is entertained (p. 375), and Rothe admits that really high climates always demand youthful and robust constitutions, and if others are sent existing neurasthenic may be made worse, or a slumbering disposition to the disease actually awakened. In all cases he recommends that the cure should be undertaken gradually. The patient should at first restrain himself from all physical exertion and gradually acclimatize himself to the mountain air in order to avoid the so-called hill or mountain-disease, the general symptoms of which are — general excitability palpitation, dyspnoea, vertigo headache etc.

It is indeed very obvious in in the shortest review of the treatment, that in the great increase in the number

of our drugs and in methods of treatment, as well as in the great elaboration which certain remedies, electricity, massage, gymnastics & hydro-therapeutics, have undergone in regard to their application, that a new danger has been created for the neurasthenic; and that to the other evil influences which produce and nourish the disease, over-treatment must now be added as not the least remote or least to be feared. The nature of the disease, too, lends itself very readily to the danger of overtreatment. The neurasthenic is easily led. A child is welcomed as a pilot across an open space on the brink of which he may be standing in anguish (agoraphobia), and in obedience to his doctor he will do everything, in his intense desire to get well. He will starve himself to cure his dyspepsia, restrain sexual tendencies to save his strength, allow himself to be charged with electricity till the taste of galvanism remains in his mouth for days and prickling and stinging sensations keep him miserable for a week afterwards. After his usual days work he will, upon the advice of his doctor, add a couple of hours more work in the shape of walking exercise, or continue such till he is dead tired for the sake of winning a night's sleep; and when he retires to rest so fatigued that not a wink can be got he will for the remainder of the night allow himself to be half poisoned with sulphonal, and rise in the morning according to orders to take a cold bath, even in the dead of winter, for the sake of its alleged strengthening power. All this he will submit to without a murmur and be ready for even more — the neurasthenic female even submitting to the most serious operations in order to escape from her trouble.

To avoid this danger of overtreatment we must in the first place be willing to learn more from our patients than we have been willing to do in the past. After the lesson which "L'homme aux petits Papiers" has taught us this should be easier. Had we accepted frankly and in good faith his few notes of his case which he so often offered in vain, and which in many cases it is now admitted that no doctor could draw up better (Kein Arzt besser zu Stande bringt), so much ignorance would not have prevailed in the past concerning the sufferings of the patient; and if we now accept the information which is now often so carefully drawn up with regard to the effects of treatment, much suffering will be saved and the way cleared for rational treatment in the future. Binswanger has in one place shown us how this may be done. When searching for a therapeutic indication as to the best place for a climate cure he says: "One follows simply the principle, send the patient there where he formerly found health and strength." If such a guide, therapeutically, is to be followed in regard to a climate cure it is difficult to see why it should not be accepted in other directions as well.

In the second place, to avoid the danger of over-treatment we must ever keep steadily in sight the indications which the disease itself shows for treatment. These are:

I. Treat the cause;

II. Treat the condition induced by the cause i.e. the basis of the disease;

III. Treat any special localisation of the disease which may demand attention.

The first indication is fulfilled by carefully enquiring into the history of the case so as to discover the causes which gave birth to the disease or favoured its development and when these are found they must be removed as far as possible from the patient. Without this being done all attempts to cure the disease may be vain, and in the hereditary cases it is all important, as only by such means can the individual be kept from sufferings to which he is by nature disposed.

In the fulfilment of the second indication we are likely to succeed best by attending carefully to the processes of nutrition. In all other chronic diseases attention to the processes of nutrition is also the chief matter, and usually means regulation of the diet; but so often is regulation of diet synonymous with diminution, or avoidance of special articles, in ordinary conversation that the latter meaning is the commonly accepted one and regulation of the diet has come to mean pretty much the same as decreasing it. It is the lot of those who interest themselves in this disease to come frequently into contact with patients whose diets have been so often regulated that there is nothing further left to regulate, and under such circumstances both patient and doctor may be not a little nonplussed. A humorous illustration, or what was evidently intended to be such, of this point, between doctor and patient, was given in a high class weekly paper (the "Fliegende Blätter") some time ago. The doctor is represented standing at the bedside and in tones more of sorrow than of anger reproaches his patient for having gone and spoiled his stomach again, and demands

to be informed how such could possibly occur after all his instructions. The patient, a dreadfully emaciated and starved looking creature, seems to feel that he is somehow to blame and humbly opines that he may perhaps on the preceding day have looked too longingly in a pastry cook's window. Such an unfortunate is however in actual life no uncommon object. Over and over again I have seen such cases, in which doctor and patient have worked hand in hand to produce conjunctures which would be ludicrous in the extreme were they not so pitiful. When called to see such, after having assured myself that no organic disease exists such as catarrh, ulceration of the stomach etc. to account for the vomiting and pain, I have often astonished the patient by utterly, in the ordinary sense of the term, abandoning all regulation of diet, and laying down only one rule - the taking of as much of everything as possible, beginning with milk for a day or two, and proceeding to soups, eggs, bread with butter, mutton chops, fish, meat etc. by rapid steps. Such an order is apt to take the patients breath away, and he may interrupt, as such a patient did recently, with the remark "but if I sit up in bed and take even a mouthful of milk I will vomit it". Then don't sit up was the answer, "for the next week you are not wanted to move a finger let alone raise your head from your pillow even to take food" This patient improved so rapidly that it was with difficulty she could be kept in bed for 3 weeks. The habit of attending to such cases enables the doctor to dispense with too great caution in laying down a rule regarding the quantity of food to be taken. Once that he is certain that no organic affection exists and that he has to

deal only with a neurosis, such an order may be given with perfect confidence that no evil will result, and to poor patients, who are very often sufferers in this way, such decision is very important from many points of view

Drugs however assist much in promoting and maintaining the cure and should never be omitted from the plan. According to circumstances their part may be simple or more complex. In the above case a stimulating tonic consisting of Tinct. Nucis Vom. Sod. bicarb., Spt. Chloroform., Ferri et Amm. Cit., Liq. arsenicalis, Ol. cajeputi and Infus. of Quassia, was given four times daily before meals. In other cases where sleeplessness is a prominent symptom such a mixture should not be taken later than ½ an hour before the afternoon tea, after which time a mixture of bromide of potassium, Ferri pot. tart. Liq. Arsenicalis and a camphor water vehicle is advisable. This change of drugs has a suggestive influence which some might consider valuable, as with the first dose of the sedative tonic the business of the day may be considered closed and the brain set in repose; out of which feeling of quietness neither conversation, reading, music nor any other thing should be allowed to bring it. Such medicinal treatment allows of ready modifications. If the iron is contra-indicated it may be left out, or if constipation is a prominent feature Pulv. Rhei, in proper doses, may be put in its place. If a greater sedative effect is desired the iron may be left out of the sedative mixture which can then be given more frequently, or if restlessness and mental pain attend the sleeplessness, Phenacetin and hyoscyamus may be added to the bromide mixture, and a return made to the

original formula as soon as possible. Other modifications readily suggest themselves if required. When sexual weakness is much complained of the prescription may rather consist of some of the stronger preparations:- Tinct. Ferri Perchlor, quinine, Liq. Strychnin. and inf. Quassiæ. Once the neurasthenic feels himself suited, however, he is very unwilling to allow any alteration in the mixture. The above combinations also, clearly suit their own desires very well; for their constant wish is to be in health what they were, and after Binswanger's method they might be labelled "stimulant- or sedative-restorative."

There is however a class of neurasthenics who would get worse upon the above treatment. In them there is ground for thinking, as Dr. Savage says,(1) that uric acid plays a part in the production of the symptoms, and "such patients must be treated as if they were gouty". Such cases turn up frequently and give in detail a set of symptoms extremely like those of neurasthenia, but the history of such cases reveals causes of a different nature in action from those which produce neurasthenia, and from experience I cannot say that they offer any diagnostic difficulties. Even in the general appearance there is usually an indication, or two, which points the way distinctly to the true diagnosis: the massive jaw, or solid teeth, the broad abdomen, or the florid complexion, may do this. In a recent case the patient had long complained of neur-

(1) B.M.J. 1894 Vol. ii p. 522.

asthenic symptoms; he was short but easily fatigued, and complained of pains of a Rheumatic nature in the loins and elsewhere. His wife had lost patience with his constant uselessness, and could not understand how he could possible be so. He would lie in bed till he got his breakfast there, then rise and take another in an hour or so, and was as ready for an early dinner as those who had only broken their fast earlier in the day. He is an energetic man and wished simply to be what he had been in this respect. Mere regulation of the diet in the ordinary sense, and a bath, followed by vigorous friction all over the body, every morning, did almost all the good wished for. The Mixture given consisted of citr. of Lithium, Liquor. of potassium, Salicylate of sodium, Colchicum Wine, Potas. Bicarb. and Inf. of Gentian as a vehicle. The pains in the loins which had been very persistent for fully four months, and for which he had employed embrocations, frictions, flannel belts etc. disappeared in the course of a week; he lost in stoutness and gained steadily in vigour and in a short time felt quite contented with both.

As for the third indication which the disease offers us for treatment I have for my part little to say. The localisations of symptoms which are usually described under such a heading are: sleeplessness and the conditions of the nervous system which may associate themselves with it e.g. irritability, mental pain, etc.; Gastro-intestinal troubles including constipation; the

various neurasthenic fears; the various neuralgias, such as Glossodynia, Gastrodynia, Nephralgia, etc. and the perhaps more common conditions of irritibility of the breasts of the ovaries, or in the male of the testicles. Such symptoms may be discussed and treated seperately in books, but never in practice. When we have a neurasthenic to deal with, our treatment should be prophylactic as well as curative in its intentions, and if we have to turn attention to symptoms here and there and give today this and to-morrow that, for their relief, it is a sign that our therapeutic plan is a poor one. The day and the Evening Mixtures, unmentioned might be thought open to this very reproach but that is not so. They are intended to suit the diurnal variations in the nervous system, and the patient soon learns their proper use. The sedative mixture especially if it consists of bromide of potas. Phenacetin, hyoscyamus and Camphor water will generally suit a headache, as well as sleeplessness, restlessness and mental pain, or irritibility of the ovaries or testicles, or even a sciatica etc. and employed with skill or slight modifications will except upon rare occasions when a sedative liniment or a blister may be required, seldom require assistance. The stimulo-tonic mixture is likewise adapted to meet all the indications, Arsenic and nux vomica are constant elements; the iron or rhubarb may replace each other according as anaemia or constipation demand, the soda, Spt. of Chloroform, oil of Cajeput and inf.s quassia are nearly always in request for their stomachic influences.

There is nothing new in all this, but the

conception. That is well represented in the term neur-asthenia, by which we are ever reminded that the condition we are treating is essentially one of debility due to defects in the quantity and quality of nerve force; and fully recognising this we receive in turn far more encouragement and support in carrying our plans of treatment into thorough and if necessary prolonged operation than we could ever hope to receive from the older conceptions and the older terms thus replaced.

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It would be impossible to give in the space at our command anything like a detailed review of this part of the subject; there is not space, even, to mention some of the references already given. But keeping in view the intention of this thesis a choice may be made to illustrate the evolution of the term Neurasthenia and thereafter to indicate what work has been done on the subject. With the first of these objects in view we may show the evolution of the term thus:—

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