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# Building Beauty: Physiognomy on the Gas-Lit Stage

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# Building Beauty: Physiognomy on the Gas-Lit Stage

## **Abstract**

From 1816 onwards, London theatres began to install gas-lighting systems to replace candles. In addition to allowing theatre managers to adjust the level of illumination, gas lights offered greater brightness and visibility for the audience. Actors had to adjust to this new level of exposure that threatened their ability to 'look the part.' Until this illuminating moment, there had been little need for makeup and actors to adhere to the principles of physiognomy – a system that correlated character traits to facial features. Under the new harsh glare of the gas lights, both the faces of the actors and the theatres themselves were found wanting

## **Disciplines**

Communication | Social and Behavioral Sciences

## **Comments**

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## **Building beauty: physiognomy on the gas-lit stage**

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From 1816 onwards, London theatres began to install gas-lighting systems to replace candles. In addition to allowing theatre managers to adjust the level of illumination, gas lights offered greater brightness and visibility for the audience. Actors had to adjust to this new level of exposure that threatened their ability to 'look the part.' Until this illuminating moment, there had been little need for makeup and actors to adhere to the principles of physiognomy – a system that correlated character traits to facial features. Under the new harsh glare of the gas lights, both the faces of the actors and the theatres themselves were found wanting.

### **Too much light**

In an 1860 letter, theatrical scene painter Twynihoe William Erle (1828–1908) wrote, damningly, about a play at the Royal Marylebone that was, in short, an utter farce [1]. The acting was abysmal, the scenery was childish and, most importantly, the makeup on the female lead was all wrong. She was, Erle complained, 'an afflictingly vulgar, as well as drearily ugly, woman, roughed to such a pitch that her cheeks glowed like a couple of chemists bottles.'

Adding insult to injury, the actress played in complete oblivion of her cosmetic catastrophe, thereby not only making herself ridiculous, but also confusing the audience about the nature of the character she was portraying:

She evidently, however, to judge from the coquettishness of her demeanour, felt comfortably satisfied that she looked very ravishing, but her own opinion and that of the spectator could not fail to be diametrically opposed, and indeed hopelessly irreconcilable on this point.

Erle reacted not just to the unattractiveness of the actress, but also to the contradiction that this produced from a theatrical and, especially, a physiognomic perspective. The most basic principles of physiognomy were expressed succinctly by Zurich pastor Johan Caspar Lavater (1741–1801) with the maxim: 'The morally best, the most beautiful. The morally worst, the most deformed' [2]. The actress was playing a heroine, and one whose goodness was meant to be reflected by her beauty. Ugliness was not only unpleasant, but also inaccurate in an age obsessed with the reflection of personality in the features of the face.

The problem faced by this female lead was still a new one. It was only with the introduction of gas-lighting to theatre interiors from 1816 that the faces of the actors could actually be seen (Figure 1). In addition to altering staging techniques, gas lighting had another effect, and one to which actors were slow to adjust – they had to change the ways in which they dressed, acted and made themselves up. With the increased illumination in the theatre, everything was on display and, as Erle’s comments reflected, the transition was far from seamless. Makeup technology lagged behind lighting technology. Until the invention of commercial greasepaint in the 1860s, by Wagnerian opera singer Ludwig Leichner,

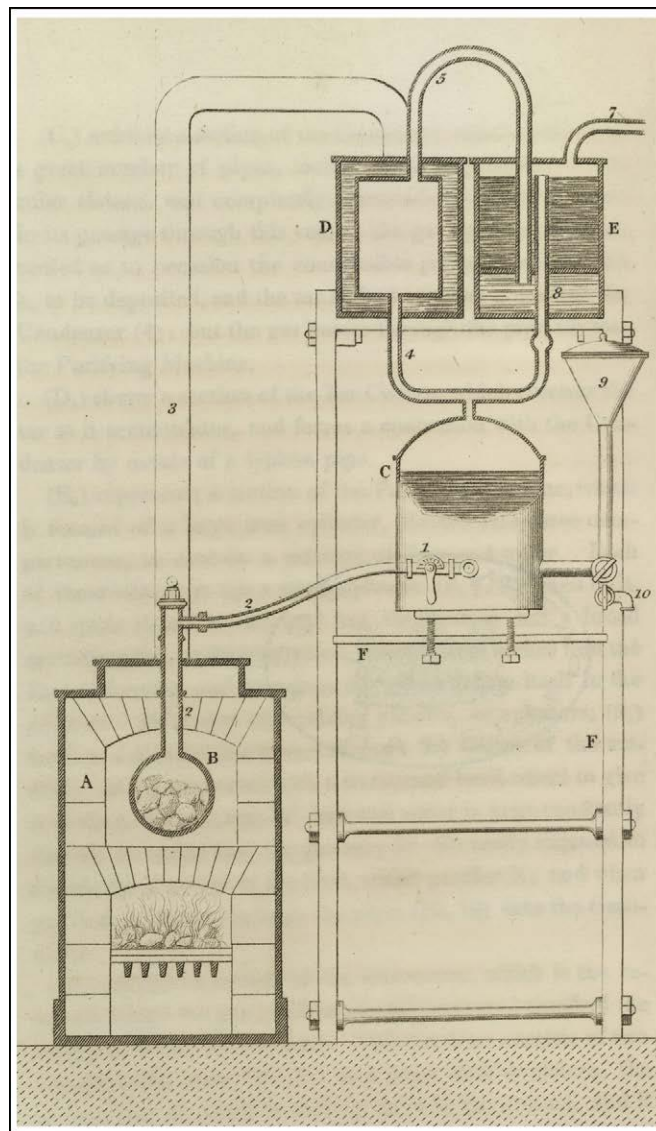


Figure 1. A 'Patent Apparatus for Making Oil Gas', reproduced from plate II in William Matthews' 1827 A Compendium of Gas Lighting. Reproduced with permission of the British Library.

actors suffered under the harsh glare. As a review of one of the early gas-lit productions noted about the new visibility, 'the whole illumination may prove to be too brilliant' [3]. There was too much light.

Even great actors were slow to change. For much of his career, the famous actor-manager William Charles Macready (1793–1873) played in gas-lit houses. But when, many years later, theatre giant Sir Henry Irving examined Macready's costume for the title role of Virginius, he was startled to find the armour made of tinfoil-covered pasteboard and the dagger to be of wood (Figure 2). The entire costume, Percy Fitzgerald (1830–1925) commented in the *Cornhill Magazine*, 'could not have cost a couple of pounds' [4]. The lights would certainly have exposed Macready's paltry costume for what it was. The challenge of gas lighting was particularly poignant as stage depictions shifted towards more realistic presentations with respect to costumes, acting styles and, crucially, physiognomic fidelity. The highly exaggerated gestures and facial expressions that had dominated the 18th-century stage seemed



Figure 2. 'Mr Macready as Virginius' Plate 162, Hand-coloured Etching in the New York Public Library Digital Gallery.

unconvincing and inappropriate. Stronger lighting contributed to the seeming absurdity of these styles, as did the widespread cultural taste for naturalism in the theatre, literature,

journalism and painting. Acting became increasingly standardized through systems that governed not just clothing and makeup, but the actual faces and bodies of the actors. Improved lighting combined with a newly physiognomically savvy audience to present a creative challenge for actors and the managers who cast them. Never was it more important to look the part, and never was it more difficult.

### The science of acting

Acting had become an increasingly regimented craft, governed by rules laid out in the physiognomically informed acting guide written by Aaron Hill (1685–1760) in 1746. Hill's *Essay on the Art of Acting*, demanding the performance of physiognomic and pathonomic (facial expression) accuracy, dominated the acting tradition (Figure 3). In this proto-Stanislavsky/Method approach, Hill proposed that the actor should communicate feeling to the

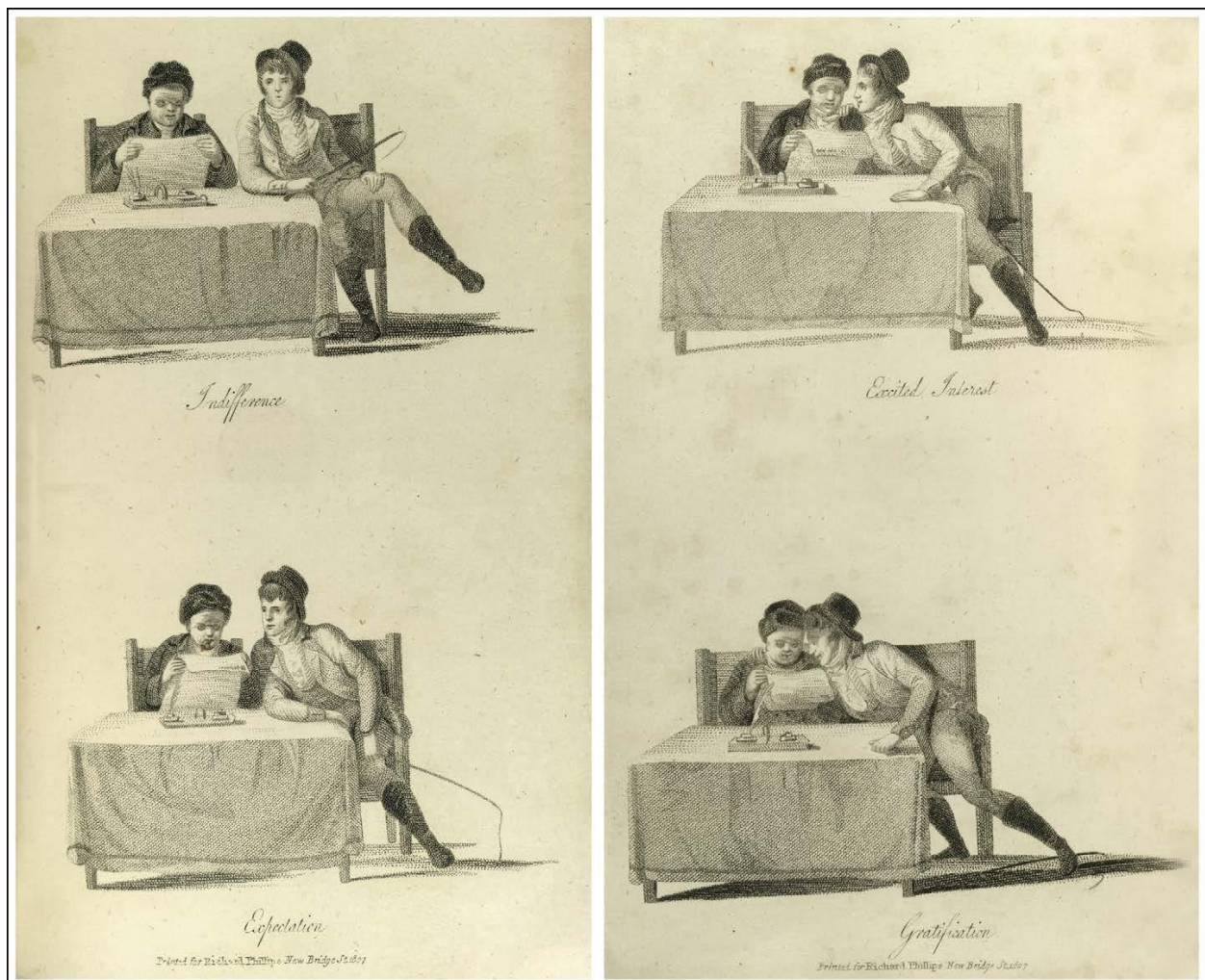


Figure 3. Reproduced from Engel, J.J. (1807) *Practical Illustrations of Rhetorical Gesture and Action*, London. Printed for Richard Phillips. Reproduced with permission of the British Library.

audience by experiencing the same level of feeling him or herself. This was achieved by experiencing the emotion mentally, which would cause it to be expressed on the face and throughout the body, and thus to the audience [5].

Actors were urged to approach their craft from a regimented perspective, observing others and studying rules to appropriately communicate their roles. Actor– teacher Henry Siddons (1774–1815) emphasized the ways in which scientific systems of identification and classification were vital to learning the acting craft. He told his readers that ‘...Lavater is a book which I have not ready at hand...If you happen to have the book, I beseech you to read what is there said concerning attitudes.’ He urged his disciples to study physiognomy as they would natural history, for if ‘an amateur in natural history is able to imprint the shape of many thousand of plants and insects in his mind, [then] we may with reason conclude, that a collection of physiognomies, collected and classed with the same industry, is a scheme equally possible, and that a new art would result from the attempt, not less important in its kind’ [6]. An 1829 article in *The Spectator* echoed Siddons in the importance of the application of scientific observation to stagecraft: ‘It will be in vain that critics...exhort players to study “nature” with increased assiduity. Actors must do something more definite—they must learn to devote themselves to the principles of their art, as musicians, painters, and sculptors so to the laws of harmony, perspective, and muscular action’ [7].

Complementing the approaches of Hill and Siddons were the costume and makeup guides that advised actors as to the necessary accoutrements for their chosen roles. Most actors picked a character type, for example, old woman or leading man, and honed it, acquiring the appropriate costumes, skills and makeup techniques for their role. Cosmetic advice, unsophisticated as it was, geared itself largely towards men because, as an early 19th-century acting guide written by ‘an old Stager’ noted, ‘[t]he Ladies in general are so au fait at improving their charms, that nay advice from us, must seem ridiculous’ [8]. Similar sentiments were expressed in an 1827 makeup guide whose writer noted that ‘[l]adies have generally sufficient knowledge of the arts of decking the human face divine, therefore the few remarks I have yet to offer on this subject will be confined to the other sex’ [9].

Much of this advice, through to the late 1850s, was very basic. Actors were advised on ways to make themselves younger or older, lighter or darker with the most rudimentary of materials. For example: ‘Crape Hair is decidedly the best imitation of Mustache, Whiskers and c. and can be easily attached to the face with liquid glue, or a solution of powdered gum and water; Indian ink applied with camel hair pencil dipped in gum, also answers the purpose well. The use of burnt cork is a dirty habit, and now generally abandoned’ [10]. This manual, and others like it, made few adjustments for the new lights, although in a much reprinted 1827 manual they were advised that ‘the late introduction of gas into our theatres has rendered a more powerful coloring than that formerly used, decidedly necessary.’ However, lest they, like Erle’s ingenue, be tempted to overcompensate, ‘[p]erformers should bear in mind that it is better to have too

little color, than too much; but they would also do well to remember that, when heated, color will sink, and it may be well in the course of a long part, to retouch the countenance' [11].

### **Gas-lit faces on display**

As lighting became another character in the show, most acting manuals were at a loss as to how to cope with the effects of the powerful illumination. In addition to scattered references to possible improvements in makeup, the bulk of the advice centred on ways to produce physiognomically coherent effects, so that the features of the highly visible actors would at least be appropriate. Physiognomic awareness and increased lighting combined to create a critical new challenge for actors. Faces became fair game for reviewers, and actors often, although not always, fell either cosmetically or physiognomically short. An 1817 review said of Joseph Munden that '[h]is lengthened visage and abrupt tones did not suit the character or sentiments of Sir Peter' [12]. Likewise, in 1826, William Farren (1786– 1861) was taken to task for his inappropriate portrayal of Sir Peregrine Quixote in *The Green Room*, for it was 'apparently written with an eye to the physiognomy of Mr. Liston' [13]. In his theatre journal, *The Journal of a London Playgoer*, literature Professor, writer and physician, Henry Morely (1822–1894) often expressed either pleasure or dissatisfaction with the inattention paid by theatre managers to their players' physiognomies. For example, about the play *Two Loves and a Life*, he commented that 'Mr. Howe is not enough of the ruffian in *Dirk Hatteraick*. He looks rather an honest fellow' [14].

These criticisms stemmed from the pressures of performing physiognomy in harsh light. Once the technical problems of overheating, ventilation and decoration had been solved, the major drawback of the new lighting was the challenge for the actors. Lingering problems remained as a result of continuous lighting in the stage and auditorium, including overlit audience members and numerous, and occasionally fatal, stage fires [15].

The East London Theatre at Well close Square was the first to incorporate gas lights inside the theatre at the start of the 1816 season. The innovation was advertised in *The Times of London* on 6 August 1816 under the proud heading 'GAS LIGHTS – The Public are respectfully informed that this THEATRE IS OPEN every Night for the Season; the whole of the interior and exterior totally illuminated with Gas' [16]. The theatre had a tremendous draw, sparking a host of followers. Soon other major playhouses in London converted to gas light, including the King's Theatre (Haymarket) and Covent Garden (later the Royal Italian Opera House) in early 1817, and Drury Lane later that same year. The reactions to the new lighting were largely salutary, recognizing the advantages of the increased and adjustable brightness for scenery and decoration:

At Drury-lane the stage is lighted by gas, which is a considerable improvement; as every part of the scene is now shown with equal clearness...At Covent Garden, the improvement in lighting the interior is considerable. The lights which formerly hung



round the house are removed, and a magnificent chandelier of gas-lights is now suspended from the centre. The effect is beautiful and novel [17].

Called an 'improvement' and 'a great change,' gas lights became an important feature of the theatre experience. It was not just the legitimate theatres that recognized the advantages of the new lights; Astley's Amphitheatre, devoted largely to spectacles such as pantomime and the circus, underwent renovations in 1818 specifically to update its lighting, giving great delight to 'children, nurses, and old aunts, and even to the entertainment of some more sage and philosophic persons'. Theatre critics were also favourably impressed, commenting that '[t]he theatre, since last year, has undergone many improvements. The front of the boxes and galleries are newly painted and gilded; and the house is illuminated with gas-lights from one grand lustre' [18]. The King's Theatre renovations were reviewed in 1817, and the new lights were noted for their elegance: 'the interior of this elegant theatre has been lighted with gas round the boxes, the lights are enclosed and festooned with cut glass from one to the other; and if the tout ensemble do not vie with the more brilliant display at Covent Garden, it has an air of neatness and lightness which is as pleasing to the eye as it is tasteful and elegant' [19].

By 1818, most theatre reviewers agreed that '[t]he superiority of the method of lighting with gas had before been fully evinced.' However, there were still some flaws with the method; building on the successes of King's Theatre and Covent Garden, Drury Lane improved upon their shortcomings in lighting with gas: 'Drury-lane has been the last to adopt its use; but has, perhaps, by that circumstance been enabled to carry it to greater perfection. The lustre is not constructed with so much elegance as that at the King's Theatre; but the light is more brilliant and more agreeable to the eye: to that at Covent-garden it is every way superior' [20].

As this reviewer hinted, not all theatres used gas lights in the same way, and not all were equally good. Though largely hailed as an innovation, the transition was difficult for many of the actors, a trend reflected in the reviews, as well as in acting manuals and even scientific journals. The English Canon, Alfred Ainger (1837–1904), suggested a series of improvements for theatre lighting, arguing that the theatre was a site of knowledge and therefore a scientifically relevant entity:

The important rank which dramatic representations have ever held among the amusements of all civilized people gives an interest to everything connected with the improvement of even their most subordinate auxiliaries. I have imagined, therefore, that an investigation of the existing methods of illuminating theatres, and a proposition for remedying some of their defects, may not be thought unworthy of a place in a scientific journal.

Ainger argued that the current system of lighting was too obviously artificial, and overpowered the actors and scenery. The actors were forced to avoid looking at the light in order not to distort their expressions, and the shadows from the lighting displayed their faces and bodies to ill effect:

In addition to the smoking and flickering of the foot-lamps, immediately between the spectator and the scene, they injure the sight by the currents of unequally heated air which they interpose, and which, by irregularly refracting the light, give a wavy and disagreeable appearance to whatever is seen through them. The effect of these lights on the performers is rendered evident by the obviously constrained aversion of their eyes, while the expression of the features is almost destroyed by the reversal of the shadows under which the face is usually and best seen. The figure suffers as much as the face from this inversion [21].

The problem of glare had long plagued theatres; as early as 1817, Covent Garden was criticized for its central chandelier, particularly as it bathed the audience, itself unprepared to be so harshly revealed, in such powerful light: 'The great chandelier suspended from the top of the theatre we should admire more, if it did not put out our eyes in looking at it; nor do we think the glare it produces any addition to the general appearance of the company of the house.' Even the stage was not helped by the ceiling illumination, as other lights interfered with its effects:

The only advantage resulting from it—that of throwing the light upon the countenances of the actors from above instead of from below (which last method inverts the natural shadows of the face, and distorts the expression), is defeated by the gas lights which are still retained between the stage and the orchestra [22].

Those sitting highest up were the audience members most affected by the new lights, because '[t]o the pit and the dress circle it affords a serene and gratifying light, and can only be specifically observed by the eye being directed upwards. But at the uppermost circle, the illumination and the heat are rather too powerful' [23]. In his 1819 Cyclopaedia, Presbyterian minister and writer Abraham Rees (1743–1825) suggested that particular care should be taken in the placement of the lights, for both the comfort of the audience and the pleasure of their viewing experience:

There is, perhaps, no department of a theatre where so much pains ought to be taken, as in the disposition of the lights...It seems obvious, that the suspension of a chandelier directly in the view of the spectator, must materially deteriorate the effect of an exhibition...When suspended over the proscenium of a large theatre, it must also greatly impede the vision of all spectators seated in the upper parts of the house...The glare of light is the front, and parallel to the stage, besides the smoke which the lamps, however clean and nicely trimmed, always produce, inverts every shadow, and throws the shade upwards instead of downwards upon the performers' face [24].

It was this glare, Rees recounted, that forced actors to exaggerate the colouring of their stage faces: 'The most experienced professional men assign this as the reason, that the face of a performer must be so highly coloured to produce an effect in the front of the house, as to appear absolutely ridiculous to a stranger unacquainted with the business, if admitted in to the

green-room, or behind the scenes' [24]. As we have seen with Erle, however, the makeup could be ridiculous even under the full effects of the gas lights.

The adjustment to gas lights was a long process, stretching through the first half of the 19th century. Not only did actors need makeovers, but so too did the theatres. In the glare of the gas lights at Covent Garden, it became clear that 'the cushions and benches required new coverings' [25]. Likewise, based in strong light, the 'monstrous and non-descript ornaments' [26] and 'the gaudy colour of the ceiling and proscenium...in the Drury Lane theatre were quickly redecorated' [27]. These adjustments were easily made, but, with poorly developed makeup technology, actors' faces proved a great challenge. Compounding this challenge was the growing demand for physiognomic fidelity and adherence to acting rules. Some adjusted successfully. Others, challenged by the lack of sophisticated makeup technology and poor physiognomic flexibility, did not.

### Makeup

As the stages started to look better, performers were eager to follow. As early as the 1850s, German actors, including the musician Karl Freidrich Baudius (1796–1860), had been experimenting with makeup technology, mixing powdered mineral pigments (as used by painters) with lard to produce grease-based paint or greasepaint (T. Maginnis, unpublished work). Homemade greasepaint was quickly adopted by French actors who brought the innovation to the United States during tours abroad (Figure 4).

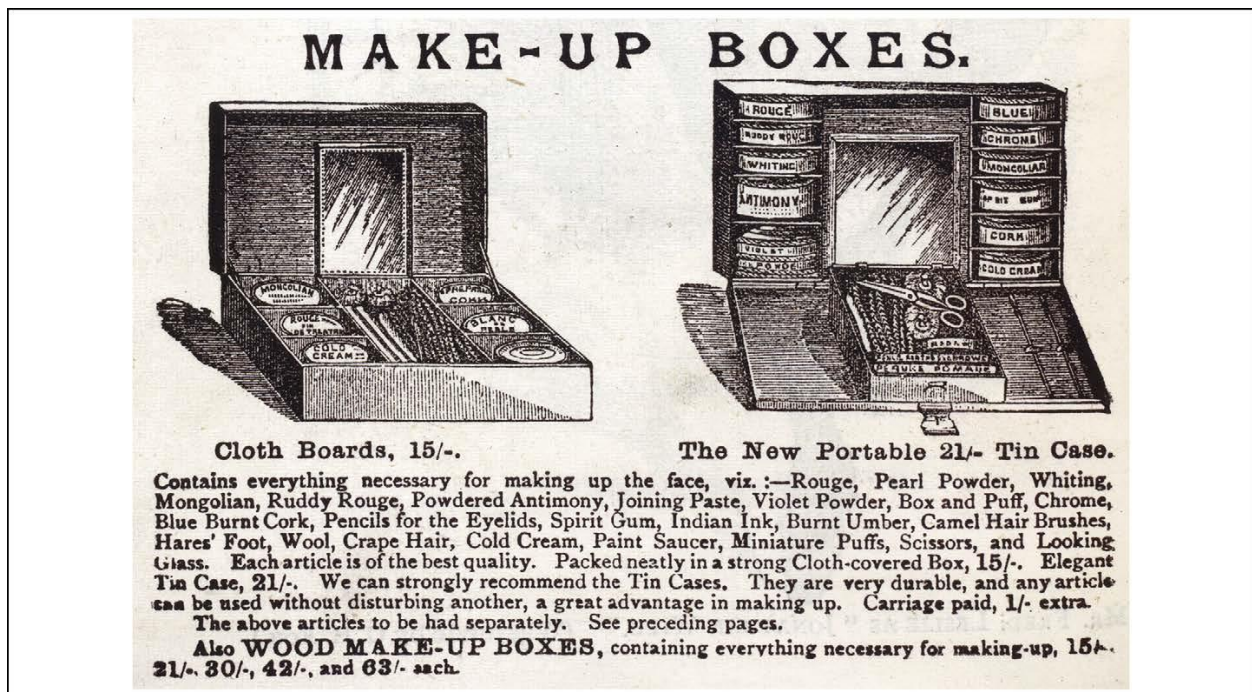


Figure 4. Makeup boxes reproduced from Fox, C.H. (1888) *The Art of Making-Up for Public and Private Theatricals: Advice to Amateurs*, p. 5. Reproduced with permission of the British Library.

For actors on the English stage, however, even the development of better makeup did not immediately mean better making-up. Until the large-scale commercial manufacture of greasepaint sticks in the 1870s, most stage makeup guides continued to instruct actors only in the use of dry pigments, including India ink, burnt matches and cork, and red and white powders. A few innovators did quietly suggest that actors should grease their faces before the application of powder, hinting at the more sophisticated techniques. As early as 1851, an acting guide advised readers in the preparation of dark skin to '[c]over the face and c. with a thin coat of lard, then with a hare's foot apply burnt cork.' This early preparation of a grease base was followed by the water-based alternative: 'The other plan is, get some burnt cork (powdered) in a plate, and, with a cloth dipped in cold water, apply it to the face' [28].

The connection between the grease and the paint was not formalized or regularly used in England until the mid-1870s, when, as the middlebrow periodical *All the Year Round* noted, finally 'supply...followed demand, and there are now traders dealing specially in the materials for making up, in theatrical cosmetics of the best possible kind at the lowest possible prices' [29]. The grease-base prevented distortion of the makeup by water, and, importantly, perspiration, which reacted to the oil by beading up and falling away. A light dusting of powder over the base absorbed excess grease, setting the face and preventing smudging. Heat resistance was only one of many advantages enumerated by training manuals and critics.

By this point, in conjunction with ever harsher electrical light, greasepaint had at last become a part of the English stage, spurring tremendous developments in makeup technology, including lipsticks, coloured eyeliners and mascaras, and various face waxes and tooth enamels. By the 1870s, makeup skills were a vital part of the actor's craft and, without a personal makeup kit, not only could actors not be seen under harsh electrical lights, they would not be seen – no one would have hired them. As *All the Year Round* observed, 'making up pertains to an actor's "line of business", and is not separable from it.' However, even with greasepaint, for some over-eager actors, the right face continued to remain elusive; much like Erle, later critics condemned 'an excessive use of cosmetics and colouring by youthful performers [whose] over-painted countenances...are really but pictorial efforts of a crude, uncomfortable, and mistaken kind' [29].

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