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GEORGE HENRY FOX'S *PHOTOGRAPHIC ILLUSTRATIONS OF SKIN DISEASES*
AND THE CLINICAL PHOTOGRAPH IN LATE NINETEENTH-CENTURY AMERICA

by

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Abstract

George Henry Fox was a New York physician and author in the late nineteenth century. His interest in collecting photographs of notable dermatological cases led to the publication of several photographically illustrated dermatology texts between 1879 and the early twentieth century. This thesis focuses on the first and second editions of Fox's *Photographic Illustrations of Skin Diseases*, published in 1879 and 1885, respectively. The hand-coloured Artotype plates from these two editions are analyzed and contrasted in terms of the influence of studio portraiture, issues of patient anonymity and consent, and the aesthetic changes between editions. The power relationships and scientific classification involved in depicting the body on film are also considered. The books are contextualized with discussions of nineteenth-century American medical history, the use of clinical photographs as illustrations, photomechanical processes, late nineteenth-century dermatology texts, and Fox's biography.

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Table of Contents

Author's Declaration	ii
Abstract	iii
Acknowledgements	iv
Introduction	1
Literature Survey	3
American Medicine in the Nineteenth Century	7
Medical Photographs as Illustration	11
Photomechanical Processes for Book Illustration	14
Dermatology Texts and Photographic Illustration	16
George Henry Fox: Life, Career, Writing	19
<i>Photographic Illustrations of Skin Diseases</i> , First Edition	24
<i>Photographic Illustrations of Skin Diseases</i> , Second Edition	26
Edition Comparison and Analysis	29
Conclusions	38
Bibliography	40
Illustrations	42

**George Henry Fox's *Photographic Illustrations of Skin Diseases*
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Introduction

Medical practice in nineteenth century America was an activity entrenched both in the traditions of European gentlemanly professions and notions of American cultural and societal progress. Physicians practicing during this period were bombarded not only with many new ideologies and scientific proofs of how the body and disease functioned, but also a myriad of technologies newly available to enhance (or complicate) their own dealings with patients. In the decades proceeding the turn of the twentieth century, photography was seen as an increasingly sensitive and accurate tool for the recording of medical specimens and conditions. Many doctors put this technology to use in their own practices, with varying degrees of success. In this paper, I will focus on one American physician and author, George Henry Fox, and examine the unique ways he put photography to use in his publications on skin diseases. The issues at hand in this analysis will include Fox's education, medical practice and professional attitudes, the sources of the images used in his books, and the place of his work in the greater genre of photographically illustrated medical texts. However, my ultimate goal will be to analyze the development of the use of photographs and text between the first and second volumes of his *Photographic Illustrations of Skin Diseases*.

This project is divided into several sections, each taking on its own particular methodology and structure. First, I will consider the literature available on this subject, and to what degree it is relevant to this academic endeavor. I will summarize some of the photographically illustrated dermatology texts

contemporaneous to Fox's work. I will look at secondary sources dealing with nineteenth-century medical history, and more specifically medical photography of the nineteenth century. I will summarize some of the critical theory relevant to the photography of patients' bodies. Sources in the history of photomechanical processes of the period will also be examined.

The next sections will address the historical and biographical background to the publication of Fox's books. I will expand upon the history of photographically illustrated medical books, focusing on dermatological texts. These publications will form a comparison for the quality and role of Fox's books in the object analysis. I will outline the development of photographic and photomechanical processes during the later nineteenth century as a foundation for an understanding the process of printing Fox's book from original image to hand-coloured artotype. Additionally, I will examine the biography of G.H. Fox to highlight significant positions and experiences leading up to the creation of his medical publications. Overall, the experiences and culture of a New York City physician are what led to the creation of these books, and the attitudes and needs of this culture will be discussed as contributing factors in the tone and approach of the text and photographs.

My main research component will begin with a detailed description of two volumes of Fox's book *Photographic Illustrations of Skin Diseases*. One, housed at the Miner Library's rare books collection at the University of Rochester, is a first edition, published in 1881. The other, from the rare books collection at George Eastman House International Museum of Photography and Film, is a second, expanded edition published in 1887. Both will be thoroughly examined and described in terms of their construction, materials, condition, and image and text content. I will compare their plates, examining editorial and aesthetic changes made for the second edition. I will also analyze changes and additions to the text, as well as any differences in printing quality between editions. I will utilize this historical background and object-based analysis to illustrate the development of the goals and ideas of the author as the editions of this publication progress. I will comment on the significance of these changes in terms of visual communication and teaching methods, aesthetics, attitudes toward disease, doctor-patient relationships, and diagnosis and treatment methods. My

goal is to view Fox's work in full historical, social and medical perspective in terms of its approach, language, visual description of patients, and organization.

Literature Survey

My primary-source research began naturally with the first and second editions of G.H. Fox's *Photographic Illustrations of Skin Diseases*.¹ Both editions contain both text and plates, and form the basis for my research. They will be discussed in detail in the body of this paper. I examined several other dermatological texts with photo illustrations from the same period as Fox, to compare the approaches of different authors, and the quality of the writing and images. The earliest photographic book I investigated was Alexander Balmano Squire's 1865 text *Photographs (colored from life) of the Diseases of the Skin*.² It is perhaps the first photo illustrated dermatological atlas ever published, and not only provides a quality work to represent the 1860s in a comparison with Fox's 1880s work, but also provides the contrast of being British, and being illustrated with albumen prints. Two American atlases, Henry G. Piffard's *A Practical Treatise on Diseases of the Skin*³ and William S. Gottheil's *Illustrated Skin Diseases: An Atlas and Text-book*⁴, provide a comparison of approaches from within Fox's medical circle. The former is illustrated with collotype plates and contains a good contrast to Fox's writing style. The latter is published by the same company as Fox, contains colour illustrations, and outlines the justification for using photographic images very clearly. Several late nineteenth-century dermatology texts illustrated with lithographs also provided context for the period's non-photographic illustration style, including *Atlas of Skin and Venereal Diseases* by Prince A. Morrow⁵.

¹ George Henry Fox, *Photographic Illustrations of Skin Diseases* (New York: E.B. Treat and Co., 1881).

George Henry Fox, *Photographic Illustrations of Skin Diseases* (New York: E.B. Treat and Co., 1887).

² Alexander Balmano Squire, *Photographs Colored from Life of the Diseases of the Skin* (London: John Churchill and Sons, 1865).

³ Henry G. Piffard, *A Practical Treatise on Diseases of the Skin* (New York: D. Appleton and Co., 1891).

⁴ William S. Gottheil, *Illustrated Skin Diseases: An Atlas and Text-book* (New York: E.B. Treat and Co., 1899).

⁵ Prince A. Morrow, *Atlas of Skin and Venereal Diseases* (New York: William Wood and Co., 1899).

The examination of a photographically illustrated medical text requires a background in the medical attitudes of the period and place in which the book was made. This contextual study begins with Jacalyn Duffin's *History of Medicine: A Scandalously Short Introduction*⁶, which provides an overview of the main developments of medicine over several centuries, and also contains an appendix detailing how to frame and investigate a research question in the history of medicine. James H. Cassedy's *Medicine in America: A Short History*⁷ examines the origins and development of the uniquely American practice of medicine. The chapter focusing on 1865 through 1940 discusses the establishment of institutionalized medical practice and treatment, and the rise of specialization among physicians. Other useful books touch on issues relevant to this project, though their main focus is elsewhere. For example, John Harley Warner's *Against the Spirit of the System*⁸ revolves around American medical students' education at the Paris Clinical School, and while the details of this education may not be directly relevant, it explains the influence of the French approach to medicine on this period in American practices of that time. W.F. Bynum's *Science and the Practice of Medicine in the Nineteenth Century*⁹ also tangentially sheds light on the influence of systemization of medicine, the creation of professional societies and specialized training on physicians' approach to their patients. Once the historical context has been established, more specific sources are needed on the use of photography in medicine. The best general overview of the subject is Daniel M. Fox and Christopher Lawrence's *Photographing Medicine: Images and Power in Britain and America since 1840*¹⁰. It examines how the advent of photography influenced the way doctors saw themselves and their patients, and describes the integration of photography into medical institutions. The authors also spend considerable energy exploring the idea of the photograph as historical source, and how visual information is read differently from that of textual sources. Stanley B. Burns' *Early Medical Photography in America, 1839 – 1883*¹¹ is an invaluable practical resource, containing several articles that detail advances in the medical use of photographs and their publication in the United States. Burns also

⁶ Jacalyn Duffin, *History of Medicine: A Scandalously Short Introduction* (Toronto: University of Toronto Press, 1999).

⁷ James H. Cassedy, *Medicine and America: A Short History* (Baltimore: Johns Hopkins University Press, 1991).

⁸ John Harley Warner, *Against the Spirit of the System* (Princeton: Princeton University Press, 1998).

⁹ W.F. Bynum, *Science and the Practice of Medicine in the Nineteenth Century* (Cambridge: Cambridge University Press, 1994).

¹⁰ Daniel M. Fox and Christopher Lawrence, *Photographing Medicine: Images and Power in Britain and America since 1840* (New York: Greenwood Press, 1988).

¹¹ Stanley B. Burns, *Early Medical Photography in America, 1839 – 1883* (New York: The Burns Archive, 1983).

touches on some of the social and aesthetic opinions of the period and how they changed physicians' approaches to photography. Included is a detailed bibliography of all photographically illustrated medical publications in the U.S. during the time period noted. Several collections of medical photography from the Burns Medical Archive are also of use, some with extensive explanatory footnotes for the beautiful plates. The largest is *A Morning's Work*¹², which contains several plates from Fox's dermatological publications. The most useful and insightful writing on medical photography I found was the chapter by Martin Kemp in Ann Thomas' *Beauty of Another Order*.¹³ Kemp frames the practice of medical photography in the context of earlier medical illustration and contemporary debates in the theory of medical education. He investigates the question of whether photography innately creates a more accurate or effective visual record than other forms of illustration.

The Artotype process, by which the photographs in Fox's publications were printed until the turn of the 20th century, falls into the collotype family of photomechanical processes. Luis Nadeau's *Encyclopedia of Printing, Photographic, and Photomechanical Processes*¹⁴ outlines the history of dichromated colloid processes, including the rash of patented collotype variations starting mid century. Jan Poortenaar's *The Technique of Prints and Art Reproduction Processes*¹⁵ focuses more on the technical details of the collotype process, but does not detail the variations of each patented alternative. Kent B. Kirby provides the best history of the process and its variants in *Studio Collotype*.¹⁶ Beginning with the influx of new photomechanical processes in the mid 19th century, Kirby explains the business and technological development of collotype processes, including the key patent holders and innovators, and important books illustrated with collotype prints. More specifically, an 1889 issue of *Photographic Times and American Photographer*¹⁷ gives an involved description of the workings of

¹² Stanley B. Burns, *A Morning's Work: Medical Photographs from the Burns Archive & Collection, 1843-1949* (Santa Fe, NM: Twin Palms Publishers, 1998).

¹³ Martin Kemp, "'A Perfect and Faithful Record:' Mind and Body in Medical Photography before 1900" in *Beauty of Another Order: Photography in Science* ed. Ann Thomas (New Haven: Yale University Press, 1997).

¹⁴ Luis Nadeau, *Encyclopedia of Printing, Photographic and Photomechanical Processes: A Comprehensive Reference to Reproduction technologies* (Fredericton, NB: Atelier Luis Nadeau, 1990).

¹⁵ Jan Poortenaar, *The Technique of Prints and Art Reproduction Processes* (London: John Lane, 1933).

¹⁶ Kent B. Kirby, *Studio Collotype* (Dalton Mass.: Heliochrome Press, 1988).

¹⁷ *Photographic Times and American Photographer*. Vol. XIII, 1883.

Bierstadt's Artotype Atelier, the studio that printed the second edition of Fox's *Photographic Illustrations of Skin Diseases*.

Finally, I surveyed some visual studies theory on the depiction of the body in photography, since the only theoretical context I had encountered for these works was in Kemp's insight into the nineteenth-century approach to medical illustration. Fox's photography of the body as a medical specimen can be understood in comparison to the power relationships involved in photographing criminals. The historical criminal photograph is explored by Allan Sekula in his chapter in Richard Bolton's *The Contest of Meaning*.¹⁸ This chapter inquires how power was exercised over inmates by photographing and classifying their appearance for purposes of identification and criminological purposes. He argues that the model for photography's use in defining 'the other' was not portraiture but scientific illustration, and that particularly in the case of Galton and Bertillon, photography was utilized as a power construct and source of statistical meaning, through the creation of image archives. John Pultz's *The Body and the Lens*¹⁹ similarly provides context for clinical photographs through its theoretical consideration of other types of scientific photographs. He uses Foucault's theories, as does Sekula, to build an argument of the photography of the body as an exercise of power, especially those taken in institutional settings. In the chapters concerning nineteenth century photography, he discusses the rise of the portrait, colonialist photography, criminality, nudes, and postmortem images. He comments on the significance of the subject returning the viewer's gaze, and the role of the studio photographer in the creation of scientific images. An overview of other scholarship on photography and the body is found in Liz Wells' *Photography: A Critical Introduction*,²⁰ wherein the scientific depiction of the body is only one aspect of a wide-ranging discussion on the body in art, pornography and portraiture, as well as in the realms of class and gender. This text clearly outlines photography's role in visual classification in many disciplines related to or comparable to medicine, as well as theoretical foundations of the 'gaze', portrayal of the abnormal body, and modes of objectification of the photographic subject. It is important to note that

¹⁸ Allan Sekula, "Body and the Archive," in *The Contest of Meaning: Critical Histories of Photography*, ed. Richard Bolton (Cambridge, Mass: MIT Press, 1989).

¹⁹ John Pultz, *The Body and the Lens: Photography 1839 to the Present* (New York: H.N. Abrams, 1995).

²⁰ Liz Wells, *Photography: A Critical Introduction* (London: New York: Routledge, 2008).

although all these texts provide insight to the implications of medical and scientific photography, whether directly or indirectly, none specifically examined clinical photography of the sort employed by Fox in his publications. Some discussion of early ethnographers, criminologists, psychologists, and even anatomists came close, but there appears to be a void in theoretical literature concerning early depictions of medical patients.

American Medicine in the Nineteenth Century

In the years following the Civil War, the American medical system was quickly developing from its almost nonexistent prewar state. This maturation was in line with many other leaps forward in infrastructure and bureaucratization that shaped the nation in the latter half of the nineteenth century. America became an international force in the field due to the institutional and governmental achievements accomplished after the internal chaos of the Civil War had subsided. George Henry Fox began his medical career during this period and grew as a professional as the structure of his profession did.

The first major overhaul in the medical system was in the realm of medical education, which to that point had existed as a haphazard, varied process wherein a postgraduate education and European instruction meant little more than a medical correspondence course certificate as far as practicing medicine in America was concerned. When Fox began his medical training in 1867,²¹ American medical education was overwhelmingly unregulated, unlike the well-established institutions across the Atlantic. Due to the long history and quality of European medical instruction, many American students attended medical school overseas or at least supplemented their American studies with courses and practical experience in Europe.²² American educational institutions experienced a renaissance of sorts in the last third of the nineteenth century, and by the time Fox himself was teaching, strong educational links had been established between universities and hospitals, allowing better clinical instruction, and medical faculty were being organized, paid

²¹ George Henry Fox, *Reminiscences* (New York: Medical Life Press, 1926), 48.

²² John Harley Warner, *Against the Spirit of the System* (Princeton: Princeton University Press, 1998), 3.

and utilized for research more along European lines.²³ The growth of medical societies also aided in the legitimization of American medical education, although many societies were very poorly subscribed until the early twentieth century. Nonetheless, their membership, particularly that of the largest, the American Medical Association, was active in advocating for government licensing and regulation of physicians and drugs, among other related causes.²⁴ Fox was one of these early association members and his contribution to the formalization of physicians' professional relationships places him in a class of medical professionals ahead of their time and concerned with the wider social implications of their professional standards.

At the same time that these medical developments were reshaping doctor training and practice, the country was progressing in ways that changed physicians' roles and priorities in patient care. The population was rapidly growing and becoming more urban, and larger urban centers were better able to support medical professionals and facilities. Rural populations were also increasingly better connected to cities and towns due to improvements in transportation and communication technology.²⁵ Meanwhile, urban growth and improved technology led to increased hospital construction²⁶ and the growth of philanthropic medical organizations, as well as more mobile rural doctors and the ability of physicians to confer with each other across the country. While this connectivity allowed for better access to medical services and a better countrywide medical network, presumably providing better care and allowing for better general health, other technologies and industrialization were contributing to declines in American health. These included increased industrial pollution and more hazardous and strenuous occupations in mills and factories.²⁷ These cultural changes affected the ways in which doctors dealt with their patients, what health problems were most prevalent, and how the medical system as a whole functioned. With larger and better connected systems of hospitals, doctors, and medical resources, many in high-population areas, physicians were better able to specialize their practice and have patients referred to them. Thus during the last decades of the nineteenth century, the

²³ James H. Cassedy, *Medicine in America: A Short History* (Baltimore: John Hopkins University Press, 1991), 89.

²⁴ Cassedy, *Medicine in America*, 91.

²⁵ Cassedy, *Medicine in America*, 70.

²⁶ Cassedy, *Medicine in America*, 73.

²⁷ Cassedy, *Medicine in America*, 72.

numbers of anesthesiologists, ophthalmologists and dermatologists, among others, rose dramatically.²⁸ Specialization itself would not have been possible, despite these cultural conditions, were it not for the continual advances in medical sciences, especially in Europe, that underpinned the practices of specialized disciplines and discovered new treatments and procedures,²⁹ and the improvements in the education system as discussed above.

In many ways Fox's career embodied the evolution of the medical profession after the Civil War. He is a typical example of how a progressive American doctor approached his profession and may have become interested in photography as part of his practice, teaching and research. As was the case with medical education at the beginning of Fox's career, clinical photography was much better established in the European medical communities than in America. This advancement was especially evident in the integration of clinical photography projects into the institutional framework of hospitals and clinics. As early as the 1850s, physicians like Friedrich Jacob Behrend in Berlin, Germany and Hugh Welch Diamond in Twickenham, England were embarking on systematic clinical photography projects to document their patients. Behrend created before-and-after images of his orthopedic patients and published the first article focused on the medical uses of photography.³⁰ Diamond created records of psychiatric patients, and also established an in-house studio and darkroom at the asylum.³¹ By 1855 the first medical monograph illustrated with photographic images was published, *De l'Electrisation Localisee* by G.B. Duchenne of Boulogne.³² These projects were taking place while the American medical system was just taking shape and most cutting-edge medical research was limited to the European continent. For the next decade, American clinical photography was largely limited to individual physicians having their patients photographed in portrait studios.³³ These

²⁸ Cassedy, *Medicine in America*, 94.

²⁹ Cassedy, *Medicine in America*, 78.

³⁰ Stanley B. Burns, *Early Medical Photography in America (1839-1883)* (New York: The Burns Archive, 1983), 1266.

³¹ Alison Gernsheim, "Medical Photography in the Nineteenth Century, pt. 1," *Medical & Biological Illustration* XI, no. 2 (April 1961), 88.

³² Gernsheim, "Medical Photography pt. 1," 92.

³³ As Gernsheim indicates, this was also the case in Europe (Alison Gernsheim, "Medical Photography in the Nineteenth Century, pt. 2," *Medical & Biological Illustration* XI, no.3 (July 1961), 149), though systematic documentation projects affiliated with institutions appeared somewhat earlier than in North America.

images were distributed amongst colleagues, added to medical museum collections, or kept as unofficial, unsystematic records.³⁴

The 1860s saw an increase in the use of photography among American physicians, particularly in New York City. In 1860, Randsford E. VanGieson wrote the first American article on the medical use of photography, arguing for the establishment of photography departments in hospitals.³⁵ Gordon Buck's before-and-after images of reconstructive surgery patients were also published in New York in the 1860s.³⁶ The range of clinical photography around this period betrays the lack of professional standards in this field as well as the variations in intent and use of patient images. American projects of the 1860s ranged from George Fisher Jackson's photography of physical deformities that lies somewhere between medical and sideshow depictions,³⁷ to official documentation of medical conditions published by the Surgeon General's office.³⁸ Photography departments were beginning to establish themselves within hospital infrastructure, beginning with Bellevue Hospital in New York City, which was run for some time by photographer O.G. Mason. Mason contributed photographs to many important American medical texts including Lewis A. Sayre's *Spinal Disease and Spinal Curvature*,³⁹ as well as Fox's publications discussed here.

Fox's publications appeared at a point in American medical history where the advancements in institutions were meeting up with the advancements in photography and the two were working together to produce important studies and instructional texts. However, there were ongoing debates over the use of photography as an illustrative tool, and of the best ways to confer this visual information through printed books.

³⁴ Burns, *Early Medical Photography*, 1259, 1263.

³⁵ Burns, *Early Medical Photography*, 1934.

³⁶ Burns, *Early Medical Photography*, 1935.

³⁷ Burns, *Early Medical Photography*, 1935.

³⁸ Gernsheim, "Medical Photography pt. 2," 148.

³⁹ Gernsheim, "Medical Photography pt. 2," 148.

Medical Photographs as Illustration

Despite the gradual move of the photographer into the workings of the hospital, clinical photography long retained its portraiture conventions and lacked discipline-wide aesthetic standards for decades to come. This kind of consensus required both further establishment of photography as integral to the working goals of the hospital and physician, and some resolution of the debate on photography's role in medical illustration.

As discussed previously, early medical photographs were taken mainly by portrait photographers in their studios at the request of individual doctors. This practice meant that many early clinical views use the aesthetic conventions of portraiture including poses, lighting and backdrops. Posing chairs, head clamps, and other studio mainstays are often visible. These visual clues, combined with the typical format of early doctor-commissioned photographs, the cdv or cabinet card, prompt the viewer to examine these images with certain biases. They encourage an initial reading that focuses on the patient as an individual, as the sitter for a portrait would have been seen. The setting does not immediately set the subject apart as an academic example of a medical condition, the fuzzy border of which was exploited by some who sold almost identical views as souvenirs at sideshows as monstrosities or freaks of nature. A distinct clinical style was needed to set apart more clearly the serious medical studies from these types of exploitative images.

A model for the systematic photography of patients was the Salpetriere in Paris,⁴⁰ which standardized its photographic methods in such a way that allowed the appearance of objectivity as well as better record keeping and educational value. By the turn of the century, the clinical photography aesthetic had changed even in America to one more recognizable to today's audiences. The focus was taken off the individual patient and put on the disease,⁴¹ anonymity was held in higher regard, and image composition was more standardized. The style that was eventually favored is described by Martin Kemp as "simple, unadorned, visually reticent and stylistically sober."⁴² As the first in-house hospital photo department,⁴³ the Salpetriere's

⁴⁰ Gernsheim, "Medical Photography pt. 2," 150.

⁴¹ Burns, *Early Medical Photography*, 1261.

⁴² Martin Kemp, "'A Perfect and Faithful Record': Mind and Body in Medical Photography before 1900," in *Beauty of Another Order: Photography in Science*, ed. Ann Thomas (New Haven: Yale University Press, 1997), 123.

guidelines for image making were widely influential, first in France where hospital photo practices were under public review by 1869,⁴⁴ and by extension in America where hospitals gradually adopted photo departments as well.⁴⁵

As the institutional world was evolving to utilize and accommodate the medical photograph, the academic medical community was debating photography's merit as an illustrative tool. While from its conception photographic imagery was treated as depicting the truth,⁴⁶ there were various objections made to the suitability of its use for scientific purposes, or suggestions for needed augmentations to make it sufficiently useful. Photography had been initially hailed as an obvious match for the needs of medical illustration. Accuracy of depiction, fine detail, and ease of comparison, the priorities of most scientific illustration, seemed to be tailored to the strengths of the photographic process.⁴⁷ However, in clinical practice, shortcomings became all too evident. Firstly, photographs lacked the colour needed to convey effectively all the details of an affliction needed for instruction, identification or diagnostic purposes. Secondly, by depicting everything in the camera's field of view, a photograph often lacked the visual emphasis provided by traditional illustration.⁴⁸ Issues of individuality and anonymity were also raised by photography, especially in cases of socially stigmatized diseases such as syphilis. Whereas in illustrations this was an easy problem to avoid, standards and rules were needed for photographic practice in order for patients to have confidence that their likenesses would be used appropriately.⁴⁹ Attempts were made to solve issues of lack of colour and emphasis by a variety of hand-colouring techniques, accompanying explanatory diagrams, and retouching.⁵⁰ Similarly, a variety of methods were used to obscure patients' identities. However, there was never a consensus as to whether these solutions were satisfactory, and the question still remained as to

⁴³ Kemp, "Perfect and Faithful," 140.

⁴⁴ Kemp, "Perfect and Faithful," 146.

⁴⁵ Starting with Bellevue Hospital in New York City, as previously mentioned.

⁴⁶ Beginning with the daguerreotype's billing as "a mirror with a memory" and continuing to early medical photographers, like Hugh Diamond, who thought photographs were untainted by caricature or subjectivity (Kemp, "Perfect and Faithful," 120).

⁴⁷ Kemp, "Perfect and Faithful," 145.

⁴⁸ Kemp, "Perfect and Faithful," 148.

⁴⁹ Kemp, "Perfect and Faithful," 148.

⁵⁰ Kemp, "Perfect and Faithful," 122.

whether a depiction of a single individual medical case made for the most effective type of medical illustration. This issue had arisen earlier within the realm of traditional scientific illustration. In non-photographic illustrations, it is possible to combine aspects of several individual cases to produce an image of a “typical” case that is completely anonymous. With the use of photography, the question arises as to whether one individual case can represent a disease when it may have a range of presentations, severities, and, perhaps, atypical variations.⁵¹

At the core of this debate on photography’s role in medical illustration was the more general question of photography’s validity as a realist medium. From its inception, photography was popularized as creating a perfect record of nature, having none of the biases of the artist interjected into the final product, as in conventional illustration. It had both the authority of a new technology and the support of medical institutions behind it in its rise to predominance in medical textbooks.⁵² However, as artists more widely utilized photographic technology and claimed the camera could be used for the artistic and personal representation of the subject,⁵³ debate grew as to photography’s infallibility as a substitute for the examination of the subject itself, and the degree to which the subject matter could be affected by the photographer’s intentions. This debate reaches far beyond the realm of medical photography, and encompasses the standing question of whether photography should be considered art or document. This is a debate that cannot be examined in detail within the confines of this project, but one that should be taken into account in any reading of Fox’s publications, and one that is ripe for further study and application to this material.

G.H. Fox was a physician well aware of the medical issues of his day and the debates going on in his discipline. As we will see, photography was being widely used to depict skin conditions in the period of Fox’s career, and thus the issues of the photograph’s strengths and weaknesses as illustration were in Fox’s mind as he amassed his own collection and chose plates for his publications. His prefaces indicate his consideration of

⁵¹ Kemp, “Perfect and Faithful,” 122.

⁵² John Tagg, *The Burden of Representation: Essays on Photographies and Histories* (Amherst: University of Massachusetts Press, 1988), 61.

⁵³ Sigfried Kracauer, “Photography,” in *Classic Essays on Photography*, ed. Alan Trachtenberg (New Haven: Leete’s Island Books), 246, 249.

the medium, and this fact is ultimately more important than the specific degree to which photography was deemed an ideal illustrative medium.

Photomechanical Processes for Book Illustration

However many physicians were arguing for the merits of photography as the ideal medical illustration, the technical challenge remained of incorporating photographs into printed volumes using an affordable and accurate process. As discussed above, medical illustrations had long been translated from life to the page by artists. The printing medium for their illustrations was generally the lithograph, by which an image could be mass printed from a metal plate in a detailed and faithful way that was fairly cost-effective.⁵⁴ Lithographically illustrated medical texts continued to be prominent after photography entered the scene since there was no comparably cheap and reliable way to incorporate photographs with the printed page. Thus the first impact photography had on publishing was in the source of conventional illustrations' imagery. Instead of illustrating medical cases from life, artists increasingly relied on photographs as their visual source material.⁵⁵ Meanwhile, starting after 1850, some medical texts were printed with tipped-in albumen photographs as illustrations.⁵⁶ This involved making individual prints for each copy of the published work and affixing them to the plates, which necessarily increased the publications costs and limited the number of plates and the size of the print run.

Technologies for translating photographs to ink were undergoing constant development during the second half of the nineteenth century. Between 1845 and 1880, at least fifty processes were introduced to print photographic images in ink. However, most were too complex or expensive to be viable, or provided

⁵⁵ Several of the lithographic dermatology atlases in the Miner Library collection use photographs from the collections and publications of prominent physicians as their source material. The sources are cited on the title pages, though not on individual illustrations.

⁵⁶ Notably, Squire's dermatology text, discussed in the next section.

inferior image quality.⁵⁷ Eventually, dichromated colloid processes came to the fore, taking advantage of the hardening of dichromated gelatin upon exposure to light by using a glass plate coated with this hardened gelatin to print an image in ink.⁵⁸ This type of process produced a very fine natural grain and continuous tones, but the delicacy of the glass support and wear on the gelatin meant the plates were good only for perhaps a thousand imprints each.⁵⁹ Many patented variations on this basic notion were developed in the 1860s and 70s, one of which was utilized by Fox and his publisher, E.B. Treat, to illustrate dermatology publications. This variation was the Artotype, and was developed from the general collotype process and perfected by J.B. Obernetter of Munich in 1870. The gelatin layer was strengthened by a mixture of soluble glass and albumen to eliminate the need for pre-exposure, as was the case in many existing processes.⁶⁰ Licenses to print using the Artotype process were issued in America by the rights-holder, Lambert, Cooper and Mueller, to various print shops, including Edward Bierstadt and Co. of New York City.⁶¹ This company, founded by the brother of artist Albert Bierstadt, provided the Artotype printing services for *Photographic Illustrations of Skin Diseases* in its second edition. A detailed account of the workings of this studio is found in a period journal,⁶² and despite some secrecy about the details of this proprietary process, the column appears to represent the Artotype as utilizing the best aspects of other collotype processes as well as innovations of its own.⁶³ And although Bierstadt himself is described as a photographer, and the permanence and beauty of the prints is stressed by the author, it is made clear that this process is not exclusively an artistic one - there are prominent mentions of its use for catalogs, portraits,⁶⁴ and as Fox's publications demonstrate, scientific illustration.

The strengths of this process were that a clean-edged image could be printed on a plate and inserted as a whole into the sections of text to be bound. No trimming or tipping-in was necessary, and the images

⁵⁷ Kent B. Kirby, *Studio Collotype* (Dalton, Mass: Heliochrome Press, 1988), 2.

⁵⁸ Luis Nadeau, *Encyclopedia of Printing, Photographic and Photomechanical Processes: A Comprehensive Reference to Reproduction Technologies* (Frederickton, NB: Atelier Luis Nadeau, c1989-1990), 73.

⁵⁹ Jan Poortenaar, *The technique of Prints and Art Reproduction Processes* (London: John Lane, 1933),

⁶⁰ Nadeau, *Encyclopedia*, 37.

⁶¹ Nadeau, *Encyclopedia*, 37.

⁶² *The Photographic Times and American Photographer*, vol. XIII, 1883:195-198.

⁶³ *Photographic Times*, 195.

⁶⁴ *Photographic Times*, 196.

could be printed much faster than by other process of the period, up to two hundred per day.⁶⁵ Fox and Treat had many reasons to employ the Artotype in reproducing the dermatology illustrations for his book. However, in choosing the most cost-effective and accurate photomechanical process available at the time, Fox tacitly accepted the aesthetics of this process in representing his medical cases. Variations in print darkness between copies, minor loss of detail at the end of print runs, possible ink smudges and absence of colour were all accepted in the mode of illustration when Bierstadt's studio was chosen to print the plates. With all its strengths and weaknesses, the printing process must be considered along with Fox's image choice and the artists' hand colouring as one of the factors that affects how the clinical cases were visually represented.

Dermatology Texts and Photographic Illustration

Fox's *Photographic Illustrations of Skin Diseases* was certainly not alone in its aim of clearly depicting dermatological conditions for reference and education. Although this publication enjoyed multiple edition reprinting and wide use, it was not the first or necessarily the most important of its type. Some of its precursors, contemporary publications, and followers will be described and compared in the following pages, as a means to understanding more fully the approach and importance of Fox's work in the context of the 1880s and of Victorian America.

Despite the general superiority of the French in promoting medical photography in hospitals, it was an Englishman who first published a book of dermatology cases illustrated with photographs. Alexander Balmano Squire, a surgeon at the West London Dispensary for Diseases of the Skin, compiled a volume of dermatological views from 1864 to 1866.⁶⁶ They were published as *Photographs Colored from Life of the Diseases of the Skin*, in which the photographs were accompanied by a description of the disease and the particular case history of the patient depicted. An introductory text by the author explains that upon having great difficulty

⁶⁵ Kirby, *Studio Collotype*, 16.

⁶⁶ Gernsheim, "Medical Photography, pt 2," 147.

producing accurate illustrations of the skin, Squire turned to photography to produce a reference volume for himself, and subsequently decided to publish it.⁶⁷ The book is illustrated with twelve tipped-in albumen photographs, each of which is heavily hand-painted in the areas of the depicted affliction, with coloured washes in some background areas.⁶⁸ The written description is kept to a minimum, one page per disease, but Squire often uses lofty language and medical short forms in these brief accounts in a manner that suggests the assumption of a thoroughly upper class, professional readership. The photographs themselves are beautifully rendered and portray the subjects in a sensitive and personal way. They often wear their street clothes and have their faces shown, though the backgrounds are kept plain and sterile.⁶⁹ The colouring, “by one of the best artists,” is heavy by later standards and could almost stand alone as illustration, as it obscures the photographic detail underneath completely. The photographs are a comparable size to later dermatology texts, centered on plates thicker than the pages of text, and the illustrations are interspersed throughout the volume. The number of plates is rather low considering this book is an overview of skin conditions, of which there are many, but the early date of this publication dictated the use of albumen prints. This meant that each copy had to have prints tipped in individually, and albumen prints were much more labor intensive and expensive to produce for publication than later mass-printed ink reproductions, so the small number was justified by financial and practical concerns.

As mass photo printing technology improved, and as dermatology was better established as a discipline, more atlases and textbooks appeared on the market. This is demonstrated by several volumes in the Miner Medical Library at the University of Rochester, which also holds a copy of Squire’s book. There are several works from Fox’s active period and the decades after that suggest that this market was a competitive and quickly changing one, and that other authors may have taken cues from Fox’s success. One of these was written by Fox’s close friend and New York City colleague, Henry G. Piffard. His 1891 volume, entitled

⁶⁷ Alexander Balmano Squire, *Photographs Colored from Life of the Diseases of the Skin* (London: John Churchill and Sons, 1865).

⁶⁸ See figure 1.

⁶⁹ See figure 2.

Practical Treatise on the Diseases of the Skin, contains fifty plates printed in a variation of the collotype process.⁷⁰ This is an improvement on Squire in quantity and presumably affordability, both of which were necessary as dermatology conditions became more highly classified and larger print numbers were needed if a publication was to be used for educational purposes. Piffard stresses the importance of using plain language, providing clear illustrations for diagnosis and classification purposes, things he claims past texts were lacking,⁷¹ although these are similar sentiments to Fox's a decade before. The images themselves are more similar in style to Fox's than Squire's, a logical fact due to the book's date and location of publication. Some patients are photographed with their faces showing, other images merely show isolated body parts. Overall the tone is more clinical than Fox due to the use of artificial lighting and plain backdrops. The images are not overtly artistic or sensitive. The quality of the images is more crisp and detailed than in Fox, but they lack any representation of colour. Their main strength seems to be an attempt at clinical control over image making, since many of the images appear to have been taken in a plain, clinical setting with a consistent aesthetic.⁷²

Another dermatology text contemporaneous to Fox is *Illustrated Skin Diseases: An Atlas and Text-book*, by Wm. S. Gottheil, also published by E.B. Treat in 1899. Treat was the mastermind behind Fox's first dermatology publication, and often partnered with Bierstadt Artotype Atelier to print photographic plates. Medical atlases must have proven good for business for Treat, and still worth the investment more than a decade after his commitment to Fox's first edition. This was due in some part to dermatology still being in a state of development. Gottheil's commentary confirms this, as he explains the difficulty of compiling a useful categorization and classification system for the book in the face of continual progress and discoveries in the field.⁷³ Gottheil argues eloquently for the importance of photographic illustrations, saying "it is difficult to represent in words the manifold impressions and the delicate variations in colour and shape that are so readily appreciated through the optic nerve"⁷⁴ and that photography printed using colour reproduction technology

⁷⁰ Henry G. Piffard, *A Practical Treatise on Diseases of the Skin* (New York: D. Appleton and Co., 1891), preface.

⁷¹ Piffard, *Practical Treatise*, preface.

⁷² See figure 3.

⁷³ William S. Gottheil, *Illustrated Skin Diseases: An Atlas and Text-Book* (New York: E.B. Treat and Co., 1899).

⁷⁴ Gottheil, *Illustrated*, 4-5.

best accomplishes this task. In the best plates, this photomechanical process does achieve impressive lifelike clarity and accuracy, and creates some beautiful images,⁷⁵ but often it leaves details muddy and detracts from the main goal of communicating medical information. Otherwise the images are much like Fox's, covering a range of poses and subjects, in a style halfway between studio portraiture and clinical sterility.

Overall, the forerunners and contemporaries to Fox who compiled photographic dermatology atlases met with general success in their aims, but faced similar obstacles in their insistence on the accuracy and documentary superiority of the photographic image. Many felt the need to add colour to the images, either by hand or by printing process, to make the images fully useful, but would not admit the lack of colour to be a weakness of the technology. Colour was applied with varying levels of success, and could vary from copy to copy, but in this realm I believe Fox's publications rose above the average in that they added elements of colour in ways that would be useful to the student or physician, but did not obscure the photographic details or overwhelm the plate.

George Henry Fox: Life, Career, Writing

Photographic Illustrations of Skin Diseases is a product of its time, location, and intended use, but it also reflects significantly on the identity of its creator, Dr. George Henry Fox. Furthermore, while the societal and medical aspects discussed previously influenced him, along with his colleagues in the American medical community, this publication also bears the mark of an individual with a distinct view on his work. A biographical sketch of the man and his career widens our understanding of the book and its purpose.

George Henry Fox was born on October 8, 1846, in Ballston Spa, New York,⁷⁶ and spent most of his childhood living in Schenectady, New York.⁷⁷ He was part of an extended family that included eighteen physicians, though this history was unknown to Fox until later in life when he became interested in

⁷⁵ Gottheil, *Illustrated*, plate XV.

⁷⁶ Fox, *Reminiscences*, 1.

⁷⁷ Fox, *Reminiscences*, 3.

researching his genealogy.⁷⁸ The professional tradition that he was aware of in his family was that of the clergy, but Fox was undecided regarding his future career until late in his college education. He credits his early inclination towards medicine to a suggestion made by his much-older brother when he was only a boy that the medical profession was the best career there was.⁷⁹ He completed his undergraduate studies at the University of Rochester, NY, evolving from an uncertain young freshman to a young man eager to specialize his knowledge and learn a profession. Even before his graduation from his undergraduate studies, Fox pursued medical learning experiences through various avenues, including dissecting a cat, volunteering to assist a physician with a patient after witnessing a shooting, and attending surgeries as a spectator.⁸⁰ These were merely precursors to his formal graduate medical education at the University of Pennsylvania, but they are significant in their unofficial and self-driven nature. Fox's medical education consisted of a combination of institutional instruction and self-directed endeavors. At the University of Pennsylvania he received lectures and clinical demonstrations from numerous professors. These classes included both theoretical scientific courses such as chemistry and physics, and practical medical courses such as anatomy and physiology, some of which included dealing directly with patients.⁸¹ Following his course work he completed an internship at the Philadelphia Hospital. In addition to working on the hospital floor and dealing with his own patients, he continued to attend clinics held by hospital physicians in which the interns would assist with some of their cases.⁸² This conventional and institutionalized education was supplemented along the way by more independent learning experiences. These began in Rochester, as mentioned above, and continued after his training at University of Pennsylvania with many courses and clinical experiences in Europe. Fox initially went to Europe with the aim of joining the medical service of one of the countries involved in the Franco-German war, but ended up traveling widely and taking courses in half a dozen continental European countries over several years. This period afforded him the opportunity to further specialize his medical knowledge, studying under several dermatologists, while not ignoring other disciplines. He traveled with and

⁷⁸ Fox, *Reminiscences*, 40.

⁷⁹ Fox, *Reminiscences*, 38.

⁸⁰ Fox, *Reminiscences*, 42, 45.

⁸¹ Fox, *Reminiscences*, 48-55.

⁸² Fox, *Reminiscences*, 59-60.

encountered many Americans with the same aims for their medical education, seeking experience with the best instructors at institutions across the continent that would broaden their knowledge and experience and aid their American medical careers. The significance of this experience in general is that there was no single way in which a medical student was required to acquire his specialized training or clinical experience before opening his own practice. It also indicates a significant European influence on American medical practice. For Fox, this time in Europe allowed for a great deal of travel for pleasure in addition to his professional experiences, and permitted more time for him to decide on and perfect an area of specialization, one that would lead to a range of professional positions and the eventual publication of the volumes on which this project focuses.

Upon his return to the United States, Fox started his own small medical practice in New York City, aiming to specialize in dermatological cases but often taking on other patients due to a lack of specialized opportunities.⁸³ The 1878 outbreak of smallpox led Fox to a short stint working for the health department, dispensing vaccinations door-to-door, but he soon took a position working at the clinics at the New York and Northwestern Dispensary to supplement his private practice.⁸⁴ Besides this community-based work, Fox worked from the moment of founding of his practice to establish himself within the New York medical world. He joined the Medical Association of the County of New York almost immediately upon his arrival, and was its president by 1891.⁸⁵ This was only one position among many that made him a prominent figure on the medical scene of the period. Fox was president of the state medical society and a longtime member of the New York Dermatological Society, beginning in 1873. This organization was the first dermatological society in the country.⁸⁶ Shortly after his membership began, Fox collaborated with several colleagues to found the American Dermatological Association. Fox established himself as a noteworthy professional in New York City and nationwide by taking active roles in professional organizations. Most importantly, these memberships created professional contacts and allowed Fox to be aware of exceptional dermatological cases

⁸³ Fox, *Reminiscences*, 132.

⁸⁴ Fox, *Reminiscences*, 158.

⁸⁵ Fox, *Reminiscences*, 145.

⁸⁶ Fox, *Reminiscences*, 150.

at many institutions. Several honorary positions and accolades grew out of his early initiative in professional organization, medical camaraderie and sharing of clinical experience.⁸⁷

In addition to creating and contributing to professional organization of physicians in general and dermatologists in particular, Fox made significant contributions to his field by means of public lectures and teaching positions. First, Fox used his personal experiences and case studies along with illustrative lantern slides to embark on public lectures on mainly dermatological subjects. These lectures were formalized and incorporated into college curricula upon his foray into teaching at Women's Medical College of New York and the College of Physicians and Surgeons, among other sessional appointments.⁸⁸ Thus Fox's career involved not only the actual practice of medicine, but also the solidification of the professional identity of the dermatologist through medical associations, and actively sharing his experiences with the next generation of physicians through his lectures and teaching.

The culmination of this full and varied professional life was seen in his many medical publications. These projects, which spanned from 1879 through the early twentieth century, incorporated Fox's case studies, teaching skills, and his organizational and classification impulse. Fox had produced several journal articles in his early career,⁸⁹ but his first book publication was spawned by his interest in clinical photography. Fox's medical interest in photography began while he was employed at the Northwestern dispensary. He took a patient with a particularly severe case of epithelioma⁹⁰ to be photographed at a nearby portrait studio run by E.K. Hough. Thus began a private collection of exceptional cases that Fox used for his own reference purposes and to exchange with colleagues.⁹¹ Upon having amassed what he thought to be a quality and well rounded collection of photographs, he arranged to have the best put on display at the offices of the Medical Journal Association. Upon seeing this exhibit, E.B. Treat, a New York City publisher, approached Fox with

⁸⁷ Fox, *Reminiscences*, 151.

⁸⁸ Fox, *Reminiscences*, 170.

⁸⁹ Syntex Laboratories, *George Henry Fox: The Man, his Work*, Leaders in Dermatology Series (Palo Alta: Syntex Laboratories, 1967), 24. Fox's early article subjects included smallpox, cutaneous syphilis, cutaneous tuberculosis, electrolysis for hair removal, and the role of diet in the treatment of dermatological conditions.

⁹⁰ This image was used as a plate in Fox's *Photographic Illustrations of Skin Diseases*, 1st edition, p. 61.

⁹¹ Fox, *Reminiscences*, 159.

the proposition of his writing a book on skin conditions and incorporating his collection of images as illustrations. This led to Fox's first published volume, the 1881 edition of *Photographic Illustrations of Skin Diseases*, soon followed by a companion volume, *Photographic Illustrations of Cutaneous Syphilis*. Though not, as sometimes claimed, the first attempt to illustrate a dermatology text with photographic images, these publications were important within the field and to the medical community at large. This is evidenced by the release of multiple expanded and improved editions of *Skin Diseases* into the first decade of the twentieth century, including yearly small-format republications from 1901-1904.⁹² Building on the original edition, Fox wrote an expanded second edition (1887) that acted as both atlas and text-book, again followed soon after with a companion volume on syphilis. Later editions included syphilis information in one volume, and a physically larger-scale atlas was attempted, though it sold poorly.⁹³ Fox and his publishers experimented widely with format to attempt to disseminate his teaching/reference material to the widest possible audience. This task was aided by the fact that Fox was a modern and direct writer, cutting through the "pomposity and verbosity"⁹⁴ that was rampant among medical writers of the period. Fox himself stated that he wished to reach those outside of the privileged urban medical environs in which clinical experience is high, and to reach them with practical advice, not dense academic treatises as had been written in the past.⁹⁵ *Photographic Illustrations of Skin Diseases* is thus significant in its style and wide usage, and these factors can be traced to its author's transcontinental education, involvement in the medical community, and attention to the need for codification and organization of dermatological specialists. Fox's career is a study in both a typical late nineteenth century medical career and the type of forward thinking that led to leadership in medical writing and clinical photographic approaches.

⁹² Syntex, *Man, Work*, 24.

⁹³ Syntex, *Man, Work*, 18.

⁹⁴ Syntex, *Man, Work*, 5.

⁹⁵ George Henry Fox, *Photographic Illustrations of Skin Diseases*, 1st edition (New York: E.B. Treat and Co., 1881), preface.

Photographic Illustrations of Skin Diseases, First Edition

Forming the basis of my research is the first edition of Fox's *Photographic Illustrations of Skin Diseases*, found in the Miner Medical Library at the University of Rochester. This edition was published in 1881, and is a smaller volume than the expanded second edition at just over one hundred pages. It is considered a dermatological atlas, whereas the second edition becomes an atlas/textbook combination with its additional text and illustrations. The first edition was bound in a fairly expensive fashion, as evidenced by the copy found at the Duke Medical Center Library, which was half-leather bound with gold stamped title on the cover and spine, the spine having raised bands and the page edges and endpapers being marbled. The copy at the Miner Library has been rebound. Its covers, spine and loose endpapers have been replaced with new material. This may detract somewhat from the book's original visual impact, but the repairs allow for easy browsing since the rebound pages turn and open quite freely. The plates in the Miner Library first edition are bound face-down with no interleaving, while the plates in the Duke Medical Library copy are bound face-up with interleaving. At first I thought this discrepancy may have been due to the recent rebinding of the Miner Library copy, but the twill hinging on the plate pages remains intact in the rebound version, and is on the right hand side of the image. This indicates that the plates were bound in this fashion when the volume was originally compiled, though the interleaving could have been removed upon rebinding. This variation in binding indicates that the first edition at least, if not the second, was likely issued in installments or as a full volume with temporary paper covers and/or loose plates, which were later expected to be bound by the buyer to fit his tastes or match his existing library collection.

The preface and contents provide insight into the first edition's intentions and Fox's strategy in writing and compiling it. The first edition is illustrated with 48 plates printed using the Artotype process, and are marked individually as being printed by Harroun and Beirstadt, the Beirstadt presumably being the Edward Beirstadt whose Artotypes illustrate the second edition and whose printing shop is described in *The*

Photographic Times and American Photographer in 1883.⁹⁶ The plates are hand-tinted, utilizing coloured washes to create the skin and lesion tones without obscuring the photographic details. Unfortunately, the colourist is not credited. The preface, written by Fox, is emphatic concerning the vital nature of photographic illustrations in the study of skin diseases. He bemoans the history of photographic plates in dermatology as lacking in vital colour or “disfigured by careless daubing.” It is indeed the case, particularly in Squire’s albumen dermatological plates,⁹⁷ that the photographic image is completely obscured by heavy hand-colouring in the medically relevant areas of the illustration. Thus Fox suggests that he is more open to preserving the intrinsic qualities of a photograph’s detail and realism than were his predecessors, who claimed their illustrations were straight from life, while they ordered their details almost completely painted over.

Fox is open in this preface about his sources for negatives and his approach to classification. The negatives are compiled from various sources including portraits he had taken of his own patients, and those collected from colleagues. Each individual case study mentions to whose patient it is referring, except in those cases where the patient is presumably from Fox’s private practice. Fox also admits to arranging the cases in no particular order, except in some cases following one with another for the sake of contrast. However, this does not indicate a haphazard approach or lack of understanding of medical classification. Indeed, Fox makes the hierarchy and classification of these diseases plain with a chart following the table of contents that describes various diseases in relation to each other.

In the text of each section, the length of each being limited to two sides of a single leaf, a case study is the first priority for almost every disease. The patient’s initials, age and doctor are usually given, along with a paragraph-long description of the disease’s duration and symptoms in this patient as well as any pertinent personal history. The remainder of the entry is usually devoted to a description of the cause, symptoms, and treatment of the disease in more general terms. A plate accompanies each disease that is featured in this edition, whereas the second edition includes entries that are not paired with images. The majority of the first

⁹⁶ *Photographic Times*, 195-198.

⁹⁷ Squire, *Photographs*.

edition's plates bear only one image, so while it contains the same number of plates as the second edition, it is illustrated with significantly fewer images. These images, one per diseases, may or may not be representative of a typical case. The images in this book are based on Fox's own photographic collection, and this being the first edition, he may have simply used what images he had on hand. There is no evidence that he made or requested images specifically for the production of this edition. In fact, Fox writes that in the early stages of his medical interest in photography, he had photographed patients with "striking forms of skin disease"⁹⁸ to have a record for his own collection and to share the case with colleagues. Thus, before he had plans for a published atlas using his photographs, he based his photographic impulse not on the typical case, useful for teaching and day-to-day diagnostic purposes, but instead the severe or divergent manifestation of an affliction.

This possible distortion or bias in the characteristics of the depicted cases seems to be confined to the images themselves and the case studies that describe them. The clinical information that accompanies the case studies is balanced and wide-ranging, acknowledging the full spectrum of severity and incarnations of the disease and providing practical advice for practicing physicians. As a whole, this edition acts as a compact, brief reference volume that would conceivably be within the intellectual and financial reach of any urban or rural medical professional, and would provide a solid and clear outline of the hierarchy and classification of dermatological conditions as well as tips for diagnosis and treatment.

Photographic Illustrations of Skin Diseases, Second Edition

The second edition of George Henry Fox's *Photographic Illustration of Skin Diseases* was published in 1887 and was revised and expanded in response to the popularity of the first edition of six years before. A copy of this edition is part of the rare books collection of the Richard and Ronay Menschel Library at George Eastman House. This book is half-leather bound, the corners and spine being covered in black leather and

⁹⁸ Fox, *Reminiscences*, 159.

the remainder of the cover in green pebbled cloth. The title has been gold stamped on the cover and spine, and the spine has raised bands. The page edges are marbled, as are the fixed and free end papers. However, there is still a significant chance that this book was being sold simply as sections with paper covers, to be bound by the purchaser. It is clear that this copy, at least, was seen as a valuable volume, worthy of quality protective binding of decorative value. If the book was sold already bound in this way, then the assumption of the publisher was likely that the market for this publication was the educated elite, and that the book would be frequently referenced, requiring durable binding to have a long shelf life.

The text of the book is printed on medium weight, wood-pulp paper, seemingly of good quality since it retains significant flexibility and is not brittle. The text is separated into chapters, each of which starts on a new page. The blocks of text within the chapter are separated with prominent subheading for each disease. Within these smaller sections, the text is organized into paragraphs with smaller subheadings indicating sections on treatment or diagnosis. Line breaks occur within a section only when a treatment formula with chemical ingredients is outlined. Thus, the hierarchy of information is established by the page layout, and reinforced by the textual information.

Interspersed throughout the pages of text are plates, which are printed on slightly thicker card with fabric hinges to allow for the pages to open and lie flat more easily. Thin interleaving tissue is also bound into the book, lying atop of each plate. The images on the plates are on the right hand side of the open book. They are accompanied, along their bottom edge, by text specifying the publication and printing information: "copyright [year] E. B. Treat, N.Y. / [image title] / Artotype, E. Bierstadt, N.Y." The hand colouring is subtly executed, utilizing mainly flesh tones and reds to highlight the normal skin versus the area affected by disease. Clothes, backgrounds, and areas generally not of medical interest are left in their natural, colourless state. This colouring is credited to Dr. Joseph Gaertner, a "well-known medical artist."⁹⁹ The employment of a medically trained professional for the colouring, as well as his involvement being prominently credited, further suggests

⁹⁹ Fox, *Photographic Illustrations*, 2nd ed., preface.

the desire for clarity and artistry, as well as scientific authority. This is perhaps not a new inclination for the second edition, but it is more clearly stated here than it had been previously.

Fox goes to great pains to outline the changes and expansions in this edition and set it apart from the first edition published only six years previously. Physicians may have been hesitant to update to a new version of the publication if it was not evident what improvements had been made that justified a further expenditure on their part. Fox outlines the fact that many of the plates have been replaced since the printing of the first edition, to allow for better, clearer images to illustrate the text, and that many plates have been supplemented with the use of more than one image. The text of the book is also expanded from the first edition, with introductions to each class of disease, longer entries for individual diseases, and a greater number of diseases described. This expansion means that the forty eight plates, though more thorough in their multiple examples per disease, do not allow for each and every disease to be photographically represented. However, the expanded text allows for the second edition to act both as an illustrated atlas of skin diseases as well as a dermatological text book, with scholastic material on the nature of different classes of disease within dermatology, increased background on each disease and its variant forms and manifestations, and more tips on diagnosis and treatment.

The relationship between text and image forms the basis for the book's organizational structure. The text is divided into seven chapters, each based on a categorization of disease. Each of these sections is further divided into at least two, but as many as 31 sections, each focusing on one particular disease within that larger category. A total of 85 diseases are discussed in the text; there are 48 plates. The text, beyond its hierarchical layout of chapters, headings and subheadings, reveals the author's intent, and the nature of the diseases themselves, in an increasingly specific way as the reader progresses through the book and chapters, beginning with the preface. This edition thus develops Fox's first edition goals of accessible reference and visual clarity with the added educational value of increased practical text and more varied visual representations.

Edition Comparison and Analysis

The plates published in Fox's first and second editions of *Photographic Illustrations of Skin Diseases* are made meaningful by knowledge of the society and context in which the books were created. However, the use and impact of the images themselves is best understood through an analysis of the objects themselves, and in the categorization and grouping of the images for the purpose of comparison. There are several ways in which to compare the plates of the two editions as two discrete groups. Both editions contain forty-eight plates, and the images are printed in both editions in a similar size and style. The Artotypes are printed in ink in the center of a thicker card on a linen hinge, and the disease name is printed beneath the image. These plate pages are interspersed throughout the text of each edition. The main difference in their relationship with the text is that in the first edition, each disease discussed in the text is illustrated with a plate, whereas in edition two, the number of diseases has increased and thus the plates illustrate only a selection of the sections of text. Additionally, the first edition includes case studies in the main body of the text, so the details of the particular patient are available to the reader in the same section as the image. This is in contrast with the second edition, which condenses the case study descriptions into small paragraphs that accompany the list of illustrations table at the beginning of the volume. Thus, the information particular to the individual depicted is relegated to an index of sorts, and the information being showcased as relevant to the use of the image is the more general instructional text. With these differences in mind, the comparison of the types of images included in the group of plates in each edition is an exercise that suggests both conscious aesthetic choices and practical publication decisions.

The first noticeable category of images that appears in both editions is that of limbs. Closely cropped images containing only arms or legs account for twelve illustrations in the first edition and thirteen in the second edition. There are several more additional plates in each that focus particularly on hands. There are several reasons why this type of image may be so prevalent in both editions. First is the obvious possibility that there are simply a plethora of skin diseases that primarily affect the limbs, and they must be illustrated using images of the areas they affect most greatly. However, there are other possible considerations as well.

Documenting the affected legs and arms allows the author to show a representative sample of the patient's skin while keeping the patient anonymous. Some patients may have consented to being photographed by their doctor only if their identities would not be revealed. An image comprised only of arms or legs would prove less identifiable than even an image including the torso or head with face obscured. The tight cropping also allows the focus of the viewer to rest on a single area without the distraction of extraneous details of the rest of the patient's body. But just as important as the concerns for patient anonymity or viewer attention is that of medical recognition. Limbs provide an instantly recognizable shape and relative size for a viewer to commit to memory for use in future diagnoses. Arms and legs provide a scale for the rash or sores that is much more easily read than by depicting a section of torso skin, and the location of the affliction is not easily mistaken.¹⁰⁰ Another practical consideration is that if a patient has limited time or inclination to be photographed, the limbs are easily exposed and readily accessible to the photographer while the subject is simply sitting in the studio in their street clothing.

The first and second editions show little evolution of approach in making images of limbs, as a closely cropped and unornamented style was already in place in the first edition. Some images show evidence of conventional portrait studio equipment being used, although these were not in themselves traditional studio portraits. One second edition image¹⁰¹ shows a slender arm, the tip of a white cap sleeve showing at the edge of the frame, resting on a velvet upholstered cushion with buttons. Such fabric would be found on posing furniture in many American studios of the time. This both confirms the documentation practices of Fox and his colleagues and suggests that little effort was made toward a more clinical, plain, or even standardized aesthetic when having medical portraits taken. Generally, skin afflictions of the limbs are portrayed as fairly common, and the illustration of disease using images of only the legs or arms was deemed effective from the start by Fox, who continued this practice through the second edition.

¹⁰⁰ An unclear example of a partial torso illustration is the plate illustrating zoster lumbo-femoralis in the first edition, where it is difficult to discern how much of and at what angle the torso is being shown. The second edition plate for dermatitis venedata is not recognizable as any particular part of the body, though the intent was perhaps just to show the skin texture. Fox, *Photographic Illustrations*, 1st ed., 27, 2nd ed., 43.

¹⁰¹ This image is utilized in both editions. Fox, *Photographic Illustrations*, 1st ed., 67, 2nd ed., 85. See figure 4.

The use of studio portrait photographers to create clinical images is significant in the realm of power structures and aesthetics. While the portrait studio may seem more egalitarian a location for documentation than a scientific lab, there are still power imbalances at work in that space. Presumably the physician is directing the photographer in how to depict the subject, and the photographer retains the power to direct the subject in pose and mannerisms. The power is further shifted from the normal portraitist/sitter relationship in that the subject is not paying for a service,¹⁰² but acting as an uncompensated subject, willing or otherwise. The studio conventions of these images, including the use of backdrops and studio furniture, affect not only the resulting aesthetic but the scientific and historical interpretation of the individual image and the group. Sekula stresses the impact of archive creation in making photography useful and powerful for classification purposes.¹⁰³ The lack of a coherent archive within Fox's photographs, the use of various studio styles and backdrops and very little standardization for classification of images, may suggest that there was less objectification and subjugation happening within Fox's haphazard documentation efforts than might be supposed of more rigorous documentation projects. However, conversely, the plain backgrounds and white sheets of later clinical photography might serve to elevate the power of the body itself, by eliminating the guises of social and narrative clues of clothing and studio.¹⁰⁴ Thus, the lack of initiative on Fox's part to break from studio conventions may have been a decision of convenience, but it affected the impact of his clinical images in much broader terms.

Children were a common and complex subject for Fox's illustrations in the first and second editions. Subjects immediately recognizable as young children account for twelve of the first edition illustrations and seven images in the second edition. This is not including images of limbs and torsos that may belong to young patients according to the case studies. The inclusion of children again raises questions of what was conscious aesthetic choice and what was demanded by practical factors or circumstance. Some of the children were undoubtedly photographed because their disease was more prevalent among young patients, and the

¹⁰² John Pultz, *The Body and the Lens: Photography 1839 to the Present* (New York: H.N. Abrams, 1995), 24.

¹⁰³ Allan Sekula, "The Body and the Archive," in *The Contest of Meaning: Critical Histories of Photography*, ed. Richard Bolton (Cambridge, Mass: MIT Press, 1989), 352.

¹⁰⁴ Pultz, *Body and Lens*, 14.

illustration would aid students in recognizing the affliction more readily in their future practice. However, more practical issues were also at hand. These young children were not necessarily willing or consenting subjects of this medical documentation, and were perhaps used as subjects when no adult volunteer could be found. The subjects could have been street children being treated at the dispensary. Others may have had parents who allowed their picture to be taken, not having the same reservations about the impact on their reputation as if they were adults.

Several of the youngest subjects are depicted asleep, being held, or distracted with a toy,¹⁰⁵ meaning they could have been more cooperative sitters than some many times their age. The signs of accommodating and distracting young children may be mainly to allow for good photographs to be taken, but they also encourage a sympathy from the viewer that is absent from many adult portraits in this publication. The inclusion of the toy or mother's hand in the final image reminds the viewer that the patient is an individual who needs comfort and not merely a visual example of a disease. And while several of these children's portraits were used in both editions, the immediacy of the subjects' individuality is lessened by the abbreviation and relocation of the case studies in the second edition. One image, new to the second edition, proves to be an exception to this tendency. It illustrates lepra maculosa, and is one of two images of this disease on the plate.¹⁰⁶ The second image is a grown man's torso, the image cropped at the hips and neck, with the hands placed on the white sheet at his waist. This image is anonymous and fairly clinical in appearance. However, the child at the left, demonstrating a similar blotchy skin discolouration, is depicted from the chest up, sitting behind a table, looking at the camera, and resting his chin on his hand. He displays a startling amount of attitude and personality for a medical portrait, and connects with the audience in a particularly personal way considering his defiant pose and nonplussed gaze. This plate indicates that in 1887, Fox was still willing to depict patients as individuals, even as some of his plates show a tendency towards more clinical and standardized modes of depiction. This may be a result of Fox's modes of collecting images

¹⁰⁵ *Zoster pectoralis* (Fox, *Photographic Illustrations*, 1st ed., 27, 2nd ed., 93); *varicella* (Fox, *Photographic Illustrations*, 1st ed., 25, 2nd ed., 21); *eczema infantile* (Fox, *Photographic Illustrations*, 1st ed., 39, 2nd ed., 65). See figures 5, 6, 7.

¹⁰⁶ Fox, *Photographic Illustrations*, 2nd ed., 177. See figure 8.

from colleagues, and having to utilize what images demonstrated symptoms most clearly, despite their other aesthetic characteristics, or were most readily available at the time of printing. However, it may speak to Fox's personal regard for patients as individuals that despite being very progressive in his writing style, categorization of disease, and illustration media, he continued to encourage identification with some of the patients depicted, especially children.

Fox's photographs of children present a complex and somewhat contradictory approach to medical documentation, as discussed above, and allow for a consideration of the role of consent and 'the gaze' in clinical photographs. These theories in visual studies are often discussed in relation to ethnographic and pornographic images, but can be applied to clinical photographs as well. 'The gaze' itself is a long-established construct in visual theory that conceptualizes the photograph as objectifying the subject and providing a voyeuristic thrill in the viewer. It acts as part of the exercise of power through institutions over the body, as proposed by Foucault.¹⁰⁷ The increased use of photography in the nineteenth century to classify populations and define 'the other' implied a power imbalance between those depicted and those using the visual information for social and scientific purposes.¹⁰⁸ This imbalance of power appears even greater when the subjects of the images are children, as they have less awareness of the implications of their being photographed than adults in the same position. In comparison to ethnographic images of the same period, these clinical images portray a similar sense of the objectifying gaze, as they are depicting the abnormal body. The native peoples of imperial ethnographic studies were seen in a similar light, as something less than the ideal of the strong, healthy, white male. Additionally, both early ethnographic and medical photographs were taken as those areas of study were still in development and operating under haphazard, unsystematic circumstances.

The difference in the portrayal of ethnographic and medical subjects may have more to do with the question of consent. The complication of consent with the use of child subjects is mentioned previously, and

¹⁰⁷ Suren Lalvani, *Photography, Vision, and the Production of Modern Bodies* (Albany: State University of New York Press, 1996), 87.

¹⁰⁸ Sekula, "Body and Archive," 345.

might be equivalent to the depiction of subjugated peoples, where the subjects' consent was assumed because of their position, and/or they felt compelled to agree to be photographed. Adult clinical subjects may have had considerably more opportunity to refuse being photographed. But the power dynamic between physician and patient was significant, even more so when the patient was of lower social standing. The institution of the hospital or clinic is intrinsically one of power over the population and the body.¹⁰⁹ However, it is not as systematic a display of control as that of subjugated people ethnographically categorized through photography. The use of children in clinical illustration by Fox and others particularly draws attention to the issues of objectification and consent and their ability to be applied to clinical photography as a whole.

Another prominent type of illustration contained in both editions is the head and shoulders portrait. This type of image stands out particularly because modern medical images rarely depict patients, especially faces, in the conventional manner of a portrait studio. Anonymity is dictated in modern medical photographs due to the legal and ethical boundaries of the medical profession. The assumption of clinical documentation is that the disease, not the patient, is paramount in the photograph, so that focusing on the individual's identity would distract from the purpose of the image. Without these aims and restrictions at the forefront of their practice, the photographers employed to make clinical images in Fox's era often chose to depict patients in a style almost identical to a close portrait for a cdv or cabinet card. Many of Fox's images were taken by portrait studio photographers. One in particular, E.K. Hough,¹¹⁰ was noted by Fox as being the first studio utilized for his collection of images of his patients.

The first edition contains traditional portraits that fall into three categories: profiles, busts, and chest-up portrayals. These portraits are dominated by images of male patients, with two portraits each of children and women compared to nine of men. This trend may be entirely coincidental, based on the random occurrence of patients of Fox and his colleagues with particular ailments that necessitated photographs of the face. However, it could also indicate a certain sensitivity to those considered the more vulnerable members of

¹⁰⁹ Pultz, *Body and Lens*, 9.

¹¹⁰ Fox, *Reminiscences*, 159.

society. A decidedly un-anonymous portrait of a person with a disease could carry a stigma, especially with communicable or venereal diseases. Subjecting the 'weaker sex' to such public scrutiny may have been unseemly to a professional such as Fox. Even with the male subjects, there is an overall aversion to depicting them head on, looking straight in to the camera. Most have their eyes averted or are shown in profile. This approach helps the reader to see the disease over the individual. The two portraits in which the patients look directly into the camera are especially visually arresting. The patients are more likely to appear as emotional individuals rather than clinical examples. Their facial expressions can imply personality and inspire sympathy.

One example of a portrait with direct eye contact is the image identified by Fox as the first patient he ever had photographed.¹¹¹ This older male patient is balding, with fluffy white hair above his ears. He has a slightly furrowed brow and narrow eyes.¹¹² He is dressed in a white shirt, dark coat, and silk cravat. The epithelioma affecting his lower lip distorts his mouth into a cartoonish grimace, but his eyes seem to plead for understanding. His facial expression reads as equally important to his affliction, perhaps because the two are physically intertwined. The second plate with eye contact is the illustration for fibroma.¹¹³ By contrast, this man is younger, scruffy and bearded, and clothed in working-class attire. A large growth affects the side of his head, distorting his eye and making his head tilt slightly to one side. He looks at the camera with questioning eyes. The inclusion of portraits where the subjects maintain eye contact with the viewer is significant in the context of 'the gaze.' This concept is intrinsic to the idea of the visual objectification of scientific subjects, as discussed previously. Returning the gaze of the viewer can be seen as a negation of this objectification.¹¹⁴ On a personal level, looking into a subject's eyes allows them to seem more human and less like a scientific illustrative tool. The same is true in the theoretical context, wherein the powerful, voyeuristic role of the viewer is diminished by the subject appearing aware of the viewer and returning his stare.

¹¹¹ Fox, *Reminiscences*, 159.

¹¹² Fox, *Photographic Illustrations*, 1st ed., 61. See figure 9.

¹¹³ Fox, *Photographic Illustrations*, 1st ed., 23. See figure 10.

¹¹⁴ Pultz, *Body and Lens*, 23.

These portraits with eye contact are similar in that they depict fairly severe cases of the diseases they are meant to represent. In the second edition, they are both replaced with less serious cases. While they may have served a purpose in illustrating the consequences of delayed medical intervention, and the human impact of disease, the focus on representative examples for education purposes overruled these examples in the second edition. However, the second edition itself contains 22 conventional portraits, 3 of which involve direct eye contact where there was none in the first edition examples. The overall priority in replacing plates was presumably the severity of the disease depicted, rather than avoiding showing faces or eye contact, since this continued with other additional plates in the second edition. However, it is interesting that in attempting to represent these two diseases with more representative cases, the emotional impact was lessened, thus making the illustration more balanced and scientific in two distinct ways. The second edition's portraits fall into the same categories of profile, chest up and shoulders up. The most prominent aspect of this category's use in the second edition is the fact that it is still being used as prominently as in the first. The conventions of studio portraiture are still very much in use in clinical photography, even years after the publication of the first edition. The photographer, and Fox himself, have not developed any qualms about depicting the patients with their faces clearly shown and in street clothing. There is little impulse towards a clinical aesthetic, but this focus on the individual sometimes results in surprisingly intimate portraits of disease.

Another prominent difference in how illustrations are used in the second edition is that multiple images are more often used to illustrate a single disease, and a certain style of illustration is often supplemented by contrasting styles. Unlike the first edition, which used a single case study and image to illustrate the effects of a disease in all but three cases, the second edition, in its revised and expanded form, takes full advantage of the opportunity to use more than one case and image to represent an affliction more fully. The second edition contains sixteen plates that utilize more than one image in their illustration, with several more showing two variations of the same disease affecting different body parts, and thus labeled as

two separate afflictions.¹¹⁵ This change in strategy could be an entirely practical consideration, due to an increase of medical images in Fox's collection in the years since the first edition was printed, or an increased budget for plate layout due to the first edition's success. It could also be in response to reader or professional critiques of the first edition stating a preference for more representative images. No matter the immediate cause, this shift is in keeping with the history and future of conventionally-illustrated dermatology texts. Examples from the Miner Library of skin diseases treatises illustrated with lithographs, dating from the 1840s and also the 1890s¹¹⁶ indicate a preference for montages of small illustrations arranged together on one plate to illustrate any given disease. These compiled views usually include a full body or full face view, accompanied by close-up skin texture illustrations and other body parts affected with symptoms. This type of montage may have been easier to accomplish in the hands of the lithograph illustrator rather than as a photographic collage, because relevant details are easier to highlight and irrelevant areas easier to exclude without losing visual context. However, Fox seemed to desire a return to a more varied visual representation of disease using more than one case study and accompanying photograph.

One particularly tactile way in which Fox combines multiple photographs in one plate is by re-photographing multiple prints lying together, slightly overlapping each other on a flat surface, to form a new illustration. This approach is significant to the use of photography as the illustrative medium in this publication because it draws attention to the materiality of the photographic prints. The reader is reminded that all the illustrations in this book began their lives as loose prints in a physician's personal collection before being abstracted as mass-produced ink illustrations. The reproduction of the prints lying together also reinforces their relationship to each other as variations in the same disease in different patients. For example, the plate illustrating fibroma, illustrated by a single portrait in edition one as described above, is now

¹¹⁵ For example, *favus capitis* and *favus corporis* (Fox, *Photographic Illustrations*, 1st ed., 35, 2nd ed., 189) illustrated by two separate images.

¹¹⁶ Prince A. Morrow, *Atlas of Skin and Venereal Diseases* (New York: William Wood and Co., 1888). Robert W. Taylor, *A Clinical Atlas of Venereal and Skin Diseases including Diagnosis, Prognosis and Treatment* (Philadelphia: Lea Brothers and Co., 1889). P. Rayer, *A Theoretical and Practical Treatise on the Diseases of the Skin* (Philadelphia: Carey and Hart, 1845). Thomas Bateman, *Delineations of Cutaneous Disease*. (London: Henry G. Born, 1849). See figures 11, 12.

illustrated with one profile portrait of an older man, a waist-up portrait of an older woman, as well as a third image with no face in view.¹¹⁷ The old woman, shown in profile with one breast and armpit exposed to show a growth under her arm, has been arranged in a somewhat clinical way, in that she has a draping of fabric over her shoulder to put the focus on the afflicted area of her body. However, this cloth is not a medical white sheet but an elaborate patterned cloth. The woman also retains her necklace and neat hairdo, projecting a somewhat portrait-inspired style. The other two images also suggest a mix of tradition and science, as the middle man wears a formal coat and shirt, and the right hand subject, though naked, leans on an ornate column in a studio setting. In addition to the basic increase in number of illustrative examples for this disease, and the aforementioned ties to the physical originals, this plate marks an improvement on the first edition because it illustrated a range of more typical cases of the disease rather than one particularly noteworthy and extreme one. So while the style of the images themselves is still languishing in the art and portrait-inspired aesthetic rather than a totally modern, clinical style, the approach to illustration has certainly changed since the first edition.

Conclusions

The dermatological photographs of George Henry Fox's publications can be examined as significant images in a variety of contexts. As historical documents, they serve to illustrate the state of American medicine during the late nineteenth century, as artifacts of the rise of the hospital and public health initiatives as well as the impact of increased specialization and classification by physicians. The images are proof of the physician's relationship with the studio photographer, and the practice of exchanging clinical photographs among medical colleagues. The photographic plates themselves attest to the constant innovation in ink reproduction of photographs for books of the time, and the aesthetic impact of utilizing the newest and best printing method of the moment.

¹¹⁷ Fox, *Photographic Illustrations*, 2nd ed., 153. See figure 13.

In a closer examination of the plates of the first and second editions of *Photographic Illustrations of Skin Diseases*, the choices and changes within this group of photographic plates takes on more specific meaning, in the context of Fox's personal approach and in terms of the visual theories of depicting the body. While there are definite themes and conscious choices in how Fox depicts his medical subjects, using framing to highlight various afflictions more effectively, contrasting cases to show variation in disease presentation, and creating portraits of patients in a set of repeated styles, his approach was by no means systematic. His goal was education and the presentation of representative images in the most accurate way possible. There was no intent to classify patients systematically, to read further into their personal characteristics based on their appearance or symptoms, or to create an exhaustive archive of dermatological variations. There are some attempts to preserve the anonymity of the patients, and other attempts to portray them as identifiable and sympathetic figures. There is some inclination towards standardization of portrayal, but also reluctance in moving away from studio conventions. The one constant is a commitment to portraying disease realistically and the importance of presenting visual case studies. Fox was convinced of photography's superiority in effectively educating the medical community about dermatology conditions, many of which were newly classified and defined by specialists such as himself. While Fox's methods appear haphazard in comparison to some ethnographic or criminal documentation of the period, he utilized the technology at hand to its utmost usefulness. He created clinical depictions that he felt represented each disease accurately, by using the best photomechanical processes, hand colouring, multiple visual examples, and a variety of poses and visual focus points. His publications are the work of a gifted physician, one who developed along with his profession in a critical period, but also influenced the textual and visual representation of patients in medical education.

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Illustrations

Fig. 1: Plate XII, taken from Alexander Balmano Squire's *Photographs Colored from Life of the Diseases of the Skin* (London: John Churchill and Sons, 1865).



Fig. 2: Plate V, taken from Alexander Balmano Squire's *Photographs Colored from Life of the Diseases of the Skin* (London: John Churchill and Sons, 1865).

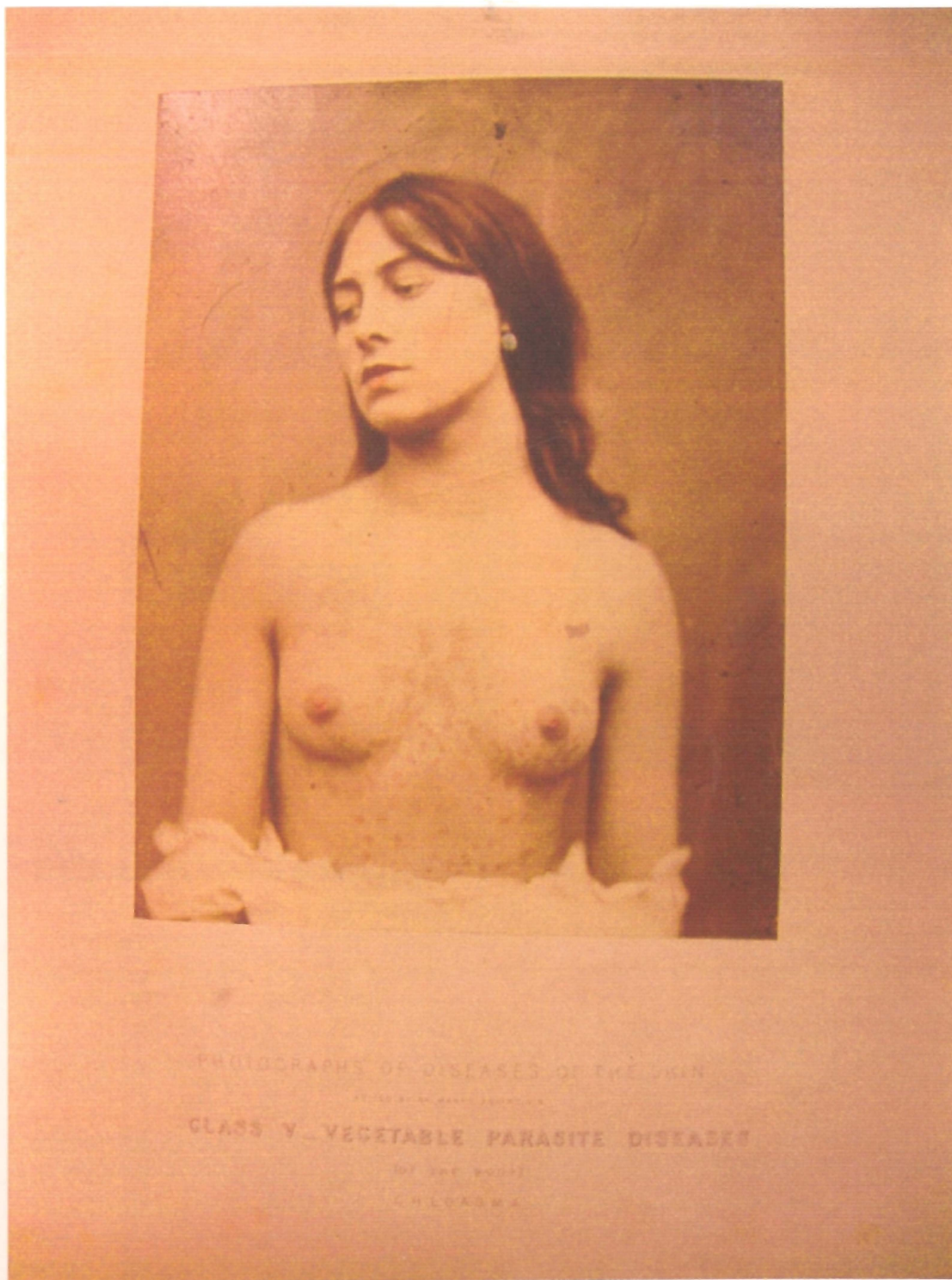


Fig. 3: Plate V and Fig. 2, taken from Henry G. Piffard's *A Practical Treatise on Diseases of the Skin* (New York: D. Appleton and Co., 1891).

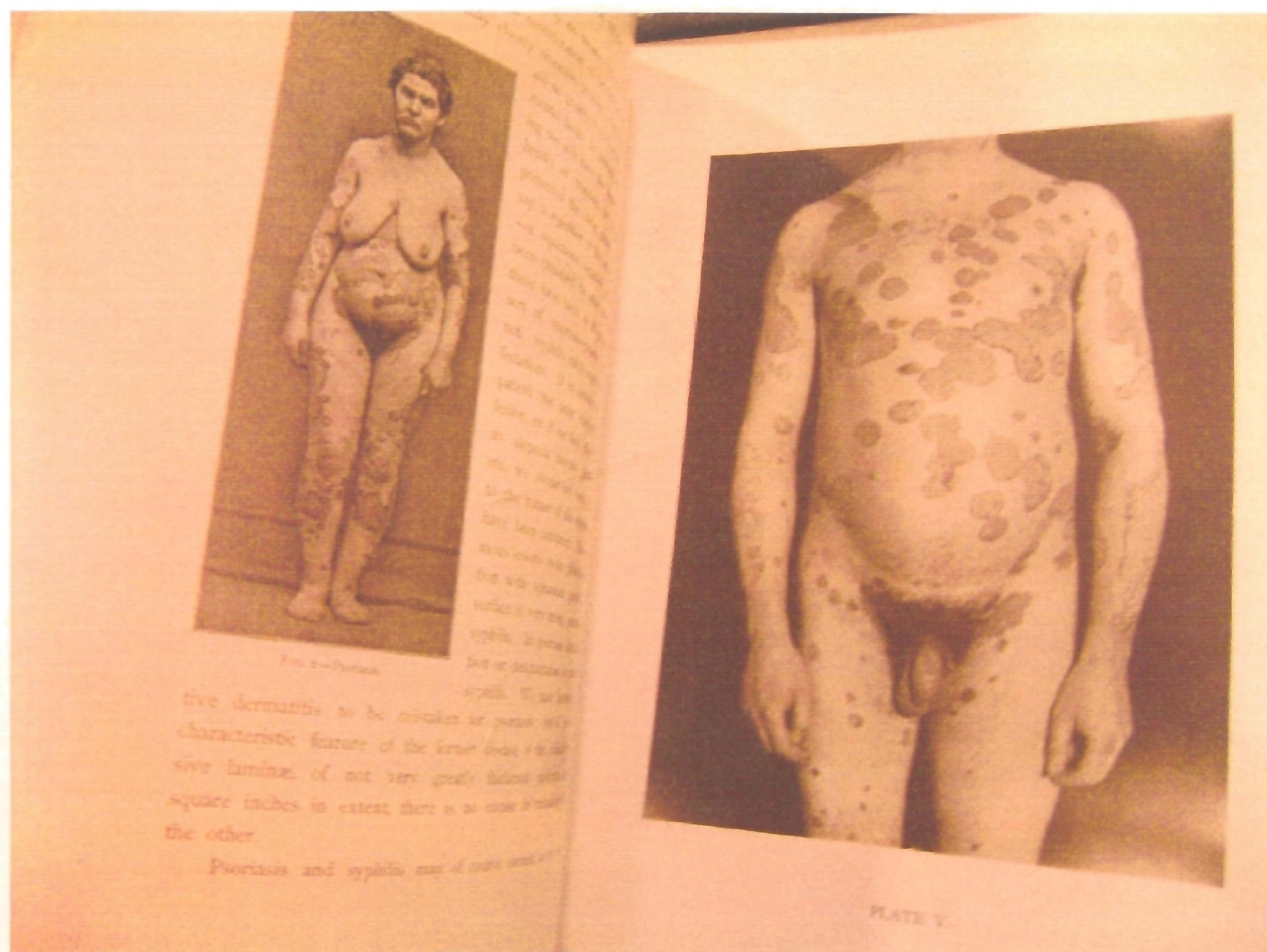


Fig. 4: Lichen planus. Fox, *Photographic Illustrations*, 1st ed., 67, 2nd ed., 85.



LICHEN PLANUS.



LICHEN PLANUS.

Fig. 5: *Zoster pectoralis*. Fox, *Photographic Illustrations*, 1st ed., 27, 2nd ed., 93.



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ZOSTER PECTORALIS

Fig. 6: Varicella. Fox, *Photographic Illustrations*, 1st ed., 25, 2nd ed., 21.



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VARICELLA

Fig. 7: Eczema infantile. Fox, *Photographic Illustrations*, 1st ed., 39, 2nd ed., 65.



ECZEMA INFANTILE.

Fig. 8: Lepra maculosa. Fox, *Photographic Illustrations*, 2nd ed., 177.



SEPTEMBER 1882 87



E. A. TREAT, N. Y.

LEPRA MACULOSA.

Fig. 9: Epithelioma. Fox, *Photographic Illustrations*, 1st ed., 61.

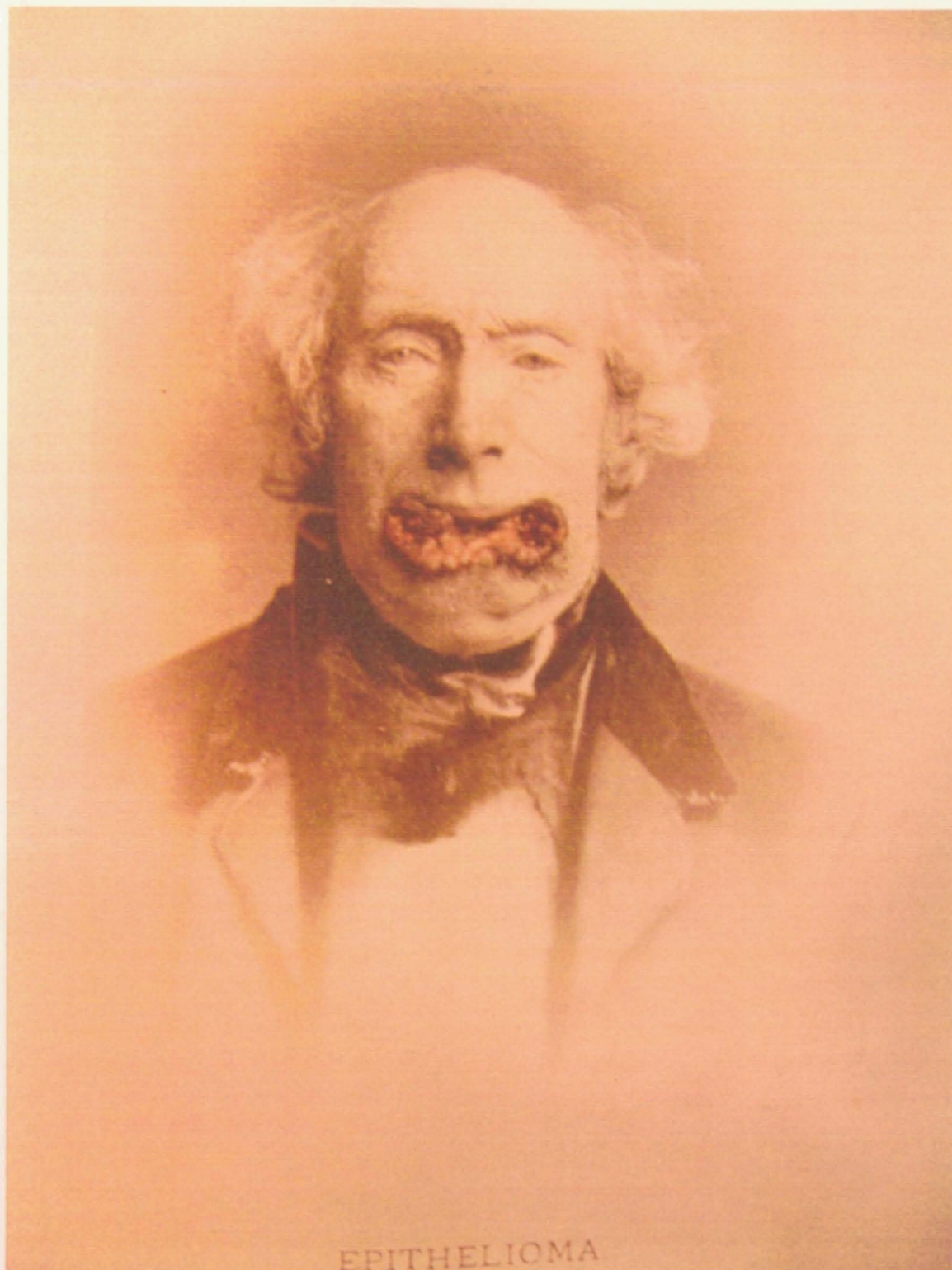
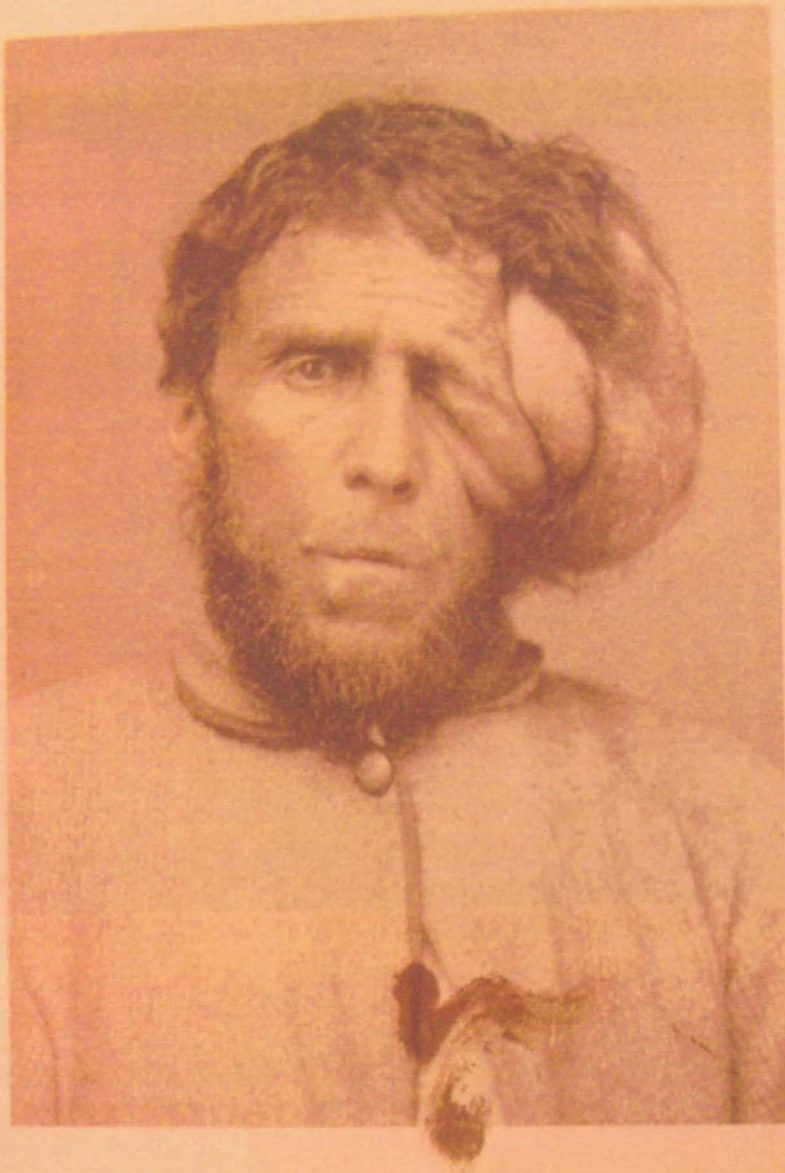


Fig. 10: Fibroma. Fox, *Photographic Illustrations*, 1st ed., 23.



FIBROMA PENDULUM.

Fig. 11: Plate XXXVIII, from Prince A. Morrow's *Atlas of Skin and Venereal Diseases*. New York: William Wood and Co., 1888.

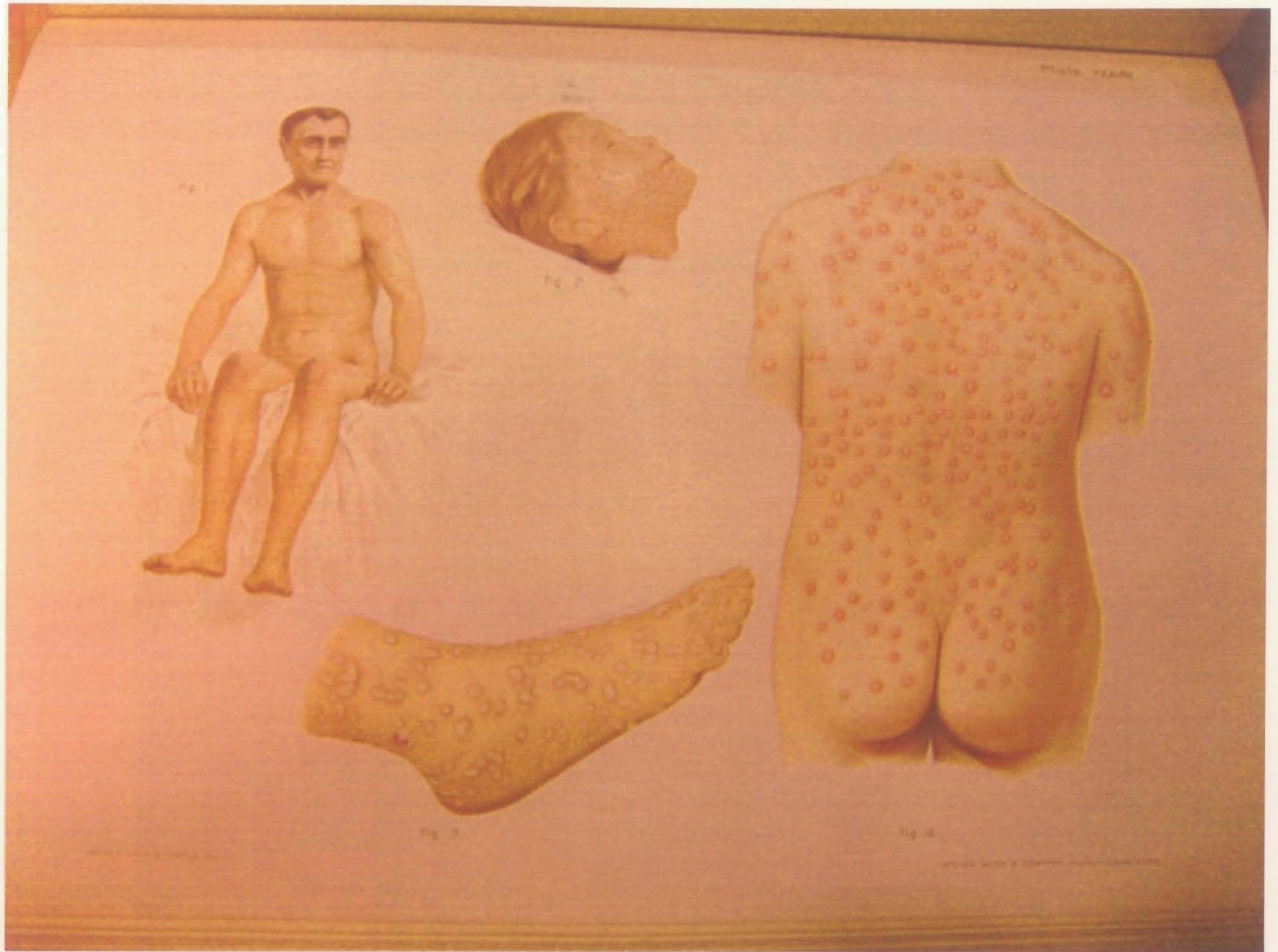


Fig. 12: Plate XXVII, from Taylor, Robert W. *A Clinical Atlas of Venereal and Skin Diseases including Diagnosis, Prognosis and Treatment*. Philadelphia: Lea Brothers and Co., 1889.



Fig. 13: Fibroma. Fox, *Photographic Illustrations*, 2nd ed., 153.

