PRESIDENTIAL ADDRESS.

BEFORE THE AMERICAN DERMATOLOGICAL ASSOCIATION AT THE MEETING IN CHICAGO, JUNE, 1901.

BY

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It is with considerable diffidence that I, who am not a pure dermatologist, address so eminent a body of specialists as that now before me. I have felt greatly the honour you have done me in electing me President of this Association, and am sure that after the distinguished men who have preceded me, my occupancy of the chair will be a very inglorious one. However, I shall do my best, and trust that the Chicago Meeting will not be one of the least instructive and interesting, for the Local Committee have worked with a will and have accomplished much.

I have thought this a very suitable occasion (the first meeting in the 20th century) on which to look back and estimate the advances made in dermatology during the century which has lately been completed, and also to try and understand how much knowledge the dertologists possessed a hundred years or more ago regarding the nature and causes of skin diseases.

We might say that the specialty of dermatology has been created during the past fifty years, and that no department of medicine has made greater strides forward than dermatology. Men interested in this specialty were the pioneers who first entered the then unknown sea of bacteriology, for to them is to be credited the honour and glory of first discovering the parasitic origin of many diseases. To Schönlein belongs the credit of first exploring these regions and opening up the whole field of cutaneous mycology, for he in 1839 discovered the parasitic fungus of Favus. In 1843 Gruby of Paris discovered the

ringworm fungus, and in 1846 Eichstädt discovered that of tinea versicolor.

The enormous influence that the discovery of the microbic origin of disease has had on surgery and medicine is incalculable. Without our present knowlege medicine and surgery would have been at a standstill, and we owe this, in the first place, to the men whose names I have mentioned above, and secondly to the magnificent work of Pasteur, Lister and Koch. As I have before said, perhaps no department of medicine has made more progress during the century just elapsed than dermatology; from being an indefinite, inexact and confused branch of medicine, it has developed into one of the most exact and scientific departments—from being a mere bye-path it has become a most important highway—and although there is much yet to learn about the pathology and etiology of diseases of the skin, nevertheless, during the quarter of the century just elapsed, and especially since the discovery of the microbic origin of many diseases, vast strides have been made.

Notwithstanding the fact that most of the pathological processes and changes are taking place before our very eyes, there is great diversity of opinion regarding the significance of those changes, and many difficult problems beset us which are as yet unsolved. Many skin diseases are more than mere local manifestations, for, as it has been said, "They have their roots in the interior," *e.g.*, such diseases as syphilis, tuberculosis, the eruptive fevers. There is a close connection between certain skin lesions and diabetes, dyspepsia, rheumatism, etc., acne may be connected with menstrual disorders, urticaria with the pregnant condition, with pleurisy, and the ingestion of certain obnoxious foods, and purpura with rheumatism. Many rashes are produced by drugs; obstructive jaundice may produce xanthoma, etc., and so it is evident that the pathology of skin disease is intimately connected with general pathology. How important, then, is it that the dermatologist should have a general knowledge of disease. The great principles of medicine and surgery should first be mastered before the study and practice of a specialty is undertaken. In this way a much broader grasp of the subject is obtained, and the specialist is much less likely to run into narrow grooves. Plato recognized this, and said that "the reason why the cure of many diseases is unknown to the physicians of Hellas is because they are ignorant of the whole, which ought to be studied also; for the part can never be well unless the whole is well."

Diseases of the skin are on the borderland between medicine and surgery, and both departments lay claim to certain skin affections.

Syphilis, tuberculosis and malignant diseases of the skin have been claimed by the surgeons, and the exanthemata, which occupy so much space in the works on dermatology of the early part of this century, have been almost given up by the dermatologists and annexed by the physicians, who in their text-books describe them very fully.

One hundred years ago the classification of skin disease, as described by Plenok in 1783, Willan in 1808, and Bateman in 1813, was based purely on the external appearances of the eruptions, the "physical-signs" as they might be called. The classifications adopted by these men are all much alike, namely, Maculæ, Pustulæ, Versiculæ, Bullæ, Papulæ, Squammæ, Tuberculæ, etc. Bateman has a class of exanthemata. Parasitic diseases were almost unknown, though Plenck has an order called "Insecta Cutanea." Elephantiasis Arabum, lupus, pellagra, syphilitica, keloid, diseases of the hair and nails, etc., were classed separately.

This classification was adopted by writers in England and on the Continent, either wholly or in a modified form. Then came the classification of Alibert, which divided the diseases of the skin into families, and was illustrated by a magnificent atlas of plates, which tended to popularize his views. His classification was as inaccurate as his pathology was erroneous; Rayer said, "it was deficient in unity and principle."

Hebra, inspired by Rokitansky, was the first to classify diseases of the skin on a pathological basis, and though his scheme has been much modified by recent discoveries and the better methods of histological investigations, most writers, even at the present time, have a classification more or less modelled on Hebra's system. I must not omit to mention the diathetic school of Hardy in Paris, and the anatomical and therapeutical school of Erasmus Wilson in London. In this Association both the clinical and anatomical classifications have been discarded, an alphabetical list of diseases being thought sufficient to fulfil all requirements.

Enough about classifications—a troublous sea on which I do not intend further to sail.

At the beginning of the 19th century *Impetiginous Eczema* of children was considered beneficial rather than injurious to the general health, and no remedial measures were advised. Now we know this eruption is due to a specific organism, and is best treated with germicidal remedies, and when cured the patient is much benefited. Cutaneous cancer was considered as the outward manifestation of a diathesis, the effect of which would soon be felt by some of the internal organs. Now we know that cancer is "prima facie" a local disease, and only becomes

general when the lymphatics are involved and the disease has lasted some time, that if eradicated early and thoroughly, it can be cured in many cases.

It was believed that the appearance of eczema or a lichen during the course of an internal malady, was always followed by a favorable solution of the disease; that during an acute disease the cutaneous affections would sometimes disappear, and physicians considered it was most important to administer remedies to bring it back so that by this means there might be a favorable termination of the internal disease. The idea that it is not well in all cases to try and cure an eruption, say of the scalp, for fear of entailing something worse upon the patient, is not yet extinct among intelligent people.

In the beginning of the last century in all works on Dermatology, Lepra and Psoriasis had separate chapters for their description, and were looked upon as distinct diseases. From the description given by Bateman in 1819, one would now conclude that they were one and the same disease; the only essential difference being that the patches in lepra are circular and discrete, while in psoriasis they are irregular and diffuse, and in 1842 S. Plumbe, although he devotes 12 pages to lepra and 21 to psoriasis, says that "he is fully convinced that for all purposes of useful discussion lepra and psoriasis might have been included under one head." He says also that "the information we have at present acquired in the modern study of cutaneous diseases, does not enable us to find a better reason for their separation than that afforded by the circumstance of its having been made by the ancients."

Arsenic and pitch were given with good effect then, and sulphur baths were strongly advised, but bleeding and purging were condemned by Bateman. White precipitate ointment is advised in some cases, also unguentum picis and dilute citrine ointment. Bateman found the decoction of the leaves and twigs of the Solanum dulcamara most beneficial.

As to the etiology of the disease, as much was known a hundred years ago as now; heredity was held to be a factor, and certain foods and drinks were said to produce it, cream, vinegar, oatmeal and alcohol, and in some cases violent exercise of the body are given as causes. Willan says cold and wet will bring it on, but the conclusion of most of these early writers is that the causes of this disease (lepra) are involved in much obscurity. No less than three varieties of lepra are described and eleven of psoriasis.

The history of *Scabies* is a most interesting one. Four different forms were recognized, viz., S. Papuliformis, S. Lymphatica, S. Purulenta and S. Cachectica. The clinical features of each one of these

were well known, and also the fact that scabies was contagious. Although the "itch mite" had been discovered as early as the 12th century, according to Hebra, and is mentioned by Ste. Hildegard in a book entitled "Physika," yet at the beginning of the 19th century it was unknown to most physicians, some recognized its existence, but it was regarded as a kind of louse and merely present accidentally in scabies. In the 17th century old women went about extracting these insects with the point of a needle from their burrows in the skin, and Borromo and Cestoni regarded the acarus as the cause of the disease, and said it could be communicated by contact and by shirts, pocket-handkerchiefs, gloves or other articles worn by the persons affected with the disease. The acarus would appear to have been lost sight of for many years, and even in the beginning of last century its existence was doubted by medical men in France, though veterinary surgeons were familiar with it as scab in sheep. But authors such as Bateman, Biett, and Casenave, still ignored it; some admitted the existence of the insect, but said it was a rare and casual circumstance, the approimate cause of the disease being the fluid secreted by the pustules.

Casenave (1829) said: "the proximate cause is wholly unknown," and thinks that pedicular diseases have been mistaken for it by those who believe in the itch mite. M. Gales had in 1812 at the Hôpital St. Louis, demonstrated many times the presence of the insect, and described it. Still Casenave says in 1828, "that until M. Gales, . . . would again visit the Hôpital St. Louis and reiterate his experiments, he should think himself justified in believing that the acarus does not exist."

In 1834 a Corsican named Renucci taught the physicians of Paris how to find the acarus. But old beliefs and superstitions die hard, and even after Eichstädt of Griefswald in 1846 described the burrow and position of the eggs in it, and the larval stage of the animal, and Languentin and Bourguignon described and gave drawings of both the male and female itch mite, and proved by experiment the contagiousness of scabies to be due to the transference of this insect, yet the profession was not convinced. In 1852, nay, even as late as 1864, some authors (Casenave, Duvergie and Gilbert), admitted that scabies could be communicated by the insect, but held that the secretion from the eruption itself was the most frequent cause of contagion. Duvergie said in 1863, that "Scabies may be a spontaneous disease." Hebra in 1846 wrote a paper on scabies, in which he credited the acarus with being the only means of contagion in this disease.

Ringworm of the Scalp was classed under the Herpes group of erup-

tions, with herpes zoster, etc., and was called herpes capitis, or tonsurans, that of the body, herpes circinatus. Most English dermatologists up to the middle of the last century held that ringworm was not contagious, because no other form of herpes was, and it was not inoculable. Casenave held strongly that H. circinatus was contagious, but did not know it was caused by a vegetable parasite. Andrew Paul, who published in 1838 an essay on ringworm, with plates, quaintly says in his preface that "he has added some plates containing representations from nature that those who have not leisure to read the book through may, however, by looking over them, have some knowledge of what it contains." Mr. Paul's work gives one an idea of the extent of the information on the subject which existed at that time. The nomenclature is most confused, for under Ringworm are figured herpes zoster, herpes iris, herpes circinatus or vesicular ringworm, herpes labialis; porrigo favosa (well illustrated), porrigo decalvans (alopœcia areata), porrigo aparsa (favus), porrigo annulata (probably lupus erythematosus) and another in the head, probably true ringworm. And again impetigo figurata, probably impetigo contagiosa. There is also a good representation of a pediculus, which is said to attack the heads of children affected with ringworm. He holds ringworm is highly contagious, but is influenced by unhealthy secretion of milk, impure air, teething and surfeit. He looks on the disease as at first local, but afterwards becoming constitutional, as evidenced by the enlargement of the glands of the neck. Pediculi capitis, favus, herpes, scabies and seborrhœa are all confused with ringworm. The itch insect and pediculi are spoken of indifferently as one and the same, and he describes how the galley slaves at Leghorn are very dextrous with pin and needle in extracting them from the skin.

This book gives one a very good idea of the confusion which then existed as to the nature of the various diseases which attack the scalp, and the great ignorance which there was before the discovery of the ringworm fungus by Gruby in 1843.

Tinea Sycosis Barbæ had been described by Celsus and later by Galen, but Bateman is the first to give a good description of sycosis. He treats it with mercurial ointments, but at the same time prescribes alternative doses of mercury and antimony followed by cinchona or serpentaria, "especially where there appears any affection of the digestive organs, which not infrequently occurs with this eruption." Most of the writers of the early part of last century confuse ringworm with sycosis, and many later on describe this disease as caused by a vegetable parasite. Even as recently as the time of the great Hebra sycosis was supposed to arise from a morbid principle in the blood. Some said it was apt to occur in cooks, founders, stokers and others

subject to long continued heat; Erasmus Wilson supposed it due to night air, and many to blunt razors (a very probable contributory cause). Hebra said it was due to letting the beard grow; he laughed at the idea of the disease being caused by a dyscrasia.

Now we know that the disease is of microbic origin and contagious, and is often conveyed by the shaving brushes and towels of barbers. According to Unna, there are two forms of the disease, one of coccogenic, the other of bacillogenic origin.

Nearly all the works on dermatology in the early part of the century have a chapter on *Vaccinia* or cowpox, and give accurate directions how to procure the vaccine virus, and the appearance of the vaccine "pock" in its various stages is described minutely. Vaccinia is classed under the pustular eruptions. A number of spurious vaccine pocks are described. Casenave (1829) mentions the fact that small-pox sometimes co-exists with vaccinia, or that vaccinia does not always protect, the same may be said of innoculation, yet both will modify the attack of small-pox if they do not protect. He concludes by saying, "Vaccination without inducing any danger in itself is still a preservative means of the highest grade of utility, and it is perhaps the most glorious victory of the art of medicine."

Would that all thought so now! In those days people were familiar with the terrible ravages of small-pox, and knew that few reached adult life without being pitted, so they welcomed with joy any means which held out a promise of relief from the dread scourge. Now-a-days, anti-vaccination societies abound, and it has become as much of a cult as Christian Science, Homœopathy, and such like delusions. Alas for the progress of the human race and its improvement by education! Education has not destroyed superstition or the belief in fads, for it is among the so-called educated classes that quackery flourishes and has its chief support.

In this brief sketch I have given you a sufficiently long account of the state of knowledge of some of the diseases of the skin in the beginning of the 19th century, and have told you how confused most of this knowledge was. The discovery of the parasitic origin of many affections aided much in clearing away the clouds and mists which enveloped diseases of the scalp especially, and prepared the way for the Vienna school of pathology which was led by Hebra, who was inspired by Rokitansky. Hebra, by his scientific knowledge and his common-sense way of looking at diseases of the skin, has done more than any man to drive away the superstitions and fallacies which enshrouded dermatologists at the beginning of the last century, and in this he was assisted by Hardy of Paris and Erasmus Wilson of London.

During the last quarter of the 19th century the histological and

bacteriological methods of investigation have thrown much light on diseases of the skin, and have helped to place the study of dermatology on a scientific basis. Many new affections have been described, and many old ones have had to be re-classified. The parasitic diseases are becoming thoroughly known, and with the new means at our disposal for investigation, ringworm, favus, tinea versicolor and scabies are now fully understood—the first named, owing to the work of Sabourand and others, is now known not to be due to one and the same fungus, but to several different kinds.

Eczema seborrhœicum has been given to us by Unna, and Duhring has contributed Dermatitis herpetiformis. Then we have Raynaud's disease, myxœdema (Ord), angio-neurotic œdema, pityriasis rubra pilaris, parakeratosis variegata, porokeratosis, blastomycosis, and many others which I have not now time to even mention. Lupus, which formerly was classed under the new growths, is now placed under tuberculosis, though there is yet some difference of opinion as to the proper place of the erythematous variety.

Many new remedies have been introduced, such as chrysarobin for psoriasis, thyroid extract for myxœdema, and many new germicides, such as ichthyol, napthol, salicylic acid, resorcin, etc., their name is legion. The X-rays and sunlight have been pressed into the therapeutic service, and animal extracts are as popular now as in the middle ages.

The advances within the last quarter of the 19th century, both in medicine and surgery, as well as in the special departments, have been marvellous. Could one of our confrères of the first quarter of the century come to life, he would imagine himself to be under an enchantment, and yet the present generation look upon these wonders unmoved, and take them as a matter of course. It is possible that the present century will see much greater marvels than the past, and that diseases which are now raging in our midst may be altogether abolished, for most are preventible.

It has been said that nearly all lethal diseases might be classed under three heads, the *Tuberculous*, the *Carcinomatous*, and those due to *Septic germs*. It is very possible that these diseases may be abolished by some antitoxin, and that syphilis, leprosy and diseases of that class, may be so controlled as in time to be abolished altogether, and then the occupation of the doctor will be gone, for people would only die from old age or from accident; a few surgeons would be required to treat the accidents which would continue to happen.

Such is the dream of the more Utopian members of our profession, and I might say with Hamlet, "It is a consummation devoutly to be wished."