used) with a small metal screw-driver like lancet. The blade is 0.3 centimeter broad and half moon shaped. This makes an ideal scarifier when given the rotary motions of a screw driver. It is so tempered that the half moon blade may be repeatedly sterilized in an alcohol flame without injury. The scarifications are made in two parallel columns an inch apart. Each time between vaccinations the scarifier is sterilized in the alcohol flame, thus preventing contaminations or mixed vaccines. The ends of the tubes containing the various vaccines are wiped with sterile gauze to clear away the spicules of glass. The usual amount of the various vaccines taken has been 2,000,000 gonococci; 40,000,000 of the *Staphlococcus aureus;* 4,000,000 streptococci; 8,000,000 colon bacilli and 4,000,000 typhoid bacilli. In each case the amount corresponds to 0.1 c.c. of the stock vaccines of manufacturing laboratories. The skin is scarified with sterile water, a salt solution of physiologic strength, or 50% glycerin and 1% phenol in isotonic salt solution. This is used as a control. Usually five other vaccinations are made. The types of organisms used depend upon the suspected infection. A fairly good reaction shows a slightly reddened area in the neighborhood of 5 mm. in diameter with slightly tense, firm and hard center. A moderately good reaction shows the hyperemic area about 10 mm., persistent and distinctly infiltrated. A very good reaction shows a distinctly edematous site about 25 mm. or more and marked infiltration and hyperemia.

CHAPTER II.

SPECIAL DERMATOSES.

Dermatobia Noxialis Dermatosis. J. D. Manget[1] reports the case of a patient infected by *Dermatobia noxiadis* by being bitten by flies while bathing in Mexico. The symptoms were general malaise, slight fever and small lesions on the back and shoulders, which caused sharp lancinating pains at times. Six weeks after exposure there were no malarial parasites found in his blood. In the five lesions on the shoulder and arm were found motile larvæ, with branched hooklets on the head, which caused the intense pain. Recovery soon followed the removal of these.

Morphea-like Epithelioma. M. B. Hartzell[2] reports 3 cases of morphea-like epithelioma. The first patient was temporarily cured by *x*-ray treatment, as was the patient in the second case, which was of interest on account of the early age at which the disease appeared, the patient being only 24. The third case was of more special interest because it was microscopically diagnosed, this not having been permitted in the other two. In all three the disease began as a smooth slightly elevated plaque, of a yellowish-white or yellowish-pink tint, over which numerous small blood vessels ran, gradually increasing in size and after some time developing ulceration with usually sharp margin. The progress was slow without marked subjective symptoms. Stellwagon, who has the only text-book reference to the subject, curtly alludes to the possibility of epithelioma resembling morphea. Crocker refers to rodent ulcer, unique in his experience, which Hartzell thinks must have been this sort of epithelioma.

Dermatitis Pediculoides Ventricosus. For 8 years cases have occurred in and about Philadelphia[1] of a new skin

(1) Medical Record, June 26, 1909.
(2) Jour. Am. Med. Assoc., July 24, 1909.

disease which appeared in epidemic form, in the summer, the small epidemics being localized to certain districts, even to particular houses. The eruption first appeared like simple urticaria; in the middle of the wheals, however, soon appeared minute vesicles, the latter becoming pustular. The onset was sudden and the duration several weeks, during which time the itching was so intense that patients often were obliged to abandon their occupations. The etiology was quite obscure until recently when an outbreak among sailors on a yacht in the harbor of Philadelphia attracted the attention of Goldberger, who started an investigation with Schamberg. Nearly 125 cases were investigated, these coming from the crews of 5 boats and the inmates of 20 dwelling houses. The first point was the history of recent handling or sleeping on new straw mattresses. Further investigation proved that all of these mattresses had been bought from 4 dealers in Philadelphia, who obtained their straw from a common source in New Jersey. Volunteers who exposed their bare arms between two of these mattresses, or slept upon them, promptly developed the disease. Some of the straw was then sifted and the dust collected in Petri dishes. One portion was placed in the axilla of a volunteer and in 16 hours caused the characteristic eruption. Another portion, after exposure to chloroform, when placed in the opposite axilla appeared to be quite innocuous. On careful search of the dust minute mites were discovered, 5 of which were obtained and, when placed on the skin under a watch crystal, produced 5 typical lesions of the disease. The mite was diagnosed at the United States Bureau of Entomology as being very close to or identical with Pediculoides ventricosus. As proper treatment of the infected mattresses with sulphur, steam, or formaldehyd in a vacuum chamber will kill the mite, the prophylaxsis against this disease is now comparatively a simple matter.

Condyloma Acuminata, according to P. Stancanellia,[2] is chronic proliferation which begins in the mucous corpuscles of Malpighi, resulting in infiltration and proliferation of

(1) Jour. Am. Med. Assoc., July 24, 1909.
(2) Gior. Intern. delle Scienze Med., May, 1909.

the papillæ; a new formed tissue of embryonic type arises, which tends to organization and histologic differentiation. Its onset is in the mucous bodies. The tissue is of hyperplastic type which tends to organization. It is furnished with a peripheral nervous reticulum, fibrillar and ganglionic. Bacteriologic and bacterioscopic researches indicate that it is not caused by bacteria. It is due probably to an exogenous inflammatory chemical substance penetrating through the epithelial strata.

Infective Warts. J. Morton[1] reports a case in which warts appeared in several members of a family under circumstances which support the theory of their infective nature. The family in question had in their house for some months a maid who suffered from numerous warts on the hands and arms. Shortly afterward it was noticed that the children, three in number, had all developed warts on the adjacent sides of two fingers one after the other, and in such exact apposition to one another as to suggest infection by contact, a conclusion which is still further confirmed by the additional observation that now one child who has a persistent habit of biting these fingers, has developed two fresh warts on the upper lip, and one inside the mouth on the anterior surface of the gum. The influence of suggestion in production of warts should be excluded ere the infective element can be positively accepted. In neuropaths warts may be produced and removed by suggestion. One of the functions of the village wisewoman or "white" witch was to charm away warts. There is strong evidence of such suggestion. (Tuke, "Influence of the Mind.")

Cheilitis exfoliativa is a condition allied to Paget's disease of the nipple, which, according to M. L. Ravtch,[2] is a keratosis characterized by excessive epidermic formation and cornification. He reports 4 cases. One was in a 39-year-old stockman who denied syphilis but had had leucokeratosis buccalis for 5 years. The lower lip presented cheilitis exfoliativa, which cleared up under a 15% solution of silver nitrate applied by cataphoresis. This was

(1) British Med. Jour., Nov. 11, 1908.
(2) Jour. Am. Med. Assoc., Nov. 14, 1908.

without effect on the leucokeratosis. The second case was that of a 46-year-old dry goods man who was an inveterate smoker. He denied venereal disease. For 2 years his lower lip felt tight and itchy. At first he thought he had chapped lips, but when he noticed exudation, crustation and exfoliation, he consulted several physicians, and one of them pronounced the growth malignant. On examination, Ravtch found it cheilitis exfoliativa. The mucous and salivary glands of the mouth were not affected. After 14 *x*-ray treatments the patient was discharged cured. The third case was that of a 35-year-old man whose history was good. He had always enjoyed good health. The symptoms were identical with those of Case 2, except that exfoliation was more pronounced. Heidingsfeld pronounced the disease lupus erythematosus. The examination, which was made in the evening, was a hasty one. Ravtch applied a 15% solution of silver nitrate, followed by Lassar's paste (the one with salicylic acid) daily. Later on he used the *x*-ray. The patient improved. A whisky drummer complained of dryness in the mouth and contraction of the lower lip. The symptoms were the same as in the previous cases except that the muciparous glands were more involved, the exudation and crusting more pronounced. As the patient greatly objected to *x*-ray treatments, Ravtch used tincture of iodin by cataphoresis and Lassar's paste as a daily application. The patient showed great improvement. There is a marked tendency to relapse.

Dermatitis from Yellow Moths. According to D. Saraguchi,[1] an eruption due to yellow moths is urticaria-like with severe itching. In those cases in which the eyes are affected there is a congestion of the conjunctiva as well as a redness of the eye-lids. The skin is never affected in any parts except those which were touched by the powder from the moths. The skin affection does not spread. The duration of this disease is from 6 to 13 days, when it disappears spontaneously.

Dermatitis Venenata from Hair Dye. J. Kingsbury[2] reports the case of a 38-year-old married alcoholic in good health, who when first seen had an erythematous eruption

(1) Sei-I-Kwai, April, 1909.
(2) Amer. Jour. of Derm., February, 1909.

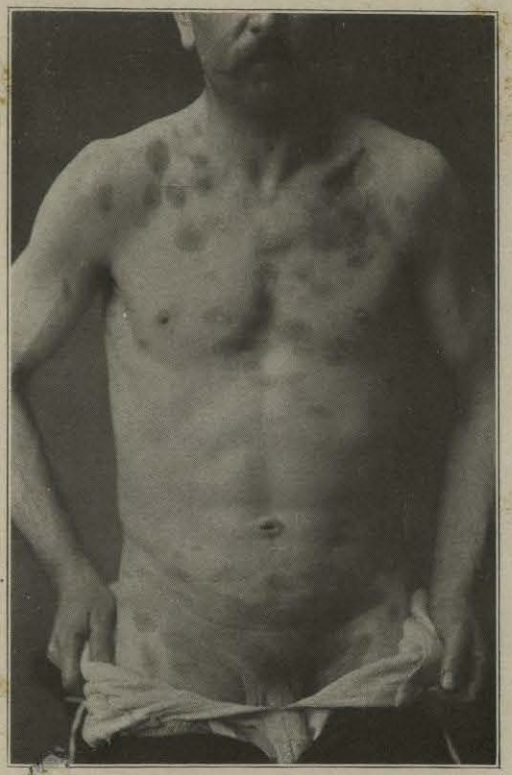

PLATE II.

TINEA CIRCINATA.

An eruption of two months' duration occurring in a 33-year-old German worker in a soap factory; characterized by circinate lesions most marked on pectoral and inguinal regions. (*From the Dermatologic Clinic, Post-Graduate Medical School, Chicago.*)

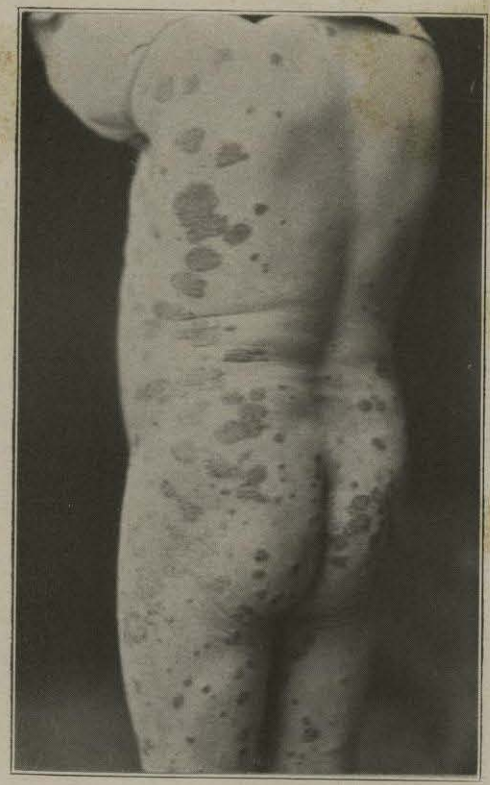

PLATE III.

ACUTE PSORIASIS.

Eruption of three weeks' duration; patient, a bartender, aged 53, had an eruption similar in character three years ago; interesting feature of this case is its wide distribution, its acute character and its occurrence after excessive alcoholism. (*From the Dermatologic Clinic, Post-Graduate Medical School, Chicago.*)

on the neck and face and complained of itching and burning. Hair showed evidence of artificial coloring and when questioned regarding the possible cause of the eruption the woman admitted that it had appeared shortly after the application of a new hair dye. An appropriate lotion was given at this time and the patient was cautioned against the continued use of the "regenerator." Another application was recently made, however, and it was followed almost immediately by a very severe dermatitis on her forehead, cheeks and neck. The eruption was vesicular in character and exuded a thick serous fluid. Eyelids became edematous and there was considerable thickening of the skin on the forehead and the neck.

Vitiligo in a 46-year-old negress is reported by J. Kingsbury.[1] About 2½ years before she noticed small white spots on her neck and shortly after similar ones developed on her face around the eyes. These rapidly increased in size and new patches appeared on the trunk, extremities and scalp. At present over half of her skin is white and there is white hair over the patches on the scalp. Although the woman is of pure negro blood there is an appreciable increase in the deposit of pigment at the border of several of the patches.

Molluscum Contagiosum. F. C. Knowles[2] reports that of 350 children admitted to a Philadelphia hospital there were 59 cases of molluscum contagiosum. Thirty-six of the patients were girls and 29 boys. The age was between 7 and 2 years. More than one area was involved in 27 of the cases. The eyelids were attacked in 22 cases; the chin in 6; the cheeks, right, left or both were involved in 11 cases; the forehead was the area of predilection in 11; the nose in 9; the cutaneous surface of the lip in 5 cases; the neck, anterior surface, in 5; the posterior surface of the neck in 3 cases; the left ear in 2; the dorsal surface of the right hand in 4 cases; the middle of the back in one case; and in one case, the left thigh was the site of attack. In one case, the vermilion border of the lower lip was involved by two small, pinhead sized lesions. Two of the

(1) Amer. Jour. of Derm., February, 1909.
(2) Jour. Am. Med. Assoc., Aug. 28, 1909.

patients had mollusca on the mucous membrane of the lip. A severe conjunctivitis was produced in one of the cases by a molluscum on the edge of the eyelid causing friction. One lesion was present in 19 of the cases; two in 12 cases; three also in 12 cases; four mollusca in 4 cases; five lesions in 2 cases; six in 4 cases; one patient had 7 lesions; and in five children there were, on each, 12 mollusca. The lesions were mostly from small to large pinhead in size; one molluscum was, however, pedunculated and cherry size. The author in conclusion remarks that molluscum contagiosum usually attacks the face, in a great majority of cases on, or in close proximity to, the eyelids. Children are more susceptible to the disease than adults.

Cysts of the Peliosebaceous System are, according to A. R. Robinson,[1] divisible into horn cysts and mixed or sebum cysts according to the comparative composition of horn cells and sebum in individual cases. As all the cyst formations appear to be associated with a hyperkeratosis follicularis, a pure sebum cyst cannot exist, but a pure horn cyst may exist without the presence of sebum. A horn cyst is composed of horn cells arranged usually more or less in a concentric manner even when in immediate connection with the common excretory duct and also when located outside this structure, and especially when in the latter situation. In shape they are cylindrical or egg-shaped when in a follicle, and roundish when in the cutis. The presence of a dark point corresponding to a follicle orifice shows the seat of the lesion in that instance, but horn cysts can communicate with the common excretory duct and yet the follicle orifice be not seen with the naked eye, not from obliteration of the duct but from the lateral location of the cyst to the follicle changing the normal relations. The absence of the macroscopic follicle orifice, in connection with a small, hard, whitish, pearl-like body, is no proof that the condition is pure milium as separate from follicle horn cyst or from the comedo condition. The view that in every case of horn comedo there is a condition of hyperkeratosis of the general cutaneous sur-

(1) N. Y. Med. Jour., June 5, 1909.

face or of the orifice of the excretory duct at the point of exit is not always true, but is probably true of the majority of cases. The cyst is a consequence of this process extending downward to the middle third of the follicle and is the source of the excessive amount of horn cells. The condition is not one of simple retention but the hyperkeratosis can commence within the follicle neck, as is the case where it is impossible or very difficult to detect an excretory duct opening in relation with the cyst, or where the duct orifice is quite narrow and apparently normal.

A pure horn cyst can exist in the follicle neck with a normal condition of the sebaceous gland proper. The small, milium-like bodies are observed, although very rarely in cases of chronic lichen planus. This condition has been observed in other diseases in which there is an active participation of the corneous layer, as in ichthyosis. Horn cysts can occur as small microscopic bodies in the follicle or as black points at the orifice or as pearl-like bodies shining through the skin; these latter are usually called milia. Whether all horn cysts are primarily in connection with the follicle duct or whether those showing no duct orifice in the skin over them are extrafollicular primarily or secondarily has been studied by Robinson in a considerable number of lesions, and he finds that horn cysts may be connected with a follicle and yet no orifice be detected satisfactorily by macroscopic examination, that is, such formations can appear as milium bodies as these are usually defined. In this case the duct orifice is not dilated and lies to one side and partly beneath an apparently normal epidermis. The smallest comedones lie in the follicle neck, the medium sized in the middle part of the duct, and the largest occupy the greater part, if not all of the degenerated follicle.

Acute Dermic Necrosis. Carey Coombs[1] reports this in a woman. It began with intermittent fever, pain along the course of the sciatic nerves, followed after a few days by the appearance of bullæ, like those of ecthyma, near the tuber ischii. These bullæ formed sores which healed in the course of 3 months. Later a bulla appeared on

(1) British Medical Jour., Aug. 14, 1909.

the inner side of the right knee, and in the course of 2 months the whole skin was gone from the right leg. On some days more than a square inch of skin died. The process usually began by serum under the epidermis at the growing point of the necrotic area; the cutis vera died in a few hours; when it was cut off granulations were found growing beneath. Eighteen months after the disease started the whole surface had skinned over. Some six months later the skin began to die again, and the patient's temperature was above 99 for 25 weeks, the highest being 104. Treatment consisted in quinin and iron throughout the illness. Opium was given at night and added to the lanolin ointment containing tincture benzoin. Boric acid in carbolic solution was used at first and iodoform was added later, and the edges of the wound were painted with hydrogen peroxid. At the onset of the second attack the sores were ionized by placing the positive electrode of a battery over layers of lint soaked in 2 per cent. zinc sulphate. The hydrogen peroxid and iodoform lotion, however, had a better effect. Persistence of high temperature, appearance and progress of the sore, and the fact that the first nurse had to leave because her hands became infected, suggested a bacterial cause, make the case peculiar. Syphilis and tuberculosis might be dismissed, as the patient and her children had never shown any tendency suggestive of either. Diabetes is, however, not excluded.

CHAPTER III.

THERAPY OF THE DERMATOSES.

Mercurial Baths in Child Furunculosis and Pemphigus. A. Reiche[1] urges Lewandowsky's procedure of driving staphylococci from the horny dermic layers by profuse sweating. They are then killed by a bath of 1 to 10,000 solution of mercuric chlorid. The child is first given a hot bath, then the pack, with warm drinks, and, from 3 to 5 grains aspirin. The furuncles are opened and sponged in the bath, the body lightly rubbed. The child is then rinsed off, wiped dry, and dusted with talcum. This procedure is repeated for 2 or 3 days, the loss of fluids being compensated by plenty of warm drinks. The children tolerate the sweating and baths well. The furunculosis was cured by the end of one or two weeks. The general health improved much under the cautious diet. This treatment has proven successful even with frail infants having general furunculosis. The same method has been applied with excellent results in acute pemphigus of the newborn, supplemented by application of 5 parts ichthyol and 5 parts glycerin in 100 parts water.

Scarlet Red for Epithelial Granulation. J. S. Davis[2] has treated 60 cases with scarlet red ointments of 2, 4, 7, 8, 10 and 20% strength. The base was vaselin. Sterilization caused the color to darken, but this did not affect the stimulating power. Clean, healthy granulations should be bathed with boric solution and dried. If the granulations be unhealthy, hydrogen peroxid is used before boric solution. Free use of silver nitrate will down exuberant granulations. The skin surrounding the defect should be anointed with some bland ointment up to within 1 cm. of the edge. Since this has been done the irritation has been

(1) Therap. Monatshefte., May, 1909.
(2) Johns Hopkins Bull., June, 1909.