The disease is not confined to the nipple but has been observed upon the penis, scrotum, vulva, anus and abdominal wall. One breast is, as a rule, primarily affected, but subsequent development may involve both. The disease occurs principally in women between the ages of forty and sixty.

Etiology. Paget's disease has been ascribed to protozoa known as psorosperms but these bodies are now regarded as altered cells. The disease is considered by some to be an instance of cancer resulting from long continued circumscribed irritation; by others as cancer *ab initio.*

Pathology. Proliferation and thickening of the deeper layers of the epidermis and inflammatory infiltration of the corium are among the pathological findings. The later changes are those characteristic of carcinoma of the breast.

Diagnosis. Paget's disease closely resembles chronic eczema but may be distinguished from it by its sharp definition, raw, granular surface, long duration and intractable character.

Treatment. Radical measures, such as are recommended for epithelioma, should be adopted as soon as the diagnosis is made. When radical measures are refused an ointment of fuchsin, five grains to the ounce of cold cream, may produce palliation.

Prognosis. Early recognition and thorough removal render the prognosis not unfavorable. Later it is that of cancer in general.

PARAKERATOSIS VARIEGATA.

Synonym: Lichen Variegata.

Definition and Description. Parakeratosis variegata is a rare affection characterized by more or less generalized, round, oval, smooth, finely-scaling patches, interspersed with small papules capped with a scale. The patches are disposed in groups with healthy skin intervening, giving the skin a reticulated appearance. The patches are purplish or pale lilac in color but may be brownish or red and disappear on pressure. On removing the scales the skin has a bluish hue with a shining, waxy look.

The eruption is more common in men than in women, worse in winter and tends to fade in summer.

Subjective symptoms are absent.

The disease is slow and indolent in evolution and essentially chronic, lasting for months or years and is unaffected by treatment.

Diagnosis. Parakeratosis variegata is distinguished from psoriasis by the presence in the latter of papery scales, showing punctate hemorrhage on removal. It most resembles lichen planus, but differs from it in affecting the face, presenting a reticulated appearance, in the absence of itching and in its rebelliousness to treatment.

The *etiology* and *pathology* of the disease are obscure.

Treatment is ineffectual. Unna advises applications of pyrogallol, the toxic effects being guarded against by the internal administration of hydrochloric acid.

PARASITES OF THE SKIN.

The parasites that infest the skin are divided into two classes, *vegetable* and *animal.*

The effects produced depend upon the form, location and nature of the organism, and are for the most part processes of irritation and inflammation with the attendant changes.

Vegetable parasites belong to the class of fungi that show absence of chlorophyl. They produce the following affections, which have received separate descriptions: *tinea favosa* (*favus*) from the *achorion Schönleinii; tinea tonsurans* (ringworm) from the *trichophyton; tinea versicolor* (*chromophytosis*) from the *microsporon furfur; erythrasma* from the *microsporon minutissimum.*

Animal parasites are of two general types, those which affect the skin exclusively and live in the human integument, and those which gain their nourishment from the skin but do not reside in it.

To the first or true parasites belong the *acarus scabiei,* or *sarcoptes hominis* (itch mite); the *demodex folliculorum;* the *pulex penetrans* (chigoe, jigger, red bug); *filaria medinensis; leptus autumnalis* (harvest bug); *ixodes* (ticks); *cysticercus cellulosæ* (young of the tape worm).

To the second class or epizoa belong *pediculi* (lice, of the head, of the pubes, of the clothing); *pulex irritans* (flea); *cimex lenticularis* (bed bug); flies, mosquitoes, gnats and other dipterous insects.

PEDICULOSIS.

Synonyms: Phtheiriasis; Lousiness.

Varieties. There are three varieties of lice which affect the human body and are named, according to the region frequented, *pediculus capitis* (head louse), *pediculus corporis vel vestimentorum* (body or clothing louse), *pediculus pubis* (crab louse).

The condition produced by vermin is called *pediculosis.*

Pediculosis Capitis. The head louse is found most commonly in children, especially young, neglected girls. The parasites chiefly affect the occipital region and seek protection in the long hair of that locality. The lesions produced from the bite and presence of the insect are those occasioned by scratching, and consist of excoriations, pustules and crusted patches. The post-cervical glands are generally enlarged, especially in the presence of pustular lesions of the scalp.

In addition to the mature parasites, there are to be seen upon the scalp the nits, or ova, of the louse, small, oval, pearly bodies attached to the shaft of the hair.

The head louse is two millemeters broad with a triangular head, long body and short legs. The female is relatively more in evidence than the male, and is much larger. The vulval slit is upon the ventral surface, the penis of the male upon the dorsal, so that the attitude in copulation is the reverse of the ordinary. Hebra once witnessed the act under the microscope.

The lice hatch in six days and are capable of procreation in eighteen.

The color of the parasite varies somewhat with that of the host, the pediculus of the Caucasian being gray; that of the negro, black; of the Mongolian, yellowish-brown; and of the Esquimaux, white (Grindon).

Diagnosis. The presence of nits clinging to the hair is sufficient evidence of the existence of lice. The parasite may escape detection by hiding in the hair and cannot be discovered without considerable search.

Treatment. Equal parts of kerosene oil and olive oil thoroughly applied to the scalp and hair will kill lice and nits in one application. Cau-

Fig. 77.—Male Pediculus Capitis (Schamberg).

tion should be observed against approaching too near a flame when the hair is saturated with the oil. The nits may be removed by washing the scalp in dilute acetic acid or vinegar, or drawing the hair through a towel soaked in vinegar. This serves to dissolve the cement substance by means of which the nit is attached to the hair.

The fluid extract of larkspur (*delphinium staphisagria*) is effective and is more elegant than the kerosene oil.

Pediculosis Corporis vel Vestimentorum. Pediculosis corporis is a condition due to the presence of the body or clothes louse, the latter being the correct term as the parasite lives in the seams and folds of the clothing. It is the faithful companion of the unwashed in civil life and of soldiers in time of war, and is vulgarly termed "gray back." The ravages of the parasite are seen about the neck, shoulders, waist and hips, where the skin is in close contact with the clothing.

The bite and irritation of the parasite produce papules, punctate hemorrhagic lesions, and pustules, and scratching leaves characteristic parallel,

linear excoriations. In long standing cases the skin becomes deeply pigmented with here and there bluish-white spots. Adults are more frequently affected than children.

Diagnosis. The diagnosis of pediculosis vestimentorum is made by the characteristic location of the lesions, hemorrhagic specks and linear scratch-marks, and the discovery of the louse in the seams or lining of the clothing.

The body louse is three millimeters long and has longer legs than the head louse. It shows variations in color in harmony with that of its host.

Treatment. Treatment consists in cleanliness, with thorough baking or boiling of the clothing. The lesions require sedative applications.

Pediculosis Pubis. The crab louse is found upon the hairs of the genital organs, perineum, anus, chest and axilla. Exceptionally it may be found in the hair of the eyebrows, eyelashes, and extremities.

Fig. 78.—Female Pediculus Corporis (Schamberg).

This louse is smaller than the two foregoing and has anterior legs terminating in a straight claw intended for locomotion, while the posterior legs are provided with a crooked claw for clinging to the hair. The crab louse attaches itself to the base of the hair at its junction with the skin and may be seen as a dirty-white or grayish speck or flake. The nits adhere closely and their position on the shaft of the hair relative to its base furnishes some idea of its length of residence.

The pediculus pubis is conveyed usually through sexual intercourse or finds lodgment on the seat of privies and public water closets and attaches itself to the first comer.

It occasions an itching somewhat paroxysmal in character, and the lesions apparent are those caused by scratching.

A peculiar, steel-gray pigmented spot or spots the size of a finger nail are said to constitute the characteristic lesion of pediculosis pubis. These spots are called *maculæ ceruleæ* and may be produced by rubbing the

parasite against the skin. The color corresponds to that found in the thorax of the pediculus. The stains disappear soon after the removal of the parasite.

Diagnosis. The diagnosis of pediculosis pubis is readily made by the discovery of the mature parasite and the nits, the former being easily seen and makes no effort at concealment. Itching of the genital region should always be the occasion for a search for the parasite.

Treatment. The popular remedy is mercurial ointment, which is effective but dirty and disagreeable. Park, Davis & Co.'s germicidal soap contains 1:1000 green iodide of mercury and is agreeable and will promptly destroy the pediculi.

Tincture of *cocculus indicus* (fish berry), a solution of quinine, half an ounce to three ounces of alcohol, are also actively parasiticidal.

An ointment of beta-naphthol, ten per cent., or of ammoniate of mercury, five per cent., are recommended for the same purpose.

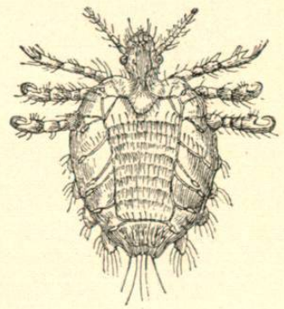

Fig. 79.—Pediculus Pubis (Schamberg).

A rapid method of killing the parasites consists in spraying the parts with ether, then removing the nits by drawing the hairs through a piece of gauze soaked in dilute acetic acid or household vinegar. It is not necessary for the hair to be cut off to facilitate treatment.

PELLAGRA.

Synonym: Lombardian Leprosy.

Definition. Pellagra is a disease endemic in certain parts of Italy and Spain and is supposed to be due to an excessive diet of spoiled or fermented corn.

Symptoms. Pellagra is characteristized by prodromal constitutional symptoms which are followed by an erythematous eruption on the exposed parts of the body, the back of the hands and feet, neck and face.

The erythema is at first red, tense, shining and accompanied by blebs and vesicles. In two or three weeks the surface becomes covered with broad, thick scales which on removal show the skin beneath to be thickened and of

a *cafe-au-lait* color. The lesions disappear during the winter and return with increased severity at the approach of hot weather. The erythema does not disappear on pressure, and after repeated recurrences, the thickened, pigmented skin becomes shining, atrophied, cracked, and its sensibility much diminished. The eruption spreads widely and may involve the entire surface of the body.

The patient becomes weak, emaciated, developes severe cerebral symptoms, falls into a typhoidal state and usually dies within five years from the onset of the disease. Mild cases may recover.

Pellagra is endemic among the poorer peasantry of Northern Italy and certain parts of Spain and France, and is an occasional exportation to this country. Women between the ages of thirty and fifty are more commonly affected than men. The disease is thought to be due to poverty, poor hygiene and the use of spoilt maize as a constant diet.

Diagnosis. Erythema of the exposed parts, with malaise, depression and debility occurring in a person from a pellagrous locality should arouse a suspicion of the nature of the disease.

Treatment. Improved hygiene, change of diet, and arsenic internally, are the recommendations for treatment.

PEMPHIGUS.

Definition. Pemphigus is an acute or chronic disease, characterized by the eruption of successive crops of bullæ, irregular in size and shape, arising from erythematous spots, or apparently normal skin.

Varieties. At one time pemphigus was the term applied to any bullous eruption, but at present two varieties only are described, *pemphigus vulgaris* and *pemphigus foliaceus*, which are probably distinct affections.

Pemphigus Vulgaris. Pemphigus vulgaris usually begins with some constitutional symptoms of a general nature. A crop of bullæ then appears, few in numbers, scattered over the body, especially the lower part of the face, trunk and limbs. The lesions vary in size from a small pea to two or more inches in diameter from coalescence. The bullæ spring from apparently sound skin but develop later a red areola. The contents of the lesions is at first clear, then becomes cloudy, rarely hemorrhagic. The bullæ dry up in a week or ten days, drop off and leave the skin somewhat pigmented in white people, and light in color in colored subjects. The eruption occurs in crops at intervals of a few weeks to a few months. The mucous membranes are not spared and cutaneous bullæ may be found associated with an affection of the eye called *essential shrinking* of the *conjunctiva* causing much deformity.

Recovery ensues in favorable cases in a few months; more severe cases are marked by an indefinite succession of eruptive outbreaks. In the malignant form of the disease ulceration attacks the base of the bullæ, grave con-

stitutional symptoms supervene, and death results from some intercurrent affection.

Among other pemphigus forms *pemphigus neonatorum*, a grave affection of the new born, is closely allied to *impetigo contagiosa bullosa* and is septic in origin and not properly classed with pemphigus.

Pemphigus contagiosus is most likely also a form of impetigo contagiosa.

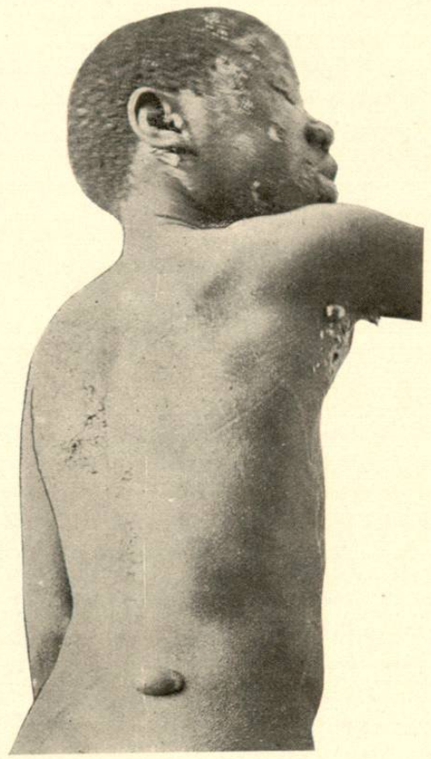

Fig. 80.—Pemphigus Vulgaris (Ohmann-Dumesnil).

Acute pemphigus is probably a bullous erythema.

Pemphigus hystericus occurring in pubescent girls is apt to fall in the class of feigned eruptions.

Pemphigus vegetans is a term bestowed by Neumann upon a condition characterized by fungating, oozing granulations, occupying the seat of former bullæ. The fungating areas form patches, spread to affect the scalp, axillæ, elbows, hands and feet and vulva. The mucous membranes are involved. The affection is progressive and usually ends fatally. It is generally found among the subjects of syphilis.

Pemphigus Foliaceus. Pemphigus foliaceus is the rarer and graver form of the disease. The bullæ are flaccid, containing puriform fluid which changes position with the attitude of the patient. They soon rupture, leaving bare a raw moist surface, bathed in a foul-smelling sero-pus and surrounded by a ragged fringe of epithelium. New lesions develop upon the seat of former ones and the eruption spreads until the whole surface of the body, including the palms and soles, may be irregularly crusted, raw, red, and bathed in offensive secretion. The mucous membranes are also implicated.

The disease lasts for months or years and eventually ends fatally.

Etiology. The causes of pemphigus are obscure. Nervous disorders, nephritis, debility, pregnancy, septic conditions have been held as causes. Acute pemphigus has been observed among those who habitually handle meat. Children are more often affected than adults. The disease is rare, especially in the United States. It is not contagious.

Pathology. The essential lesion of pemphigus is caused by an outpouring of fluid which separates the layers of the skin. The bleb has the horny layer or the entire epidermis for its roof. Inflammatory evidences are present to a variable extent.

Diagnosis. Pemphigus is to be distinguished from *erythema bullosum, dermatitis herpetiformis, bullous syphilide,* and *impetigo contagiosa.*

In bullous erythema, the bullæ spring from an erythematous, often raised, base, and run a comparatively brief course.

In *dermatitis herpetiformis* the lesions are multiform and pruriginous; in *bullous syphilide* the bulla dries into a thick, greenish crust with an ulcerated surface beneath; in *impetigo contagiosa* characteristic lesions are seen on the hands and face, drying in papery crusts and usually furnishing a history of inoculation.

The chief points of diagnosis in pemphigus are tense bullæ springing from apparently normal skin, occurring successively and running a notably chronic course.

Pemphigus foliaceus in the early stages is recognized by flabby bullæ with contents shifting position somewhat like the bubble of a spirit level. Later the distinction between it and generalized *eczema rubrum, exfoliative dermatitis* or *pityriasis rubra* is very difficult.

Treatment. Attention should be given to the condition of the general health. Quinine, iron, cod liver oil are the chief reliances and must be given in considerable doses for a prolonged period. Crocker advises salicin, fifteen grains three times a day, to be increased.

Locally the bullæ should be opened and soothing, protective applications made. Dusting powders of bismuth, starch and oxide of zinc are

beneficial, as are also lotions of boric acid, calamine and lime water. The continuous bath has proven serviceable in pemphigus foliaceus.

Prognosis. The prognosis of pemphigus is in the main favorable. In mild cases recovery is probable but relapses are the rule. In the severer types the prognosis is grave; hopeless in pemphigus vegetans and pemphigus foliaceus.

PERFORATING ULCER OF THE FOOT.

Description. Perforating ulcer of the foot is an uncommon affection and usually attacks the metatarso-phalangeal joint of the great or little toe on its plantar aspect. One or both feet may be concerned. The lesion begins as a corn which undergoes ulceration, the ulcer extending slowly until the structures down to the bone are involved and a more or less painless sinus is formed. The ulcers may be single or multiple and are due to trophic degeneration of certain nerves occurring in the course of *syphilis, locomotor ataxia, leprosy* and *peripheral neuritis.*

The hand may also be affected.

Treatment. The treatment of perforating ulcer of the foot is based on general principles. Packing the sinus with salicylic acid paste is suggested by Treves. Stretching of the musculo-cutaneous, plantar or posterior tibial nerves has been followed by successful results, though the ulcers are apt to return. If more conservative measures fail, amputation must be performed.

PERLECHE.

Description. Perlèche (*pourlècher*, to lick the lips) is an affection of infants and young children occurring at the commissure of the lips as a whitish, macerated, wrinkled, loosely adherent pellicle which lends an appearance of fissuring to the angles of the mouth. The commissures may divide a patch of perlèche into two halves, like the leaves of a book. Varying grades of stomatitis are associated with the affection.

Subjective symptoms are slight but sufficient from a sense of stiffness to cause the child to lick its lips, hence the name. The affection is contagious and thought to be due to one of the pyogenic micro-organisms.

Perlèche resembles a mucous patch but is distinguished from it by the coexistence with the latter of corroborative evidences of syphilis. It is a rare disease, at least in this country.

Treatment. Cauterization with nitrate of silver is promptly curative. It tends to spontaneous recovery but there may be left a pearly, smooth surface lasting for some time after the disappearance of the disease.

PITYRIASIS ROSEA.

Synonyms: Pityriasis Maculata et Circinata.

Definition. Pityriasis rosea is an acute, mildly inflammatory affection characterized by rounded or oval, red macules which enlarge into scaly, dry,

circinate or oval patches with salmon-colored, wrinkled, parchment-like centres and rosy red borders.

Symptoms. The eruption, with or without mild prodromata, may appear rapidly or slowly upon the anterior aspect of the trunk in the form of small, pink papules surrounded by a halo of redness. These enlarge into macules and finally into patches which are variously sized and more or less round or oval in contour, and pale-pink or red in color, gradually becoming shining, yellow, wrinkled, like chamois leather in the centre, and rosy at the periphery. The patches are very sparsely covered with fine,

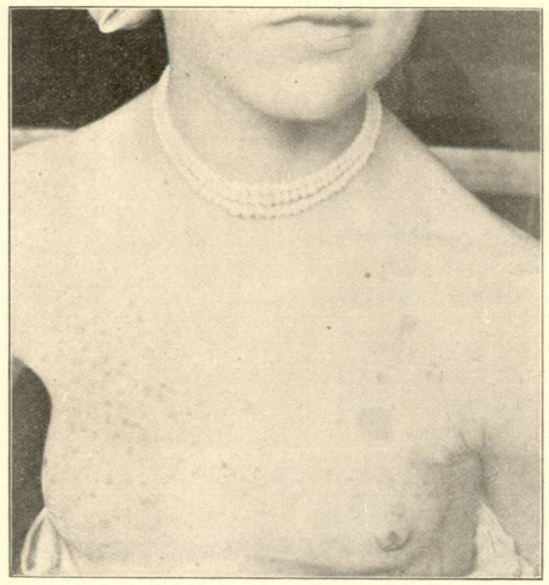

Fig. 81.—Pityriasis Rosea.

branny scales. They fade out slowly, beginning in the centre, and leave a faint ring to mark their former outlines. There is frequently to be observed a herald or primitive patch, fawn-colored or yellowish, which constitutes the point of origin of the eruption.

The regions affected by pityriasis rosea are the neck, front of the chest and front and sides of the abdomen; the face and extremities usually escape.

The eruption runs its course in four to eight weeks though exceptionally it may be continued for several months.

The subjective symptoms are not marked.

Etiology. The cause of pityriasis rosea is not definitely known. It is regarded by some authors as parasitic in origin, being an aberrant type of diffused ringworm. No parasites have, however, been isolated.

The affection is more common in children and young adults than in older individuals.

Diagnosis. Pityriasis rosea must be distinguished from syphilis which it much resembles. The syphilide is less red in color, lacks the salmon or fawn-colored patches and there are usually concomitant evidences of syphilis at this stage in the form of enlarged glands, mucous patches and remains of a local sclerosis which will lead up to a correct diagnosis.

Ringworm is not so rapid in evolution as pityriasis rosea, is more inflammatory in character and the trichophyton fungus may be found in the scales.

Psoriasis presents characteristic scales which are thicker, larger and more adherent than those of pityriasis.

Patches of seborrhœic eczema are found upon the scalp and other hairy regions of the body and present a more definitely raised border with moist and greasy scales.

Treatment. Pityriasis is inclined to run its own course regardless of treatment.

Internally, salicin in ten to fifteen grain doses may be given three times a day and locally ointments of boric acid or of precipitated sulphur. Laxatives and tonics are sometimes required. The tar vapor bath appears to have a beneficial effect upon the eruption.

PITYRIASIS RUBRA.

Synonym: Primary Exfoliative Dermatitis.

Definition. Pityriasis rubra is a rare, chronic or recurrent disease not dependent upon a preëxisting eruption. It involves the whole surface of the skin, which becomes a deep-red and is followed by profuse scaling and gradual shrinking. Death is the usual termination.

Symptoms. The disease begins as an erythematous patch which slowly enlarges; new patches form, unite and gradually cover the entire cutaneous surface. The skin is at first bright-red, becoming yellowish on pressure. Large, loosely adherent thin scales then form, are shed in great abundance and rapidly reform. The skin of the palms and soles is frequently cast off in large plaques. The skin gradually loses its pliancy, becomes slightly infiltrated, shrunken and fissured. The hair and nails may be involved and also the mucous membranes, which become dry and cracked. The inguinal glands become enlarged and prominent and there are crops of follicular abscesses, pustules and furuncles scattered about the surface. Itching is generally absent and the normal secretions of the skin are usually preserved. The patient complains of a sense of chilliness and sometimes of pain and burning in the skin. The disease continues for months or years, the patient occasionally recovering but as a rule becomes gradually enfeebled, bedridden and dies from marasmus or intercurrent disease.

Etiology. The etiology of pityriasis rubra is unknown. It occurs more frequently in men than women and has been observed in children. Crocker regards it as due to a toxin.

Pathology. The affection is, in the beginning, a superficial dermatitis but later shows a new formation of connective tissue with subsequent cicatrization, obliteration of the skin appendages, pigmentation, and elastic tissue hyperplasia.

Diagnosis. No other disease involves the entire surface as a uniformly dry or scaly redness (Jackson). It differs from psoriasis in being universal and not presenting papery scales. Eczema is itchy, infiltrated when chronic, rarely universal and has periods of exudation.

Treatment. Treatment exerts no especial influence upon the course of the disease. Attention to the general health, with tonics and nutritious food, are the indications. Pilocarpin has been recommended. Arsenic may be given in the later stages. Sherwell advises the internal and external use of linseed oil, internally in the form of flax seed. Starch and soda baths may serve to alleviate the distressing symptoms.

Prognosis. In the severe form of this disease cure is rarely observed.

PITYRIASIS RUBRA PILARIS.

Definition. Pityriasis rubra pilaris is a rare, chronic, desquamative disease affecting the skin wholly or in part and rarely causing impairment of the general health.

Symptoms. The disease presents three salient features, *prominence of the follicular openings; scaliness; redness and roughness* with *exaggeration* of the *normal folds.*

It begins with prodromata consisting of nervousness, malaise, and various hyperæsthesiæ, all being of short duration. The initial lesion is situated usually upon the hand or face and consists in one or more erythematous patches covered with scanty, furfuraceous scales. When fully developed the separate patches or the entire skin are covered with small, discrete or confluent, conical papules which are scaly and silver-gray or red in color. Many of the papules show a black point in the centre which represents the stub of a hair surrounded by a corneous or squamo-sebaceous cuff. The papules may be absent and in their place are small,dark comedo-like points lending a shaven-beard appearance to the affected part. By flattening out and coalescence the papules form erythematous, scaly patches. The skin is rough, harsh to the feel and owing to follicular prominences resembles that of a plucked fowl. On the face and scalp the conical elevations are absent and the surface of the skin is rough, reddened and scaly. The hair may or may not be affected; the nails usually show atrophic changes. The backs of the fingers are usually involved and show typically the conical elevations and broken ends of hairs. The eruption is usually symmetrical. Later in the development of the disease, the skin becomes somewhat thickened and infiltrated and exhibits checker-board squares marked off by the deepening of the furrows.

Pityriasis rubra pilaris is fully established in a few weeks, and continues for months or years, then disappears. Recurrences are almost invariable. As a rule the general health is undisturbed. Subjective symptoms with the exception of slight itching are absent.

Etiology. The cause of pityriasis rubra pilaris is unknown. It has been observed in both sexes and most of the cases reported have been in childhood or young adults.

Pathology. An excessive cornification of the hair follicle is the principal morbid change. The epidermis is thickened and shows inflammatory alterations.

Diagnosis. Pityriasis rubra pilaris differs from *lichen ruber*, which it much resembles, in its extensive, pliable, red sheets of eruption, smooth on the body and rough on the extremities, its light, red, silvery appearance, accumulated, soft, readily detachable scales and its follicular asperities which remain pale for some time after pressure.

Lichen ruber affects particularly the flexor surfaces, presents subjective symptoms and undermines the general health.

Ichthyosis usually spares the face, palms, soles and flexures of the joints, and the scales are more adherent.

Psoriasis seeks the elbows and knees, is not a follicular disease and presents larger scales which are not pierced by hairs.

Treatment. The treatment of pityriasis rubra pilaris is not satisfactory. Pyrogallol, salicylic acid, and the tar preparations may be used locally as stimulating ointments in the same manner as in the treatment of psoriasis.

Prognosis. The chances of ultimate recovery are poor. The disease may undergo retrogression but constantly recurs. No fatal case has been reported.

PLICA POLONICA.

Definition and Description. Plica polonica is the term applied to a peculiar matted, felted condition of the hair. It is observed chiefly among Poles and formerly received considerable attention at the hands of dermatologists on account of its undiscovered origin. It is now known to be due to matting and tangling of the hair as a result of harboring of pediculi, nits, eczematous oozing, pus and miscellaneous filth.

A rare form of plica, *plica neuropathica*, has been described. The felting occurs in limited areas on the scalp of cleanly persons and is regarded as a trophic disturbance affecting the cortical cells of the hair.

Treatment. The treatment of plica polonica consists in cutting the hair and disinfection of the scalp.

POROKERATOSIS (*Mibelli*).

Synonym: Hyperkeratosis Centrifuga (Respighi).

Definition and Description. Porokeratosis is a very rare cutaneous affection beginning as a papule and eventually becoming converted into variously sized and shaped lesions surrounded by a horny ridge. The affection has been noted on the hands and feet and mucous membranes of the mouth.

Porokeratosis begins as a warty papule which enlarges peripherally, flattens, is elevated or depressed and becomes surrounded by a horny, sinuous seam or ridge with a black, sunken line along its crest. The patch may be rounded or irregular and within the linearform seam the surface is smooth, atrophic or scaly and presents small, horny projections.

Diagnosis. The diagnosis rests upon the presence of the horny ridge with its broken black line surrounding the lesion, a picture that is seen in no other affection.

Etiology. Porokeratosis may begin at any age. It shows a preference for males and a tendency toward familial occurrence. It is regarded as a form of *linear papilloma.*

The affection is essentially chronic and tends to recur after removal.

Treatment. Electrolysis, curetting or the application of a destructive caustic are the remedies employed.

PRURIGO.

Definition. Prurigo is a rare, chronic, inflammatory disease of the skin, characterized by pale, pink, small, firm, discrete papules occurring on the extensor surfaces and accompanied by intense itching, glandular swelling, and infiltration of the skin.

Symptoms. Prurigo begins usually in infancy as an urticarial eruption on the extensor aspects of the limbs and gradually assumes the characteristic pin-head to pea-sized, firm, papular elevations, either normal in color or pinkish and intensely itchy. The lesions are numerous, closely aggregated and especially marked upon the extremities, buttocks, thorax and abdomen; the face, scalp, neck and flexures of the joints being usually spared. As a result of scratching and irritation the skin becomes rough, harsh, infiltrated, slightly scaly and pigmented. Excoriations, blood crusts, and secondary pustulations are commonly observed. The glands, especially those of the inguinal region, become indurated and enlarged.

The general health is impaired, the patient becoming anæmic and debilitated, chiefly through loss of sleep attendant upon the severity of the itching. The disease is usually worse in winter.

Etiology. Prurigo is most frequent in Europe and is rarely seen in this country. It occurs among ill-nourished, neglected children.

Diagnosis. Prurigo, at least in its severest manifestations, is a very rare disease in the United States. It is distinguished from *papular eczema* by its distribution, uniform type of eruption, history, course and rebelliousness to treatment; from *pruritus* by its course, history, regions affected, and the infiltration and pigmentation of the skin.

Treatment. Rest, forced feeding and reconstructive tonics are important considerations in the matter of general treatment. Tincture of cannabis indica is recommended for its sedative effect upon the skin.

Locally tarry preparations seem to do the most good.

Alkaline baths followed by inunctions with sulphur ointment; tincture of green soap applied with friction, washed off and a bland ointment rubbed in; five per cent. beta-naphthol ointment and an ointment containing thymol or menthol, are among the therapeutic suggestions likely to prove of benefit.

Prognosis. The disease is extremely rebellious and the prospect of ultimate cure, especially in the severer manifestations, unfavorable. It usually persists through life.

PRURITUS.

Definition. Pruritus is a functional neurosis of the skin whose sole manifestation consists in itching, without objective changes in the skin except such as are produced by scratching.

Varieties. Pruritus may be general or affect certain localities such as the anal region, scrotum, vulva or extremities. It is an accompaniment of senile degenerative changes in the skin (*pruritus senilis*) and is often observed among certain individuals at the beginning of cold weather (*pruritus hiemalis*, winter itch), in others at the first approach of hot weather (*pruritus aestivalis*). These seasonal types of pruritus may be generalized but as a rule are limited in extent, affecting chiefly the lower extremities.

A form of transient pruritus sometimes follows bathing (*bath pruritus*).

Symptoms. The itching in pruritus is variable in extent and intensity. It may be mild and fugitive, or persistent and intense. Paroxysmal attacks of itching accompanied by frenzied scratching are characteristic features of the severer grades of pruritus. Scratching and harsh rubbing frequently produce lesions in the form of excoriations, blood crusts and regional infiltration with loss of the normal color of the skin. The itching is usually worse at night and is aggravated by warmth and draughts of air.

Local forms of pruritus such as concern the anus, vulva, scrotum, palms or soles, produce changes in the skin and it becomes thickened, pigmented and exhibits eczematoid eruptions.

Etiology. Pruritus is a functional disturbance of the sensory nerves and may arise from a number of causes. Hepatic derangement, disorders of the nervous system, gout, rheumatism, lithæmia, alcoholism, albuminuria and diabetes are all contributing factors. It may also be the result of mimicry.

Pruritus vulvæ is frequently due to irritating discharges, menstrual and uterine disorders; anal pruritus, to seat worms, piles or fissures; scrotal or perineal to venous congestion and disease of the genito-urinary organs.

In some instances pruritus is hereditary. It is more common in men than in women, especially in middle-aged men.

Diagnosis. The essential feature of pruritus is itching without obvious lesion, and this fact should remove diagnostic difficulties. *Pediculosis* and *scabies* may be differentiated by the peculiar distribution of the eruptions and the discovery of the parasite. In the various forms of eczema some visible eruption is the occasion of the itching, not the result.

Treatment. Success in treatment of both general and local pruritus depends upon the recognition and removal of the cause. Regulation of diet, hygiene, bathing and exercise, discontinuance of tea, coffee and alcohol, the relief of constipation and of renal insufficiency are the prime features in the general therapy of pruritus. Complete change of scene and mode of living are often demanded.

For the direct relief of the itching may be given tincture of cannabis indica, ten drops, to be increased to twenty or thirty, three times a day, or tincture of gelsemium, ten drops every half hour until toxic symptoms are produced. Carbolic acid in pill form, containing one or two drops each; quinine, ten to fifteen grains, once daily; nitrate of pilocarpin, gr. 1-16 hypodermically; digitalis; ergot; ichthyol; antipyrine in five to ten grain doses; wine of antimony, five drops after meals; salicin and salicylate of soda in full doses; phosphate of soda; are among the drugs likely to prove beneficial.

A calomel purge, occasionally administered, does good.

Vapor baths, Turkish baths and baths containing bran, starch, bicarbonate of soda, or potassium sulphide, three ounces to twenty gallons of water, followed by the free use of dusting powder, are useful.

Carbolic acid is one of the most dependable local antipruritics. The following formula will be found serviceable:

℞

Acid. Carbolic.,	℥j.
Glycerin.,	℥j.
Aquæ ad,	℥viij.

M. Sig. For local use.

Alcoholic solutions of resorcin; solution of bichloride 1:3000; peroxide of hydrogen; equal parts of vinegar and water; dilute tar solutions, especially the liquor carbonis detergens; black wash; saturated solution of boric acid; calamine lotion; are among the applications employed for the relief of itching. Ichthyol 1-10, is often helpful.

Ointments of carbolic acid, menthol, thymol, and other refrigerants, or of cocaine are also beneficial.

For local pruritus Bronson's formula is very effective. It is the following:

℞

Acid. Carbolic.,	ʒj-ij.
Liquor. Potassæ,	ʒj.
Ol. Lini ad,	ʒj.

M. Sig. Shake before using.

This may be dabbed on the part after the surface has been dried. Its effect is not cauterant.

Pruritus of the vulva, scrotum, or anus may be temporarily relieved by very hot water applied to the part on compresses. This may be followed by painting the surface with ten per cent. ichthyol. Compound tincture of benzoin; nitrate of silver, fifteen grains to the ounce of sweet spirits of nitre; camphor-carbolic solutions; saturated solution of acid boric; guaiacol, ten grains to an ounce of powdered starch; subacetate of lead in milk; any or all of these are worthy of trial.

Not infrequently a focus of irritation may be discovered, which may be relieved by applications of menthol or cocaine or, if resistent, by touching it with the Paquelin cautery or fuming nitric acid.

Crocker calls attention to the favorable influence upon local pruritus of a mustard plaster to the spine.

The Turkish bath is sometimes comforting.

The length of the spine may be lightly gone over with the point of a cautery.

The static brush discharge, X-ray exposures, the application of the high frequency currents are sometimes promptly and markedly beneficial in local as well as in general pruritus.

Besides the other means mentioned salt rubs and mechanical stimulation are serviceable in pruritus senilis.

Prognosis. The prognosis of pruritus is uncertain. The disease is often very obstinate. The ultimate cure will depend upon the discovery of the provoking internal or local causative factor, and its removal. Palliation can always be secured by local treatment.

PSORIASIS.

Definition. Psoriasis is a chronic, dry, inflammatory disease presenting reddish, sharply-defined, slightly elevated patches covered with thick, imbricated, papery, white scales.

Symptoms. The eruption of psoriasis shows a marked preference for the extensor surfaces, especially the knees and elbows, and for the scalp, and begins as a minute, slightly elevated scaly papule (*psoriasis punctata*). The papule flattens, enlarges and becomes covered with a white, adherent scale, which if lifted off reveals a slightly pale, granular surface—the prickle layer—and this if removed causes points of bleeding to appear.

Patches form which enlarge to the size of coins (*psoriasis nummularis*) and are completely covered with scales, or the centre is clear and the border

alone shows the characteristic scale (*psoriasis annularis*). The edges of contiguous patches meeting, gyrate forms are produced (*psoriasis gyrata*),

Fig. 82.—Psoriasis (Ohmann-Dumesnil).

or the patches coalesce, are abundantly scaly and present plaques of more or less rounded outline and considerable dimensions (*psoriasis diffusa*).