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SKIN DISEASES:

THEIR
DESCRIPTION, ETIOLOGY, DIAGNOSIS,
AND TREATMENT

ACCORDING TO THE LAW OF THE SIMILARS.

BY

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PHILADELPHIA :
BOERICKE & TAFEL,
1900.

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PREFACE.

Man is a composite being. We have the skeletal man; the muscular man; the arterial man; the nervous man; the venous man; and enclosing and protecting all these the skin—or outer man. This outer man is the one in whom we all take a greater or lesser pride; the one that receives the greatest amount of attention; the one that more pains are taken to beautify and adorn than all the others; the one in which any imperfection is soonest noticed, and for which relief is most promptly sought.

The physician who can soonest remove the disfiguring blemishes, heal diseased conditions, smooth and beautify the skin is the one whose praises are the loudest proclaimed by the gratified patient.

In no other department of medical science is a reputation so readily made as in the department of dermatology, for the reason that patients can speedily judge whether the physician is likely to do them good or harm.

What not to do in treating skin diseases is an important thing to know. The physician must have a thorough knowledge of the general course and behaviour of skin diseases, and it is essential that he should be proficient in the principles of general medicine, in order that he may treat affections of the skin intelligently and successfully. The reason for this statement will become apparent as we study the etiology of the various lesions. We will then find that it often is necessary only to treat the cause to remove the lesion; and in this branch of

medical science, more than in any other, perhaps, we will find Hahnemann's rule to treat the *totality* of the symptoms complained of by the patient, the *only* method by which we may cure our patient.

"The highest aim of healing is the speedy, gentle, and permanent restitution of health, or alleviation and obliteration of disease in its entire extent, in the shortest, most reliable, and safest manner, according to clearly intelligible reasons."

"When the physician knows in each case the obstacles in the way of recovery, and how to remove them, he is prepared to act thoroughly, and to the purpose, as a true master of the art of healing."

The author has been prompted to prepare this work by a conviction of the existence of an urgent demand for a work on Dermatology in our School of Medicine, which should embody the advances recently made and set forth the distinctive characters of our therapeutics in a rational and practical manner.

The work has been written in the first instance with the view of meeting the wants of the homœopathic practitioner in his daily dealings with diseases of the skin; at the same time the needs of the medical student in preparing for his examinations has been kept constantly in mind.

The author has endeavored to present his subject in the most practical manner and with the fewest possible words consistent with an intelligible presentation of the same. To this end he has avoided all theoretical and controversial discussions, which are of interest to the specialist rather than to the general practitioner or student.

7 W. North Ave.

May, 1899.

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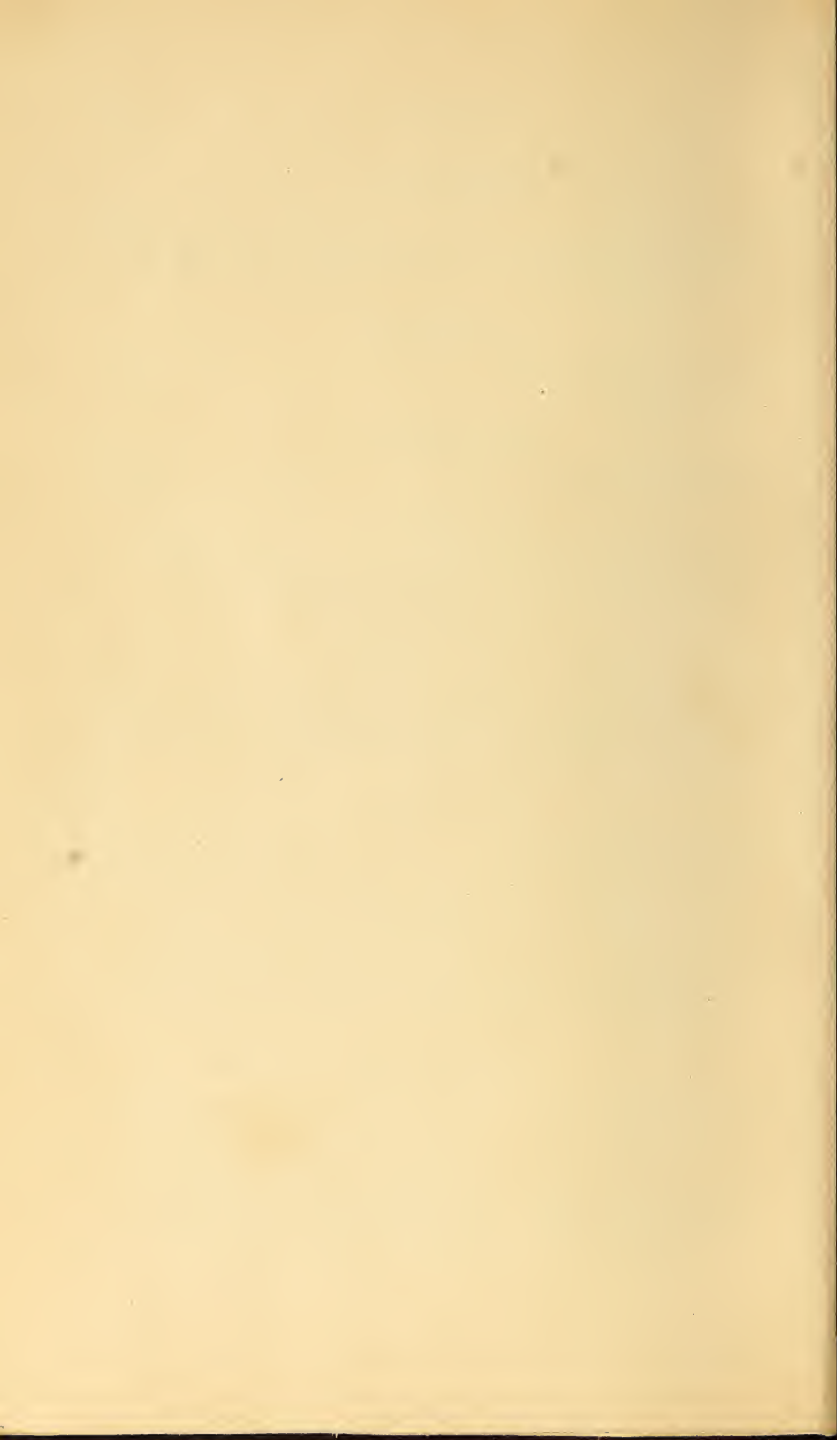
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CHAPTER I.

THE ANATOMY OF THE SKIN.

In order to correctly understand the nature of the morbid changes that go on in the skin, and to comprehend correctly how and where these changes begin, it is necessary to have an accurate knowledge of the healthy skin in its different parts.

The healthy skin is, of course, the standard of comparison for all changes in the skin, and without the clearest perception of what that standard is the student can, of course, only fall into error from the inability to distinguish between what is normal and what is abnormal.

The skin consists of an epithelium resting upon a connective tissue basis. The epithelium, which is composed of many layers of cells, is called *epidermis*, the connective tissue basis is called *cutis vera*, *dermis*, or *corium*. The surface of the dermis is thrown up into a number of elevations—*papillæ*—which differ in size, form, complexity, and arrangement in different regions of the body. Some are small, more or less conical elevations, *simple papillæ*. In others, a broader primary elevation is divided at its summit into a number of secondary elevations; these are *compound papillæ*. In many regions of the skin, as, for example, in the palms of the hands, the papillæ are arranged in ridges separated by shallow furrows. The surface of the skin, that is, the contour of the epidermis, does not follow the papillary contour of the dermis; the papillæ accordingly appear to plunge into and be covered

up by the more even epidermis, the surface of which, however, is marked by the ridges and furrows spoken of above as well as by bolder creases and folds.

The surface of the dermis is not developed into a distinct and separable basement membrane, as is so often the case in a mucous membrane; but in the most superficial portions of the dermis the connective tissue shows little or no fibrillation and consists of a homogeneous matrix, in which are imbedded connective tissue corpuscles and extremely fine elastic fibres. This superficial portion of the dermis, which is especially well developed in the papillæ, serves accordingly the purposes of a basement membrane, and sharply defines the dermis from the overlying epidermis. At a very little distance from the epidermis, fibrillation makes its appearance, the bundles of fibrillæ interlacing in a network which, very closely set in the outer, more superficial layers, becomes more and more open in the inner, deeper parts. The connective tissue of the dermis thus passes insensibly into the subcutaneous connective tissue, in which thick interwoven bundles of fibrillæ, bearing in transverse section a certain resemblance to sections of tendon bundles, form a tough open network, the larger spaces of which are frequently occupied by masses of fat cells of the subcutaneous adipose tissue. Elastic fibres are very abundant in the dermis proper, being very fine immediately beneath the epidermis and becoming coarser in the deeper parts; they are present also, though to a less extent, in the subcutaneous connective tissue. The skin, as a whole, is a very elastic structure.

Blood vessels are very abundant, forming close-set capillary outworks and looks immediately under the epidermis, especially in the papillæ, and more open networks elsewhere; but no blood vessel passes into the epi-

dermis. Lymphatic vessels and lymphatic capillaries are abundant in the dermis, being connected here as in other regions of the body with smaller "lymph spaces."

The consideration of the nerves of the skin will be deferred until we come to deal with the skin as an organ of sense; for though some of the cutaneous nerve fibres are efferent fibres distributed to the blood vessels, and probably to the sweat glands and other structures not directly connected with the sense of touch, by far the greater number are afferent fibres beginning in the distinct tactile organs, or otherwise serving as sensory structures.

The epidermis consists of two parts, separated by a fairly sharp line of demarcation; an inner soft layer, the Malpighian layer, or *stratum Malpighii*, and an outer harder horny layer, or *stratum corneum*. The skin, as is well known, varies in thickness in different regions of the body, and the differences are due almost exclusively to variations in the thickness of the horny layer which, as over the lips, may be extremely thin, or as on the heel, excessively thick; compared with the variations in thickness of the horny layer, the variations in thickness of the Malpighian layer or of the dermis may be disregarded.

The line of demarcation between the Malpighian and horny layers follows the contour of the surface of the skin, not that of the dermis, the papillæ of which appear in sections as if imbedded in the Malpighian layer. When the skin after death is macerated, the horny layer is apt to peel off from the Malpighian layer below, which, originally soft and rendered still softer by the maceration, then appears as a layer of slimy tissue spread out between the sides of and covering the summits of the papillæ of the dermis, somewhat after the fashion of a

network; hence this layer was in old times spoken of as the *rete mucosum*.

The lowermost, innermost portion of the Malpighian layer resting upon the dermis, consists of a single layer of elongated, or almost columnar cells placed vertically, that is, with their long axis perpendicular to the plane of the dermis. This layer which preserves the original features of the epiblast of the embryo, and which may be followed over the papillæ as well as along the intervening valleys, presents a characteristic appearance in vertical sections of the skin. Each cell, which is about as large as a leucocyte, consists of a relatively large oval nucleus lying in the midst of a coarsely granular cell substance, which stains readily with the ordinary staining reagents. The base of the cell abutting on the dermis often shows fine processes interlocking with corresponding processes from the dermis; the sides of the cells are in close contact, but merely in contact, no cement substance existing between them.

The rest of the cells of the Malpighian layer, much like each other, are polygonal or irregularly cubical cells, resembling the vertical cells just spoken of in so far that each consists of a coarsely granular cell-substance in which is imbedded a relatively large nucleus; this, however, is spherical, not oval. The surface of each cell is thrown up into short ridges, radiating somewhat irregularly from the centre of the cell and projecting at the surface and edges, so as to give the cell somewhat the appearance of being armed with a number of prickles. Hence these cells are often called "prickle cells." The prickles of a cell do not interlock with those of its neighbors but touch at their points, so that the contact of two adjacent cells is not complete but carried out by the points of the prickles only, minute spaces being left between. Hence the whole

Malpighian layer is traversed by a labyrinth of minute passages, along which fluid can pass between the touching prickles.

In dark skins, as that of the negro, pigment particles abound in the lower Malpighian cells, especially in the vertical layer. In such cases branched pigment cells, connective tissue corpuscles loaded with pigment granules, are to be seen in the dermis also; and occasionally similar branched cells may be seen in the epidermis between the Malpighian cells. Leucocytes also not infrequently pass out at the dermis and wander among the cells of the Malpighian layer.

The nuclei, not only of the vertical, but also of the other polygonal cells may, not infrequently, be observed in various stages of karyomitosis. Throughout life the cells of this Malpighian layer of the skin appear to be undergoing multiplication by division; the increase of population thus arising is kept down by the cells passing upward and outward, and becoming transformed into the cells of the horny layer.

The line of demarcation between the Malpighian layer and the horny layer is, as we have said, sharp and distinct. It is furnished by two peculiar strata of cells, more conspicuous in some regions of the skin than in others. The lowermost, innermost stratum consists of a single layer or of two or three layers of cells which are not unlike Malpighian cells, but are differentiated by their form, being extended horizontally so as frequently to appear fusiform in vertical sections, by the absence of prickles, by their staining very deeply with certain reagents, such as osmic acid, and especially by their cell substance being crowded with large discrete granules of a peculiar nature. Hence this stratum is called the *stratum granulosum*.

The stratum above this consists of two or even more layers of cells, elongated and flattened horizontally, the cell substance of which is homogeneous and transparent, free from granules and not staining very readily. In the middle of a cell may frequently be seen a rod-shaped nucleus placed horizontally. These clear transparent cells form a transparent seam, the *stratum lucidum*, between the stratum granulosum and Malpighian layer below and the horny layer above.

The horny layer, which is, as we have said, of variable but nearly always of considerable thickness, is formed of a number of layers of cells which, differentiated already in the lowest layers, have that differentiation completed as these pass upward. The upper, outer portion of this horny layer is continually being shed or rubbed off in the form of flakes of variable size. Each flake upon examination, as for instance after dissociation by maceration or with the help of alkalies, is found to be composed of elements which can no longer be recognized as cells, and which may be spoken of as scales. Every scale is a flattened mass or plate in which no nucleus can be seen, and which consists not of the proteids and other constituents of ordinary cell substance, but almost exclusively of a material called *keratin*. This is a body, the exact nature of which has not yet been clearly made out, but which has the general percentage composition of proteids, from which it is a derivative, with the exception that it contains a considerable quantity of sulphur (the keratin of hair contains as much as five per cent); this sulphur appears to be somewhat loosely attached to the other elements of the keratin since it may be removed by boiling with alkalies.

The lowermost portions of the horny layer are composed of elements which may still be recognized as cells,

inasmuch as each contains a nucleus, though this obviously undergoing change and on the way to disappear. Each cell is, however, flattened and plate-like, and its substance already consists largely of keratin. In passing upward from the lower to the more superficial pairs of the horny layer such an imperfect cell loses its nucleus, and becomes the wholly keratinous plate just described. The whole horny layer consists of strata of elements, horny to begin with, but becoming more completely so in the upper parts. Below, in contact with the moist Malpighian layer, the horny layer is moist but the superficial parts become dry by evaporation; and here the strata delaminate from each other, the outer ones, as we have said, being shed in the form of flakes, which seen in the dry condition under the microscope have often the appearance of irregular fibres.

The karyomitosis seen in the cells of the Malpighian layer, not only in those of the vertical layer, but in the others as well, show, as we have said, that these multiply by division; we have no evidence of multiplication taking place elsewhere in the epidermis. The more superficial cells of the Malpighian layer, thrust upward by the newcomers, are transformed into the cells of the stratum granulosum; and although we do not as yet fully understand the exact nature of the transformation we may conclude that the peculiar granules of these cells are concerned in the manufacture of keratin. Changed by the consumption of their granules in this manufacture, the cells of the stratum granulosum become first the cells of the stratum lucidum, and then the cells of the distinctly horny layer, pushed upward through which, by the new formations continually succeeding below them, they pass to the surface and are eventually shed.

The papillæ in the papillary part vary in size and as-

pect in different parts of the skin. They are pointed or thread-like about the fingers, and club-shaped or rounded over the general surface of the body. On the palm of the hand, about the nipple, and the sole of the foot, they are longest and largest, being often 66 to 1 m. They are shortest on the face. They are of two kinds—nervous, containing nerve fibres ending in tactile corpuscles, and vascular, containing blood-vessels in the form of a loop.

There are, in addition, spindle-shaped cells, or cells anastomosing by processes, amongst the connective tissue bundles in the substance of the corium and around the vessels.

The thickness of the corium varies. It is thinnest about the eyelids and prepuce; on the face, scrotum, and body, generally, it is thicker. On the sole of the foot and palm of hand it is thickest, being from 2.25–2.28 of a millimetre.

The corium is well supplied with vessels, lymphatics, and nerves. The vessels come up from the connective tissue below, give off branches to the fat and the glands, then constitute a network which sends off more or less obliquely twigs to form a longitudinal plexus along the base of the papillæ, from whence finally capillary loops are supplied to most of the papillæ. The lymphatics have much the same arrangement as the blood-vessels. The plexuses, however, are situated beneath those formed by the capillaries, but no lymphatics are supplied to the papillæ. The spaces normally seen between the connective tissue fibres are supposed to be lymphatic spaces; they have no proper boundaries. The blood-vessels and lymphatics are thought to communicate, though this has not been proved, by means of peri-vascular spaces where the blood-vessels and lymphatics run together, the walls of these spaces being formed by the connective tissue around.

Nerves accompany the blood-vessels coming up from below, and are of two kinds, medullated and non-medullated; the former go with the tactile and Pacinian corpuscles, and the latter form, it is thought, a fine network below the site, in connection with the capillary plexus, and are in communication with those found in the site. Non-medullated fibres also run with the capillaries, which supply the vascular papillæ.

The subcutaneous cellular tissue is nothing but a lax network of connective tissue. The bundles of fibres, "usually cylindrical, exhibit constrictions at various points like those of the arachnoid membrane, and consist of a number of sinuous fibres of connective tissue, between which lie numerous fusiform and connective-tissue corpuscles of various forms and dimensions." It is this part in which the fat cells are collected in the meshes of the fibres, the only seats destitute of fat being the eyelids, penis, scrotum, and ears. The fat I need not describe. The fusiform cells that lie between the bundles and fibres of the connective tissue are connected with these fibres by means of processes given off one at either end, with other minor ones elsewhere. Other fusiform cells, without processes (the migrating cells), and small cells like blood-cells, are observed, the latter being contiguous to the vessels. There is no line of demarcation between the corium above and the subcutaneous tissue below.

The Sweat Glands. — A sweat-gland, like other glands, consists of a secreting portion and a conducting portion. The secreting portion is a long tubular alveolus coiled up in a knot and placed in the subcutaneous connective tissue at some distance from the epidermis. Generally the gland is formed of one such tubule only, but sometimes two tubules unite into a common duct. The duct beginning in the knot, in the convolutions of which

it shares, runs a somewhat wavy but otherwise straight course vertically toward the surface of the skin onto which its lumen opens.

Through the epidermis the duct is nothing more than a tubular passage excavated out of the epidermis with a remarkable corkscrew course, the turns of the screw becoming more open and the canal wider in the upper part as it approaches the surface. In the Malpighian layer the cells bordering on the passage are flattened and inclined downward so as to afford a more or less definite lining; there is a similar arrangement, but not so well seen, in the corneous layer. Reaching the dermis in a valley between papillæ, the passage becomes a regular duct, with an independent epithelium of its own, a distinct basement membrane continuous with the upper surface of the dermis, and an outer coat of connective tissue strengthened, in the case of some of the larger glands, such as those of the axilla, with plain muscular fibres. The epithelium consists of two or three layers of small rounded cells, each with a relatively large but absolutely small nucleus, generally staining deeply. The cells leave a narrow tubular thread-like lumen which is lined with a very characteristic distinct cuticle.

The duct continues to possess these characters after it has entered the knot and begun to pursue a twisted course, but soon changes suddenly into the secreting tubule. This may be distinguished from the duct by being wider, and by being lined by a single layer of cubical or columnar cells larger than those of the duct, bearing larger nuclei, and behaving differently toward various staining reagents. The lumen though fairly distinct is not lined by any cuticle as in the duct. Lying between the basement membrane and the epithelial cells, or rather imbedded in the basement membrane, are seen a number

of plain muscular fibres disposed longitudinally or in an elongated spiral, and often forming a distinct coat beneath the epithelium.

As in the case of other glands, we are unable to make any statement as to the work carried on by the epithelium lining the duct, but we may probably assume that the sweat is mainly secreted by the larger cells of the terminal coiled part of the tubule. These cells, therefore, like other secreting cells, are probably "loaded" and "discharged;" but as yet no structural changes in the cells corresponding to these phases have been satisfactorily ascertained, though after the administration of pilocarpine, which causes sweating, the cells of glands hardened in alcohol stain more deeply than usual with carmine. It must be remembered, however, that the sweat contains normally neither mucus nor proteid substances, and we should, therefore, not expect to observe granules in the cells.

The peculiarly placed muscular fibres have been supposed, by their contraction, to assist in the flow of sweat along the tubule. In certain cutaneous glands of the frog, of a relatively simple nature, there is evidence that the secretion is ejected from the comparatively large lumen by the contraction of plain muscular fibres in the wall of the gland, or by a contraction of the wall itself, which is contractile without being distinctly differentiated into muscular tissue. And this rather supports the above view; but the matter is at present by no means clear.

The coil of a sweat gland is well supplied with blood-vessels in the form of capillary networks, and nerves have been traced to the tubes; but the exact manner in which these end is not as yet known.

Though present in all regions of the skin (of man),

the sweat glands are unequally distributed, being more abundant in some regions, such as the palms of the hand, than in others. In the axilla are glands of very large size, and in these the ducts possess distinctly muscular coats.

The sebaceous glands are appendages of the hairs, and are seated in the corium; their ducts open into the hair follicle at the neck in the case of the larger hair follicles; but in the case of the smaller, or downy hairs, the relative position of the glands and hair follicle is altered, so that the minute hair follicle leads into the duct of the sebaceous gland, which opens directly on the surface. These glands are absent from the palm of the hand, the sole of the foot, and the dorsum of the third phalanges of the fingers and toes, and there are few about the penis. The largest are found about the nose, scrotum, anus, and labia.

Just where the corneous layer abruptly leaves off in the upper part of the hair follicle, a sebaceous gland opens into the cavity of the follicle, on each side of the hair. Each gland consists of a short rather wide duct which divides into a cluster of somewhat flask-shaped alveoli. The basement membrane, both in the alveoli and in the duct, is lined with a layer of rather small cubical cells continuous with the layer of perpendicularly disposed cells which form the innermost layer of the outer root-sheath, as of the Malpighian layer of the skin generally. This layer of cells leaves a wide lumen both in the alveoli and in the duct; this lumen, however, is occupied not as in other glands with fluid, but with cells. Both alveoli and duct, in fact, are filled with rounded or polygonal cells which may be regarded as modified cells of the Malpighian layer. The whole gland, indeed, is a solid diverticulum of the Malpighian layer.

In the alveoli the cells next to the layer of cells imme-

diately lining the basement membrane, though larger than these, resemble them in so far that each consists of ordinary cell substance surrounding a nucleus of ordinary character. The more central cells are different; their cell substance is undergoing change; numerous granules or droplets, some of them obviously of a fatty nature, make their appearance in them, and the nuclei are becoming shrunk and altered. The cells are manufacturing fatty and other bodies and depositing the products in their own substance, which, however, is not being removed, but is dying. These changes are still more obvious in the cells lying within the duct; the cells as indicated by the breaking up of the nuclei are dead, and the whole of the cell substance has been transformed into the material constituting the secretion of the gland called *sebum*, which is discharged on to the surface of the skin through the mouth of the hair follicle.

In these sebaceous glands, secretion, if we may continue to use the word, takes place after a fashion different from that which we have hitherto studied. In an ordinary gland the cells lining the walls of the alveoli manufacture material which they discharge from themselves into the lumen to form the secretion, their own substance being at the same time renewed, so that the same cell may continue to manufacture and discharge the secretion for a very prolonged period without being itself destroyed. In a sebaceous gland the work of the cells immediately lining the wall of an alveolus appears limited to the task of increasing by multiplication. Of the new cells thus formed, while some remain to continue the lining and to carry on the work of their predecessors, the rest thrust toward the centre of the alveolus are bodily transformed into the material of the secretion; and during the transformation are pushed out through the duct by the genera-

tion of new cells behind them. The secretion of sebum, in fact, is a modification of the particular kind of secretion taking place all over the skin, and spoken of as shedding of the skin. It is chiefly the chemical transformation which is different in the two cases. In the skin generally the protoplasmic cell substance of the Malpighian cells is transformed into keratin; in the sebaceous glands it is transformed into the fatty and other constituents of the sebum.

The so-called "ceruminous glands" of the external meatus of the ear are essentially sweat glands. They are wrongly named, since the fatty material spoken of as "wax" of the ear is secreted not by them but by the sebaceous glands belonging to the hairs of the meatus, or by the general epidermic lining. The ceruminous glands appear at most to supply the pigment which colors the "wax."

The Meibomian glands of the eyelids, on the other hand, are essentially the sebaceous glands of the eyelashes, the glands of Mohl being in turn sweat-glands.

A hair is a development, in the form of a cylinder, of a cap of corneous epidermis surmounting a papilla of the dermis sunk to the bottom of a tubular pit, or involution of the skin, called a hair-follicle. In the upper part of the hair-follicle the walls consist of ordinary skin with all its parts, dermis, Malpighian layer, and corneous layer, the latter as usual of considerable thickness. At some little distance from the mouth of the follicle the corneous layer suddenly ceases, and in the follicle below this the epidermis is represented by the Malpighian layer, now called the outer root-sheath, and two layers of peculiar cells, forming the inner root-sheath, of which the outer is called Henle's and the inner Huxley's layer; these may, perhaps, be considered as corresponding to

the stratum granulosum lucidum respectively. The dermis of the wall of the follicle is at the same time developed into an outer layer with bundles of connective tissue disposed chiefly longitudinally, and an inner layer of peculiar nature, the arrangement of which is transverse, and which at least simulates, if it really be not, a muscular transverse coat. Between this dermis of the follicle and the outer root-sheath or Malpighian layer is a very conspicuous definite hyaline basement membrane, so thick that it presents a very easily recognized double contour.

At the bottom of the follicle the dermis of the wall of the follicle is continuous with the substance of the (dermic) papilla, while the outer root-sheath or Malpighian layer, which here becomes extremely thin and reduced to one or two layers, is reflected over the papilla, and there expands again into a mass of cells, which like the cells of the Malpighian layer in the rest of the skin multiply, and by their multiplication give rise to the corneous body of the hair. It is said that in those hairs which possess a medulla the vertically disposed lowermost cells of the Malpighian layer are at the actual summit of the papilla continued upward in the axis of the hair, as the medulla.

The layer of Henle, following the Malpighian layer or outer root-sheath on which it rests, is similarly reflected and forms over the hair a single layer of flat transparent imbricated scales known as the cuticle of the hair; Huxley's layer, similarly reflected, forms a similar layer of similar scales, but this is considered as belonging to the root-sheath, and is called the cuticle of the root-sheath.

Muscles of the skin: There appear to be two kinds of muscles found in the skin—the voluntary, or striated, and the involuntary. The former are to be detected in the

face, beard, and nose, " ascending sometimes obliquely, sometimes vertically, between the hairs and the sebaceous follicles to terminate in the corium " (Biesiadecki). They come from below. The organic or non-striated muscles are more abundant. They occur forming a kind of network in the scrotum. Over the general surface of the skin bands of fibres are detected in connection with the hair follicle, and are called *arrectores pili*. These muscles exist as single fasciculi .045 to .22 of a millimetre, sometimes on one, sometimes on both sides of the hair follicle, in immediate relation to the sebaceous glands, which they enclose more or less. They run from the corium above to the part of the hair follicle just below the glands, and there end in the inner sheath of the hair follicle. Some authors affirm that bundles go down to the subcutaneous tissue and send off vertical and horizontal branches. Neuman, who is of this opinion, states that bands run above and under the sweat glands, more especially in the axilla. He describes also independent bundles of muscle in the corium quite unconnected with the hair follicles.

The nails, and the part upon which they lie, are essentially the same in structure as the skin in its different parts, only that the horny layer is more developed, forming the actual nail. Posteriorly, the nail is fitted into a groove; the part fitting into the recess is called the *root*, and the portion underlying the nail is that which represents the corium—it is, in fact, the corium; it bears, however, the name of *matrix*. Between the nail itself and the matrix is the *rete mucosum*; in fact, the bed of the nail may be described as consisting of corium with the sub-connective tissue beneath, and the rete above.

As in the case of the skin the rete dips down between the papillary projections of the corium of the nail.

The corium itself, or matrix, is divided into two parts,

which are separated by a more or less convex line seen through the nail and known as the *lunula*. The hindermost of these two divisions has its papillæ directed forward, less distinct, and more closely seated together. The front portion is thrown into longitudinal folds, and upon these are seated the papillæ. These folds are produced by the peculiar disposition of bundles of connective tissue in the structures beneath. The matrix towards the front part of the nail is covered by cells that are more and more horny, whereas over the posterior surface of the matrix (the root of the nail) these cells are softer. In fact, the part of the nail matrix behind the lunula is the spot where the nail is formed. The soft cells are directed forward, guided by the fold of the skin over the nail at its root—which fold lacks glands, and papillæ on the surface applied to the nail—becoming more horny as they advance.

A correct knowledge of the anatomy of the skin is an immense aid to the right comprehension of morbid changes going on in the skin.

The *epithelial* stratum of the skin, made up of the horny and mucous (rete Malpighii) layers, are the special seat of a number of morbid processes. In parenchymatous inflammation as in small-pox, the first stage seems to be a great increase in the cells of the rete, and the pustule subsequently produced is formed bodily in the rete, its walls being formed by altered rete cells, stretched into fibres and enclosing pus cells. In the formation of vesicles and bullæ, the rete is chiefly concerned. In some cases of non-inflammatory diseases, the epidermic cells are found to have undergone special changes, or to have been arrested in their development, as in psoriasis.

The relation of the epidermis to the papillary layer, in

regard to diseased action, is a matter of no little importance.

Dr. Auspitz draws the following conclusions in regard to the production of diseases from the growth inwards of and resultant changes in the papillary layer:

1. In hyperæmic and inflammatory processes occurring in the skin the papillæ are found to be only succulent and slightly swollen ; but no modifications of form occur, unless consecutive to secondary change in the Malpighian stratum.

2. In simple and lymphatic hypertrophy of the connective tissue matrix, as well as in cell-infiltrations of the corium, the same law holds

3. In the keratoses, or horn-producing affections—ichthyosis—there is either no change in the form or size of the papillæ, or it is due only to the pressure of the hypertrophied horny layer. The prismatic and columnar forms of the latter are by no means dependent on the papillæ of the cutis.

4. The papillomata (warts, condylomata, epithelioma) originate essentially in an active neoplastic process taking place in the rete, which penetrates to a greater or less extent into the likewise hypertrophied connective tissue matrix of the corium. The papillæ of the cutis, here, too, perform only a passive role, their elongation and dendritic form being occasioned by the hypertrophy of the epidermis; whilst the elevation of the surface of the skin is due to the hypertrophy of both.

5. An outgrowth of the connective tissue of the skin sometimes occurs, but is never dependent on the pre-existent papillæ.

6. There is no essential anatomical difference between the several forms of papillomata, warts, pointed condylomata, and cauliform excrescences. The syphilitic con-

dyloma differs from these only through the specific cell infiltration of the corium.

7. Epithelioma represents exquisitely the types of the hypertrophic growth inwards of the epidermis into the connective tissue matrix.

The rete is an important pathological ground, from the fact that in most inflammatory processes there is to be found in it a great increase of the spindle-shaped or migrating corpuscles. It is now established that cutaneous cancers originate in a morbid change in the cells of the Malpighian layer, and by the disordered growth of these same cells in masses from their inter-papillary parts, into the corium. This is an undoubted fact and gives countenance to Dr. Auspitz's views.

The *corium* is also the seat of very important pathological changes that originate in its substance and various alterations of its component elements. It is the essential seat, of course, of hyperæmic changes; and according as the longitudinal plexus, or the papillary vascular loops, or both, are implicated the redness varies in aspect. The corium is, further, especially its papillary layer, the early seat of many inflammatory changes, the vessels dilating, and permitting moreover the escape of white blood cells into the corial textures, and likewise serum, which makes its way to the rete, forming vesicles, etc. Then, again, the fibrous elements of the corium furnish the migrating or fusiform cells that appear in great numbers in chronic inflammations especially, and migrate to the rete. The corium is the chief seat, moreover, of neoplasmata other than cancerous, as in the case of syphilis and leprosy; these new growths supposedly originating from the connective tissue elements. A simple increase of the latter, too, is held to constitute certain other diseases, such as pachyderma, keloid, etc. The vacuolæ and lymphatic

spaces are also seats of particular changes, as in leprosy. A knowledge of the structure and peculiarities of hair follicles and sebaceous glands is not less important in relation to the origin of many common diseases, as acne, fibroma, cancer, lichen planus. Without it the student will attain little real knowledge of the pathology and therapeutics of these frequently occurring affections.

In the case of the nail, unless a student knew what was the part of the matrix at which the nail was actually formed, he would be at a loss to diagnose a syphilitic from a non-syphilitic growth, or to comprehend the difference which arises when inflammation attacks now the posterior part of the matrix (where the nail is formed), or now the anterior portion; nor would he be able to explain the predilection of parasites for the root of the nail.

The Nature and Amount of Perspiration.

The quantity of matter which leaves the human body by way of the skin is very considerable. Thus it has been estimated that while 0.5 gramme passes away through the lungs per minute, as much as 0.8 gramme passes through the skin. The amount, however, varies extremely; it has been calculated, from data gained by enclosing the arm in a caoutchouc bag, that the total amount of perspiration from the whole body in twenty-four hours might range from 2 to 20 kilos; but such a mode of calculation is obviously open to many sources of error.

Of the whole amount thus discharged part passes away at once as watery vapor mixed with volatile matters, while part may remain for a time as a fluid on the skin; the former is frequently spoken of as *insensible*, the latter as *sensible*, perspiration or sweat. The proportion of the insensible to the sensible perspiration will depend on the

rapidity of the secretion in reference to the dryness, temperature, and amount of movement of the surrounding atmosphere. Thus, supposing the rate of secretion to remain constant, the drier and hotter the air, and the more rapidly the strata of air in contact with the body are renewed, the greater is the amount of sensible perspiration which is by evaporation converted into the insensible condition; and conversely when the air is cool, moist, and stagnant, a large amount of the total perspiration may remain on the skin as sensible sweat. Since, as the name implies, we are ourselves aware of the sensible perspiration only, it may and frequently does happen that we seem to ourselves to be perspiring largely, when in reality it is not so much the total perspiration which is being increased as the relative proportion of the sensible perspiration. The rate of secretion may, however, be so much increased that no amount of dryness or heat, or movement of the atmosphere, is sufficient to carry out the necessary evaporation, and thus the sensible perspiration may become abundant in a hot, dry air. And practically this is the usual occurrence, since certainly a high temperature conduces, as we shall point out presently, to an increase of the secretion, and it is possible that mere dryness of the air has a similar effect.

The amount of perspiration given off is affected not only by the condition of the atmosphere, but also by the circumstances of the body. Thus it is influenced by the nature and quantity of food eaten, by the amount of fluid drunk, by the character of exercise taken, by the relative activity of the other excreting organs, more particularly of the kidney, by mental conditions and the like. Variations may also be induced by drugs and by diseased conditions. How these various influences produce their effects we shall study shortly.

The fluid perspiration, or sweat, when collected, is found to be a clear, colorless fluid of a distinctly salt taste, with a strong and distinctive odor, varying according to the part of the body from which it is taken. Besides accidental epidermic scales, it contains no structural elements.

Sweat, as a whole, is furnished partly by the sweat glands and partly by the sebaceous glands, for, as we shall see, the small amount which simply transudes through the epidermis, apart from the glands, may be neglected. Now, the secretions from these two kinds of glands differ widely in nature, and the characters of the sweat, as a whole, will vary according to the relative proportion of the two kinds of secretion. The secretion of the sebaceous glands appears to be fairly constant, the larger variations of the total sweat depending chiefly on the varying activity of the sweat glands. Hence, when sweat is scanty, the constituents of the sebum influence largely the character of the sweat; when, on the contrary, the sweat is very abundant, these may be disregarded, and the sweat may be considered as the product of the sweat glands.

We are not able at present to make a complete statement as to what bodies occur exclusively in the sebum and what in the secretion of the sweat glands. The former consists very largely of fats and fatty acids, and appear to contain some form or forms of proteids; but we have reason to think that the sweat glands secrete in small quantity some forms of fat, and especially volatile fatty acids.

When sweat is scanty, the reaction is generally acid, but when abundant, is alkaline; and when a portion of the skin is well washed the sweat which is collected immediately afterward is usually alkaline. From this we

may infer that the secretion of the sweat glands is naturally alkaline, but that when mixed sweat is acid; the acidity due to fatty (or other) acids of the sebum. In the horse, which is singular among hair covered animals for its frequent profuse sweating, the sweat is said to be always acid and to contain a considerable quantity of some form of proteid. These features are probably due to the large admixture of sebum from the numerous sebaceous glands connected with the hairs.

Taking ordinary sweat, such as may be obtained by enclosing the arm in a bag, we may say that in man the average amount of solids is from 1 to 2 per cent., of which about two-thirds consist of organic substances. The chief normal constituents are: (1) Sodium chloride, with small quantities of other inorganic salts. (2) Various acids of the fatty series, such as formic, acetic, butyric, with probably propionic, caproic, and caprylic. The presence of these latter is inferred from the odor; it is probable that many various volatile acids are present in small quantities. Lactic acid, which has been reckoned as a normal constituent, is stated not to be present in health. (3) Neutral fats and cholesterin; these have been detected even in places such as the palm of the hand, where sebaceous glands are present. (4) The evidence goes to show that neither urea nor any ammonia compound exists in the normal secretion to any extent, though some observers have found a considerable quantity of urea (calculated at ten grms. in the twenty-four hours for the whole body). Apparently some small amount of nitrogen leaves the body or the skin, as a whole, but this is probably supplied by the sebum or by the epidermis.

In various forms of disease the sweat has been found to contain, sometimes in considerable quantities, blood, albumin, urea (particularly in cholera), uric acid, calcium ox-

alate, sugar (in diabetic patients), lactic acid, indigo (or indigo-yielding bodies giving rise to "blue" sweat), bile, and other pigments. Iodine and potassium iodide, succinic, tartaric, and benzoic (partly as hippuric) acids have been found in the sweat when taken internally as medicines.

CHAPTER II.

SOME GENERAL OBSERVATIONS.

The great number of diseases peculiar to the skin which present themselves for treatment are well worthy of the most earnest and anxious consideration of the general practitioner as well as of the specialist. It is only of recent years that the varieties of skin diseases have been made a special subject of study by numerous physicians in this country and abroad, and we may point with pride to the rapid strides made as regards the pathology, diagnosis, prognosis and treatment of these formerly obscure and obstinate diseases.

Correct diagnosis of cutaneous affections is the foundation of successful therapeutics; but diagnosis, properly speaking, does not alone consist in giving the correct or approved name to the disease immediately under consideration, nor even in a careful differentiation of the special variety. It involves a broader knowledge, including a more or less complete acquaintance with the nature and relationships of the various affections. The mere naming of a disease is a comparatively easy matter, and of greatly inferior value to that more comprehensive knowledge that appreciates that the disease is not a distinct entity by itself, but is rather the result of a particular or peculiar pathological process in progress in a person with a given constitution or habit of body.

In these days patients want to know what disease they are affected with, and, in the great majority of cases,

they will read up for themselves all that they can find upon the subject. The term eruption will not answer for the more intelligent. The intelligent physician must not be content with being able to simply give the systematic name that is applied to the particular lesion or group of lesions present, but should also be able to make a diagnosis of the patient as well.

Of late years dermatology has divided the different eruptions into classes and sub-classes, and with this division a more thorough and extended study of the causes pathology and treatment of the same has been accomplished, and the dermatologist can intelligently study the various lesions of the skin and form a correct opinion as to the duration, progress and ultimate result in each and every case.

A man says he has an eruption upon the face, and wants to know what it is and when he will get over it. His remark that he has an eruption conveys to the mind about as much of an idea of the trouble as if he said he had a hole in his coat. We must know, before we can express an opinion, what kind of an eruption it is. Is it vesicular, papular, pustular or tubercular? When we find that it is vesicular, we then wish to know the size of the vesicles, whether they burst or not, whether they itch or not and a number of other points which help us to arrive at a correct understanding of his case. We are then able to tell what the affection is, and its probable duration and ultimate termination. We are enabled, also, to give him the proper medicines, prescribe a suitable diet, and to take such measures as will protect others against the disease, if it is of a contagious nature. Errors in diet predispose to certain affections of the skin, and in very many cases aggravate existing disorders. Want of cleanliness is a frequent cause of cutaneous eruptions, as well as of many

of the preventable diseases. So, also, is the abuse, or even use, of alcoholic stimulants, cosmetics, tobacco, etc. A man's occupation is sometimes to blame for his unhealthy skin; especially is this true of the baker, the grocer, the mason, the bricklayer, the painter, the photographer, etc. Frequently the medicines taken for some internal disease cause an eruption, the nature and cause of which is not always seen at a first glance and may be entirely overlooked. *Belladonna, Carbolic acid, Iodide of Potash, Sulphur, Iodoform, Antipyrine* and a great many other remedies produce eruptions. Mental shock and emotions also produce eruptions.

The following cases of Dermatoses following mental shock were reported in our journals in 1889:

A lady, after witnessing a violent assault upon her husband, was much prostrated by the fright, and three weeks later a bullous eruption, having the characteristics of foliaceous pemphigus and accompanied by incessant pruritus, made its appearance.

Another case was a little girl who was rescued from burning, and remained for some time in a condition of prostration from fright. A month afterward a pemphigoid eruption made its appearance upon the body, disappeared under treatment, but reappeared several times.

A third case was that of a woman who became very much excited in a quarrel with her husband. A few days afterward an exudative erythema made its appearance on the arms, hands and feet; and vesicles on the lips. E. de Smet has recorded cases of purpura hæmorrhagica from the same cause.

The dermatologist must be very observing and a good cross-examiner in order that he may see all that is upon the surface of the body, and by his critical examination draw out all that is below the skin in the shape of ab-

normal sensations and symptoms. The more complete and thorough the description he obtains from the patient, the more accurate is his diagnosis apt to be, and the more successful his treatment; for the same affection in two patients may require almost opposite treatment. Take shingles, for example. The eruption may be precisely the same in two children, but the accompanying pains in one are burning, jerking and itching, worse in the evening, and from the slightest touch; in the other, burning, neuralgic pains, worse about midnight, but ameliorated by warmth. The first case will be relieved by *Zinc.*, the second by *Arsenicum*. Or, we may illustrate by two cases of acne occurring in a brother and sister. The one patient addicted to sexual excesses and strong drink, with a tired feeling all the time; the other, suffering with scanty menses, gastric difficulties and frequent diarrhœa. The disease is the same in both persons, but the causes are different, and we should be obliged to give *Rhus* in the first case, and *Puls.* in the other. Again, an eczema in one may be the expression of ill-nutrition from privation or scanty supply of proper food, while in another it may be the result of a plethora due to excessive indulgence in the pleasures of the table. We may, it is true, apply the name eczema in both instances, on account of the similarity of the lesions; yet the real condition of the two patients is almost diametrically opposite.

A positive diagnosis, it should be remembered, is not always possible upon a first examination, but it is desirable at all times that we may distinguish between a contagious and a non-contagious affection. For example, how important it is to recognize herpes of the prepuce, and not mistake it for chancre. The one, a disease of but little importance, the other of the greatest significance; in fact, a terrible infliction, which, if wrongly diagnosed,

may lead to the infection of perhaps dozens of others, and among the number many perfectly innocent persons. This statement may seem rather strong, but instances are on record where several persons have become infected from using the common water-closet. And yet, these two diseases, herpes of the prepuce and chancre, are frequently confounded, but, fortunately for the welfare of the community, it is usually the innocent one that is mistaken for the more serious.

The prognosis is not as important, perhaps, as the diagnosis, considering the fact that very few skin diseases are destructive to life, but it is a great comfort to the patient to learn that the disease is one of no danger; that it is not contagious, and that, in a short time, it will be cured. When the patient has good reasons to suspect that the eruption upon the skin is only a manifestation of some form of syphilis, no words can convey the feeling of relief experienced when he or she is told that the trouble is only a skin disease and in no way connected with that loathsome disorder.

The causation is always to be carefully investigated and studied, for by removing the special causes in each case a return to health may be expected, or at least the patient is put in the best possible condition for recovery. All violations of the general laws of health may produce diseases of the skin, hence it is very important to inquire into the habits, occupation, diet and dwelling-places of those seeking treatment.

The treatment of skin diseases varies, of course not only in different affections, but in the same disease as it occurs in persons of different diathetic tendencies. Each patient must be treated according to the special indications in his case. We must consider his age, his surroundings, his diet and mode of life, and all co-existing

diseases which aggravate or are the cause of his trouble. In short, treat the totality of symptoms.

The majority of cases of diseases of the skin are not preceded or even accompanied by severe constitutional disturbances; if there happen to be much fever and malaise, especially when the patient takes to bed from a sheer feeling of illness, and an eruption rapidly develops itself, something grave, probably one of the acute specific diseases, is present. This is all the more likely to be the case if the patient falls, at it were, *suddenly ill*. The main guide in these cases is the temperature: if the thermometer be raised in the axilla to 101 or 102 degrees F., and emphatically so if to a higher point than this, there can be very little doubt on the point. However, amongst the occasional exceptions, acute lichen, erythema nodosum, secondary syphilis, acute eczema, pityriasis rubra, acute pemphigus, urticaria, zoster, may be named, but these are not accompanied by high temperature. Secondary syphilis has been mistaken for the mottling of typhus and measles, acute lichen for measles, and zoster for pleurisy, on account of the pain. Occasionally in eczema there may be marked pyrexia, but not a markedly high temperature. When symmetrical, the disease is usually due to a blood-poison; when unsymmetrical, to local causes or perhaps to affections of the nervous trunks.

Perhaps one of the greatest errors committed in diagnosing cutaneous diseases is the dealing with them in a piecemeal manner. It is the universal expectation of the student to be able to diagnose a disease of the skin from merely looking at it. Many a student, if asked with a patient before him, What is that disease? will look,—and, it may be, look closely—and then make his diagnosis and give the thing a name. In no other class of

disease would he do that. He would obtain the objective, and the subjective symptoms; and use every means at his command for physical examination. It is of equal importance that he exhibit a like careful comparison in lesions of the skin.

One of the first cares of the dermatologist should be to distinguish in diagnosis between primary and secondary phenomena. The one set are of course essential points of the disease, and the secondary results may, if care be not taken, be elevated to the rank of important items. For instance: In the case of an erythema, in connection with long-continued congestion, more or less thickening may occur; if this be not clearly perceived to be an accidental occurrence, the diagnosis becomes difficult. Take the case of pityriasis rubra, a disease in which the whole skin becomes intensely hyperæmic with free shedding of scales. If this be properly treated it will disappear, and leave not a trace. It may be unaccompanied throughout its course by any thickening of the papillary layer; but if it continues a long while this layer may be thickened, and then there are present hyperæmia, papillary hypertrophy, and scaliness, as in psoriasis; and the diagnosis between pityriasis rubra and psoriasis could not be made from the mere surface appearances and alterations only. But the two things clinically are wholly different. This shows the importance of attending to the primary elementary lesion and the history and course of diseases.

Again, in searching for the earliest stage of disease when that occurs in patches, it is necessary to go to the edge of the disease since it there presents its most recent characters.

The typical course and characters of any disease may be masked by the co-existing development of a second disease, and here the interminglage of the features of the

twain will be detected, as in urticaria and scabies or purpura; scabies and syphilis; eczema and scabies; eczema and psoriasis, and the like. The capriciousness as regards the appearance and disappearance of an eruption of an erythematous type, is suspicious of urticaria. Multi-formity means that a disease is complicated, unless it be scabies or syphilis.

As regards the temperament, the dermatologist is generally enabled to say at a glance whether a patient is of full habit and likely to have a loaded system—especially the case in women; whether there be organic disease, or if there be a dyspeptic habit, or an ill-fed system, that signifies debility. If *lymphatic*, the patient is prone to eczema, impetigo, intertigo, the pustular aspect of scabies and ringworm; if *gouty*, the scaly diseases, chronic eczema and lichen agrius; if *rheumatic*, erythema nodosum; if *strumous*, eczema, lupus; if *florid*, psoriasis especially. There is also the *cancerous* cachexia, and in *nervous* subjects various hyperesthesia engrafted upon ordinary eruptions. Red-haired subjects are declared to be very liable to pityriasis of the scalp.

Some eruptions are more or less periodic in their occurrence, as in the case of pemphigus, but the dermatologist should remember that in districts where malarious disease is common, a disease not usually possessing periodic features may sometimes be so influenced that its eruption occurs in a periodic manner, or the febrile disturbance by which it is accompanied may show itself in periodic outbursts.

Psoriasis, eczema, and syphilitic diseases are essentially those which recur.

Occupation exerts considerable influence in some lesions of the skin. Cooks are particularly liable to eczema and erythema, and bakers, grocers and bricklayers

to lichen about the backs of the hands; chimney-sweepers are liable to epithelioma of the scrotum; cotton-workers to urticaria; butchers and graziers to whitlow, boils and malignant pustule and ecthyma; cavalrymen and shoemakers to eczema marginatum in the fork of the thighs; young women who come from the country and have the full diet fare of the city servants and those who change their mode of life, so that it entails more exercise and better living, get an overloaded system that shows itself in erythema papulatum, erythema nodosum, or impetigo.

The age of the patient is very important. During the first six weeks of life congenital syphilis develops itself; intertrigo, eczema of the scalp, and seborrhœa capillitii also occur about the same time. Syphilitic pemphigus occurs, it is said, before the child is six months old, not afterwards; during the first few months and up to and through the period of dentition, strophulus and eczema are met with. Cancer (epithelioma) is a disease of late life—it does not occur before thirty, generally about sixty and beyond. Lupus is a disease which commences in early and young life, and the same may be said of syphilis. The parasitic diseases occur in the young, rarely after twenty-one years of age. Herpes circinatus is the form seen in adult life. In old people, phthiriasis, ecthyma cachecticum, pemphigus, and pruritus, with cancer and rodent ulcer, frequently occur.

We should have some rules as to the mode of studying skin diseases. The following are probably the best; they are taken from Fox:

1. The observer should always strip his patient so that the disease may be exposed to the fullest extent compatible with a due regard to the proper feelings and sensitiveness of the individual. To be satisfied with seeing a bit of a patch of disease in this spot, or just a spot or two

there where the malady is most marked even, is often to run great risk of arriving at an erroneous diagnosis, if not to actually make one, certainly to miss the recognition of transitional stages, which are of the utmost importance in determining the general character and often the exact nature of a disease.

2. It is of much importance that mere *stages* of diseases should be regarded as stages and nothing else. Diseases must be dealt with in their entireties. Where the whole of a disease is made up in any particular instance of certain stages, in estimating the nature and characteristics of that disease one stage must not be regarded in particular—be thrust into undue prominence—at the expense of others. The several stages together constitute the disease.

3. A clear distinction should be drawn between *essentials* and *accidentals*. For instance, the essence of scabies is the acarus in its furrow. All else that follow—the follicular irritation, improperly called lichen, the ecthyma, the urticaria, which may occur in many different diseased states of the skin—is accidental, and due to the irritation and the scratching practiced.

4. It should be a point with the dermatological student to make as little as possible of mere *superficial* appearances and changes, because these are brought about as the result of, and are indeed often secondary to, more important and primary changes in the deeper parts.

5. It is important to pay special attention, as far as possible, to the primary anatomical seat of the disease. What the primary seats of individual diseases are, so far as regards cutis, cuticle, follicles, and the like, I shall discuss in another place in speaking of elementary lesions and the individual diseases themselves.

6. Special attention should be paid to the fact of the

character of an eruption being *permanent*, or *transient*, or *interchangeable*. The case of lichen planus may be taken to illustrate this point. In it the characteristic lesion is a red flattened papule covered by the minutest scales. This is the sole lesion present. The papule never changes into a pustule or a vesicle; but not so is it with the papule of eczema or variola. The tendency of a syphilitic papule is to become oftentimes a pustule or tubercle, which gives place to an ulcer, and so on. The eruption as a whole may be again *capricious*, appearing and disappearing suddenly, often in the course of a few minutes. This feature in itself is almost diagnostic of urticaria.

7. Those who are studying skin diseases should observe whether an eruption be *uniform* or *multiform* in character. Multiformity implies (*a*) the co-existence of two or more diseases, in which case there will be present the features of the two or more diseases commingled; or it implies (*b*) the existence (1) if the lesions be inflammatory—that is, if pustules or vesicles be present, of scabies, or (2) if the lesions be degenerative, if ulcers and suppurating tubercles, for example, be present, of syphilitic disease. The difference between the two main classes of cases, the complicated disease on the one hand and scabies and syphilitic on the other, being that in the former there are no transitional stages observed, as in purpura urticans, pemphigus pruriginosus, impetigo and scabies; syphilis and scabies, etc.; whereas, in the latter class, they are present as between the papules, vesicles, and pustules of scabies, or the papules, tubercles, pustules and ulcers of syphiloderma. Multiformity as it exists in scabies and syphilitic eruptions—relates in each case to such different kinds of eruption, and the multiformity moreover in complicated or co-existent diseases is seen to

be due to the commingling of such distinct lesions without transitional forms that the character of multiformity becomes at once a very reliable guide in diagnosis; of course, other things help, as rest, development, etc., but multiformity is a good rough test of syphilis, scabies, or complicated diseases.

8. It is wise to note certain differences, not only as to the general nature and character of cutaneous diseases as they exist in the old and young, but also in reference to the same disease as it occurs in the old and young. The cutaneous diseases of childhood are essentially distinguished from those of the adult, in that they are uncomplicated by organic diseases of the internal organs, and by those more complex and profound perversions of nutrition which arise from overworked or badly used organs, such as gout, dyspepsia, free retention of excreta in the blood, rheumatism, and so on. They contrast with those in the old by the absence of coincident degenerative changes in the body, which are to be the lot of the man who passes the meridian of life. The cutaneous diseases of children are uncomplicated in this respect, and speaking generally, they are the result of the misuse of pabulum supplied to the body, or the direct consequence of improper diet. The case of eczema infantile may be taken as an example. But there is a difference in constitutional conditions—the diathetic conditions in the child who suffers from skin disease are different from those of the adult or aged. It does not take any long time to see how frequently the subjects of skin diseases in the young are strumous, and what an influence this diathesis has on the skin diseases of the young as contrasted with those of the middle-aged and of an age beyond the latter period of life; that syphilitic affections other than those hereditarily transmitted are specially the privilege of the adult,

and so on; that in the advanced in years there are not only complicating organic diseases of internal organs, blood alterations due to mal-assimilation, degenerative tissue changes such as cancer, but disease specially connected with decay of the nervous system, as in senile pruritus. But to put what I wish to enforce in a few words, I may say that, as regards *kind*, the diseases of children are the result of malnutrition from deficient or bad feeding; those of the adult the result of mal-assimilation; those of the aged the result of degenerative changes. As regards complications, diseases of the young are often closely connected with the strumous diathesis especially; those of the adult with functional derangements of internal organs and mal-assimilation, such as dyspepsia, hepatic and renal torpor—and with the diathetic conditions, phthisis, rheumatism, and the commencement of gout; those of the aged are linked with nerve pareses and degenerations of the skin, as evidenced by increased pigmentation, atrophy of the glands, and of the nerves in the papillæ, and also with organic diseases of important internal organs. All this is important therapeutically.

9. It is to be remembered that there is a difference in the conditions associated with skin diseases, as they occur in hospital and private practice. The constitution of the hospital patient is depraved by mal-hygiene and want of proper food, that of the private patient is depraved, no doubt by want of hygiene oftentimes, but also by overloading of the digestive organs, and not from actual want of food. But more than this; the nervous system participates in the latter much more actively in helping, controlling, or modifying the existing disease; and this as the result of the luxury enjoyed by the rich, and the greater mental toil undergone by the busy man of the middle classes, the effects of which, in both cases, are felt

by the offspring. The old amongst the hospital patients show especially nervous symptoms connected with physical decay, and at the two extremes of life the evil consequences of uncleanliness are most marked, because there is less power to resist its influence—in the hospital patient.

10. There are differences in the same disease as seen in this and other countries, as well as a distinction to be drawn between the several kinds of cutaneous affections occurring in this country and abroad. There is, indeed, a nationality of disease as well as of character or physique.

11. A very close relation exists in many instances between cutaneous disorders and functional disturbances in internal organs. Dr. Singer calls attention to this relation, and thinks that it is more frequent than is generally known, as the symptoms, meteorism, flatulence, eructations, loss of appetite, and constipation, may be lacking. Examination of the urine with detection of the greater or less excretion of indican will give one an index of how matters stand. Urticaria is nearly always accompanied by digestive disturbances. In the so-called idiopathic urticaria the amount of indican in the urine is nearly constantly increased. Collect the twenty-four hours' quantity and test from that as it varies during the day. He employed Obermayer's reagent. In certain forms of facial acne, and in nearly all cases of senile pruritus, he found a constant relation between the skin eruption and increased intestinal fermentations at the lower portion of the small intestine. In some instances hyperæmic changes in the skin and mucous membrane *have a common origin*, as in lichen planus and pityriasis rubra, from disturbance of the sympathetic for example, and this is the explanation of the coincidence in the two diseases named, of the skin changes, and pyrosis, menorrhagia, and the like. In

other instances the changes in skin and internal organs, instead of having a common origin, react the one upon the other, and the important point to notice is this: that the cutaneous troubles may be excited and intensified by internal troubles. There are four organs whose derangement excites or intensifies skin mischiefs. The stomach, the liver, the kidney, and uterus. In the vast majority of cases it is rather intensification than excitation that the practitioner has to deal with.

12. It is important always to be aware of the fact of the bias impressed upon skin diseases by various diatheses—especially the syphilitic, the gouty, the strumous, and the nervous.

13. Observers should accustom themselves to examine microscopically the morbid products of skin diseases. The surgeon and the physician obtain most valuable indications from the examination of the minutest portions of morbid tissue and the juice it may yield; and the dermatologist is much to blame for an omission in this respect. The microscope affords very valuable assistance in the differential diagnosis of herpes, eczema, psoriasis, and tinea especially. For instance, inflammatory products are absent in psoriasis, present in the other three diseases; whilst in all forms of parasitic disease resembling herpes and eczema, as in so-called eczema marginatum, fungus elements are detected, provided proper care is observed.

CHAPTER III.

CLASSIFICATION OF THE ELEMENTARY LESIONS.

The first step in diagnosis is to obtain a clear and full understanding of the different lesions, so that their true character may be recognized at a glance. Each author has a pet classification which he honestly believes to be the best. One divides them into 1. Maculæ; 2. Erythematous; 3. Papular; 4. Vesicular; 5. Pustular; 6. Squamous; 7. Tubercular; 8. Parasitic.

Another gives 1. Masculæ or stains; 2. Erythema or redness; 3. Wheals; 4. Papules, or pimples; 5. Squammæ or scales; 6. Vesicles, or little bladders; 7. Blebs, or large vesicles; 8. Tubercula, or lumps; 9. Pustules, or mattery heads.

I have found the following division to be of the greatest help in diagnosing skin affections: Macules, Vesicles, Bullæ, Pustules, Papules, Tubercles, Scales, Fissures, and Ulcers.

There is one remark I would make with a view of helping the reader to avoid a common error in regard to these lesions. It is this, that the different typical forms of lesions embrace or include each of them several varieties, and the designation of each typical form or lesion is to be regarded as a generic term, applicable to several varieties of the same lesion. It is not enough, for instance, to say a papule is present. Since there are various

kinds of papules, it is necessary to state what particular kind of pustule is meant. When it is said a tubercle is present, the class to which the lesion belongs has only been defined; the tubercle may be that of a cancer, lupus, or syphilis. I am convinced that one of the commonest errors into which those who are studying skin diseases fall is the neglect to recognize the fact that there *are* several different varieties of the same kind of elementary lesions, and their confusion of these several different varieties. This is especially the case with papules. We will describe the several varieties of elementary lesions.

A *macule* is a small, circumscribed portion of skin, in which has occurred some alteration in its color, but without any secretion, effusion, infiltration, or change in its thickness or consistence. The macule itself may be white from loss of pigment, red from congestion, or dark or black from increase of pigment.

The principal diseases in which it occurs, and chief features, are:

1. Chloasma, in which the macule or discoloration is somewhat diffuse, occurring on the forehead and cheeks, and is of a brownish color.

2. Erythema; The macules are of varying size of a reddish color.

3. Ephelis; Macules of a yellowish to a dark brown color. Chiefly found on the exposed parts of the body.

4. Lentigo; Small, dark-brown macules scattered over the surface, on the covered as well as on the uncovered portions.

5. Lentigo maligna; Very dark macules, from the size of a large pin-head to that of a pea, later becoming infiltrated, and sometimes ulcerating.

6. Leprosy; Brownish macules of varying size.

7. Leucoderma; White or light-pinkish macules, surrounded by a dark border.

8. Lupus; Minute reddish-brown or ham-colored.

9. Nævus; Red or purplish, disappearing on firm pressure.

10. Purpura; Red or purplish, not disappearing on pressure.

11. Rosacea; Rosy macules

12. Syphilis; (*a*) Reddish macules, appearing in early syphilis, chiefly on the chest, abdomen and back; (*b*) Macules resembling those of leucoderma, and met with about the neck in young women in the early period of the disease.

13. Xanthelasma; Yellowish macules, chiefly met with about the eyelids. A *vesicle* is a small elevation of the horny layer of the epidermis, by the effusion of a serous fluid.

The principal diseases in which vesicles are found, and their chief features, are:

1. Eczema; In patches, minute and closely aggregated, and rupturing in a day or two, except where the epidermis is very thick.

2. Dermatitis multiformis; Lesions of larger size and greater duration, and frequently accompanied with other lesions of a pustular character.

3. Erysipelas; Lesion situated on a diffused inflamed base, usually on the face.

4. Erythema multiforme; Associated with macules and patches of erythema.

5. Herpes; One or more groups of three or four vesicles of moderate size, and not packed together so closely as in eczema. They usually last a few days, and dry down into a small scale or crust, except on the genitals, where they rupture promptly.

6. Impetigo contagiosa; Medium-sized vesicles, lasting a few days and drying down to form crusts, occurring on any part of the body.

7. Scabies; Small, pointed vesicles, usually met with on the hands and fingers.

8. Sudamina; Minute, disseminated vesicles, corresponding to the sudoriparous ducts.

9. Varicella; Vesicles of medium size, which may or may not be umbilicated.

10. Variola; Umbilicated vesicles succeeding papules.

11. Zoster; Vesicles of good size, seated on inflamed patches, and following the course of a nerve-trunk.

A *bulla* is a larger elevation of the epidermis, by a serous or sero-fibrinous effusion, than a vesicle.

The principal diseases in which bullæ are found, and their chief features are:

1. Erysipelas; The bullæ of erysipelas are in reality very large vesicles, seated on the inflamed base.

2. Leprosy; Large bullæ, usually solitary, and appearing at intervals.

3. Pemphigus; Large bullæ, solitary, or in crops at intervals.

A *pustule* is an elevation of the epidermis, small or large, by a purulent exudation.

The principal diseases in which pustules are found, and their chief features are:

1. Acne; Small, scattered pustules, resulting from the suppression of papules, chiefly met with on the face, back, and chest.

2. Ecthyma; Scattered pustules, of medium size.

3. Eczema; Closely aggregated pustules, of small size.

4. Dermatitis multiformis; Pustules associated with other lesions.

5. Furuncles; A pustule seated at the apex of an inflamed, painful, and slightly elevated spot.

6. Scabies; Isolated pustules, especially frequent about the hands and wrists.

7. Syphilis; Pustules succeeding papules, or occurring without them.

8. Variola; Umbilicated pustules which follow vesicles, and which were preceded by papules, discrete or confluent.

The common feature of these three lesions—vesicle, bulla, pustule—is a fluid exudation—serous, sero-fibrinous, or purulent—which lifts up a greater or less extent of horny epidermis, producing an elevation on the skin, and the lesion consists of an effused fluid, kept in bounds by a limiting membrane.

A vesicle, bulla, or pustule having formed may further progress in one of several ways. After a few days the effusion may be reabsorbed without rupture of the epidermis, and leave nothing but a loosely attached scale, which soon exfoliates. On the other hand, the epidermis may rupture in a day or two, the effusion be poured out, and the whole dry up to a small crust, which in a few days more is wholly detached; or, still again, a vesicle or pustule may rupture promptly, but from the denuded surface a serous or purulent fluid may continue to exude for several days or even weeks.

A *papule* is a small, solid elevation of the skin. In this case the exudation into the skin is of a plastic character, mostly cells with but little fluid effusion—not sufficient, in fact, to produce a vesicle. A papule may disappear in a few days by absorption of the exudation, or may be gradually converted into a pustule; or may undergo ulceration, or may even persist without alteration almost indefinitely.

The principal diseases in which papules are found, and their chief features are:

1. Acne; Papules of varying size, chiefly met with on the face, shoulders, back, and chest, and frequently changing into pustules.

2. Erythema multiforme; Grouped papules, most frequent on the extremities.

3. Eczema; Scattered, or more or less closely aggregated, on the arms, inside of thighs, and elsewhere, frequently accompanied with scratch-marks.

4. Lichten simplex; Scattered papules, frequently met with over the entire surface.

5. Lichen planus; Flat, umbilicated papules, greatly resembling those of a papular syphilide.

6. Lupus; Persistent and gradually increasing in size; becoming tubercles, usually on the face.

7. Miliium; Minute white papules on the eyelids and contiguous skin.

8. Molluscum contagiosum; Umbilicated papules, containing a cheesy matter which may be pressed out, frequently pedunculated—in this respect differing from acne papules, which are not pedunculated.

9. Prurigo; Hard, and under or in the skin, not much elevated, and with little change in color of the skin; more easily felt than seen, and accompanied with scratch-marks.

10. Rubeola; Red papules, covering the entire surface, and accompanied with febrile symptoms.

11. Scabies; Small papules, usually accompanied with other lesions, and generally with their apices scratched off.

12. Strophulus; Red papules, in infancy only.

13. Syphilis; More or less generalized reddish or copper-colored; may degenerate into pustules, or become covered with a fine scale.

14. Urticaria; Large papules, lasting a few hours only, but succeeded at short intervals by others, and accompanied with sharp pruritus.

15. Variola; Discrete or confluent, changing into vesicles, and later into umbilicated pustules; usually accompanied with severe general symptoms.

16. Xanthelasma; Yellowish and slightly elevated, most frequent about the eyes, but may occur elsewhere.

A *tubercle* is a solid elevation of the skin, larger than a papule, but agreeing with it in other respects and capable of undergoing the same changes—namely, absorption, pulsation, ulceration, or indefinite prolongation.

The principal diseases in which tubercles are found, and their chief features are:

1. Acne; Tubercles on face, back, etc., with inflamed bases, and usually terminating with suppuration.

2. Fibroma; Single or multiple, and scattered over all parts of the body.

3. Frambœsia; Fungous tubercles, frequently of large size—very rare.

4. Keloid; Flat tubercles, or flattened elevations of the skin, with projecting finger-like processes.

5. Lentigo maligna; Commencing as macules, becoming papules, and afterward tubercles, frequently with ulceration.

6. Leprosy; Reddish-brown tubercles on the forehead, ears, and other parts of face and body.

7. Lupus; Solitary or but few reddish-violet tubercles, of very slow increase, and terminating with ulceration.

8. Morphœa; Flat, light-colored tubercles, followed by atrophy, from one to a dozen—rarely more.

9. Rosacea hypertrophica; Confined to the nose.

10. Syphilis; Copper-colored, terminating with suppuration or ulceration. In early syphilis, numerous; in late

syphilis, number of lesions limited, and occurring in groups.

Scales are collections of cells of the stratum corneum, which, instead of pursuing their usual and normal course, collect in undue number and quantity, and are loosely or firmly attached to the skin in more or less heaped-up masses. When these scales are small in size, loosely attached, like a fine powder or meal scattered over the surface, they are termed *farinaceous*; on the other hand, when large, thick, heaped up, and firmly attached, they are called *furfuraceous*.

The principal diseases in which scales are found, and their chief features are:

1. Dermatitis exfoliativa; Large scales, consisting of flakes of horny epidermis; sometimes several inches in extent.

2. Eczema; Medium size, scales occurring in the last stage of the disease, and frequently preceded by exudation and crusting.

3. Ichthyosis; Very adherent thick scales, the disease commencing in early life and continuing indefinitely.

4. Lupus erythematosus; Very fine adhering scales, situated on a reddened, infiltrated base.

5. Pemphigus foliaceus; Large scales, due to imperfect formation of bullæ.

6. Pityriasis simplex; Fine white scales on a surface but little affected otherwise, and readily exfoliating.

7. Pityriasis rubra; Fine scales on a reddened surface, usually generalized.

8. Psoriasis; Thick, adherent, imbricated white scales on a reddened infiltrated surface, more or less generalized.

9. Syphilis; Small scales at the summit of papules, or thicker and larger on reddened infiltrated surface, more or less generalized.

10. Trichophytosis capitis; Fine scales among hair-stumps on round patches.

Fissures are solutions of continuity, and are characterized by varying length and depth, but with scarcely appreciable breadth. They rarely extend deeper than through the horny or Malpighian layers, though sometimes they penetrate the cutis vera. They are frequently accompanied with a scanty serous exudation.

The principal diseases in which fissures are found, and their chief features are:

1. Eczema; Especially at flexor aspect of joints, palms of the hands, and soles of the feet.

2. Leprosy; Especially at extensor aspect of small joints or between them, and usually accompanied with anæsthesia.

Ulcers are solutions of continuity of three dimensions—namely, length, breadth, and depth. Their borders may be sharp cut and perpendicular to the skin, or may be sloping or overhanging, features which often afford a valuable clew to the origin of the lesion.

The principal diseases in which ulcers are found, and their chief features are:

1. Carcinoma; Ulceration on the elevated surface of a carcinomatous tumor; underlying tissues hard.

2. Lupus; Ulceration following one or more tubercles, sometimes becoming carcinomatous.

3. Scrofula; Irregular and uneven, frequently with overhanging margins.

4. Syphilis; Round or ovoid, with straight "punched-out" margins.

5. Simple; Round or oval, with sloping margins.

Tumors:

1. Carcinoma (epithelioma); Usually solitary, hard, and terminating by ulceration.

2. Elephantiasis; Sometimes immense tumors of the genitals, which in rare instances have reached the weight of one hundred pounds.

3. Fibroma; Solitary or multiple, of varying size, sessile or pedunculated, without tendency to ulceration.

4. Papilloma; Warty tumors, of varying size and number.

5. Sarcoma; Soft "fleshy" tumors, bleeding readily; usually solitary, unless accompanied with melanotic deposit.

6. Steatoma; Enlarged sebaceous glands, with retention of secretion.

In addition to the above there are certain other lesions, some of which are secondary, while others are peculiar to certain special diseases, and will be described in connection with them.

With the foregoing list of diseases and lesions, and with their chief peculiarities visible at a glance, there should be but little difficulty in working out an analytical diagnosis in the great majority of cases of cutaneous disease. We would, however, advise the student to pursue the following course: First, determine the predominant lesion, then turn to the list of diseases which are characterized by that lesion, and see how closely the descriptions there given agree with the appearances presented; and, when a choice is made, carefully read the description of the disease itself as found in later pages of the book. Should the disease in question present more than one lesion, examine the lists of diseases under each lesion, and proceed as before. Several years' experience in studying dermatology has satisfied the writer that the pursuit of the method here laid down will enable the student to become a prompt and correct diagnostician in a surprisingly short time. He will, of course, meet with

cases in which he will not succeed, but he should remember that cases not infrequently occur which puzzle even the most expert.

The subject of diagnosis, however, cannot be dismissed without allusion to certain eruptions or rashes that arise, not spontaneously, but after the ingestion of certain drugs that have been administered for other diseases. The following named drugs have been known to give rise to the lesions which follow their titles, viz.:

Acid, Carbolic.—Erythema.

Acid, Salicylic.—Erythema, vesicles, papules, and wheals

Aconite.—Erythema and vesicles.

Antimony.—Vesicles and pustules.

Antipyrin.—Papules.

Arnica.—Erythema, bullæ, and scales.

Arsenic.—Erythema, papules, vesicles, bullæ, pustules, and wheals.

Belladonna.—Erythema.

The Bromides.—Erythema, vesicles, bullæ, pustules, papules, tubercles, and wheals.

Cannabis Indica.—Vesicles.

Chloral.—Erythema, papules, vesicles, and wheals.

Cinchona derivatives.—Erythema, papules, vesicles, and wheals.

Copaiba.—Erythema, papules, vesicles, bullæ, and wheals.

Digitalis.—Erythema and wheals.

Hyoscyamus.—Erythema and wheals.

The Iodides.—Erythema, papules, vesicles, bullæ, pustules, and wheals.

Iodoform.—Erythema, papules, and vesicles.

Naphtalin.—Papules.

Phosphorus.—Bullæ.

Santonin.—Papules, vesicles, and wheals.

Sulphonal.—Macules, papules.

Sulphur.—Erythema and vesicles.

Violet-water (locally).—Papules.

Pathology.

The pathology of the skin presents no essential differences from the pathology of other parts of the body—that is, the same morbid processes that are met with elsewhere also find expression in the dermal tissues. For instance, congestion, inflammation, hypertrophy, atrophy, cedemas, infiltrations, degenerations, neoplasms, pseudo-plasms, nervous derangements, etc., are the processes which result in the production of the various lesions that constitute the essential visible characteristics of cutaneous disease. In addition we have certain parasitic invasions, of both animal and vegetable origin. The complex structure of the skin, and of the special organs contained in it, together with the anatomical peculiarities of the appendages, give rise to an almost infinite variety of changes.

CHAPTER IV.

ETIOLOGY.

The general question of the treatment of diseases of the skin involves the consideration of the different and several indications, and of the means at our command for the fulfillment of these indications. Before, however, we can properly appreciate the special features appertaining to any one given morbid condition, it is better to devote a little time to the discussion of the general factors which lead to the development of cutaneous disease; in other words, to consider the question of etiology.

Primarily it may be stated that cutaneous lesions are due to influences or forces from without, or from those which exist or arise within the body. To the former class may be assigned such as depend on temperature and climate, such as are due to traumatisms of various kinds, such as result from various parasitic invasions, etc. This is in reality but a limited class; on the other hand, the etiological factors which arise within the body itself are very numerous. We will, however, first consider the external causes. Excessive heat or direct exposure to the sun may excite undue activity of the sudoriferous glands, and result in the production of *sudamina*, or the extremely annoying papular affection known as *lichen tropicus*; or to an erythematous or even vesicular inflammation, commonly known as sunburn; or to the more trivial affection called *ephelis*, or freckles. Excessive cold may result in absolute congelation of exposed

portions of the integument, followed by death and sloughing off of the parts; or a less degree of cold may excite the condition known as *pernio*, or chilblains, or in some persons produce chapping or fissuring of the skin; or, by depressing the general vitality, promote an outbreak that otherwise would not have occurred. Of the animal parasites that may infest the body, the different varieties of *pediculi*, or lice; the *acarus*, or itch insect; the *leptus*, etc., produce affections more or less annoying, but usually readily removable. On the other hand, the infinitely minute and to the naked eye invisible parasites of vegetable origin, as the *achorion* and the *trichophyton*, give rise to affections which are exceedingly tenacious, and sometimes well-nigh incurable.

The internal causes of cutaneous diseases, however, are far more frequently in operation, and are far more important than those of external origin. In this class we may place those affections of the skin which are due to pre-existing lesions of some part of the nervous system, as, for instance, *zoster*, which results from an anterior lesion of the ganglion attached to the posterior root of a spinal nerve; or some of the lesions of *leprosy*, which succeed certain degenerations of the spinal cord. The nervous system, however, may be in a perfectly sound condition, and yet act as the medium for the transmission of some internal irritation to the surface; thus, the gastric irritation resulting from the ingestion of shell-fish may manifest itself chiefly on the skin in the form of *urticaria*, or a chronic irritation of the pelvic viscera may be the active cause of *rosacea*. Again, cutaneous lesions may be due to internal changes which have in turn arisen from external causes as, for example, the cutaneous manifestations of *syphilis*, which are due to an internal dyscrasia produced by the entrance into the body of a certain form

of morbid matter from without. Leprosy may be placed in the same category.

Still another internal cause of cutaneous lesions will be found in that condition of ill nutrition or imperfect assimilation known as scrofula or *struma*.

Finally, we may have external lesions resulting from the accumulation in the blood of certain *materies morbi*. Most of the so-called medicinal rashes are due to this. Or, again, we may see the *materies morbi* generated within the body itself through imperfections in the digestive, assimilative, or excretory functions. As a matter of fact, I believe that fully one-third of the cases of cutaneous disease which come under the physician's eye are due to this last-named cause. If this be true, a somewhat brief consideration of this topic will not be out of place at this point.

In order that nutrition may be healthily carried on in any part, there must be—(1) a proper state of the blood; (2) a proper condition and behavior of the tissues to be nourished; and (3) a right exercise of the controlling influence exerted by the nerves. And these three must work harmoniously together. Deviations from health may originate consequently from a flaw in any one of the three conditions above named. The theoretical origin, therefore, of diseased changes in the skin may be specially in the blood, as we see in zymotic affections, and here the skin affection is only symptomatic or a part of a more general disease; in the tissues themselves, as seen in the case of warts, cancer, keloid, psoriasis; or in the nerves, as in pruritus, and, it is thought and now generally taught, herpes, pemphigus, and urticaria. If the exact origin of disease be not as stated, the parts of the system chiefly concerned in the production of diseased conditions may be emphatically in one case the blood, in a second the

tissues, and in a third the nerves. But of course, inasmuch as the ordinary action of these three agencies is bound up and related in the closest manner in health, the misbehavior in disease of one affects, secondarily, the proper action of others of the three agencies concerned in healthy nutrition. So that all are more or less involved in disease when fully developed, but primarily one or the other is mainly concerned in it.

Now there is much readiness to ascribe disease to changes in the blood, but not to sufficiently recognize the influence of perversions in the inherent cell-life of the skin structures, nor the controlling supervision of the nerves in the generation of cutaneous disease. Cancer is an example of disordered tissue-life.

It is more than probable that the origin of some diseases of the skin may really be in the central nervous system, and the cutaneous trouble is the effect of a general disturbance of the nervous system; or in the nerves themselves that run to the affected part; at any rate the nerves are mainly concerned, or they may constitute the agency by which the morbid changes in the skin are produced.

Some of the causes that produce altered states of the blood-current, are:

1. Poisons of acute specific diseases—for example, those of small-pox, etc
2. The circulation of special poisons, be they animal—siphilitic; medicinal substances—arsenic, etc.; or dietetic, such as shell-fish, giving rise to urticaria, roseola, erythema.
3. Dietetic errors, as in wine-drinkers, high-livers, non-vegetarians, etc., leading to the increase of urea and uric acid in the blood.
4. The tuberculous, scrofulous, and lymphatic dys-

crasiæ, giving rise to non-specific eruption—impetigo, acne.

5. The gouty and rheumatic diatheses, as in lichen agrius.

6. Altered and lowered nutrition from such causes as bad living, poverty, misery.

7. The accumulation of excreta in the blood from non-excretion, suppression of natural discharges, kidney disease, etc.

8. Convalescence from severe and lowering diseases by which the body is rendered much less able to resist disease.

9. Climacteric, or endemic influences, often malarial in nature, which act by deteriorating the system generally.

10. Disorders of the liver and spleen leading to pigimentary deposits in various parts, jaundice, and pruritus, etc.

Local irritants frequently lead to alterations of tissue, and rank here with burns, scalds, parasites, the occupations of bricklayers, masons, and washerwomen, etc., as causes of local mischief.

Dyers, and those who handle cheap clothing, frequently suffer from erythema due to the irritant action of dyes.

Certain tissue peculiarities may be inherited. The father may transmit dispositions in tissues to behave in particular ways directly to the child, as a local peculiarity, independent of any blood state, and in this sense psoriasis, cancer, ichthyosis, may be hereditary.

There are two sources of local irritation that deserve special notice. I refer to the use of *flannel* worn next the skin, and *scratching*. Some skins are so irritable in health as to be excited to an unbearable degree by the use of flannel. In a very large number of cases of skin disease pruritus is in this way intensified and the disease

even protracted, and in proportion to the degree of uncleanliness. Flannel acts, as a mechanical irritant, by augmenting the local heat, and intensifying reflex action.

Scratching plays an important part in the modification of skin diseases, most of which are accompanied by itching. To relieve itching scratching is the most natural thing to do. What does it do? 1. When there is no eruption it may produce one. 2. It augments and modifies existing eruptions. 3. When the disease is *non-contagious*, secretion, in scratching, may be transferred from place to place; and if acrid, set up local inflammation; and when *contagious*, scratching is the surest method of inoculation, as in the case of contagious impetigo. Children in this way transplant the disease from the head to various parts of the body. Mothers, beyond a doubt, get the disease about their hands from contact with children.

Upon the nature of the cause depends the *contagious* or *non-contagious* quality of any disease. It is generally conceded that parasitic and the acute specific diseases are contagious.

Sex has some influence as a cause of disease; males suffer by preference from sycosis, pemphigus, psoriasis, eczema, and epithelioma; and females from acne, kelis, and lupus especially.

In our own clime race would seem to exert an influence upon lesions of the skin. Dr. Morrison, of this city, has preserved histories of five hundred cases of skin diseases in negroes, and forms the following conclusions:

“Acne and lesions due to pediculi and insect-bites are uncommon. Mosquitoes, the cimex lectularius, and insects in general, do not produce the same ill effects” (My own observation, which has been quite extensive, would lead me to disagree with the doctor in regard to

the pediculi. They are very apt to have lesions from this cause). "Ainhum is peculiar to the race, two cases having been seen; one man had lost one little toe, and that of the opposite foot was affected."

Chancre is more indurated, and more frequently complicated with phimosis.

Chloasma appeared to show a lessening of pigment, instead of an increase. (Dr. Heitzmann takes issue with Dr. Morrison on this subject, and asks how can a diminution of the normal pigment be termed chloasma, an increased pigmentation being usually understood by that name.)

Chilblain is common.

Elephantiasis Arabum mostly follows syphilis.

Erythema multiforme is difficult to diagnose, as are all erythematous conditions.

Eczema appears to be more amenable to treatment; 129 cases are recorded.

Favus and pediculi capitis are rare. (The latter is common. D.)

Keloid appears common, especially false keloid after injuries. It is seen following variola and zoster, and after piercing the ears.

Lupus is seldom encountered.

Lymphadenitis is quite common.

Pruritus is much complained of, and it is said that syphilitic lesions itch in this race.

Scabies was rarely seen. (I have seen several cases.)

Syphilis is abundant.

Scaly and pustular lesions are often seen.

Urticaria wheals do not seem to be so elevated, but very itchy.

Dr. Atkinson reported a pustular folliculitis very frequent in young, closely-shaven negroes. The pustules

penetrate into the follicles of the beard without producing that degree of irritation which is to be called sycosis. He thinks that fifty per cent. of the young negroes who shave very close have it.

He has noticed that it is common to find deep and permanent pigmentation after the application of a mustard plaster. (I have often noticed the same condition.)

Involution occurs after a time in keloidal tumors; they become flaccid, and, after some years, soft.

Pediculosis appeared to him to be as frequent in colored as in white children.

Acute exanthemata produce, upon desquamating, a peppered appearance, looking as though the skin were dusty or sprinkled with fine powder. In scarlatina it is due to the slight elevation of the papules, which is not evident in Caucasians.

Whatever be the causes of the various cutaneous affections, we are chiefly concerned with the means that the physician has at his command with which to treat them successfully. First of these is hygiene. It goes without saying that recovery is facilitated by the substituting of good hygienic surroundings for bad ones; and under this head we may include fresh air, wholesome food, cleanliness, exercise, and seasonable clothing. It is hardly necessary to go into details on these points, if the fact is recognized and remembered; and in all chronic affections of the skin, and in some of the acute ones, these matters should be inquired into, and corrected when possible. Our resources further include mechanical, chemical, and pharmaceutical remedies, and also electricity. An elastic bandage applied to an old, infiltrated eczema of the leg is an illustration of the first; an active caustic applied to an obstinate ulcer may be considered as an example of the second; but by far the largest proportion of

remedial agents will be found in the pharmaceutical division. This class embraces remedies used both internally and externally. The homœopathic materia medica is rich in remedies having a direct and specific action upon the skin. And the fact that we always prescribed for the totality of symptoms manifested in our patient, laying stress upon the affection as shown in the skin *only as a symptom* of the *diseased* condition, often leads us to prescribe, with the happiest results, a remedy not ordinarily classed among the skin remedies. Great improvements have been made by both schools, in the last few years, in the external applications. Formerly lotions and ointments were almost the only means of making external applications, but within recent years we have learned the value of collodion, of solutions of gutta-percha (*traumaticin*), mixtures of gelatin with glycerin, starch, etc., plasters and other bland compounds and mixtures, as excipients for the drugs that we desire to bring into direct contact with the diseased parts.

Electricity, also, as a destructive agent (*electrolysis*), or as a modifier of local nutrition, or as an excitant of reflex action, plays a by no means humble part in the treatment of these diseases.

If physicians would give as much thought and care to the study of these affections as they do to others, not only would our armamentarium be enriched and purified, but our successes would be greater and failures less. They should not be content with the mere diagnosis and naming of the disease, but should study the peculiarities of each case, and the influence exerted by the general health or condition of the patient on the special lesions in question.

When treating of the several lesions, therapeutically, it shall be my endeavor to give the best that is recom-

mended by both schools of medicine. We must bear in mind that "The physician's highest and *only* calling is to restore health to the sick." "The highest aim of healing is the speedy, gentle, and permanent restitution of health, or alleviation and obliteration of disease in its entire extent, in the shortest, most reliable, and safest manner, according to clearly intelligible reasons."

Keeping these aphorisms of our illustrious master ever before us, we will proceed in the next chapter to take up the different lesions of the skin, and study them with the best light we have at our command.

CHAPTER V.

LOCAL DERMAL INFLAMMATIONS.

Under the head of local dermal inflammations we include those diseases which partake essentially of the nature of local diseases, and are characterized by inflammation, as the primary and the essential phenomenon. By inflammation we understand not merely hyperæmia, with engorgements of the affected parts by blood, so that the parts are swollen and red and hot, not only hyperæmia, with stasis in the vessels and serous effusion in addition; but also an increased activity in the tissues themselves outside the vessels, and the formation of new products, or "inflammatory exudation," to use a commonly employed term. The character and source of these new products are important items in this matter of inflammation. As regards the character of the new product, its typical features, and ultimate destination in marked cases are those of pus. Pus, in fact, is the highest grade of inflammatory products, but pus is not necessarily formed, and it is held that the new products may give rise to the production of a tissue-like connective tissue. Pus is derived from two sources—namely, from white blood cells, and also from connective-tissue corpuscles. There are three leading changes observed in inflammatory exudation—*resolution*, *organization*, and *suppuration*.

The local inflammations we are about to consider are generally characterized by hyperæmia and the presence

of inflammatory infiltration. They are the erythemata; eczema, or catarrhal inflammation; that form which commences as a serous catarrh of the papillary layer, and is followed by the outpouring of sero-purulent discharge, as in catarrh of the mucous membrane; plastic or papular inflammation, in which the inflammation is characterized as much by the absence of serous as by the deposit of fibrinous exudation; suppurative inflammation; and lastly, hyperæmia, accompanied by excessive formation of epithelial and certain cell growths in the papillary layer, conveniently termed squamous inflammation, as in psoriasis.

Two of these groups or classes might be separated from inflammation perhaps, and dealt with as hyperæmias solely, and these are the first and the last of the above named. In the former there is hyperæmia and serous exudation, as in erythema; but what is the important thing to notice in relation to the point under discussion, there is no cell proliferation or cell infiltration in the tissues. If the hyperæmia is persistent then there follows in due course hypertrophy. To avoid, however, making another group in classification I have grouped the erythematous diseases under the head of local inflammations. With regard to "squamous inflammation," there is here only hyperæmia and hyperplasia or hypertrophy, and no actual inflammatory infiltration. Psoriasis, the type of the class, is on the borderland only of inflammation; but we will group it under inflammations for the present at all events.

The reader will very naturally want to be told wherein lies the difference between hypertrophy and hyperplasia following hyperæmia, on the one hand; and the changes that occur in the skin in zymotic diseases, and those that are observed in lupus, syphilis, and leprosy on the other hand; and what are the differences that lead derma-

tologists to make the special class of diseases to be dealt with in this chapter. In the first place, with regard to the local changes in the zymotic diseases—as small-pox and typhoid—these are only parts of a general malady, and could not be regarded in a group characterized essentially by peculiarities of local change. From an etiological point of view it would be impossible to do so. Then, in regard to lupus, syphilis, etc., there are certain anatomical characters and behaviors about the growths, which, no less than peculiar concomitants of associated constitutional states and the like, that mark them as belonging to a special class of neoplasmata or heterologous new formations. In regard to the distinction to be drawn between hyperplasia consequent on inflammation, and hypertrophy, the latter is much slower, even if the etiology be left out of view; there is in the one the escaped blood cells developing into the new tissue, and in the other the increased supply of blood and transuded serosity. But the two have certain analogies, and it is difficult if not impossible to draw a line between hypertrophy and inflammation. But further, it may be said—and this applies to tumors and special neoplasms, as lupus and syphilis—whilst the inflammatory infiltration is caused by some irritant, the tumor or heteroplastic neoplasm arises spontaneously, or from a specific cause acting generally and modifying nutrition. There is with inflammation the accompanying heat, redness, pain, and swelling, and these “signs” acutely developed; there is less tendency to spontaneous cure with tumors; and lastly, the inflammatory exudations directly tend to the formation of pus.

Erythematous Diseases.

The diseases which rank under this head as having simply erythema as their primary and only feature are ex-

ceedingly simple and well defined. They are three: erythema, roseola, and urticaria. These erythemata are characterized mainly by the occurrence of active hyperæmia of the longitudinal plexus of the skin (erythema), and its immediate consequences—for example, serous effusion—nothing more. In erythematosus diseases the redness may be rosy (roseola), or bright red (erythema urticaria); in urticaria “wheals” are present. The erythema in these diseases is removable by pressure. Unlike the more common eruptive diseases of the skin, the erythemata exhibit the closest connection between local and constitutional phenomena. Febrile symptoms antecede and are relieved by the development of the erythema in the exanthemata, showing that the local skin changes are secondary, and only parts of a general disturbance which is primary. I shall include under this head sections on follicular hyperæmia, pellagra, and certain medicinal rashes.

Erythema.

The term *erythema*, used by itself, is the name of a symptom, not of a disease, and may be applied to any reddened or congested surface not accompanied with elevation, and may be produced by a variety of causes. There are, however, two well-marked affections, *erythema multiforme* and *erythema nodosum*, which are distinct morbid entities, and deserve careful consideration.

Erythema Multiforme.

The eruption of erythema multiforme is a diffused patch of redness over which circumscribed elevations, also red, are scattered. These elevations may be few or plentiful, and may be from an eighth to three-quarters of an inch in diameter. The small ones, according to size,

may be called papules or tubercles, while the larger ones, which are always flattened, may assume the appearance of an elevated ring, around which a second or a third ring may develop. On the flattened tubercles, of medium size, vesicles are sometimes met with, and hemorrhagic effusions may also occur within them.

These lesions rarely persist for more than a few days, or at most a week or so, at the end of which time they gradually subside and disappear, leaving after them slight stains, which last a few days longer. After the disappearance of the first eruption, or even while it is still in full bloom, a second crop of lesions may come out, and after these a third, prolonging the trouble in this way for several weeks and even months. Two or more of the lesions mentioned may coexist, and the eruption may appear on any part of the surface, but as a rule it prefers the extremities. Slight febrile action may precede the development of the eruption, but it soon disappears, and there is rarely any accompaniment other than slight itching. The causes of erythema multiforme are obscure: occasionally it appears due to errors of diet, and sometimes also to uterine disorder. The prognosis is favorable, so far as any trouble may result from the eruption; but when it is prolonged for weeks, as is sometimes the case, it proves very annoying. It attacks by preference the backs of the hands and feet, the arms, the legs, and the forehead. It is mostly an affection of children and young people. It attacks females more than males, and prevails in the spring and fall. Individuals who are troubled with it one year are apt to have it again at the same time in succeeding years. When occurring on the fingers it closely resembles chilblains. It may be commonly known by its superficial and protean character, and its symmetrical distribution.

Erythema Nodosum.

This is a much more important but also rarer affection than the preceding one. The disease is characterized by the eruption of reddish tumors, from the size of a bean to that of a small egg, and usually situated upon the lower extremities, between the knee and ankle. For a day or two the depth of color increases, then becomes somewhat purplish, and with the "black-and-blue" appearance which accompanies hemorrhagic effusions, and finally passes into the stage of green and yellow, like an ordinary bruise. A week or ten days may be occupied by these processes; and, as the color changes, diminution of size takes place, and in about two weeks complete resolution is effected. Suppuration very rarely occurs. The number of the nodes is usually limited to three or four, but may reach nine or ten, and may appear on the thighs and upper extremities as well as the parts already named. The swellings are usually a little painful for the first day or two, but not afterward. Relapses may prolong the disease for several months. Occasionally the eruption is ushered in by febrile action, but not in all cases. It usually occurs in young females, and is not unfrequently accompanied by menstrual derangement. In many cases, however, the eruption is preceded by or complicated with arthritic pains. This has led many writers to believe the affection to be more or less closely connected with rheumatism.

The disease is self-limited, requiring no special treatment other than sedative applications to the affected parts.

In erythema multiforme the allopaths claim that "Unless the cause of the affection be discovered, little need

or can be done in the way of treatment, and the affection may be left to run its course, which it will usually do in two or three weeks, and may not return until the following season, for in some persons this disease appears to affect a predilection for the spring and autumn months, returning annually at one or the other of these seasons."

TREATMENT.—When there is much itching and burning either a carbolic acid or veratrum viride lotion may be used. When the opposing surfaces are much inflamed they may be protected by dusting with buckwheat powder, or equal parts of starch and zinc oxide. Especial attention should be paid to cleanliness, and all irritants should be removed. Poultices are apt to do more harm than good, and better be avoided. Particular attention must be paid to the diet; such food as corn-flour, maizena, and the like must be forbidden, and proper nutritive substitutes be given to children in conjunction with a suitable quantity of milk.

In the erythemata dependent upon general causes you must always remember the effect of ingesta; that a gouty or rheumatic habit, disordered menstrual function, dentition, delicacy of skin, or lymphatic temperament, are present in greater or less degree. It is important to allow the patient the use of an unstimulating diet only, to forbid him spirits, wine, and beer, to clear out the bowels, and in the early stage to adopt a soothing régime, with tepid sponging and emollient baths.

Bed-sores are best treated by attempting to "harden" the skin in the early stage by spirit applications, removing pressure as much as possible at later stages by pads, cushions, and water-beds, and by using charcoal poultices or soap plaster spread on soft leather to the sores. For chilblains, equal parts of turpentine and tincture of

Aconite, and soap liniment, together with the indicated remedy, constitute the best treatment.

The internal remedies for erythema are:

Aconite.—Erythema excited by the action of the sun's rays.

Æthusa.—Appearance and disappearance of reddish-blue spots on the trunk and left leg. General malaise.

Ailanthus.—Irregular spots of capillary congestion. Dark almost livid eruption on the forehead.

Arsenicum iodide.—Erythema, especially of the face.

Belladonna.—Inflamed red patches. *Irregularly*-shaped scarlet spots over the body. More on face and upper part of body.

Berberis.—Mottled spots as after a bruise on the right shoulder, left humerus, back of the hand and wrist.

Bryonia.—*Red round hot spots* on the malar bone, as large as peas.

Cadmium sulph.—Red spots on the extremities.

Chelidonium maj.—Round red spots, size of a half dollar, accompanied with burning pain, on anterior surface of the forearms and face, disappearing in a few hours.

Chloral hydrate.—Bright red or bluish erythema over the whole body, permanent under pressure, mottled with livid patches and deep red spots. Pruritus of the whole skin.

Crocus sat.—Circumscribed red spots on the face, which burn.

Condurango.—Erythematous blotches on the face and arms.

Gelsemium.—Papulous eruption on the face resembling measles.

Gossypium.—Round little spots with pale red circles around the knee caps and over the shin bones, which itch very much.

Lactic acid.—Several bright red blotches on the anterior surface of the leg, with slight burning and no itching. Relieved by cold. Eruption brightest at 8 A. M.

Laurocerasus.—Erythematous patches, terminating in dark red purple spots.

Mercurius sol.—Light red patches on the forearm and inner side of the thighs. Itching changed to burning by scratching.

Mezereum.—Erythema on the legs in old people.

Nux vom.—Pimples on the face with itching, burning after drinking wine or alcoholic liquors.

Phytolacca.—Painful erythematous blotches of a pale red color.

Pulsatilla nut.—Erythema of the scalp. Dark blue or red eruption on the legs and ankles.

Rhus tox.—Ridges on the lower limbs.

Sabadilla.—Red streaks on the arms. Worse from cold.

Ustilago.—Fine eruption of a deep red color, about the size of a pin's head, appearing on any part of the body after scratching. On the neck it takes a circular form.

Mr. M., a very large and fleshy man of exceedingly good habits and with no history of specific trouble, presented himself for a long standing and obstinate erythema. The case had been prescribed for under nearly every conceivable diagnosis, the majority of physicians claiming it was due to syphilis. During a fishing expedition, some years ago, he thought he had been poisoned while in bathing, and since that time he has been exceedingly troubled with this persistent local inflammation. His unusual flesh had been a constant irritant, and being obliged to work for his living he had almost despaired of recovery.

In the folds of his right groin and extending back be-

tween the nates an immense phlegmonous surface was visible. So long had it existed that fissures and ulcerations, and excessive secretions of sweat and pus had complicated what might have been a short enduring, and simple sore. A rash, like measles, extended over the surrounding healthy skin. Extreme local itching and general aching pains made him exceedingly restless. These symptoms were always worse after midnight and during wet or cold weather.

With these indications he was given *Rhus tox.* 30 four times daily for a week. He was directed to use a local wash of warm water and lanoline soap, being careful to wipe the parts to perfect dryness. He was then to use a dusting powder of aristol and wear an abdominal supporter to relieve any chafing. In four weeks he was entirely well.

Roseola.

It is important to know this disease—not so much because it gives rise to any anxiety or trouble, as that it is likely to be confounded with measles and scarlet fever. Roseola is not generally considered to be a contagious disease, but rather occurs in an epidemic form. The eruption is preceded by some febrile symptoms; the *rash* is not much raised above the level of the surrounding part, and is of a *rose* color. It is in fact an erythema of a *rosy* hue. The eruption is patchy, and its color deepens somewhat as the disease advances. It is accompanied by slight itching and sensation of heat. Before the eruption makes its appearance, and during the slight febrile symptoms, a slight redness of the mucous surfaces of the palate and fauces will be noticed on inspection of these parts. When not epidemic, roseola seems to depend chiefly upon derangements of the digestive appara-

tus as a producing cause, though it may likewise be due to sudden changes of temperature, violent exercise, taking cold drinks while the body is warm and perspiring, etc.

The eruption may appear suddenly during the night, and cover the entire body with its rose-colored patches, situated closely together, yet distinct.

Roseola is divided into two groups, *Idiopathic* and *Symptomatic*. In the latter group the roseola occurs as an accidental phenomenon in the course of acute diseases, and hence is called symptomatic; in the other group it exists as the sole and primary disease.

Idiopathic Group.—*Roseola infantilis* is the name given to roseola when it is seen in infants. It roughly resembles measles minus the catarrh; it runs an irregular course as regards precursory symptoms, which vary in degree, and in the extent, degree, and seat of eruption. It may be quite general but patchy, or it may be limited to the arm, or the neck, or trunk; the rose-blushes often come and go for several days capriciously, and are accompanied by local heat and itching, which are often marked at night. No catarrhal symptoms, as in measles, are present. The redness generally lasts a dozen or more hours.

When the disease assumes the form of rings (and this is generally observed about the buttocks, thighs, and abdomen), developed from little rose spots, and enclosing presently a healthy circle of skin an inch or so in diameter, the variety *R. annulata* is present. The concomitant symptoms are the same as those of the common form. It is not necessary to make all the varieties of roseola that are made by some authors.

The Symptomatic Group contains roseolas which are merely rosy erythmata developed in the course of acute diseases, generally appearing about the arms, breast, and

face, thence spreading over the body. *R. vaccinia* co-exists with the formation of the vaccine vesicle, and is accompanied by slight fever. It commences around and about the seat of the vaccination. In cases of fevers, about the tenth day or so, and indeed whenever the weather is very warm, the perspiration is apt to distend the sweat glands, which become more or less hyperæmic, so that little vesicles form, for example, miliaria and sudamina. Sometimes red blushes accompany this particular kind of vesicular eruption, and to these rosy blushes the name *R. miliaris* has been given.

After surgical operations a rash like scarlet fever very frequently occurs; its color varies somewhat; it is not contagious, and is without the general symptoms, the throat complication, hot skin, quick pulse, and tongue of scarlet fever. It is due, doubtless, to some volatile poison free in the blood. It has no gravity.

The **Prognosis** offers no point of gravity or interest.

The **Diagnosis**.—Roseola is likely to be confounded with rubeola, scarlatina, urticaria, erythema. It is known from measles, in that it possesses no catarrhal symptoms; in that there is no relation between the febrile symptoms and the amount of eruption; in that there is no epidemic influence at work in its production; in that it is irregular in its distribution, non-crescentic, not uniform, not dark-colored; but irregular, rosy, and often commencing in other parts than the face. Rubeola has a regular course, and is not partial in regard to the distribution of its accompanying eruption.

It makes very little difference if roseola be confounded with erythema, for the one is a *red*, the other is a *rosy* erythema.

In *Scarlatina*, the general aspect of the disease is grave; the fever is marked, the throat is bad, the tongue

is peculiar; the skin harsh, dry; the rash general, punctiform, boiled-lobster like. The progress is more uniform, and the disease can be traced to contagious or epidemic influence.

In *Urticaria*, the diagnosis is at once settled by the discovery or production of a wheal, and the peculiar stinging character of the local irritation, with the capricious character of the eruption.

Treatment.—The benign and self-limiting nature of the disease leaves but little need for work under this head. The old-school advise giving salines, aperients, laxatives, etc., and treating any special symptoms. Locally, in removing all causes of irritation—for example, irritated and tender gums, by lancing; acidity of stomach, by magnesia, soda, or lime-water; intestinal irritation, by “alteratives,” such as rhubarb, and subsequently tonics, keeping up the warmth of the surface, and if possible, bringing on perspiration. The surface should not be chilled. The patient should be kept within doors for a few days, and have a warm bath at bed-time, followed by cutaneous frictions with oil; the diet should be light and non-stimulating.

Belladonna is the principal internal remedy. *Ferrum phos.* is highly recommended by some physicians. Large doses of antipyrine produce an erythematous eruption which is cinnabar-red in color, slightly elevated, and consists of rounded spots, disappearing under pressure. At the knees and elbows are found great red patches, chiefly on the extensor surface. The head, palmar and plantar surfaces are not affected.

Urticaria.

Urticaria is an affection of the skin characterized by the development of white or reddish elevations termed

wheals, which are accompanied with more or less pruritus. These wheals may be few and localized, or, more frequently, they exist in considerable number, and are generalized.

Not infrequently a little heat and itching first appear; and, if the part be rubbed or scratched, the wheals become manifest. The elevations may last for a few minutes only or for a few hours, and disappear, leaving no trace behind. Later in the day, or perhaps the next day, a renewal of the eruption occurs, and these may be repeated for a few days or persist for months, constituting a chronic urticaria.

The degree of pruritus varies; it may be hardly more than an agreeable sensation, or may be sufficiently severe to constitute a veritable torture. The scratching will, of course, be commensurate with the itching, and lead to more or less excoriation and even deep wounding of the skin.

The wheals are chiefly met with on the covered portions of the body, and their appearance is favored by warmth frequently disappearing if the parts be exposed to a draught of cold air. Thus it not infrequently happens that a patient may have a severe attack at home, but, by the time he reaches the physician, all signs of the eruption will have disappeared, or perhaps there will be nothing visible on the skin except a few insignificant scratch marks. In these cases, if the finger nail or the point of a pencil be sharply drawn across the skin, it will be followed by a white line, which in a few moments becomes elevated and red, and lasts for a brief period, and then disappears.

Urticaria presents certain peculiarities according as it occurs in the adult and the child, owing, in the latter, to the greater sensitiveness of the skin, and the tendency to

the deposition of lymph in the site of the wheals. Some authors treat of urticaria in the adult and in the child. I think this is entirely unnecessary and apt to lead to confusion.

The chronic forms may result from the acute, or develop out of a state of tolerable health, and without apparent cause. There is little pyrexia present in chronic urticaria. When the crops of wheals are of pretty long continuance, the disease is called *U. perstans*. In other cases the wheals are small and very fugitive; but the skin is irritable, and the itching intense. This is *U. evanida*. The name of *factitious urticaria* has been given to that form of the disease which is easily produced by mechanical irritation, and is not idiopathic.

It occasionally happens that in the formation of wheals, instead of serum being poured out, a certain amount of hemorrhage occurs. This effusion of blood in connection with the escape of serosity from the vessels is not confined to urticaria, but may take place under certain circumstances in connection with almost every skin affection which is hyperæmic and inflammatory. When the effusion is conjoined with the development of wheals, the blood generally raises the cuticle somewhat, and produces what is called *purpura urticans*. The cuticle sometimes bursts, and exposes a reddened surface that does not heal, and whence a certain amount of bloody fluid may ooze for a while. The name of *Urticaria hemorrhagica* has been given to this latter disease, and it includes the so-called *purpura urticans*. The hemorrhage, however, is a mere epiphenomenon, though it indicates a purpuric tendency. These little hemorrhagic wheals are sometimes seen about the neck and face of nervous women and elderly men out of health.

Etiology.—In a person predisposed to this affection

almost any external irritation may cause an outbreak; and an exactly similar eruption may be provoked in some by contact with certain poisonous plants, as the common nettle. More frequently, however, the eruption is of internal origin, and is but the reflection of pre-existing irritation of the gastro-intestinal or sexual organs. Certain articles of diet—as crabs, lobsters, various shell-fish, and certain fruits—as well as certain medicinal agents, excite a gastro-intestinal derangement, which is chiefly made manifest through the cutaneous disturbance.

Under the first head, or local excitants, rank the acarus, fleas, bugs, mosquitoes, lice, flannel, the contact of numerous other irritants, such as “jelly-fish.”

Prognosis.—There is no gravity attaching to urticaria. Acute attacks *ab ingestis* are of short duration. Chronic urticaria is very troublesome; the intermittent form is also very obstinate.

Diagnosis.—Urticaria ought not to be confounded with any other disease. The sudden appearance of eruption and its capricious character, the tingling sensation, the presence of wheals, gastric disturbance, and irritability of skin are absolutely diagnostic.

Frankworsky urges flagellation of the skin with nettles as a very efficient remedy in anæsthesia, paralysis, and neuralgia. He has witnessed good effects from the same in locomotor ataxia. In asthma, dyspnœa, amenorrhœa, virile impotence, and rheumatic pains, it regulates the disordered functions. In favor of this procedure he cites the rapidity of its action, its innocuousness even after prolonged use, and the total absence of all irritation of the kidneys arising from it. It leaves no scars, and gives rise to no suppurating surfaces on the skin. The flagellation may be either local or general and should be con-

tinued until bullæ form. Its action is stimulating and refreshing.

Treatment.—The principal consideration in the treatment is the diet, which should be light, nutritious, and easily digestible. To allay the itching the eruption may be frequently dusted with toasted rye or wheat flour, or when the cuticle is not broken it may be washed with brandy and water, or salt and water. Warm vinegar and water lotions may be used to allay the itching and burning. Chloroform, one-half drachm to the ounce of cream, will frequently prove serviceable. Benzoic acid, grs. v-x, water \bar{z} j. is spoken of favorably. A weak carbolic acid lotion at times acts well. The Turkish bath may help when other means fail.

In acute cases, especially those in which it is clear that the trouble has arisen from irritant ingesta, the indications for treatment are clear, and should be promptly carried out. A good emetic, or a free purge, will clear out the alimentary canal, and, thus removing the cause of the irritation, bring the affection to a speedy close.

In children, especially, the diet must be carefully regulated. In chronic cases, especially when caused by eating shell-fish, study *Arsenicum*; in cases of gastric origin, consult *Kreosotum*, *Bovista* and *Pulsatilla*; in children who are fond of eating salt, *Natrum mur.*; candy eaters may be benefited by *Argentum nitricum*.

The indications for the homœopathic remedies are as follows:

Aconite.—Red and broad vesicles with itching, and feverish symptoms. Urticaria febrilis. Great heat, thirst, frequent pulse, malaise, sleeplessness; fear or fright.

Allium cepa.—Nettle-rash on the thighs with stiches and burnings. Acute catarrhal symptoms.

Anacardium.—Nettle-rash from emotional causes. Dull pressure as from a plug in various parts. Weakness of memory.

Antimon. crud.—White blotches with red areolæ, violent burning and stinging. Blotches and vesicles, as from stings of insects, on the face and joints, coming on with itching and disappearing in a few hours. Thirst, nausea, thick white coated tongue, gastric derangement.

Antimon. tart.—White lumps with red areolæ, which itch; eruption comes and goes, makes him irritable, very hot and thirsty; worse after meals.

Apis mel.—Red and inflamed raised patches of hives, with stinging and burning. Aggr. by heat, amel. by cold water. Itching and appearance of blotches after scratching. Stinging burning over the whole body, passing off after sleeping soundly; sudden stinging sensation over the whole body, with white and red spots in palm of hands, or arms and feet, on head and nape of neck; uterine catarrh; urine scanty and high colored.

Arnica.—Itching wheals, relieved by scratching.

Arsenicum alb.—Itch-like eruption. Wheals of a scarlet color on the face and neck, the size of a half-dollar. Obstinate cases, intense burning. Itching better from external heat; worse from cold or from scratching. Irritability of the stomach

Astacus fluvi.—In chronic cases when other remedies fail. Clay colored stools.

Arum.—Dirty, yellow blotches on calves and legs with burning. Better in a warm room. Melancholy. In light-haired, scrofulous subjects.

Antipyrin.—Dr. Nicot reports in full four cases, all occurring in young women who had since early childhood been subject to attacks of urticaria, in which alkaline treatment had utterly failed to produce any relief. In

one of these the eruption appeared periodically each day and Dr. Nicot recommended the use of *Antipyrin* in seven and a half grain doses two or three hours before the expected period of eruption. After four days of this treatment the eruption disappeared entirely and did not return. His other cases are somewhat similar to the above, with the exception that the periodic element was not so well marked. In very chronic cases the improvement was less marked than in recent cases, though even then the cure was progressive and continuous.

A lady, 24, suffered for many years with recurring attacks of urticaria, from which she could obtain no relief. As an experiment she took *Antipyrin*. One dose of five grains mitigated the discomfort at once and entirely dissipated the attack. These cures are in accordance with the law of the similars, inasmuch as urticaria has been noted after the exhibition of this drug. Some observers have noted a thick crop of urticaria involving the skin that is not protected by the clothing. Others have discovered swelling of the face and body. A very common condition produced by the drug is "erythema, scarlatina-like redness, with itching and urticaria."

Belladonna.—Bright scarlet red elevated puffy spots, surrounded by a white border. Parts sensitive to the touch. After eating cabbage or sour-kraut.

Berberis.—Blotches like nettle rash on the shoulder and right arm, accompanied with burning and stinging. Momentary cold sensation on the parts. Heartburn with soap-sud taste in mouth.

Bryonia.—Nettle-rash with rheumatic pains from atmospheric changes, with sleeplessness. Symptoms worse from motion and from exposure to the heat of the fire.

Caladium.—Nettle-rash on the chest alternating with

asthma. Itching and sudden, violent corrosive burning, often on small spots. Worse at night.

Calcarea carb.—Chronic nettle-rash. White elevated hard nettle-rash which disappears in the cold air. Elevated red stripes on tibia, with severe itching and burning after rubbing. Children inclined to grow fat. During dentition. Symptoms aggr. by drinking milk. Acidity.

Carbo veg.—Blotches on the calves of the legs, wrists and feet. Burning in various places on the skin at night in bed. Bloating of the abdomen after a meal. Frequent eructations. In cachectic individuals, accompanying dyspepsia.

Causticum.—Chronic nettlerash, coming out more fully in fresh air, with decided aggr. and itching from the heat of the bed. Rash on the thighs just above the knees. Worse during day, better during wet weather.

Chloral.—Eruption on arms and legs, exactly like nettlerash, in large raised wheals, with intense irritating, itching, œdematous swelling of face, cheeks, eyelids and ears, coming on suddenly from a chill, not from heat. Aggr. by the smallest quantity of wine, beer or spirits. In grain doses in obstinate cases.

Cinchona.—Nettle-rash coming out after scratching. Frightful swelling of the face, forearms and hands in the morning. Debility after loss of animal fluids. Malarial complications.

Cimicifuga.—Urticaria from menstrual or rheumatic disorders. Excessive muscular soreness. Brain feels too large for cranium. In nervous hysterical females.

Cina.—White wheals surrounded by erythematous redness, first on the nose, then all over the body. From worms.

Cocculus.—Hard blotches, surrounded by red areolæ,

on the limbs, wrists and back of the fingers. Burning itching as from nettles.

Conium.—Stinging like flea-bites, only one stitch at a time. Evanescent itching.

Copaiva.—Urticaria, at first on the face, especially the forehead, then on the back of the hands, and finally in isolated patches all over the body. Large red blotches, with constipation and fever. Violent chills, headache, and general malaise; red, hot skin, nettle-rash all over the body, delirium, drowsiness, scanty urine, which is dark, with brick-dust sediment. Great restlessness.

Condurango.—Chronic urticaria. Gastric pains, mostly at the cul-de-sac of the stomach.

Cosmoline.—Its effects, when applied to the skin in cases of *urticaria*, *eczema*, *psoriasis*, *herpes*, and in nearly all cutaneous diseases in which the skin is *dry* and *irritable*, is certainly very soothing and often curative.

Dulcamara.—White blotches, with red areolæ, on the arms and thighs, stinging and itching with burning after rubbing. After taking cold. Nettle-rash over the whole body without fever. Eruption preceding the menses. Gripping pains in the bowels, with nausea and diarrhœa.

Fagopyrum.—Sore, red blotches inducing scratching, which aggravates. Swelling, the size of a hen's egg, on the neck and shoulder. Dreadful stinging itching.

Graphites.—Red spots like flea-bites all over, especially on the calves of the legs. Itching worse in the evening and at night. Skin dry, never perspires, and is inclined to crack. In females with disposition to delayed menstruation.

Hepar.—Chronic nettle-rash on the fingers and hands. Burning and itching of the skin after scratching.

Hypericum.—Eruption like nettle-rash on both hands

at 4 P. M. Crawling in the hands and feet, they felt fuzzy.

Ignatia.—During chilly stage of intermittent fever. Frequent discharge of much watery urine. In nervous subjects.

Kali carb.—Urticaria during menstruation. Worse in warm weather. In persons with dry skin, or who are inclined to pulmonary troubles.

Lycopus.—Troublesome urticaria, especially affecting the left forearm and right leg, before eating.

Lycopodium.—Itching with nettle-rash eruption on the extremities. Desire to eat, but a small quantity of food fills him up. Inclined to constipation. Urticaria from eating oysters, or shell-fish.

Magnesia carb.—Hard blotches as if from nettle-sting, worse during menstruation. Menstrual flow more profuse at night.

Mercurius.—Small flat light red blotches on the sexual parts, abdomen, chest and inner side of the thighs. Easy perspiration without relief.

Natrium mur.—White blotches on the arms and hands, turning red on scratching. Red blotches over the whole body. Violent itching.

Nux vom.—When accompanied by constipation, vertigo and headache.

Podophyllum.—Intolerable itching of the skin on the body and arms; on scratching it raises up in blotches like hives.

Psorinum.—After suppressed itch, frequent attacks of urticaria, with fine vesicles on the top which dry and peel off in fine scales. Coming on after any exertion.

Pulsatilla nig.—Red, hot spots like nettle-rash. After eating fat pork, fruits or buckwheat.

Pulsatilla nut.—Blotches on the right breast, standing

out like measles, with red base, turning white on scratching. Violent itching, worse at night before bed time.

Rhus tox.—Vesicular urticaria from getting wet, during the rheumatism, with chills and fever, worse in cold air. Rheumatic pains worse at rest. Skin swollen and red; itching all over, worse on hairy parts, burning after scratching.

Robinia.—Burning itching wherever a part of the face is touched. Itching of skin where anything rests upon it. Sour stomach.

Sarsaparilla.—Blotches as from nettles. Burning itching with chilliness after abuse of mercury.

Sepia.—Chronic form. Red, lentil-sized blotches on the hands. Eruption breaks out in the open air and disappears in a warm room, especially on the face, arms, and thorax. After milk and pork.

Solanum oler.—Urticaria febrilis.

Spigelia.—Small elevations like hives on the lower extremities *after scratching*.

Stannum.—Small, itching hives below the waist through the day. Itching aggravated by rubbing. In patients with phthisis.

Sulphur.—Eruption, itching and burning over the whole body, with febrile symptoms, or when the indicated remedy does not act well. Itching aggravated by the warmth of the bed. Chronic cases.

Tetradymite.—Nettle-rash on face after eating crabs.

Triosteum perf.—Nettle-rash with gastric derangement.

Urtica urens.—Nettle-rash attending or preceding rheumatism. Itching swellings all over the fingers. Aggravated every year at the same time. Itching and burning of the skin, as if scorched; raised red blotches; fine stinging points; pale rash requiring constant rubbing; consequences of suppressed nettle-rash; eruption and

itching disappear as soon as she lays down and re-appear immediately after rising.

Ustilago.—Terrible itching at night; menstrual irregularities from ovarian irritation. During the climaxis.

Veratrum alb.—Nettle-rash, about the joints only.

Zincum met.—Stinging itching in the skin with nettle-rash eruption after rubbing. Itching rash in hollows of the knees and bends of the elbows. After moderate wine drinking.

The following case, reported by Dr. Hoyne, is very instructive: Female, complained of itching all over the body, but especially bad upon the back. No eruption was to be seen, but writing a word upon her arm it stood out in blazing red a moment or two afterward, a certain diagnostic sign of urticaria. Her other symptoms were: Urine quite scanty but clear, and of good color; no appetite of consequence; meat does not agree with her; sour things disagree; drinks a large quantity of water daily; her limbs swell, principally about the ankles; dreams frequently and they are decidedly unpleasant; alternate constipation and diarrhœa; nearly every morning she has nausea and dizziness; shortness of breath when lying down, especially on her back. The urine, on examination, showed no disease of the kidney. She received *Apis*, and in three weeks was entirely relieved of all her symptoms.

Follicular Hyperæmia.

Hyperæmia of the follicles of the skin is often confounded with diseases which it complicates, and it is important that this accident common to many dissimilar diseases and its true significance should be distinctly understood in relation especially to the matter of general diagnosis.

Whenever the skin is much irritated, and particularly if scratching is practiced for the relief of itching, the follicles are apt to become congested. The result is that red hyperæmic papules are formed by erection and turgescence of the upper part of the follicular walls. If the hyperæmia persists long enough a certain amount of hypertrophous growth may take place as a consequence of the hyperæmia, and solid papules may then form at the hair follicles which may from being scratched become covered at the apex with scales of dried blood that has been effused from the excoriations; in fact, the papules become pruriginous. But this is only a secondary result, not a primary condition. This accident of follicular congestion is found in a variety of diseases, and must be carefully distinguished from primary mischief, though in itself it indicates an excessive irritation of the skin. It is, in fact, the sign of a "scratched skin," and should be always recognized as such.

Medicinal Rashes, or Eruptions, The Direct Result of the Action of Drugs.

It is important that the homœopathic dermatologist should be fully acquainted with the eruptions of the skin produced by the administration of medicinal substances. Many of our remedies are capable of producing some form of an eruption upon the skin, and it is this fact, or rather a knowledge of the action of these different medicinal substances, that enables the homœopathic physician to prescribe successfully for many cases that the old school relegate to hygiene and time for a cure.

As the therapeutic indications in the various lesions of the skin are but a history of the effects produced upon the healthy skin, in the prover, of the different medicines mentioned, no attempt will be made here to enumer-

ate them. I shall, however, at the close of the volume, give the "skin symptoms" of some of the newer remedies, as all may not be so familiar with these as with the older remedies.

Occasionally we find a case that will not respond favorably to any one of our old-tried friends, and some one of the newer remedies will prove to be the more exact sim-
ilimum, and prove a grateful blessing to our patient.

CHAPTER VI.

THE ERUPTIONS OF ACUTE SPECIFIC DISEASES (ZYMOTIC).

WHICH ARE OF CONTAGIOUS NATURE, OF DEFINITE
COURSE AND DURATION, ACCOMPANIED BY FEVER,
THE RESULT OF POISONING OF THE BLOOD BY
SPECIAL VIRUSES—ONE OF THE EFFECTS
OF THIS POISONING BEING THE DE-
VELOPMENT OF CERTAIN CHAR-
ACTERISTIC ERUPTIONS ON
THE SKIN.

After considerable weighing of the question as to whether it were better to take up these affections or not, I have decided to give, for diagnostic purposes, a short description of this class of diseases, more especially of the eruptions.

Variola.

The eruption on the skin is characterized by the appearance of bright, red, hard acuminated points, the size of hemp-seeds, distinct from each other at first, and which, passing through the stages of vesicular and pustular inflammation, arrive at their maturity on the eighth day of eruption. The individual pustules then scab, their contents drying into brown masses which become detached in from twelve to fifteen days, and leave behind in their place permanent cicatrices, or "pits." Variola

is often preceded, as regards its local state, by more or less erythema, which subsides on the appearance of the vari. This has been termed *erythema variolosa*. Variola is said to be *discrete*, when the pustules are scattered over the surface; *coherent*, when the eruption is plentiful, and the *vari* are "closely packed side by side but still distinct;" *confluent*, when they run together; *modified*, when the disease succeeds to a prior attack or occurs after inoculation. Variola is, by universal consent, divided into five stages: *Incubation*, which is reckoned by the length of time which elapses between exposure to the poison of the disease and the development of the first effects (from five to twenty days); *Invasion* (two days); *Eruption*; *Suppuration*; *Dessication*.

The " *Period of Eruption* "—Eruption makes its appearance on the third day after the first occurrence of constitutional disturbance, and travels over the entire body within a day, when the febrile condition is greatly relieved.

There are exceptions to this when the rash appears on the second, fourth, fifth or sixth day. Should the eruption appear on the second day, the attack will be severe and the disease of the confluent variety; if on the fourth day or later it will be unusually mild and of the discrete variety.

The spots appear first on the face, about the forehead, and thence they extend to the trunk and limbs. These spots are, in the very outset, small papules, red, hard, and pointed, and their more or less closely packed or scattered condition affords a good guide as to whether the disease will be confluent or not; if the skin be very red and erythematous, probably the case will assume the confluent form. On the second day of eruption—fourth of disease—the papules formed from elevation of the

epidermis by an increase of the *cells of the Malpighian layer* and *distension* of the *vessels* in the true skin, but particularly the papillary layer, are transformed into vesicles. If these vesicles be punctured, nothing escapes from the puncture. On the third day of eruption—fifth of disease—umbilication commences as a central depression, which becomes more marked every day, *pari passu* with suppuration, which now commences; the pustules are “whitish and surrounded by an inflamed areola;” the fourth day of eruption. If the contents are now turned out, a little “disc” of dirty plastic matter, presenting an umbilicated shape, and attached to the cutis beneath, will be noticed. It is not at all unusual to observe the confluent in one, the discrete form in another part of the same subject. The onset of *maturation* is observed about the end of the fifth or beginning of the sixth day of eruption, or the eighth of disease. The contents of the umbilicated vesicles soften down into pus, the umbilication diminishing with enlargement of the base of the pustule, and a yellow color replacing the white.

The stage of eruption, lasting about five days, is characterized by the cessation or at least by a remission of the febrile and other symptoms, which is not true of the other eruptive fevers. The temperature which has been 104° to 106° falls to 100° , the pulse ranging from 110 to 130 falls to 70 or 90—in fact, the patient may feel perfectly well. These diagnostic symptoms may be wanting if the disease proves to be of the confluent variety.

Maturation, as it is called, is complete on the eighth day of eruption; between the eighth and eleventh day, *secondary fever* sets in, when the stage of *dessication* is reached. This is the period of recovery or resolution, when the local and general symptoms subside, the scabbing dries, and the discharge ceases. The crusts fall off

in the next three or four days, exposing raw, red surfaces, which desquamate, and by-and-by leave behind red-looking marks, which gradually fade and assume the well-known aspect of small-pox marks.

Itching of the skin to a greater or less extent persists during the whole course of the eruption. The rash also appears on the mucous membrane of the mouth and throat at the same time, presenting the appearance of round opaque spots, which are situated mainly on the tongue and soft palate, but are not by any means confined to these parts, for in many instances the rash appears in the larynx, trachea, bronchi or nostril, upon the mucous membrane of the vulva, prepuce, etc., with resultant laryngitis, bronchitis, etc. Or the eruption may take place in the eye and as a consequence lead to destruction of the sight; in the tunica vaginalis, giving rise to variolous orchitis; upon the peritoneum surrounding the ovaries, giving rise to variolous ovaritis. Orchitis is more frequently met with than ovaritis. The eruption upon the mucous surface gives rise to considerable discomfort, for these ulcerated spots are as tender to the touch as ulcers in other situations.

When variola is produced by inoculation there are some differences. On the third day the puncture is inflamed, it is itchy, and surrounded by a little blush of redness, whilst the spot is slightly indurated; on the fourth or fifth day the central point acuminates, and a little coming vesicle is seen; on the sixth day there is an early state of pustule, and it is umbilicated; on the seventh day a perfect pustule is formed with an inflamed areola; on the ninth or tenth day, maturation takes place, and the umbilication of the pustules goes; from the twelfth to the fifteenth day desiccation takes place, and

from the twentieth to twenty-fifth day the scab falls off. The disease is rarely confluent.

The fever, which had subsided or entirely disappeared, returns during the stage of suppuration. The temperature rises to 106° to 108° , the pulse runs up to 110 to 140 or higher, the thirst is urgent and there are no longer perspirations of any sort. This secondary or "suppurative" fever terminates in a few days in the discrete variety if there are no serious complications, but in the confluent it is somewhat prolonged.

Each pustule has an inflammatory areola of considerable extent. The face especially becomes greatly swollen—œdematous. In the confluent variety this œdematous swelling is frequently sufficient to completely close the eyes. The hands and feet are likewise swollen and burn like fire. As a consequence of the eruption in the mouth and throat a free and copious flow of saliva is to be expected. The glands and subcutaneous tissues of the neck become enlarged in many cases.

Hemorrhagic variola commences very much like the other varieties, but there is a marked coldness of the extremities followed by a deep purplish redness of the surface. The eruption at first shows a very deep red color, and when the vesicles appear they are of a bluish-black color; in other words, they are filled with blood. At the same time ecchymosed spots, resembling bruises, are seen more or less over the entire surface and in the conjunctivæ of the eye. The patient expectorates blood, vomits blood, passes blood with the stool and urine—there is a flow of blood from every outlet of the body. Recovery is very rare, and death may take place at any stage, but usually before the pustules form.

I have never had to treat a case of this form, but from a comparison of the symptoms as above given would

recommend the employment of two remedies internally—*Crotalus hor.* and *Phosphorus*.

To prevent pitting lard and charcoal may be used, or the face may be painted with sweet cream; the object being to exclude light and air. Various expedients have been recommended, but they all fail in the majority of cases.

The advice of the dermatologist is not infrequently sought for the removal of certain disfiguring consequences of variola about the body.

In the first place redness of the face has to be dealt with therapeutically. This may be rendered much less visible by the use of some mild astringent, but the greatest care must be taken to avoid every application which could in any degree increase by stimulation the hyperæmia. The following makes a very excellent preparation:

℞. Oxide of Zinc, ℥jj.
Calamine powder, ℥ss.
Glycerine, ℥jj.
Rose water, ℥vjij.

It should be used after bathing with hot water, being dabbed in and allowed to dry. Scarring cannot in the nature of things be prevented. If the scars become the seat of hypertrophous growth of cicatricial tissue the knife must not be used, but the frequent application of contractile collodion had recourse to. It should be applied twice a day for some time. Acne spots may also develop about the nose, for which the ordinary treatment for acne should be employed.

The indications for remedies are as follows:

Aconite.—During the febrile stage at the beginning, headache, epistaxis, injected eyes and frequent pulse.

Anxious restlessness. Pain in the back and aching in the limbs. Apprehension of a fatal issue. Excessive thirst.

Ammon. carb..—Hemorrhagic diathesis, from fluidity of blood and dissolution of red blood-corpuscles; tendency to gangrenous ulcerations.

Ammon. mur..—Eruption well developed upon trunk and upper extremities, but scanty on lower ones; sore throat, with swelling about neck; hemorrhages.

Antimon. crud..—Gastric state, with vomiting and heavily coated tongue, especially during prodromal stage.

Apis mel..—Erysipelatous redness and swelling, with stinging, burning pains in skin and throat; absence of thirst; scanty micturition; at a later period great dyspnoea; sensation as though he would not be able to breathe again; great restlessness; suppression of urinary secretion.

Arsenic..—Asthenic cases, with great sinking of strength; burning heat; frequent small pulse; great thirst; great restlessness; irregularly developed variola, with typhoid tendency; hemorrhagic variola, or when the pustules sink in and their areolæ grow livid; metastasis to mouth and throat in last part of eruptive period.

Baptisia..—Typhoid symptoms; fetid breath; pustules appear thickly upon palatine arch, tonsils, uvula, and in nasal cavities, but scantily upon skin; profuse salivation; great prostration, with excessive pains in sacral region. After taking the drug appetite improves and the patient is able to take and to retain nourishment.

Belladonna..—During first stage, high fever with cerebral congestion; intense swelling of skin and of mucous membranes, with tickling cough, dysuria, and tenesmus of bladder; sleeplessness, with desire to sleep; delirium

and convulsions; photophobia; ophthalmia. During later stages *Belladonna* modifies the itching of the desiccating pustules.

Bryonia.—Brings out the eruption when it is delayed, or when it suddenly disappears. In the first stage with gastric symptoms, or after the eruption is out, if ascites sets in, very cross and irritable; wants to lie still; dry mouth without thirst, or else wants large quantities at long intervals. Constipation of hard, dry stools.

Camphora.—Sudden collapse, with coldness of the surface; the swelling of the skin suddenly sinks in, and the pustules seem to dry up, from the complete giving out of the life forces; excessive weakness; the patient, though cold, cannot bear to be covered.

Calcareo sulph.—Pustules discharging matter.

Cantharis.—Hemorrhagic state; patient passes bloody urine, with cutting burning pains; burning pains through whole intestinal canal, with unquenchable thirst and disgust for all kinds of drinks.

Carbolic acid.—Dr. Middleton believes this drug to be as near a specific for variola as it is possible for any drug to be for any disease, and even in the hemorrhagic variety, if used early, there will be greater prospects of recovery than with any other drug known. He employs the *ix*. When given at an early stage of the disease, Dr. Montefero has found that the pustules fail to develop; they shrink and dry up after a few days without any swelling of the subcutaneous tissue. In the suppurative stage it moderates the fever, and lessens the suffering in the mouth and pharynx. The urine turns black when standing, and in some cases shows some traces of albumin.

Carbo veg.—Asthenic variola, with cold breath and

excessive prostration ; great desire for fresh air ; livid purple look of the eruptions ; hippocratic face.

Chamomilla.—Great fretfulness of children during eruptive stage, with the usual impatience and coldness.

China.—Variola hemorrhagica, with great exhaustion from the copious painful stools ; excessive debility and prostration after a severe attack.

Cimicifuga.—In the precursory stage, for the muscular rheumatoid pains ; during eruptive fever great wakefulness, mental excitement as if the brain would burst out ; dull heavy aching in small of back, relieved by rest, increased by motion ; excessive muscular soreness ; prickling itching heat of the whole surface ; eruption of white pustules over face and neck ; it modifies the disease, prevents the development of pustules, and thus reduces the danger of pitting.

Coffea.—Restlessness and bilious vomiting at the commencement of the disease.

Cuprum.—Convulsions preceding the eruption ; vomiting, delirium, sopor.

Ferrum.—Fiery redness of the face after recovery.

Gelsemium.—Predominance of nervous symptoms, as nervous chills, restlessness ; intense and painful fever at the commencement of disease, with tendency to convulsions.

Hamamelis.—Hemorrhagic variola ; blood dark, venous ; oozing of dark blood from nose ; bleeding gums, hematemesis, bloody stools ; uterine hemorrhage, petechiæ ; tearing pains across the small of back, with fullness of the joints of the legs ; typhoid condition. (If *Ham.* fails, try *Crotalus horr.*).

Hepar.—Loose, rattling cough, without expectoration ; suppurative stage ; swelling and suppuration of the glands.

Hydrastis.—Itching tingling of eruption, face swollen, throat sore, pustules dark, great prostration; buccal cavity full of pustules; pulse slow and labored, with palpitation of heart; intense aching pain in small of back, legs feel very weak and ache; is said to prevent pitting to a great degree.

Hyoscyamus.—Eruption fails to appear at the proper time, causing great nervous excitement, with rage, anguish, delirium, coming on in paroxysms; patient wants constantly to get out of bed and to be uncovered (hyperæsthesia of skin); vesicles coming out in crops; restless sleep; slight fever; dry teasing cough, relieved by sitting up.

Ipecac.—Gastricismus during eruptive stage, with constant nausea.

Kali mur.—Controls the formation of pustules.

Kali phos.—Putrid conditions, heavy odor, exhaustion and stupor. Adynamic symptoms indicating blood decomposition.

Kali sulph.—To promote the formation of healthy skin and the falling off of the crusts.

Melandrinum 30x was used during the epidemic of 1880-1 with great success as a preventive as well as a curative agent. It prevented the suppurative fever, or lessened it at least to a considerable degree, and took away all offensive exhalation.

Mercurius.—Variola in the stage of maturation; ptyalism; tendency of blood to head; irritation of mucous membranes; moist swollen tongue, with great thirst; diarrhœa or dysentery, with tenesmus, especially during the period of desiccation.

Natrum mur.—Salivary flow, confluence of pustules and drowsiness.

Opium.—Drowsiness and stertorous breathing. Com-

plete loss of consciousness. Impending paralysis of the brain.

Phosphorus.—Hemorrhagic diathesis; bloody pustules; hard, dry, exhausting cough, with pain or feeling of rawness in chest; bronchitis; hemorrhage from lungs; back pains as if broken, impeding all motion; frequent faintings; typhoid variola, even so from the start.

Phosphoric acid.—Confluent variola, with typhoid conditions; pustules do not fill with pus, but degenerate into large blisters, which, bursting, leave an excoriated surface; patient is stupid, does not want anything, not even a drink; answers questions, but does not talk otherwise; subsultus tendinum, great restlessness; fear of death; watery diarrhœa.

Rhus tox.—Typhoid symptoms, dry tongue; great restlessness; patient wants to get out of bed, notwithstanding his great debility; sordes on lips and teeth; confluent smallpox, with great swelling at first, but afterwards the eruption shrinks and becomes livid; blood in pustules; bloody stools.

Sarracenia.—From reports, the consensus of opinion seems to be in favor of this plant in the treatment of severe cases of variola; there are no reliable indications as yet.

Silicea.—Suppurative stage exhausts the strength of patient and desiccation is delayed; caries of bones, following severe attacks of variola, with fistulous openings and discharge of thin pus and bony fragments.

Solanum nig.—Hemorrhagic variola.

Stramonium.—Entire swelling of the face before the eruption, with muttering delirium.

Sulphur.—Tendency to metastasis to the brain during suppuration; stage of desiccation; occasionally indispensable as an intercurrent remedy, where others fail.

Tartarus emet.—Eruption tardy in coming out, with great oppression under sternum, nausea, vomiting, sleepiness, or for suppression of eruption; putrid variola, with typhoid symptoms, especially typhoid pneumonia, with tendency to paralysis of lungs; vomiting of viscid mucus, clogging the air-passages; pustules in larynx, mouth, throat, and digestive organs; leaving bluish-red marks on face, genitals, and thighs.

Vaccininum has been used undoubtedly with great benefit in variola; its use has shortened and ameliorated all stages quite considerably. Sulphur was given afterwards.

Variolinum.—Especially where the disease throws itself with full force on throat. Given steadily during the disease it will run a milder course, changing imperfect pustules into regular ones, which soon dry up; it promotes suppuration and desiccation, and prevents pitting.

Veratrum vir.—Intense fever, with excessive pain and restlessness. Used in alternation with *Macrotin* the pustules flattened rapidly, dried, and fell off.

Varicella.

This is a disease of childhood. After pyrexia lasting a few hours, or not more than a day, the eruption of varicella appears, often on the back first of all, as distinct red papulæ, which become vesicular in a few hours; the eruption is successive during three or four days. The same kind of changes occur in the eruption as in variola, but the disease is more superficial, and the vesicle is unilocular, and it is not generally umbilicated; the contents are serous rather than puriform. On the first day the vesicles are transparent; opalescent on the second and third; on the fourth they shrink and desiccate; and

on the sixth the scabs fall off. Sometimes, however, the contents of the vesicles become puriform. The general pyrexia is slight.

The prognosis is favorable. If the fever runs high with much disturbance of the system, the patient may require one of the following remedies: *Acon.*, *Bell.*, *Merc.*, *Rhus*, *Tart. emet.*, or *Verat. v.*

Typhus Rash.

This consists of two component parts:

1. A subcutaneous mottling, of a more or less livid hue, and diffused generally over the body.
2. Petechiæ, small, about the size of pin's heads, scattered all over the body, and showing out from the mottling; at first these are slightly raised, and their color increases gradually in intensity; they do not fade by pressure, except slightly in the very early stages. The eruption of typhus is not prolonged by successive crops. It makes its appearance between the fifth and eighth day of disease, and disappears a few days before convalescence. It has been mistaken for syphilitic rash.

Typhoid Rash.

Is characterized by the appearance between the eighth and twelfth day of disease of rose-colored, elevated, circular, softish spots, about a line or so in diameter, on the abdomen, back of hand, arms, chest, and back (if kept warm). These rose-colored spots disappear by pressure, and they appear in successive crops, each spot lasting three or four days, and then gradually fading. There may be from half a dozen to a score of these spots present at one and the same time. Sudamina often co-exist with them.

Measles.

Within fourteen days from the reception of the contagion, the eruption of measles appears, the first stage, the stage of invasion, consisting of a catarrhal attack upon the head and chest. The child is restless and feverish with headache. The eyes grow red, weak and watery, unable to bear the light. There is frequent sneezing, with watery discharge from the nose and a constant short, dry and sometimes croupy cough. In exceptional cases there may be vomiting and delirium. About the fourth day, the stage of eruption comes on, the rash appearing first on the face and extending in the course of 48 hours over the body. About the third day of the disease the rash may be observed on the fauces. The eruption consists of numerous deep red circular spots resembling flea-bites. Between these spots the skin retains its normal color, except upon the face, where it may be œdematously swollen. On the cheeks the rash sometimes becomes confluent, forming blotches and presenting a crescentic shape. In the same order as it came on the rash fades, beginning to grow faint on the face when it is at its height on the body. In this stage the fever increases, the temperature rising to 102° to 106° . The third stage, the stage of desquamation, begins about the eighth or ninth day of the disease, when the rash disappears and the epidermis peels off in fine scales. This is the course of the normal type, but in some cases the onset of the disease is so violent that the child dies in the second stage from asthenia with typhoid symptoms. In other cases, inflammatory measles, the rash grows darker, assumes a purple color, remaining visible for some days, and all the symptoms are intensified. The cough becomes croupy and there may be lobular pneumonia. This

runs to exhaustion, with disappearance of the eruption and collapse. The sequelæ of measles are chronic catarrhal cough and chronic pneumonia, which may end in consumption, also scrofulous affections, chronic inflammation of the eyes, otorrhœa, swelling of the glands.

In the treatment of measles, the bedroom should be kept at an equal temperature of about 65° and aired frequently with care. The light regulated to the eyes of the invalid. The diet light, with ripe fruit in season, if the bowels are not disordered. After the disappearance of the fever and catarrhal symptoms a warm bath may be given, with another on the following day, with thorough rubbing and friction of the skin afterward; after which, if the weather is favorable, the patient may be allowed to go out.

Therapeutic Indications.

Aconite.—In the beginning, with dry, hot skin, full, frequent pulse, thirst, red, watery eyes with photophobia. Stitching pain in side and chest. Dry, hacking and croupy cough. Catarrhal irritation. Anxious restlessness. Vertigo on raising up.

Antimon. crud.—White-coated tongue. Gastric derangements. Pain in the ears.

Apis.—Confluent eruption and œdematous swelling of the skin. Cough and soreness of the chest, as if bruised. Violent cough similar to whooping cough. Catarrh of the bowels, diarrhœa in the morning, stools greenish-yellow. Scanty, high-colored urine. Oppression of the chest and inability to remain in a warm room.

Arsenic.—Malignant cases with typhoid symptoms. Eruption dark colored or retroceding. Pale, earthy face. Great dryness, burning and itching of the skin. Rapid prostration. Intense thirst, but drinks only small quanti-

ties. Anxiety and great restlessness. Thrush in the mouth and on the fauces. Worse about midnight.

Belladonna.—In the commencement with hot, moist skin, and frequent soft pulse. Congestion to the head. Constant drowsy sleep or drowsiness with inability to sleep. Bright redness of the throat, with pain on swallowing. Diphtheritic symptoms. Back feels as if it would break. Thick, white-coated tongue. Worse about three o'clock A. M. Complication with scarlet fever.

Bryonia.—Eruption does not come out well. Congestion to the chest with stitching, shooting pains on breathing or motion. Rheumatic pains in the limbs. Great dyspnoea and hurried breathing. Dry mouth without thirst or thirst for large quantities at long intervals. Better from warm drinks. Children grasp the cup with both hands.

Camphora.—Vital depression. Face pale, skin cold and blue, inclination to uncover. Eruption does not come out. Various sequelæ, particularly difficult and painful micturition.

Carbo veg.—Persistent hoarseness after measles.

Chamomilla.—Great restlessness, child wants to be carried. Very cross and fretful. Painful, watery diarrhoea.

China.—Violent colic, with unquenchable thirst. Abdominal ailments with frequent stool. Debility and no fever.

Coffea.—Nervous, restless agitation, preventing sleep. Dry, hacking cough, with constant tickling in the larynx.

Cuprum acet.—Measles, bronchitis, delirium, wants to go home. Expectoration only during the night. On falling asleep, begins to talk, scold, turn, twist and scream; on being aroused, was perfectly rational; tongue and mouth red.

Drosera.—Cough, like whooping cough, or hollow, barking cough.

Dulcamara.—Retrocession of the eruption from exposure to cold, damp air.

Euphrasia.—Profuse, bland discharge from the nose, and of acrid running from the eyes, with photophobia. Cough only during the day.

Ferrum phos.—Measles in all stages, especially in the initiatory and prodromic, also for the symptoms of inflammatory affections of the chest, eyes, or nose, or ears.

Gelsemium.—After *Aconite*, great deal of coryza; drowsy with fever heat, no thirst. When the eruption turns livid, with cerebral symptoms. Rawness of the chest, with cough.

Hepar sulph.—Croupy cough, with rattling in the chest, but without expectoration, worse in the morning.

Ipecac.—Eruption slow to appear, with oppression of the chest. Constant tickling cough with every breath and rattling of phlegm. Constant nausea and uneasiness in the stomach.

Kali bichrom.—Cough, with rawness of the chest. Pustule on the cornea. Stitches in the left ear extending into the neck and head. Running of water from the eyes, with burning when opening them. Watery discharge from the nose, with great sensitiveness and ulceration of the nose. Loud rattling cough with tough, stringy expectoration.

Kali mur.—For the hoarse cough, for all the glandular swellings and the furred tongue, with white or gray deposit, it is a remedy of prime importance. For the after-effects of measles. Diarrhœa, whitish or light-colored, loose stools, white tongue. Deafness from swelling in the throat, etc.

Kali sulph.—Suppressed rash, rash suddenly recedes

with harsh and dry skin. This remedy will assist the returning of the rash.

Mercurius.—Swelling of the glands of the throat, and difficult swallowing. Soreness of the throat and ulceration of the tonsils. Profuse secretion of saliva and fetid breath. Pit of the stomach very sensitive. Profuse sweat without relief.

Nux vom.—Nose stopped. Cough dry in the evening and loose in the morning.

Phosphorus.—In complication with pneumonia, or typhoid symptoms come on. Violent exhaustive cough with tightness across the chest. Dry cough with vomiting. Hoarseness, and aphonia. Stitching pains in the chest, worse from coughing or breathing.

Pulsatilla.—Inflammation of the eyes and photophobia; thick, yellow discharge from the nose; dryness of the mouth, without thirst; nightly diarrhœa, after previous rumbling in the bowels; rattling, loose cough, with expectoration of thick, yellow mucus; increase of all the symptoms towards evening; chronic, loose cough after measles.

Sticta pulm.—Incessant dry or spasmodic cough, worse in the evening and during the night, with oppression of the chest and feeling as if a hard mass had collected there.

Stramonium.—Sometimes before the eruption there is delirium with frightful visions of rats and mice, from which the patient tries to hide. Spasmodic symptoms in the pharynx and difficulty of swallowing.

Sulphur.—The eruption does not come out and the catarrh becomes continually worse. Violent otalgia with purulent discharge. Chronic after complaints, otorrhœa, diarrhœa.

Verat. alb.—Eruption develops slowly and is of a pale,

livid color. Hemorrhages without relief. Burning heat with alternate cold extremities. Very frequent weak intermittent pulse.

Verat. vir.—In the early stage with fever and pulmonary congestion. Cough, dyspnoea and pains in the chest. Convulsions preceding the outbreak of the eruption.

Scarlatina.

On the second day of illness the rash appears on the neck and face, and is made up of small red dots, which crowd together, forming patches of various sizes and extent; after a while the whole surface becomes of an uniform hue; on the third day, the eruption is seen on the body generally, the upper extremities, and the mucous surfaces visible to the eye; on the fourth day, the lower limbs are scarlet, whilst the surface is hot, dry, and harsh. The eruption, which may be called a general efflorescence of boiled lobster color, is most marked about the third or the fourth day, and it is generally more intense in color towards evening, especially in the loins and flexures of joints. On the trunk it is often "patchy." The eruption fades on the fifth day—first on the face; desquamation follows about the eighth or ninth day.

The diagnosis between scarlatina and rubeola is the only one that requires notice.

In scarlatina the rash appears on the second, in measles on the fourth day after the first onset of symptoms. In scarlatina the rash is bright red (boiled lobster color); it is not crescentic, and it is uniform or not patchy, or associated with intervals of normal integument. In measles the rash is of dull red color, and it takes the form of little crescentic patches, with intermediate lines of healthy skin. The skin in scarlatina is very dry, harsh, and

pungent. In measles this is not so marked, nor is the subsequent desquamation so distinct or characteristic.

In measles the changes in the mucous membranes are accompanied by secretion; there are coryza, suffusion of conjunctivæ—in scarlatina, the mucous surfaces are red, dry, ulcerated; there is also sore throat of marked kind, but this is absent in rubeola. The aspect of the tongue is characteristic in scarlatina, and the pulse is very rapid and irritable.

Erysipelas.

For generations past, the old school has been enunciating learned theories regarding the etiology of this disease. The "*status biliosus*" and the "*status saburralis*" each had its day. Clogging of the pores of the skin, and consequent *accumulation* of acridities, which nature should have eliminated; and the theory that some noxious principle *from without found entrance* in some mysterious manner, each claimed due regard. Simple inflammation on the one hand, and specific inflammation, involving the lymphatics, on the other, have also had their advocates. Thus, most opposite theories have been advanced, have been held for a season, and then have fallen again into disrepute. It appears quite probable that some micro-germ may be the abnormal excitant, *it* serving as the agent through which the perverting force is enabled to act upon the vital *dynamis*. However, the observations of different investigators are not in harmony.

Erysipelas is an acute febrile disease, characterized by a peculiar inflammation of the skin and enlargement of the neighboring lymph-glands, which is accompanied by more or less severe general symptoms. It is contagious and inoculable, and arises spontaneously under conditions not accurately determined; in the latter case it is called

Idiopathic. When spreading by its own contagion, which diffuses itself through the air or is carried by linen or instruments previously used for dressing patients with erysipelas, or by flies—it is called *Traumatic*, and is mostly found in the surgical wards of hospitals. As the slightest scratch may be the recipient of the poison, the disease is often communicated to nurses and physicians. DaCosta found that the idiopathic form was almost invariably attended by albuminuria, which in the traumatic form was either absent or present only in a decidedly less marked degree.

Erysipelas affects the skin in its whole thickness and the subcutaneous cellular tissue. All the layers of the corium and of the subcutaneous cellular tissue are edematous, swollen, and penetrated by large, finely granulated, white blood-corpuscles. The most important distinctive feature of erysipelas is its disposition to spread only by creeping uninterruptedly onwards without making jumps; it spreads like water in blotting paper. When on the scalp or face it is limited mostly to a more or less extensive portion of the skin of the head and face, and seldom descends over the neck to the trunk; on other parts of the body it is apt to spread over larger surfaces.

The local symptoms are frequently preceded a day or two by a feeling of general malaise, chilliness and feverishness. Then the part affected begins to feel hot and tense; the skin reddens and swells, and becomes very sensitive to the touch. At the same time the adjacent lymphatic glands commence to swell. This inflamed portion assumes a red, smooth and shiny appearance, which is, however, darker and duller on the scalp than on other parts, and to the touch it gives the impression of a hard, stiff, caked mass. The inflammation gradually

creeps on until it reaches from side to side of the scalp, down into the face, and even to the neck and shoulders.

On the second or third day, generally, the redness and swelling reach their height, and, at this stage, in some cases, the epidermis becomes raised and filled with a yellowish, limpid fluid, sometimes tinged with blood, in the shape of large blisters—*Erysipelas bullosum*—which either dry up, or burst and become covered with crusts.

During the height of the disease, the patient has high fever, with evening aggravations; his sleep is restless and full of dreams; he sometimes becomes delirious. On the fourth day the redness and swelling gradually subside on the places first attacked; while those parts which were invaded later stand yet in full bloom. By and by, however, they grow paler, softer, and assume a wrinkled appearance, as the swelling leaves; the crusts dry off, and on the whole surface the epidermis peels off in large flakes; the entire process lasting from about eight days to two weeks.

But this is not invariably its course. Just in its very nature to creep on lies its danger. It may, by continuity of tissue, wander to the mucous membrane of the nasal and pharyngeal cavities, cause an œdema of the glottis, and affect the larynx, the bronchial tubes, and even produce pneumonia and pleuro-pericarditis.

The tongue usually is covered with a white creamy coat, which dries gradually, becomes dirty yellow and, when the fever is protracted, blackish and crust-like; there is nausea and vomiting; sometimes diarrhœa and, what seems very remarkable, in rare cases profuse intestinal hemorrhage, in consequence of ulcers in the duodenum, which generally have proved fatal, and remind one of similar symptoms which are occasionally observed after severe burns of the skin. In almost all idiopathic cases there is albuminuria. The fever, accompanying

erysipelas, is characterized by a sudden rise of the temperature to even 104° F., or higher often within from eight to twelve hours, still rising, in some cases, to 107.6° F. When recovery approaches, it usually sinks as rapidly as it rose, and may attain its normal standard within a few hours, or in a single night; then desquamation of the epidermis, in the form of large or branny scales, and wrinkling of the skin terminate the local process. The hair usually falls out, but quickly grows again. The skin, too, recovers its normal state; only upon the eyelids, the scrotum, the prepuce and vulva, where it is naturally tender, it may in severe cases undergo a more or less extensive gangrenous destruction, and its duration be prolonged to several weeks, even months.

Unlike to other infectious fevers, erysipelas leaves a very great susceptibility for renewed attacks. Not a few persons are subject to a periodically returning form—the so-called *Habitual erysipelas*, which mostly affects the face or lower extremities.

Phlegmonous erysipelas is usually the result of an injury, and deep abscesses form in various parts of the body, discharging a foul, dirty pus. These cases are very serious, and often prove fatal.

Dr. H. Landerer relates the history of a case of melancholia of seven months' standing and progressing towards incurable dementia, in which the patient, a young girl, recovered completely from her mental affection simultaneously with the subsidence of an attack of facial erysipelas spreading to the scalp. Two or three years had elapsed when the report was made, and she still maintains perfect health.

Burns has collected twenty-two cases of tumors which were the seat of idiopathic erysipelas. Three cases of sarcoma were permanently cured. In four cases of

lymphona of the neck, some of the glands entirely disappeared, and the others became smaller. In five cases erysipelas was artificially produced. Three of these cases were of carcinoma of the breast. In one of them the disease was not checked; in another the tumor was diminished to one-half its former size, and the third was practically cured, a small induration in the scar, the size of a pea, remaining. A multiple fibroid sarcoma was diminished in size, and an orbital sarcoma was unchanged.

My own observation has been limited to one case, a carcinoma of the breast. Erysipelas was artificially produced, with the result of death in about three weeks. No effect was produced upon the carcinoma.

Treatment.

Local.—The use of oven-dried rye meal, or powdered starch may afford much comfort to the sufferer. The starch, for such purpose should be carefully prepared by washing it in cold water in order to remove all foreign matters; it should then be allowed to settle, the supernatant water poured off, and the starch then slowly dried. During the drying process it should, from time to time, be broken up so as to expose fresh surfaces, thereby hastening the process. The starch is thus readily converted into an almost impalpable powder, which, when applied to the inflamed surface, promptly relieves the itching and burning. Applications containing fatty substances are usually harmful in their effects.

The following makes an excellent application in some cases: The site of the disease is to be painted with this mixture every two hours, and then covered with anti-septic gauze.

℞ Carbolic acid,
Tincture of iodine,
Rectified spirit, āā ℥j.
Oil of turpentine, ℥jj.
Glycerin, ℥jjj.

Dr. Hilsman recommends the application of strong heat to the parts affected. This procedure is evidently homœopathic. Erysipelas is a dermatitis of a specific character, and the application of a high degree of heat produces, itself, a dermatitis. Whether the high heat kills the microbe of erysipelas or not does not affect the homœopathicity of the treatment. The parts attacked by erysipelas are covered with heavy felt and then a red-hot smoothing iron applied forward and backward over the felt which heats the affected parts and removes the erysipelas. Some cases are intolerant of heat.

The external application of raw cotton to the inflamed parts, to keep off the air, as in burns, is recommended by several physicians.

I have found the application of *Ver. vir*, one teaspoonful of tincture to half a glass of warm water, to be very soothing.

In domestic practice a poultice of raw cranberries, or scraped potatoes, or raw carrots, is often used with decided benefit.

The indications for remedies are as follows:

Aconite.—Intense synochal fever, with restlessness, fear of death, etc.

Ammon. carb..—*Erysipelas of old people*, when cerebral symptoms are developed, while the eruption is still out; debility and soreness of the whole body; tendency to gangrenous destruction.

Anthracin.—*Erysipelas gangrenosa* with typhoid symptoms; great pain in head and dizziness; delirium and un-

consciousness; great prostration and depression; fainting and copious sweating; sleep short, unrefreshing, more like stupor.

Apis.—Erysipelas, with bruised sore pain and much swelling; stinging, burning, prickling pains in the skin, which is very sensitive to the slightest touch; *erysipelas of the face and scalp*, with puffiness of the eyelids; typhoid tendency; sphaclated spots here and there; the whole eruption rather pale than deep red; chronic erysipelas, recurring periodically; apt to go from right to left.

Arctium lappa.—Chronic erysipelas is said to be removed permanently by its persistent use. (*Gymnocladus Ptelea*.)

Arnica.—Phlegmonous erysipelas, with extreme tenderness and painfulness on pressure, with tendency to the formation of bullæ; the swelling hot, hard, shining, even deep red; the patient feels nervous, cannot stand pain, and feels tired as after hard work, or as if beaten.

Arsenic.—Irregular progress; disposition to internal organs; terrible restlessness and sinking of strength; fainting pain in the bowels and hemorrhage, as sometimes occurs in large burns.

Belladonna.—Intense erysipelatous fever, accompanied by inflamed swellings, passing even into gangrene; skin imparts a burning sensation to the examining hand; phlegmonous erysipelas; tendency to attack the brain, with delirium; severe headache, furious look, violent thirst, dry tongue, parched lips, etc.; smooth and shining erysipelas on the right side of the face; tendency of inflammation to spread in streaks.

Borax.—Erysipelas of the left side of the face, painful when laughing, with sensation as if covered by cobwebs.

Bryonia.—*Erysipelas articulorum*, with drawing-tearing pains, increased by motion.

Camphora.—Great exhaustion; coldness of skin; breathing scarcely audible or visible.

Cantharides.—Typhoid erysipelas; *vesicular erysipelas*, with fine stinging-burning pains internally and externally, the patient being uneasy, restless, distressed, dissatisfied; unquenchable thirst, with disgust for all sorts of drinks; kidneys and bladder involved; erysipelas begins on dorsum of nose and spreads to both cheeks, but more to the right.

Comocladia.—Burning on face and eyes, worse towards evening; excessive swelling of the face, with tormenting itching and swelling; corrosive itching of the head; dizziness and heaviness of the head, with shooting pains, relieved by motion.

Croton tigl.—Œdematous swelling of eyelids; large and small blisters; intermediate skin cracked and peeling off; violent burning.

Cuprum.—Sudden sinking of the swelling and changing into a bluish color; violent brain symptoms.

Euphorbium.—Erysipelas of head and face, with digging, boring, and gnawing pains, followed, when ameliorated, by creeping and itching of the part. Considerable swelling of the parts affected, with small vesicles discharging a rather yellowish fluid.

Eucalyptus glob.—General erysipelas, with putrid dysenteric passages; typhoid symptoms. A desire to be constantly moving about.

Ferrum phos.—Rose and erysipelatous inflammations of the skin, for the fever and pain and severe symptoms of inflammation.

Graphites.—Chronic disposition of the disease to return, from right to left; phlegmonous erysipelas of head and face, with burning-tingling pains; swelling and induration

of lymphatics and glands; very liable to take cold from the least cold air.

Hydrastis.—Wandering from left side of nose to right over whole face and scalp; intense pain in the lumbar region; chills down the back; extremely restless; disturbed by noise; delirium; urine suppressed.

Hydrophyllum Virg.—Burning and watering of eyes, with slight itching. Eyelids swollen, sclerotica injected, fiery redness, sensitive to light. In the morning eyelids agglutinated.

Ipecac.—Retrocession of eruption, with vomiting.

Kali carb.—From right to left side; œdematous swelling under the eyebrows. When touched ever so slightly on his feet, he jerks them up much frightened; he talks of pigeons flying in the room, which he tries to catch with his hands; he gets regularly worse about 3 o'clock A. M. After previous attacks.

Kali mur.—Schüssler says this is the chief remedy in vesicular erysipelas.

Kali sulph.—Blistering variety, to facilitate the falling off of scabs.

Lachesis.—Where the cerebral affection does not yield to *Belladonna*; bloated red face, attended with heat; headache and coldness of the extremities; one-sided tense headache, extending from occiput to eyes, with vomiting, vertigo, tendency to faint, and numbness; left side especially affected. (*Bell.*, right).

Ledum.—Erysipelas of face and eyes from bites of insects.

Natrum phos.—Erysipelas, smooth, red, shiny, tingling or painful swelling of the skin.

Natrum sulph.—For the smooth form, with or without vomiting of bile.

Natrum benzoicum—Dr. Haberkorn uses this drug in

full physiological doses and given in seltzer water. He has treated fifty cases without a death, and reports that almost uniformly within forty-eight hours the temperature was reduced to normal, and the patient felt well. The local symptoms quickly subsided, ending with desquamation. No local treatment was used.

Nux vomica.—Gastrosis the cause of the erysipelas; burning itching all over the skin, worse in the evening; great debility, with oversensitiveness of all the senses, and irritability of temper.

Pulsatilla.—*Erysipelas erraticum*; bluish, spreading rapidly, especially about buttocks and thighs; smooth skin, headache; mucous diarrhœa, nausea, neither appetite nor thirst.

Rhus rad.—Phlegmonous erysipelas, especially when it begins in the ankle and moves gradually up the leg in the deeper tissues; sometimes with very little fever.

Rhus tox.—*Vesicular erysipelas*; itching all over, especially on hairy parts; after scratching burning; swelling and redness of the face, with partial or entire closure of the eyelids; bruised feeling in the limbs and back; tendency to attack the brain; dark bluish redness of the parts affected.

Rhus ven.—The symptoms usually begin by itching and tumefaction in the hands and face, the swelling gradually spreading over different parts of the body.

Ruta.—In combination with wounds.

Sulphur.—*Erysipelas migrans*, appearing in subsequent throes, and running its course for a longer time than usual. Helps often when all other remedies fail.

Terebinthina.—*Erysipelas bullosum*, skin red and indurated, swollen; clusters of small, flat, pale, yellow vesicles, often confluent, with large red halos, here and there turning bluish-black, showing a tendency to gangrene.

Trichlorphenol.—The daily application of a 5 to 10 per cent. solution of *Trichlorphenol* by means of a brush to an erysipelatous surface has been accompanied by excellent results.

Verat. vir.—Right side of head and face much swollen and covered with large blisters; headache; high fever; no sleep; no appetite; intermitting attacks of nausea; occasional vomiting of the water drunk. It was applied low, externally and internally.

Rubella.

There is a form of eruption which resembles measles, but differs in several particulars, and about which some dispute exists. It has received several names, as, for example, rubeola notha, roseola, rotheln, rosalia, German measles, etc. Rubella is undoubtedly the proper term for this rose-red colored eruptive fever. Very little is written of it in our text-books, although it is a disease of frequent occurrence. It is probably contagious, and is more prone to be epidemic than either measles or scarlet fever. One attack usually protects from subsequent invasion, but does not protect from either measles or scarlet fever.

Rubella occurs chiefly between the ages of three and twelve years. It may be seen in infants, rarely adults, and is characterized by stages of incubation, invasion, eruption, and decline, and closely resembles measles in some cases, and scarlet fever in others.

The history of the patient will aid diagnosis. Has the child had either scarlet fever or measles? Are either of these diseases existing epidemically? The stage of incubation varies from four to twenty-one days. The invasion stage is from twelve to twenty-four hours. Catarrhal symptoms absent, though the fauces are reddened. One of the most characteristic symptoms of rubella is the

enlargement and induration of the cervical, post-cervical and post-auricular glands. Occasionally only a few of these glands may be affected, but more often the entire chain, also the lymphatic glands in other parts of the body, may be involved.

The eruption may first appear, like the eruption of measles, upon the face, but spreads more rapidly over the surface, or it may appear over the whole surface at once; it is most intense during the first day; it may rapidly fade in one part and appear in another; in color it is of a pale rose-red, but not so red as scarlet fever, nor so bluish as measles.

Over the more vascular parts it is often slightly elevated, with a tendency to become confluent. In other parts it is more maculate in form and of a much higher color in the centre; nor do we have the characteristic odor so peculiar to measles. The tongue is usually slightly coated and cleans in patches, producing the so-called "mapped tongue" but never the strawberry tongue. Desquamation is slightly branny, and follows the eruption in nearly every case. In some cases it is well marked; in others, however, it may only be observed on some particular parts, as about the nose, and may last for three weeks or more. The patient very quickly recovers; there is no dropsy or renal disease following in its wake.

For internal remedies consult Rubeola.

Frambœsia, or Yaws.

This disease is confined almost exclusively to the negro race; it originated on Guinea coast of Africa. It is a constitutional disorder, attended often with fever, and by a peculiar papular eruption, sometimes having almost a crimson appearance like that of a wild raspberry, hence

its name. Its probable cause was syphilis, spread among the negroes of West Africa by the English traders. Proofs of its venereal origin are as follows:

1. That it is contagious, and can be inoculated in the same manner as matter taken from an indurated chancre.

2. It is accompanied by ulcerated throat and pains in the bones.

3. The eruption is of a secondary specific type, though not of the usual lean-ham color but yellowish-white, having an ulcerative tendency.

4. It is transmitted by parents to their offspring.

5. Such children infect those who suckle them.

6. The disease is much improved by mercurial treatment.

7. The pathological histology of the papules resembles the tissues found in syphilitic gummata.

The disease begins with malaise and fever, pains in the head and bones which are worse at night, and ulcerated throat. The body becomes covered with yellowish-white patches of varying size, with the formation of papules which break down and ulcerate under a scab with great loss of tissue. The eruption generally breaks out in the face, the neck, the upper and lower extremities, the parts of generation, the perineum, the hips, and about the anus. They are much less frequently observed about the trunk, and are not so often seen on the hairy scalp. They may form on the nostrils where the mucous membrane joins the skin, and here the yaws may assume an elongated form, nearly closing the nostril, and hanging down on the lip. The same form may be observed about the eyelid. Near to the mouth they may appear in such numbers and so closely set together as to form almost a ring round the mouth. This is especially the case in children. Around the anus also they sometimes coalesce

and form one projecting circular band an inch and more in breadth.

An attack of framboesia varies much in severity as regards the size and number of actual yaws.

After the disappearance of the yaws without ulceration, a dark spot is left where each yaw has been and of corresponding size. These spots are of deeper shade than the natural black of the skin, and they remain for many years, but may possibly wear out in time. The skin is quite smooth, and the texture uninjured. In white skins the spots are of lighter hue than natural. When, however, the disease ulcerates scars are left.

Should yaws not properly develop its several early stages the general health suffers, the patient becomes cachectic, unhealthy ulcerations appear over the body, especially about the joints, which swell and become painful, and offensive effluvia are given off from the body, and the attacked dies a lingering death, or becomes crippled, more or less, by the deep ulcerations.

The mercurial preparations, and *Jatropha curcas*, are the principal internal remedies.

CHAPTER VII.

PAPULAR INFLAMMATIONS.

Lichen Planus.

Lichen planus is a non-contagious affection of the skin, characterized by the development of small, flattened papules, which frequently present a distinct central depression or umbilicus.

Lichen planus is an eruption of pimples, remarkable for their color, their figure, their structure, their habits of isolated and aggregated development, their habitat, their local and chronic character, and for the melasmic stains which they leave behind them when they disappear.

The *color* of the pimples is a dull crimson-red, more or less livid, and suffused with a purplish or lilac tinge.

In *figure* the papulæ are flattened, smooth, and depressed on the summit, angular in outline, but slightly elevated, and of a size ranging between one and three lines in diameter; the flatness is rendered more conspicuous by the summit of the papule being occupied by a thin, horny, semi-transparent lamina of cuticle, depressed on the surface, and marked by the aperture of a follicle, which represents a sort of *hilum*. In structure, the papule of lichen planus is a hyperæmia with exudation, surrounding a follicle and surrounding a thin layer of horny, transparent cuticle; while the aperture of the

follicle and its conical epidermic plug are visible in the center of the horny plate. The horny covering is in no wise a scale ; it rises and falls with the papule and neither separates nor exfoliates.

Lichen planus presents two principal forms of manifestation—*discrete* and *aggregate*.

The *habitat* of the eruption is also characteristic of the identity of lichen planus. It is pretty constantly met with on the front of the forearm, just above the wrist ; in the hollow of the loins; on the lower half of the abdomen; on the hips; around the knees, particularly over the mass of the vastus internus muscle; on the forearms and calves of the legs, and in women around the waist and in the grooves occasioned by the garters. We have seen it also, but less frequently, on the palms of the hands and soles of the feet; and in two instances on the tongue, the buccal membrane, and the mucous lining of the fauces.

Lichen planus is essentially *chronic* and *local* in its habits. In distribution it is generally symmetrical, but occasionally is limited to one side of the body; sometimes occurring on one side in the upper extremity, and on the other in the lower. It has no constitutional symptoms of its own, and frequently prevails with very little disturbance of any kind.

Of course, the totality of the characters above noted are not to be found in every case. The characteristic features, however, are the flattened umbilical papules. This central depression may not be noted in every papule; and when a number of them have run together and coalesced, it is commonly absent, and met with only on those in the neighborhood of, but which do not form a part of, the patch.

The duration of the affection is indefinite. It may undergo resolution, and the papules disappear after three

or four months; or, especially when the eruption is extensive, may resist the best-directed treatment for a year or more.

Etiology.—No one has thus far offered a plausible explanation of the causes of lichen planus. It is undoubtedly a constitutional affection, but whether due to certain unknown changes in the blood, or to a reflected irritation from some special internal organ, is entirely unknown.

Diagnosis.—In general aspect the affection may be mistaken for a papular syphilide, or a papular eczema, but hardly for any other than those two diseases, except it be the lichen ruber of Hebra. The positive features, however, that have been detailed above do not occur in the diseases mentioned, and are sufficient of themselves to establish the diagnosis.

The prognosis of lichen planus is favorable, as there is little or no evidence that it tends either directly or indirectly to shorten life. The duration of a given eruption, however, is very uncertain, except that, in a general way, the more extensive the lesions the longer they may be expected to remain.

Treatment.—Locally, chrysarobin, thirty grains, with one ounce of traumaticin (liquor gutta percha). This should be painted on the spots daily until a considerable degree of local irritation is produced. Sedative applications should then be applied for a few days, and the skin allowed to recover from the effects of the drug. A single course of this sort will cause most of the spots to disappear.

When there is much itching, temporary relief is afforded by the application of cloths wrung out in hot water. Should the itching prove obstinate, a weak car-

bolized oil and lime water lotion, or grindelia robusta, dr. j. to water ℥j may be used.

The following ointment has proven very beneficial in many cases, to relieve the itching of lichen planus and eczema:

℞ Chloral hydratis, dr. ss.
 Camph. pulv., dr. ss.
 Acidi carbolici, m. x.
 Balsum peru., dr. j.
 Menthol, grs. xx.
 Ung. zinci oxidi, q. s. ad. ℥j.

M. fl. unguent., Sig. Apply morning and night.

As regards internal treatment the old school rely almost entirely upon arsenic, giving preference to Fowler's solution.

The patient should be liberally fed and well hygiened.

Homœopathic Remedies.

Antimon crud. is the principal internal remedy.

. Others are indicated as follows:

Agaricus musc.—Eruption of small pimples with red areolæ and violent itching. Sensation in various parts as if ice cold needles were piercing the skin. In light complexioned persons and drunkards.

Arsen. alb.—In chronic cases. Burning itching, painful after scratching. Great weakness and prostration. Oppression of breathing.

Chinin. ars.—In the diffused form with threatening marasmus. Chronic intestinal derangements.

Iodine.—Small dry, red pimples on the arms, chest and back, with jerking sensation while appearing. Rough, dry skin. Emaciation. Ravenous hunger.

Kali bichrom.—Papular eruptions on the forearms. Rheumatic pains in the limbs. In fat light complexioned individuals.

Ledum.—Eruption of pimples on the forehead as in brandy drinkers. Eruption of small pimples like red millet seeds over the body. Excessive itching on the backs of both feet, worse after scratching, and by warmth of bed. Relieved after scratching the feet sore.

Nux juglans.—Red pimples on face, neck, shoulders and back. Little tubercles with hard scurf on the instep.

Potassium iodide.—Lichen on the face and shoulders. Sensitive swelling of the thyroid gland, great general debility.

Sarsaparilla.—Red dry pimples. Burning itching with chilliness.

Staphisagria.—Itching pimply eruption over the face and behind the ears, with rough skin. Burning of the eruption after scratching.

Salphur iodide.—Red pimples on the nose, chin and arms, with itching. In chronic cases.

Lichen Ruber.

To Hebra is due the description of an eruption to which he applied the name above given. It, like lichen planus, is a papular affection, but the papules present a different aspect, and they are *acuminate*, not *flattened*. They do not exhibit the central hilum. The papules rarely if ever undergo spontaneous resolution, but persist throughout the entire period of the disease, which, as a rule, terminates with the patient's death. The papules at first are discrete, and each is decked with a minute adhering scale. New papules continue to form, and in time considerable patches, raised, red, and scaly, come into existence.

The prognosis is essentially grave. A few cases have

been reported cured, but in the majority the disease lasted until death terminated the patient's existence.

Externally we may seek with some measure of success to procure resolution of the lesions by active substitutive treatment, involving the use of iodine, bichloride of mercury, carbolic acid, strong alkaline applications, etc.; but whether either or all of them is capable of retarding the usual termination is problematical.

There are several varieties of lichen given by different authors, but, as they are but forms of either the two above mentioned or lichen simplex, we will omit them, especially as they will be referred to in the description of the various lesions of the skin, and simply give a description of lichen simplex.

One case, reported in one of our journals I would like to mention, as showing the efficacy of a well chosen homœopathic remedy.

The case, as reported, is as follows:

Cure of Lichen Urticarius by Thuja.

A gentleman brought his fourteen year old son for treatment for a skin affection that had defied two able specialists. He had been treated both internally and externally and strictly dieted—but without effect. The lichen was wont to come periodically in the warm weather; the patient literally tears himself because of the irritation. The rash was much worse on the left side, that being the side on which he was vaccinated. *Thuja* 30, was ordered in very infrequent doses. The spots continued to appear for a week after taking the powders, then they disappeared and he has remained quite free from them, although eating freely of meat, fish and fruit. It may be remarked that the cure took effect during warm weather, and that the urticarius lumps were described as worse in the warmth.

Lichen Simplex.

Lichen simplex includes as its sub-varieties, *L. circumscriptus*, *L. agrius*, and *L. pilaris*.

Lichen simplex is often seen in the summer, sometimes recurring in the same person several times; the papules are flesh-colored, red, smallish, sometimes very minute, and more or less pointed, lasting a week or so, and followed up by the development of others; the papules are usually seen on the back of the hand, the outer aspect of the forearm, the neck, and the thighs. They are accompanied by a good deal of itching. The papules disappear by resorption, and never become vesicles or pustules. This lichen may last for weeks and months. The disappearance of the papules gives rise to a little desquamation. The skin generally is dry and thickened. The disease is rare. *L. circumscriptus* is the name given to the disease when the papules are collected together into little round or roundish elevated patches; the border of the diseased patches in such cases is well defined and papular, the surface elevated, rough and dry to the feel; its area increases by circumferential enlargement, and its centre presently clears somewhat; there are generally several circles, and their most usual situation is the back of the forearm or the hip; at other times the back of the hand or calf may be affected, or the inside of the thigh. The patches after a while get more or less scaly, or inflamed and cracked, simulating eczema, but never actually discharging; or in consequence of the centre healing, assume a circinate form; but the history, absence of moisture, and the dry red roughened base are distinctive.

Lichen agrius, or the inflamed form of lichen, differs

from the above in the presence of secretion, and hence approaches eczema; but it is, as its name implies, an acute, inflamed lichen. The local manifestation consists of clustered or closely packed red papulæ, accompanied by intense itching and burning, causing the patient to scratch violently; this in its turn sets up additional irritation, the torn and excoriated papulæ are inflamed, and exude a thin fluid; the whole patch thickens, fissures, and becomes covered over with *thin scales*, not the yellow puriform scales of eczema. Lichen agrius may also arise by inflammation of the chronic stage of any of the other forms of lichen, and not primarily as an acute form. The acute state lasts about ten or fifteen days, the chronic weeks or months; this variety of lichen is observed about the back, neck, legs, arms, and shoulders; it constitutes one aspect of grocers', bricklayers', and bakers' itch. Vesicles and pustules may, however, form; and then there is an inflamed, raised, reddened, excoriated, discharging, fissured patch, the seat of intense and often intolerable itching and burning, made worse by stimulation of all kinds, especially the warmth of bed. The disease either subsides or increases by the development of fresh crops of papulæ.

Lichen pilaris.—Occasionally one sees, either alone or in conjunction with ordinary lichen, or other disease where the skin is hyperæmic, little elevations like papulæ, which are, however, seated at the hair follicles; the hair in fact piercing the centre of the papule. A distinct lump is felt by the finger. Hyperæmia of the follicular plexus is followed by fibrous deposit outside the follicle, forming a papule.

When this is accompanied by inflammatory deposit, then solid papules are formed at the hair follicles and constitute lichen pilaris.

Lichen pilaris is then "fibrous inflammation" seated at the upper part of the hair follicles, the effusion of plastic lymph taking place around the follicular walls, and producing, according to its degree, more or less well marked and distinct papulation, each elevation being perforated by a hair. It must not be confounded with pityriasis pilaris, which is merely a desquamation of cuticular cells into, and distending, the hair follicles, preventing the formation of the hair, and producing a blocking up of the follicles, the collected cells forming "a knot" in the upper part of each follicle, a state of things that may occur after pityriasis rubra, or as the result of an inactive state of skin, especially about the thighs, and which latter only needs the free use of soap and water for its removal.

Prognosis.—As a rule, the simple forms get well, with proper treatment, in two or three weeks. *L. circumscriptus* and *agrius* are often very obstinate.

Lichen appears to be common in those of nervous temperament and in summer time. It attacks all ages, and is evoked by local and reflex irritation, by a deficiency of alkali in the system; irregularities—mental, physical, alimentative, etc.; hereditary tendency; certain occupations—*e. g.*, cooks, bakers, grocers, bricklayers, etc.; hot climates, all seem to be causative factors of this disease.

Diagnosis.—We frequently find some difficulty here. The chief points to remember in regard to lichen are the dry and thickened state of the skin and the presence of papules, which are always to be found, if the disease is in patches, at the extending edge; the hard feel of the papules, and their tingling or itchiness. Lichen simplex and scabies may be confounded. *Lichen* is uniform, *scabies* multiform. In *scabies*, besides papules there are vesicles, often pustules, and the papules are not so closely

aggregated; the eruption also is in the line of flexion, not, as in lichen, in that of extension—*i. e.*, lichen is seen chiefly on the outer aspect of the arm; it may occur on the back of the hands and fingers, but it is not interdigital. Lichen simplex never occurs in the feet; it is common on the face; scabies is not. In scabies, too, there is the characteristic vesicle and sillon, whilst the disease is contagious and easily removed by sulphur treatment.

Phtheiriasis may simulate lichen, but it is associated with an unhealthy, relaxed, muddy, dirty state of the skin—flabby is the word; the papules (which are pale) are fewer in number, and each is marked at its apex with a dark speck (dried blood) effused as the result of scratching. The skin is not thickened and dry, as in lichen, nor is there any attempt at scaliness, as in lichen, nor aggregation of papules into patches or groups. Phtheiriasis is essentially a disease of advanced age. It occurs in the uncleanly, and there is often a peculiar urticated state of skin, seen very markedly on the back and chest, produced by an exaggeration of the spaces enclosed by the normal furrows. Phtheiriasis does not occur about the face; the sensation is one of formication, and is altogether out of proportion to the local disease, whilst pediculi may frequently be detected in the folds of the linen.

Lichen agrius resembles *eczema*, but the latter is moist and discharging, occurs in delicate and thin, not in harsh dry skins; again, the history and edge of the patch in lichen point to the existence of papules; then the patch is much thicker and harsher than in *eczema*, and wants its thick yellow crusts; the latter in lichen are thin, pretty few, and “flimsy.”

It is important to remember that scabies may be com-

plicated with lichen, and the latter may be set up as the result of irritation in scabies. One sees this state of things very frequently in the hot season—the irritation of a few scabious spots bringing out a pretty general lichen.

Treatment.—The following ointments are sometimes useful :

℞ Chloroform, M. vjij.
 Glycerine, ℥j.
 White wax ointment, ℥vj.
 Cyanide of potassium, gr. iv.
 M. Sig. Apply night and morning.

Or,

℞ Carbonate of lead, gr. iv.
 Glycerine, ℥j.
 Simple cerate, ℥j.
 M. Sig. Use as above.

For the itching, the prescription mentioned in lichen planus, or,

℞ Dilute hydrocyanic acid, dr. ss.
 Brandish's solution of potash, dr. j.
 Rose water, ℥vj.
 M. Apply as needed.

One of the following internal remedies will generally be indicated:

Alumina.—Red pimples on the face. Pimples on the neck and back. Intolerable itching of the whole body, especially when becoming heated in bed.

Ammon. mur.—Pimples on the back of the hands desquamating next day.

Anatherium.—Red pimples with itching and burning. Scarlet skin with burning.

Antimon. crud.—Small red pimples on right shoulder. From digestive derangement.

Arsen. alb.—In chronic cases with burning itching.

Belladonna.—Papular eruption on the hands like lichen agrius.

Bovista.—Red pimples on the foot.

Bryonia.—Pimples on the abdomen and hips.

Castanea vesca.—Several small pimples on the right thigh, back of the left ear, and on the left upper lip.

Caladium.—Pimples on the mons veneris. Soreness of pimples to the touch.

Kreasote.—Forehead covered with pimples the size of millet seeds.

Ledum.—Small pimples like red millet seeds over the whole body. In brandy drinkers.

Mercurius.—Pimples on the labia. Voluptuous itching. Itching changes to burning by scratching.

Nabulus serp.—Pimples on the face about the nose, upper lip and chest with itching.

Natrum carb.—Pimples on the face and lips. White pimples on the nose.

Nux juglans.—Red pimples on the face and neck. Pricking itching.

Plantago.—Hard white flattened isolated papules on the inside of the thigh. Some papules have a red point in the centre.

Phytolacca.—Pimples with itching on the left leg. Worse first part of the night.

Rumex crisp.—Red pimples on calves of the legs, with itching worse immediately after undressing.

Sepia.—Pimples close together on the face. Pimples on the legs, and in the bends of the joints.

Sulphur.—Pimples on inner parts of the thighs. In simple cases.

Sulph. iod.—Red pimples on the nose, chin and arms.

Tilia.—Eruption of small red, rather deeply seated pimples, with violent itching and burning like fire after scratching.

Lichen Scrofulosorum.

The disease occurs essentially in strumous subjects. It shows itself in the form of little elevations about the size of millet seeds, either pale, or yellowish, or a brownish-red color. These papules never become vesicles; they are grouped together, sometimes in circles, sometimes in segments of circles. The papules are seated at the hair follicles, and are by-and-by covered by thin scales; the patches itch slightly, but not so much as to be scratched, and hence they are not excoriated.

The patches remain in one condition a long time, and undergo no changes but exfoliation and involution. The disease is limited to the trunk, the belly, the breast, and back, being rare on the extremities. Its course is very slow. Generally speaking many groups of papules develop at the same time. They soon reach the height of development, and then remain awhile in *statu quo*. In consequence of the absence of local symptoms, the disease exists unnoticed for some time. When at its acme, other symptoms are observed; between the groups, and at the same time, on parts free from lichen—that is, on the extremities and face—more or less numerous isolated bluish-red elevations are developed; these are about the size of lentils, and look very much like common acne; some of the papules are said to contain pus; then by-and-by they wither and disappear, leaving dark pigmented lentil-sized marks in some places, whilst in others fresh formations take place. The skin between the diseased patches is the seat of desquamation, the scales being pale and shining, whilst the whole skin may assume a cachectic appearance. In 90 per cent., the disease is observed in markedly

scrofulous subjects, and particularly children, together with swelling of the submaxillary, cervical, and axillary glands, with caries and necrosis, or tabes mesenterica.

The treatment is the same as for scrofula. Cod-liver oil internally, with inunctions of oil externally is a great aid in treatment of these cases.

Strophulus.

The disease is popularly known as the red gum, tooth-rash, etc.; some authors look upon it as the lichen of infants. This is wrong, as lichen is an affection of the papillary layer of the derma, about the hair follicles, while strophulus is at the sweat follicles, and is characterized by the appearance of small red or white papules, varying in size from pins' heads to small millet seeds; they are irregularly dispersed or slightly aggregated, and intermingled with more or less erythema; are attended with itching, sometimes slight moisture, and desquamation. It makes its appearance on the most exposed parts, the face especially, but also the neck, arms, and limbs, in successive crops. There are two forms of the affection. One variety, mostly due to over-clothing, appears in infants a few weeks old. The other variety is frequently met with during the period of dentition, lasts longer than the former variety, and is often associated with gastro-intestinal disturbance.

Treatment.—Scrupulous cleanliness must be observed; the diet should be carefully regulated; the child must not be too much wrapped up; the use of soap must be avoided; tepid sponging, spirit or alkaline lotions, may be used locally. A very useful lotion is:

- ℞ Carbonate of soda, gr. xx.
 Glycerine, dr. jj.
 Rose-water, ℥vj.
 M. Apply locally.

Almond emulsion and lime-water may be also used.

Lancing the gums is proper only when they are swollen or so tender as to distress the child.

Chamomilla is the principal internal remedy.

Other remedies may be indicated as follows:

Ammon. carb.—Rash appears more on the right side. Frequent starting in sleep as if in affright.

Antimon. crud.—Child cannot bear to be touched or looked at. Disturbance of digestion, nausea, vomiting and diarrhoea. Tongue, thickly coated white.

Calc. carb.—Eruption attended with swelling of glands, heat, thirst and want of appetite. Scrofulous children and during dentition.

Chamom.—Eruption of red pimples, itching worse at night. Great sensitiveness of the nervous system with irritability, cannot stand pain, the wind, or currents of air. Child very cross and restless, wants to be carried.

Lycopodium.—The skin dry and hot, with yellow color, especially of the face, and emaciation. Eruptive itching, worse from 4 to 8 P. M. Red sand in urine.

Nitric acid.—Eruption with burning, itching pains, worse at night, from change of weather, or during perspiration. Strong smelling urine, like that of horses.

Prurigo.

The older writers used this term in a variety of ways, and included under it several unrelated affections which possessed the common symptoms of itching. Modern usage, however, confines it to a definite affection, first clearly described by Hebra.

The disease is chiefly characterized by intense itching, often commencing early in life, and extending over a number of years. In the beginning little will be found in the way of lesion other than a few scattered papules, which are little if at all raised above the surface of the skin, and are perceived more readily by the sense of touch than by that of sight. They appear to be seated in the skin, and do not, except when directly irritated, project above it. Accompanying the papules we find the usual indications of all itching affections, namely, "scratch-marks," and these will be developed in direct ratio with the severity of the pruritus and the vulnerability of the skin. In addition to these we will find increased pigmentation, increased distinctness of the natural lines and furrows, and increased roughness, hardness, and thickness of the skin. The extensor surfaces of the limbs are the chief seats of the trouble. These phenomena may be embraced under the title of prurigo *mitis*, or *vulgaris*, but in exceptional cases, however, all the symptoms may be greatly aggravated, constituting the prurigo *ferox* of Hebra. The papules are larger, the excoriations more severe, and the papules may be torn open, giving exit to a little sero-purulent fluid; and a localized or general eruption may complicate, and to a certain extent mask, the primary affection. The whole surface becomes deeply pigmented, and the axillary and inguinal glands become enlarged.

Prurigo, whether in a mild or severe form, is a chronic disease, occurring even in childhood, and lasting for life.

The *etiology* of prurigo is unknown. The microscope throws about as much light upon the subject, as on many other cutaneous affections. Different observers obtain different results. The majority suggest the possibility of a connection with the sudatory apparatus.

Prurigo is mainly an affection of the poorer classes, and occurs mostly on the extensor surfaces of the lower extremities, but is frequently found on the forearms and trunk. It is aggravated during the winter months.

Diagnosis.—The diagnosis of prurigo is not to be definitely made at the very beginning of the disease, but may be suspected in childhood when there is no other obvious cause for the pruritus. When, however, it has lasted for some years, this very fact is presumptive evidence; and the discovery of the peculiar papules, in connection with the scratch-marks and their location, should in the absence of complications enable the diagnosis to be made.

The prognosis is bad, except when judicious treatment is instituted early in the course of the affection.

Treatment.—Relief may be obtained by means of prolonged baths and energetic frictions, and alkaline and tarry preparations, such as the *tinctura saponis viridis*, to which a liberal amount of tar has been added. Peppermint oil acts as a temporary sedative. As the violence of the disease is most fully displayed at night, the applications should be made at bed-time, except in cases of such severity that the patient is obliged to abandon business or social life, and give himself up entirely to the treatment of his disease.

Prurigo as a Family Affection.—Dr. Sokoloff records the history of a family, in which, of six children (aged from 1 to 12), three (two girls and one boy) were suffering from a severe general prurigo. In each instance, the symptoms had first appeared about six months after the child's birth to gradually attain their maximum intensity about the fifth year of the patient's life, after which the itching as gradually decreased. The symptoms were always intensified during summer, and under the influence

of heat in general. All the three patients were fair and fat, while those not affected were of dark complexion and lean.

The following makes a very soothing lotion:

℞ Sodii hyposulphit, dr. j.
 Acid carbolic, dr. ss.
 Glycerini, ℥j.
 Listerini, ℥ijj.
 M. Sig.: Use as a lotion.

Lotions of bran water, or of *Mezereum* or *Grindelia* 1 part, water 10 parts, will be useful in allaying the itching, as will also Carbolic acid, gtts. v.; Aqua, ℥j. In obstinate cases the use of sulphur vapor baths is commended.

Indications for internal remedies are as follows:

Aconite.—Furious itching all over the skin, with febrile symptoms, and especially with inflammation of the skin, thirst and restlessness.

Arsenic.—Chronic form, itching and burning, better from warmth. Thirst, drinking little, but often, restlessness.

Belladonna.—Creeping, crawling itching, with burning and soreness. Aggravated about 3 P. M. Children with blue eyes, blonde hair, delicate skin and red complexion.

Borax.—Child becomes pale, the flesh relaxed and withering, with crying, aversion to food, and awakening from sleep with screams. Whitish pimples with red areolæ.

Carbo veg.—Itching over the body day and night. Derangement of digestion with bloating of the abdomen and frequent eructations.

Dolichos.—Intolerable itching all over the body, worse at night, preventing sleep, worse after scratching.

Ignatia.—Fine pricking itching, changing from one part to another.

Mercurius.—Apthous or eczematous prurigo. Itching worse at night, and worse from warmth of the bed. Sweating easily, but without relief.

Rumex.—Itching better from warmth, contagious prurigo.

Rhus ven.—Elevated red blotches, more on face, neck and chest, with violent itching.

Sulphur.—Intense itching, worse in the evening and in bed, recent cases. Dry skin. Averse to washing.

CHAPTER VIII.

ECZEMA.

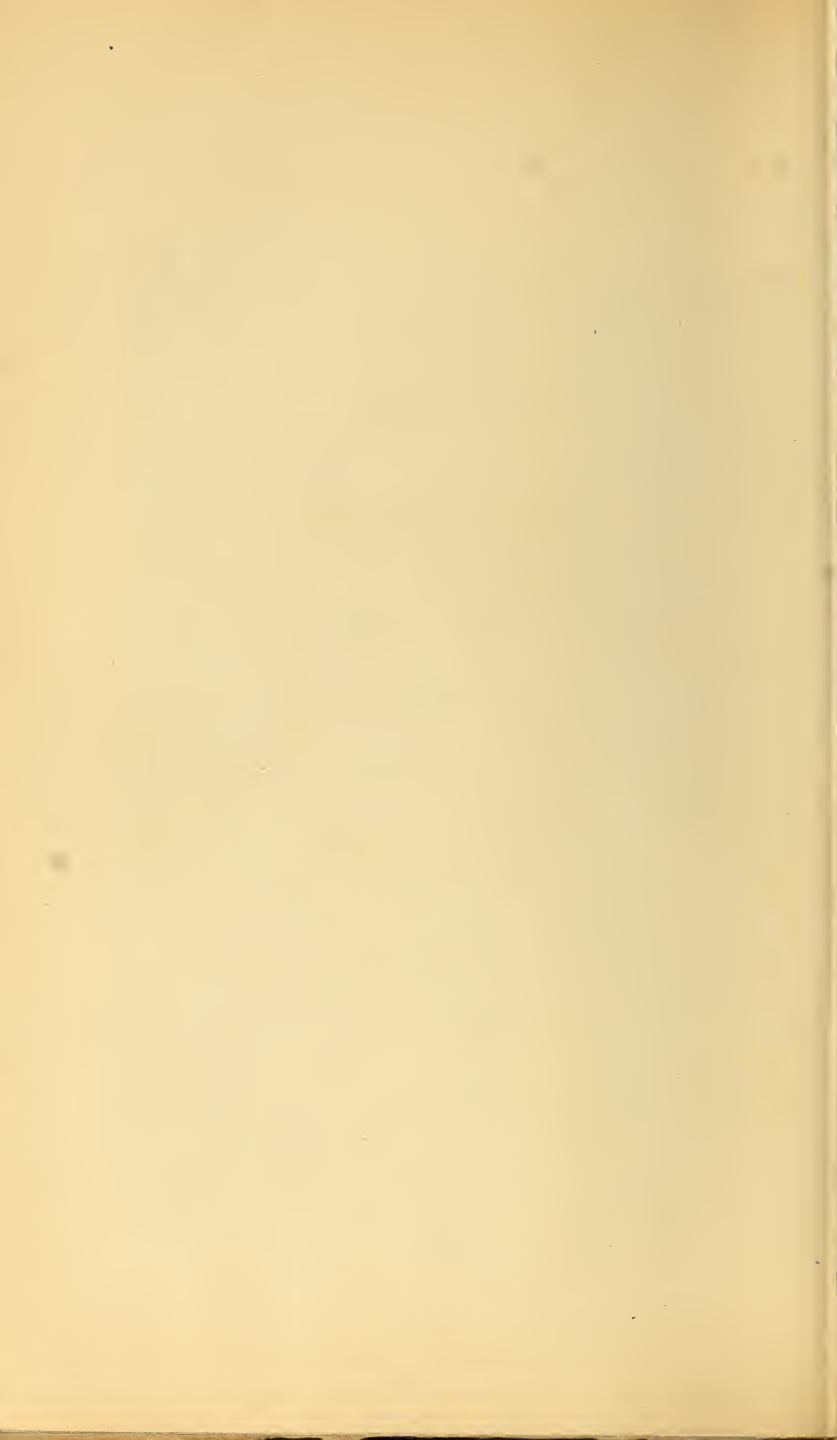
Among the most common as well as perplexing cases of skin disease met with by the dermatologist and general practitioner, eczema justly occupies a prominent place, assuming as it does a multitude of forms, general and local, acute and chronic, and appearing so universally among all classes of society, the rich as well as the poor, the ignorant and the well educated, and arising from the most varied causes.

An accurate and at the same time concise description of eczema is impossible, in view of the fact that the disease presents so many forms and phases, and that of a dozen consecutive cases no two may look alike, or even bear what ordinarily would be termed a family resemblance. These differences are due to the occurrence of lesions which may be quite dissimilar in character and appearance, and combined in ways and proportions almost without number. The aspect, too, of the individual lesions varies somewhat with the location they occupy, the degree of activity they present, and the length of time they have lasted.

The varieties of eczema dependent on the primitive or characteristic lesion are six in number—namely, erythematous, vesicular, pustular, nudose, papular, and fissured; and these in their progress may undergo changes and become complicated with or give place to certain secondary lesions.



EOZEMA RUBRUM.



The varieties of eczema dependent on the activity of the process may be classed as acute and subacute, while those that run but a short course may also be termed acute, and those of longer duration chronic.

Location greatly influences the appearances presented by eczematous lesions, and the principal modifications met with in this connection are those seen on the scalp, face hands and feet, genitals, and about the anus. Eczema may also invade the follicular apparatus of the skin, and give rise to an eczematous affection of the hair-follicles and of the sebaceous glands.

We will best understand the appearances presented by this protein malady if we trace the course of a simple acute eczema of the general surface. It commences with a local congestion, or erythema, followed in a few hours, perhaps, by a crop of minute, closely aggregated vesicles filled with a clear, transparent serum. It often takes a sharp eye, and even a lens, to distinguish their separate contours. When closely examined, we find them to consist of a very thin and delicate epidermic covering, which for a brief period retains the lymphic exudation that is seeking an exit. Rubbing, scratching, or other violence from without, or the pressure of the exudation from within, soon ruptures the epidermis, and usually in twenty-four or thirty-six hours the vesicles have disappeared, and we find in their place a red and exposed surface more or less moist with exudation. If exposed to the air, the watery portions of the exudation evaporate, and light, straw-colored crusts remain. As the exudation continues, the crusts thicken until they drop off, or are purposely removed. After a varying period (days or weeks, as the case may be) the exudation diminishes, the crusts lessen or cease to form, and nature makes an attempt to cover the part with a new layer of horny epi-

thelial cells. It may be weeks before this effort is entirely successful, and the affected surface presents in the interval a reddened and somewhat glossy surface scantily covered with loosely attached scales of small size, the scales being composed of embryonic horny cells which have not yet attained a normal character and consistence. Those first formed are less visible than the normal cell, and are quickly shed, to be replaced by others of more natural character and aspect, until finally we find a complete regeneration of the epidermis, and a return to the condition which existed before the appearance of the attack. In eczema pure and simple we never have ulceration or loss of tissue, and recovery takes place without the least trace of scarring.

For practical convenience the course described above may be divided into three stages: the first being that of congestion and vesicle formation, the second that of exudation and crusting, and the third that of dryness and scaling.

The *pustular* variety of eczema pursues the same course and passes through the same stages as the vesicular, and differs from it only in the character of the exudation and the color of the crusts in the second stage. Instead of a transparent, lymph exudation we have a purulent one, and the crusts are of a greenish color. In the vesicular form the number of leucocytes in the exudation is limited, while in the pustular they are abundant. The third stage of both varieties is identical, and if a case be seen in this stage it is impossible to determine, except by the patient's recital, whether the eruption had been characterized by vesicles or pustules.

The *nudose*, or exfoliative form, differs from the preceding forms by the fact that neither vesicles nor pustules are observed, but instead a rapid loosening and exfolia-

tion of the horny layer over the whole or greater part of the affected area. The succeeding exudation may be serous, sero-purulent, or purulent, and crusts form, as already described. In the second and third stages the appearances are the same as those presented by the two first-named varieties.

In the *papular* variety an area of congestion becomes the seat of small scattered or aggregated papules, with little if any tendency to exudation, unless the papules be wounded by scratching. In this case a small quantity of lymph may exude and dry into a minute scale or lamina.

The papules after a time subside and the surface becomes somewhat glossy and scaly, but not to the extent met with in the varieties already described. The arms and forearms, and the thighs and legs, especially the flexor aspects, are the favorite seats of papular eczema, although it is sometimes met with on the face.

In the *fissured* variety we have a more or less reddened surface without vesicles, pustules, or epithelial exfoliation, but instead presenting small cracks or fissures extending through the stratum corneum, and sometimes through the stratum Malpighii as well. Exudation is slight, crusting is absent, and the skin after a time returns to the normal condition by simply closing of the fissures and disappearance of the congestion. The palms and soles are the favorite seats of this variety.

The *erythematous* variety is characterized simply by a red and congested patch of varying extent, and is not accompanied with vesicles, pustules, papules, or the other lesions of the disease.

Cases of eczema vary in respect to the grade of inflammation present. In one it may exhibit great activity and be accompanied with decided heat, high color, and other evidences of marked inflammatory action, in either the

first or second stages or in both ; and this activity may continue for an indefinite period, and until the case prepares to enter the third stage. On the other hand, the natural color may be but slightly altered, the increase of local heat be almost inappreciable, and the general process partake of a subacute character from the beginning. In other cases, again, an eruption which is subacute may at any stage of its progress suddenly assume an acute phase, or there may be frequent alternations of activity and comparative quietude. This is a very striking feature of eczema, and one that should always be borne in mind. A case may be progressing nicely under treatment, and with the prospect of early recovery, when suddenly the trouble may relapse into its previous active state, and often apparently without sufficient provocation.

The *duration* of eczema varies. In some cases it may run its course in a few days or weeks, while in others it may be prolonged for months or years, constituting the *chronic* form of the affection ; or, again, there may be frequent relapses, even after complete disappearance of the individual attacks.

The *location* of an eczema greatly influences its appearance, and exhibits also preference for certain varieties of lesion. Thus, in eczema of the scalp, especially in infants and children, the process is usually acute, with profuse lymphy or purulent exudation, which mats the hair together in a tangled mass, offensive to both sight and smell. If by chance pediculi find lodgment in such a scalp, they multiply rapidly, and by their irritation increase and aggravate the trouble. If proper care and cleanliness are not practiced, the scalp may become a mere mass of animated filth.

When eczema attacks the scalp in children, it frequently extends to the face, and presents an active form

of inflammation of the vesicular, pustular, or nudose type, accompanied with a good deal of heat and pruritus. If it extends behind the ears, fissures may form.

In adults, eczema of the scalp is usually of the subacute form, without much exudation; and on the face it may be of the erythematous type, without other lesion.

When the palmar and plantar surfaces are attacked by eczema, we may have a purely erythematous lesion, characterized by a red, dry, and glossy surface, on which the natural skin lines are greatly exaggerated as to size and distinctness, and many lines appear which are not noticeable in the normal condition. In addition fissures may form, accompanied with slight exudation. This type of the disease is the most common, and is usually subacute and chronic. On the other hand, we may have an acute eczema of the hands and feet, accompanied with vesicle formation. In consequence of the thickness of the horny epidermis on those parts, the vesicles do not easily rupture, but instead retain their integrity, and even become larger, and remain as vesicles until absorption of the contents occurs, when what was the summit of the vesicle separates as a small scale.

The penis and scrotum usually exhibit the erythematous variety, vesicle and scale formation being rarely met with.

The inner aspect of the thighs and legs is the favorite location of the papular form, although it may be met with on almost any part of the body, and even on the face.

On the lower extremities below the knees eczema is frequently encountered as a direct result of varicose veins, and, if these latter have given rise to ulcers, a broad and diffuse zone of erythematous eczema will almost always surround them, with scattered patches on the neighboring parts.

Eczema about the anus is frequently marked by radiating fissures of greater or less depth.

Eczema may extend from the skin proper down into the follicular openings, especially those of the face and other hairy parts, except the scalp. In these cases the surface eczema may play a very secondary part. On the one hand, we may have the hair-follicles especially involved. When this appears, the general surface of the patch will be found red, and either dry or exuding, but the inflammation having invaded the lining membrane of the follicles, they will be found swollen and loosened. Slight traction on the hair will extract it, accompanied with its root-sheaths. Frequently the exudation which forms within the follicle comes to the surface, and lifts the epidermis surrounding the hair, and forms a pustule (rarely a vesicle) pierced through the center by the hair. This deep-seated inflammation sometimes results in extension of the action beyond the proper outline of the follicle, and nodules form. This condition must be distinguished from sycosis, with nodules, etc., resulting from parasitic invasion.

The sebaceous glands may also become the seat of eczematous inflammation, either with or without marked participation of the surface. Under the stimulus of the eczema the glands exhibit increased functional activity, and the eczematous exudation when present becomes mixed with the increased sebaceous secretion, and, instead of a purely lymphic or purulent exudate, we have some thin sebum mingled with it, which usually dries into greasy scales or crusts.

When an eczema persists for any great length of time, and becomes *chronic*, we find additional features that are important both as regards description and treatment. The chief of these is infiltration. The skin is still red,

but usually dry, and appears to possess double or treble its natural thickness, and the patch is very appreciably raised above the surrounding surface.

Dr. Taylor reports three cases of malaria accompanied by an eczematous eruption, both making their appearance simultaneously ; under proper treatment both conditions were relieved, the remedies given relieving both conditions.

Dr. Stettler reports an interesting case of vulvar eczema as a sequel of the climacteric period.

The extreme prevalence of eczema makes its correct and certain diagnosis of the first importance ; and, if the rules laid down in the general chapter be closely followed, there need not, in the great majority of cases, be any very great difficulty. The history of the attack, the frequently multiple lesions, and their progress as observed or, as related by the patient, should not leave the physician long in doubt.

It is important, however, to distinguish a dry scaly eczema of the scalp in children from a condition sometimes presenting very similar appearances, but due to an entirely different cause—namely, the vegetable parasite, *trichophyton*, which is the etiological factor of ringworm. In cases of doubt the microscope will decide by revealing the presence of the fungus. In like manner eczema of the hair-follicles of the face must be carefully distinguished from *ringworm* of the same parts, to which the name of *barber's itch* is commonly given.

Eczema sometimes resembles psoriasis, and psoriasis sometimes resembles eczema ; or, again, we may have an eruption which no one would be justified in pronouncing either one or the other from the appearance only. Usually the history will enable us to decide. On the hands and feet we may have appearances which may present

difficulties in diagnosis between eczema, psoriasis, and syphilis.

Lastly, we have known a lichen planus to be mistaken for a papular eczema even by gentlemen well versed in cutaneous diagnosis.

Etiology.—It may be regarded as almost axiomatic that the better we understand a disease the better we will be able to treat it. This is especially true as regards eczema. Occasionally cases of acute eczema will be met with that recover under the simplest application, and even under the influence of a plain, non-medicated dressing. Unfortunately, these cases are rare, and in the chronic forms it is often necessary to avail ourselves of every possible aid to recovery. A thorough appreciation, therefore, of all the causes of the eruption, both actuating and contributing, can not fail to greatly assist the therapist in the proper selection of the remedial agencies applicable to a given case.

Eczema attacks more frequently light, florid-complexioned individuals, and is a commoner affection in this country than in Europe. Like the individual who makes a failure in life, eczema usually travels from head to foot as age advances. It appears more particularly on the head in infancy and youth, descends to the trunk and genitals as adult life approaches, and appears on the lower limbs as its victim is tottering to the grave.

Among the exciting causes we may mention irritation of the skin by scratching, by friction of the clothing, by irritating ointments, by oils, by bandages, by artificial legs, trusses, etc., by hot baths, by too high a temperature, by alternation of heat and cold, by heat and moisture, by the injudicious use of Turkish and Russian baths, by strong potash soaps, and by any exciting cause giving rise to hyperæmia of the skin. In quite a number

of cases it seems to be hereditary. It is by no means a rare disease in those who are syphilitic, gouty or strumous.

It is frequently dependent upon renal troubles, menstrual irregularities, dentition, dyspepsia and mal-assimilation, varicose veins and hemorrhoids. Undoubtedly perverted innervation, with general debility and morbid conditions of the blood, is an important cause.

Overfeeding, the habit of feeding the child too frequently, and of allowing children who have passed the milk-diet period to eat frequently of inappropriate food between meals, will prevent the recovery of chronic cases, despite the administration of the well-selected remedy. When the tongue is coated, the breath foul, and the bowels constipated, the diet requires particular attention. Children kept in warm rooms where the air is vitiated are liable to suffer from this affection, especially if they catch cold easily from the least exposure. Allowing the child to sleep upon a very soft pillow, into which the head becomes buried at night, or feeding "bottle babies" with milk too warm, has seemed to aggravate some cases. Fresh air and sunlight, with attention to hygienic measures, will exert a favorable influence upon this stubborn disease. The diet must be carefully looked after, and all sweets and confections be strictly prohibited. The sleeping apartments must be properly ventilated. Plenty of exercise in the open air must be taken. The clothing must be adapted to the season. Bathing sufficient to meet the requirements of cleanliness should be insisted on, but too frequent or too profuse use of water is not advantageous. The acute stage of eczema is very intolerant of water. If the surface is raw and discharging, water aggravates the condition. Water, however, is not to be absolutely excluded from the treatment of eczema. It not infrequently happens that very

hot water—hot as it is possible for the patient to bear it—will cause immediate cessation of itching; while in chronic cases, with considerable infiltration, systematic use two or three times a day of very hot water will often be followed with the happiest results. A full bath of tepid water, with a pound of sal soda added to it, and taken at night, will generally exert a soothing influence; while in sluggish and chronic cases ten or twelve pounds of common salt added to a full bath will exert a stimulant action and tend to promote the cure.

In all cases search should be made for all possible causes of local irritation, and the first care should be to remove them, if practicable.

The *diet* of eczematous patients is of the first importance. No hard-and-fast general dietary laws can be adhered to. Each patient must be treated according to his case, and at first be put upon as simple a diet as possible. When this basis is reached, the patient's taste is to be consulted and his diet made more varied, care being taken to avoid anything that is known to disagree with him. Sometimes, it is advisable to have a patient increase the number of meals in a day, while decreasing the quantity of each one. Some patients do best on solid food alone, leaving out tea, coffee, and the like. Sometimes the best results are obtained by having the patient eat only one sort of food at a meal—whatever he fancies. In many cases of chronic eczema a liberal supply of fluid is useful, and this not taken at once, but often in small quantities. Up to three quarts of water may be taken in this way. The addition of salt to the dietary is also useful. As a rule, you will find that adult sufferers from eczema are decidedly carnivorous in their tastes, eating a good deal of meat with a very scant quota of vegetables and cereals. Many of them are par-

ticularly fond of the pleasures of the table, and indulge much more freely than there is any necessity for. As these matters are under the control of the patient himself, no pains should be spared to impress on him the necessity for a change in his habits. It is not well to cut off the supply of meat absolutely, but it should be very decidedly restricted, and a larger proportion of bread, vegetables, and cereals substituted.

Patients often fancy that diet of this sort will reduce their strength and incapacitate them for the amount of labor that their daily vocations necessitate. These fears are groundless, and on trial will soon be dissipated.

A very interesting and important question has been raised as to the propriety of healing completely a discharging eczema, and the fear of driving in the disease has often deterred practitioners from affecting a speedy cure.

Hebra and his school laugh at this idea, and no doubt in the majority of cases with good reason.

The question at issue, whether an habitual discharge may be suppressed without danger to a patient, depends upon the patient, and not on the disease.

“I attended a child who had lost two younger brothers from acute tuberculosis. He had a very extensive eczema of the scalp and face, but otherwise appeared in good health. Under appropriate remedies his eczema rapidly got well, but its disappearance was attended with all the signs of acute hydrocephalus, from which he soon died.

With the family disposition to this disease, it is not unlikely that the child might have succumbed to tuberculosis had the eczema not been cured; but I fear my treatment was injudicious, as the child's disposition to disease of a special and serious kind was not taken into account.” (Simon.)

Analogies of the impropriety of rapidly suppressing habitual discharges are common enough. Hemorrhages from the lungs or stomach occur often enough when hemorrhoids, which have been bleeding for years, are suddenly cured, and cases have been recorded in which cerebral hemorrhage has seemed to follow rapid cure of an old ulcer.

Local Treatment.

The local treatment consists in first allaying the acute inflammatory symptoms, if any exist, and involves the employment of various lotions, glyceroles, ointments, oils, plasters, powders and soaps. It is not always an easy matter to say what will soothe in any particular case. Bran infusion, or decoction of marsh-mallow or poppy heads, to which a little clarified size has been added, are very good applications to start with as lotions night and morning. The linimentum aquæ calcis is sometimes efficacious.

During the first and second stages the solution of the peroxide of hydrogen is of great value. The commercial article usually contains twelve volumes of the peroxide, and is too strong to apply in many cases of eczema, and may require dilution with one or two parts of water or even more. The effect of this solution in many cases appears almost magical, reducing the purulent exudation, and hastening the formation of a new epidermis.

Dilute alkaline preparations, especially a solution of carbonate of soda, are useful for cleansing purposes, and, to a certain extent, for the relief of pruritus.

Strong alkaline preparations, such as *liquor potassæ*, green soap, and its tincture, have a distinct function to perform in the reduction of thickened epidermis, in eczema of the hands and feet and in the removal of infil-

tration. If a patch of greatly infiltrated eczema be painted with liquor potassæ, in a few moments little droplets of serum will be seen upon the surface. If that be wiped off, fresh serum exudes, and this continues for some minutes. When the tendency to exudation ceases, the parts should be wiped dry and a sedative ointment applied. The application is repeated on the second or third day, according to the degree of irritation produced, and this is continued until several applications have been made. The result will be a notable reduction of the infiltration.

Should the itching prove obstinate, a weak carbolized oil and lime water lotion, or a grindelia robusta lotion, one drachm to the ounce of water may be used.

The following lotion I have found very useful to allay the terrible itching present in some cases, and to soften the texture of the scalp and reduce the inflammation. At the same time give internally *Lappa major* 2x or 3x tablets:

- ℞. *Lappa major*, ʒjj.
 Glycerine, ʒj.
 Aqua destillata, q. s. ad., ʒiv.
- M. Sig.: Apply to scalp on retiring.

Ointments.—The ointments most in vogue are the unguentum zinci oxidi, ung. hydrargyri ammoniati, ung. picis liquidi, and ointments containing carbolic acid, salicylic acid, and resorcin. Of these the zinc ointment is probably inert so far as any direct medicinal effect is concerned. It is simply a protective, and as such serves an admirable purpose, especially in cases of extensive disease, where it would be neither safe nor prudent to employ the mercurial preparations. The addition of a little belladonna increases its sedative effects.

Unguentum hydrargyri ammoniati, either alone or with the addition of a little stramonium, is much more effective as a curative agent than zinc ointment, but must be used with a certain amount of discretion, and should not be applied to a very extensive surface, lest salivation should occur. In some cases it irritates and should be abandoned, and in a few instances I have known it to excite an intense dermatitis.

Ointments containing from four to ten grains of carbolic acid to the ounce are sometimes of service for the relief of the distressing pruritus.

The following makes an excellent application for the intense itching:

℞. Chloral hydrastis,
 Camph. pulv., āā dr. ss.
 Acidi carbolicī, M. x.
 Balsam Peru, dr. j.
 Menthol, gr. xx.
 Ung. zinci oxidi, q. s. ad., ℥j.
 M. ft. unguent. Sig.: Apply morning and night.

The second stage of eczema with exudation and crusting is the period when the above-mentioned ointments are of the most service. After removal of all crusts, and careful drying of the surface, the ointments may be smeared on the parts, or applied on muslin and bound on. The salve-muslins introduced by Dr. Unna, which consist of a loosely woven fabric thickly impregnated with the ointment, are exceedingly convenient when a fixed dressing is desired. The plaster-muslins of Unna have a firmer consistence, and are more generally useful than the salve-muslins. Similar dressings have been placed on the market, and fully meet all requirements.

The frequency of the application or of the dressing will depend in great measure on the amount of discharge.

Sometimes the applications will require renewal night and morning, and sometimes but once in twenty-four hours. As a rule the parts should be disturbed as little as possible, and the dressings removed only when necessary.

Unguentum picis liquidi and ointments containing oleum cadinum, oleum rusci, and similar empyreumatic substances, play quite a different part in the treatment of eczema. They should never be used in the first or second stage of the disease, or when acute conditions are present. In the third stage, however, where the skin presents a dry and scaly surface, covered with newly but imperfectly formed epithelium, and especially if the affection is indolent, these preparations are of the greatest service.

In inveterate cases, oil of white birch may be used in the form of an ointment, one-half to two drachms to the ounce of vaseline.

Collodions.—Contractile collodion will sometimes avert a threatened eczema, and prevent extension from one already existing, if applied around the margin of the lesion. Flexible collodion is a protective only, and may be useful when the exudation is slight. Cantharidal collodion is sometimes employed as an application to an old and obstinate local patch which it is desired to stir up to some degree of activity. Occasionally it hastens a cure—more frequently it does more harm than good. Collodion with five per cent. of iodine will often prove of service in chronic thickened patches, while collodion containing three or four per cent. of salicylic acid will dissolve and remove thickened epidermis from the hands and feet more quickly, perhaps, than any other substance. Salicylic acid, however, should never be used continuously, or during the second stage, when the epithelium is absent, as it tends to prevent the cornification of the new epithelium.

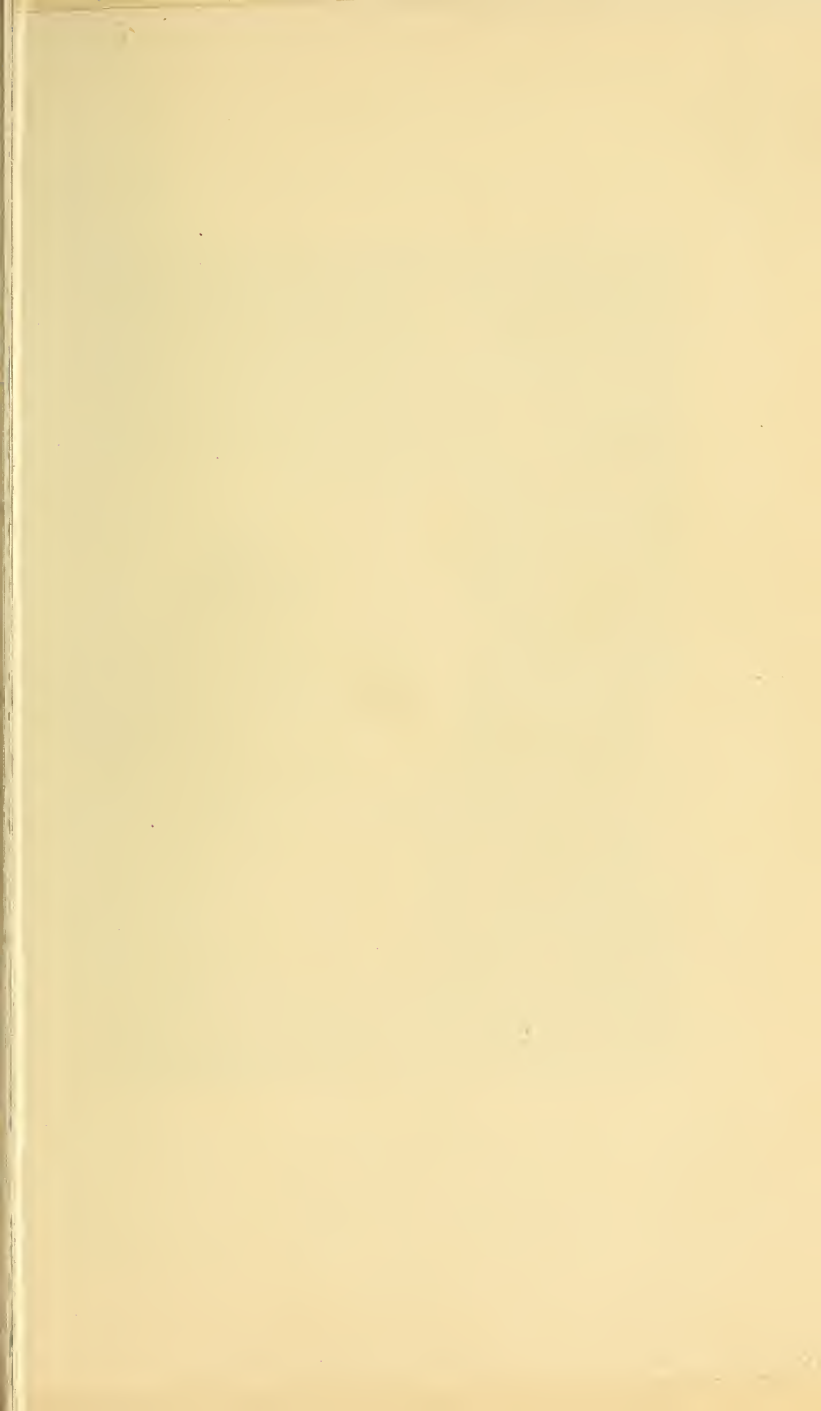
Traumaticin is the name in common use to designate a ten per cent. solution of gutta-percha in chloroform, and it possesses many advantages over collodion, and may be made use of in connection with oxide of zinc, ammoniated mercury, etc.

Gelatine, mixed with glycerine, and dissolved by heat, has been used as a basis for the incorporation of various drugs applicable to the treatment of eczema. When applied it should be liquefied by heat and painted rather thickly on the parts. It can only be used where patients are confined to the bed, and is not as useful, in my experience, as other applications.

Powders.—It is sometimes found that in the second stage of the disease ointments and lotions of every kind increase the irritation and add to the discomfort of the patient. Fortunately, these instances are rare; but when they are met with simple or medicated powders will sometimes prove of service. Starch, lycopodium, ordinary toilet powder, or talc, may be used alone, or the oxide of zinc or subnitrate of bismuth may be used with either of them.

Soaps.—Soft potash soap, equivalent to the *sapo viridis* of the Pharmacopœia, contains an excess of alkali, and is used for the reduction of infiltration. It should be thoroughly rubbed in with the aid of flannel moistened in hot water until a lather has formed. This is left on, and the effect is similar to that of liquor potassæ, already noticed. Hard soda soap, prepared for laundry use, also contains considerable free alkali, and may be used for the same purpose. Tar soap is of service in the third and scaly stage of the disease.

Certain mechanical means are sometimes employed in the treatment of eczema. The application of rubber, in the form of an elastic bandage, often proves of the great-





ECZEMA.

est service in thickened eczemas of the lower extremities ; then the object sought is steady pressure with a view to produce absorption of the infiltration. The silk elastic stocking may be used for the same purpose.

Sometimes localized patches of eczema of long standing fail to yield to any of the ordinary means for their relief, and necessitate more vigorous interference. In this connection scarification is extremely useful, and patches of thickened eczema will sometimes disappear almost as if by magic after the use of the knife.

Treatment of the Special Forms and Varieties of Eczema.

Bearing in mind the general principles that underlie the treatment of all cases of eczema, we will consider the special varieties as influenced by age, degree of inflammatory action, locality, etc., commencing with eczema of young children.

In *eczema intertrigo*, so common in the groin and nates of infants, absorbent cotton dusted with finely triturated powder should be constantly applied, so as to come in contact with the inflamed surfaces and separate them. Boracic and salicylic acids, each one part to two of sub-nitrate of bismuth, and five of oxide of zinc, is a good powder. Camphor mixed with ointments or washes relieves itching. A two per cent. solution of acetic acid, or a one per cent. solution of aluminium acetate in water, frequently gives relief. Carbolic acid is very efficient for itching.

In eczema of the scalp in children we frequently, and perhaps generally, find the case acute as regards its character, though it may be chronic as regards the duration of time that it has existed. It is almost always presented to the physician in the second stage characterized by

exudation and crusting, and complicated with enlarged glands at the back of the neck, small abscesses of the scalp, and may also be accompanied with pediculi. The vesicular and pustular forms are the most common, and the crusts, entangled in and retained by the hair, accumulate more thickly than elsewhere. The first thing to do is to cut the hair off as short as it is possible to do it with scissors. If pediculi are present, search through hair stumps for their ova, which should be removed. If many crusts adhere to the scalp after clipping the hair, saturate the parts with olive oil, and, after a few hours, give the scalp a good washing with soap and warm water. After thorough drying, apply zinc or diluted white precipitate ointment. The ointment should be applied thickly, and renewed daily and even twice daily, and accumulations of old ointment be removed by gentle use of the comb as often as necessary. The scalp should not, however, be washed again for several days; in fact, the less frequently it is washed the better. If abscesses are present, they must be opened, and perhaps poulticed for a day or two. Eczema of the scalp, in many cases, seems to be called into existence as a consequence of parasitic irritation; and when the eczema itself is of but limited extent, but the parasites are numerous, they may be made the first point of attack and cutting of the hair be avoided. I know of nothing more effective than drowning them out with ordinary kerosene. If the hair be thoroughly saturated with this for two or three days in succession, soap and water, and a fine-tooth comb and patience will do the rest. The parasites destroyed, the eczema may recover spontaneously, or more quickly if aided with a few applications of ointment.

The enlarged glands at the back of the neck require no special attention. When the eczema gets well they will

subside. Eczema of the scalp often extends to the forehead, face and ears. If fissures form behind the ears, it is well to add a little finely-powdered graphite to the ointment. As the case progresses toward recovery, and the exudation and crusting cease, and the third stage, characterized by dryness and scabs, is ushered in, the treatment requires a change.

A little tar, in some of its forms, should then be added to the ointment, and the proportion of tar gradually increased as improvement occurs. If progress toward recovery should halt, a little more active stimulation may be the thing needed. If, however, the eruption should revert to the second stage, as not infrequently happens, the latter treatment will have to be resumed.

Eczema of the scalp in adults presents itself more frequently in a subacute than an acute condition, and very commonly in the dry and scaly stage, the patient complaining of a certain amount of irritation and an excessive formation of dandruff. If the same condition should be present on the non-hairy parts, tar would be thought of as a remedy. This, however, is practically impossible on the scalp, except for those who are able to abandon social and business pursuits. As a substitute for tar Dr. Piffard recommends the following mixture as equally efficacious, and at the same time free from the objectionable features of the other. I can endorse his claim.

℞. Acidi salicylici, gr. x to xx.
Ol. lavendulæ, ℥ iij. .
Ol. citronellæ, ℥ j.
Ol. eucalypti, ℥ ij.
Ol. ricini, ℥ jj.

M.

In this preparation the salicylic acid is designed to restrict the formation of scale, the eucalyptus to act as a

stimulant, and the castor oil to correct the drying effect of the latter. The best way to apply it is from a small oil can. The hairs having been separated, a few drops are applied directly to the scalp and gently rubbed in with the finger. All the affected portions are gone over in this way. To make the application in the most thorough manner the patient will, of course, need assistance. If care be taken, only so much oil as may be necessary is applied to the scalp, and the hairs, except near the surface of the scalp, do not become disagreeably impregnated with it. This application should at first be made daily; but at the expiration of a week the intervals may usually be lengthened. If at any time the condition should revert to the second stage, with exudation and crusting, the oil must be discontinued, and white precipitate or zinc ointment substituted. Although I have devoted considerable space to the local treatment, I do not wish it understood that this is the most important; it is simply *one* of the means to effect a cure. The internal, constitutional treatment is, by far, the more important; they must go hand in hand to procure the best results.

Eczema barbæ.—In eczema of the hairy portions of the face, the disease not infrequently descends into the hair-follicles, and especially involves the root-sheaths, and may be accompanied with considerable infiltration of the tissues between the follicles. The most frequent form is the pustular, each pustule being pierced by a hair. When the hair is extracted, it is generally accompanied with the root-sheaths, which are swollen and loosened from the follicle. It is of the first importance that this affection be not mistaken for *trichophytosis*.

If the eczema be purely superficial—that is, if the inflammation has not descended into the follicles—it may be treated very much as an eczema situated elsewhere.

If, however, it is sycosiform in character, with infiltration and pustules, epilation must be performed. Every hair in the affected region must be plucked out with forceps. As a rule, they come out easily and without much pain, in consequence of the loosening of the root-sheaths. The necessity for epilation will be apparent when we consider the fact that the loosened hairs, while in the follicles, are, to all intents, acting as foreign bodies, and thus tend to keep up the inflammation. After epilation, white precipitate or zinc ointment should be applied two or three times a day.

Ecze^ma of other hairy parts—axillæ, pubes, etc.—does not usually take on the sycosiform character, and epilation may be unnecessary.

Ecze^ma of the genital region frequently presents itself as a chronic affection of the scrotum; and most of the cases will have existed for years before consulting the physician. The parts will usually be found red, dry, and thickened, and the seat of more or less pruritus. In long-standing cases there are usually decided infiltration and thickening of the skin. Of all forms of ecze^ma this is the one which is the most difficult to control. One writer disposes of the question of treatment in the following words:

“The treatment of ecze^ma of the genital organs and anus does not differ from that of ecze^ma in general, except in so far as we must bear in mind the predisposing causes, and endeavor to remove them if possible.”

This general advice is good as far as it goes, but perhaps the most important of the predisposing local causes is the dependent position of the parts, and their constant exposure to friction, to say nothing of the natural moisture of the parts. As these causes can not be conveniently removed, we must confine ourselves to a partial

mitigation of their effects. This can be accomplished, so far as the scrotum is concerned, by a properly-fitting and snugly-applied suspensory bandage. The bag should be applied in such a way as to keep the parts as elevated as possible, and with as much pressure as can be conveniently borne—without, however, constricting the upper part so as to impede the venous circulation. If there is much infiltration, the first efforts should be toward its reduction. There are three principal methods by which we may seek to accomplish this end; First, by a few scarifications of the scrotum, permitting the parts to bleed freely, care being taken not to cut any of the larger veins. After scarification the patient should sit for some minutes in a warm antiseptic sitz-bath to encourage bleeding and exudation. After the parts are dried, a little tincture of benzoin or other antiseptic lotion may be sprayed over them, and the suspensory applied. In a week or two the scarifications may be repeated. The relief afforded by this is sometimes surprising. Many patients, however, have such a dread of cutting operations about the genitals that some other procedure must generally be advised. The second means that we have is galvanization. The constant current, applied daily or on alternate days, will sometimes reduce the infiltration and relieve the itching. The testicles should be pushed well up, and the scrotum held between two good-sized sponge-covered electrodes, and a current of eight or ten cells passed for five to ten minutes, the strength and duration of the current being regulated according to the susceptibility of the patient. The third method of reducing the infiltration is the one most commonly employed, and consists in the application of liquor potassæ. This should be mopped on with a small tuft of absorbent cotton wrapped around the end of a stick.

This application should be made by the surgeon himself, and not intrusted to the patient. After its immediate effects have passed off the parts may be dressed with zinc ointment and the suspensory adjusted. From six to a dozen applications, made at intervals of four or five days, will frequently produce very marked reduction of the infiltration. Eczema of the penis, however, may exist alone, and if met with in persons passed middle life, and especially if the glans and inner surface of the prepuce is involved, the presence or absence of glycosuria should be ascertained. If this condition is present, the parts should be carefully washed after urination if the water comes in contact with them and an antiseptic lotion or powder applied. The general treatment should be that which is appropriate to the diabetic condition.

Eczema in the *vulva* is rarely met with until the climacteric or later. In some cases it is doubtless excited by irritating uterine or vaginal discharges, but in perhaps the majority it is due to glycosuria. In either case the preliminary treatment is clear, and, probably, the best local application is the peroxide of hydrogen.

Eczema of the *palmar* and *plantar* surfaces, frequently accompanied with great thickening of the epidermis and with fissures, requires special treatment.

The thickened epidermis must be removed mechanically with knife, file, or sand-paper. After all that is possible has been removed in this way, a five per cent. solution of salicylic acid in flexible collodion should be applied. After several daily applications have been made, it will be found that still more of the epidermis may be easily removed. If infiltration be present, liquor potassæ should be applied, taking care not to let it get into the fissures, if any be present. The fissures themselves should be dressed with graphite, and white pre-

cipitate or citric ointment applied to the entire diseased surface.

If, however, there be little infiltration or epidermic proliferation, tar or its equivalent is indicated if the surface is dry and scaling; while some of the less stimulating ointments should be applied if the surface be moist and exuding. At best, eczema of the hands, if already chronic, is an exceedingly obstinate affection, and one difficult to remove.

Eczema of the leg is very frequently dependent on pre-existing varicose veins, and when such is the case is difficult to manage, unless the diseased veins can themselves be brought under control. If the varicose condition be at all severe, the general nutrition of the skin of the leg seems to suffer greatly, and a slight wound from scratching may degenerate into an ulcer. The cutaneous tissues, which are the site of the lesion, and for a considerable space around it, may be greatly thickened, and the surface present a bluish tint from impeded circulation. When this condition exists, the utmost benefit will be secured from the systematic use of the rubber bandage applied so as to bring firm but even pressure to bear upon the parts. The bandage should, in the first instance, be applied by the physician, and the mode of its application taught the patient. The bandage should, when practicable, be applied morning and night, and, if it becomes soiled by discharges of any kind, should be replaced by a fresh one, while the first one is permitted to soak in cold water till again needed. After the leg has been restored to its natural size, the bandage may be discarded, but an ordinary elastic stocking should be worn habitually. The direct applications to be made will depend on the stage of the eruption and condition of the lesion.

Eczema of the leg, however, is not always of varicose origin, but sometimes presents itself as a chronic subacute circumscribed lesion, with or without much infiltration. If scaling be a notable feature—that is, with decided epidermic thickening and proliferation—a few applications of salicylic acid will prove of great service as a preliminary application, and a ten or fifteen grain solution in flexible collodion should be painted over the spot. This may be repeated a few times until the tendency to scale formation has notably diminished. If there be but little infiltration, tar, or some of its preparations, is indicated; but if infiltration is marked, potash or scarification should be employed and afterward zinc or white precipitate ointment.

Acute eczema of the leg requires different treatment. If the greater part of the leg or both legs are involved, rest in bed or on a lounge, with the limbs elevated, is a *sine qua non*. The parts, being inflamed, hot, red, swollen, and exuding, need rest and soothing treatment. Absolute rest must be insisted on, and when secured apply a diluted solution of peroxide of hydrogen. The best method of applying it is with an atomizer. Purulent exudation is brought under immediate control, and offensive odors are destroyed. After two or three days, as a rule, the inflammation will be lessened, the area of denuded surface diminished, and attempt at healing be apparent. Now, some of the medicated plasters containing oxide of zinc or ammoniated mercury should be applied. These may be left undisturbed for several days, and if covered with an elastic stocking the patient may be permitted to take moderate exercise. If no indiscretions be committed, steady progress toward cure may usually be expected.

Eczema of the *inner surface of the thigh* not unfrequently appears in the papular form, and may best be treated with permanently attached dressings containing zinc or white precipitate.

Eczema of the *anus* is an insidious affection, and is frequently of long standing before it is brought to the notice of the physician. Thickening and fissures often coexist, and should first be treated and healed by cauterization, peroxide of hydrogen, graphite ointment, or powder, etc., before any attempt is made to reduce the infiltration by strong alkaline applications. One of the most effective applications to the fissures is the fine point of a Paquelin cautery at a white heat.

Eczema of the *mammæ* and nipples is a very frequent accompaniment of scabies in the female, and when met with the latter disease should be suspected and sought for, and the scabies, if present, receive the first attention.

In obese persons an eczema may arise from the irritation produced by the confinement of the cutaneous secretions by overlapping folds of skin, as under pendulous breasts and in the groin between the thigh and genitals. In these, simple dusting powders, with separation of the parts by linen, will often accomplish all that is required.

We now come to the consideration of the most important of the means of cure of eczema, and one in which Homœopathy has won some of her brightest laurels,—the internal treatment.

Indications for the remedies are as follows:

Aconite.—Acute eczema in plethoric persons.

Alumina.—Dry, thin subjects and old people with constipated bowels; the slightest bruise of the skin smarts; brittle nails; much itching with no relief from scratching; the patient feels as if the white of egg had dried on the surface; itching aggravated in the evening

and from the heat of the bed, and every other day ; and, in the open air.

Ammon. carb.—Eczema in the bends of the extremities ; excoriations between the legs, and about the anus and genitals ; violent itching relieved by scratching. Aggravated by either cold applications or hot poultices ; in children.

Ammon. mur.—Eczema on the face and across the loins ; intense burning, somewhat relieved by cold applications ; constipation ; in fat, sluggish individuals.

Anacardium.—Acute eczema on the face, neck and chest. Tubercles on the scalp, sore when touched ; violent itching, worse at night, and after scratching ; redness of the skin with eruption of small vesicles ; rough, exfoliating skin around the mouth, burning around the lips as from pepper ; sensitiveness to draught.

Antimon. crud.—Eczema with gastric derangement ; violent thirst ; white coated tongue ; yellowish, tenacious discharge ; violent itching ; aggravated from wet poultices, from bathing and working in water, from alcoholic drinks and in the sun.

Antimon. tart.—Pustular eczema with bronchitis ; violent itching, suppurative rash, particularly on the occiput, chest and arms ; sleepiness with nausea ; rattling cough ; irritable ; wants to be carried ; complains when touched.

Apis.—Eczema with renal troubles, scanty urine, no thirst ; tendency to dropsical swellings ; burning and stinging in the skin ; aggravated from heat, ameliorated from cold water and scratching.

Argent. nitr.—Eczema on the genitals ; urging to urinate ; in children who eat too much sweets.

Arsen. alb.—All forms accompanied by intense burning of the skin ; fetid or purulent discharge or dry, scaly eruption ; falling out of the hair in patches here and

there, leaving the skin dry and dirty looking; dry, parchment-like skin; thirsty, drinking little and often; aggravated after midnight, from cold, in open air and from scratching with bleeding afterward; ameliorated from heat.

Arundo Maurit.—Eruption on the chest, upper extremities and behind the ears. Intolerable itching, crawling sensation, especially over the loins and shoulders; in young children.

Astacus fluv.—Thick crusts on the scalp; enlargement of the lymphatic glands; clay colored stools.

Aurum.—Old persons with mercurial symptoms; suicidal tendencies; constant desire to be in the open air even in bad weather.

Baryta carb.—Eczema capitis, with falling out of the hair and swelling of the adjacent glands; fat, dumpy children; timidity in the presence of strangers; chronic disposition to swelling of the tonsils or glands of the neck; takes cold easily; aggravation at night and from scratching; ameliorated when walking in the open air.

Bellad.—Eczema on the face with scarlet redness, burning, itching eruption, sensitive to the touch; in teething children, with tendency to convulsions; oversensitive, excitable persons.

Borax.—Eczema on the face and scalp; red, papulous eruption around the cheeks and chin; excoriating secretions; aphthous difficulties; slight injuries suppurate; dread of slight downward motion.

Bovista.—Eczema about the mouth and nostrils; general lassitude, especially in the joints; patient wants to urinate immediately after micturition; constipation; perspiration smells like onions; aggravated from warmth; grocers' itch; moist vesicular eruption with formation of thick crusts; eruption on the thighs and bends of the

knees; on the back of the hand; swelling of the upper lip; burning, itching; no relief from scratching; symptoms worse during hot weather; the skin of the fingers becomes dented by the use of the scissors or other instruments.

Bromine.—Profuse oozing of a dirty, nasty-smelling discharge; eczema covering the head as with a cap; crawling sensation beneath the scalp, with sensitiveness to the touch; glands of the neck hard and swollen; high-colored urine.

Bryonia.—Eczema capitis when the scalp is very tender to the touch, and there are pains and aches worse from motion; eczema all over the body, *especially on the back*; eruption slow in making its appearance; symptoms worse from exposure to the heat of the fire; stools dry and hard as if burnt.

Calcarea carb.—Chronic and squamous eczema in scrofulous persons; skin inclined to ulcerate; itching and burning in the skin; thick crusts with oozing; parts affected—nape of neck, head, face, on and behind the ears, genital organs, region of umbilicus, hands and bends of the extremities; chalky stools; menses too soon and too profuse; takes cold easily; cold feet, as though there were damp stockings on them; no dread of water, but the disease is aggravated by water; aggravated in the open air and from water and from drinking milk; ameliorated in a warm room; in big-bellied children with light hair and blue eyes; profuse sweating of the head.

Caladium.—Eczema alternating with asthma; great disinclination to move; vertigo on going to sleep; eczema of vulva, chest and forehead; ameliorated when perspiring.

Cantharis.—Eczema with urinary difficulties; much burning and smarting or burning itching; aggravated from touch; ameliorated from lying down.

Carbo veg..—Eczema with hemorrhoids and flatulency; the most innocent food disagrees; cachectic individuals; aggravated from warmth and water.

Carbolic acid..—Moist vesicular eruption on the hands and all over the body. Itching better from rubbing, but leaving a burning pain.

Causticum..—Eczema in rheumatic or gouty individuals; moist eczema on the neck and around the nipple; thick crusts on the nostrils; great restlessness; child is afraid at night in a dark room; aggravated in the open air and in the evening; ameliorated from the warmth of the bed.

Chamom..—Excoriations between the thighs in children and infants; unhealthy skin, every injury suppurates; severe itching of sweating parts; child fretful, must be carried about.

Chelidon..—Eczema rubrum of the scrotum, or ankle; heat, swelling and redness of the parts; bitter taste in the mouth when not eating or drinking; pain in the hepatic region; chronic affections of the abdominal organs.

Cicuta..—Thick, whitish scurfs appear on the chin and upper lip; they secrete a dampness; sometimes affect the nose; no itching; the exudation dries down into a hard, lemon-colored scab.

Clematis..—Red and humid eruptions when the moon is increasing, growing pale and dry with the decrease; scaly spots with yellowish corrosive ichor; pustules over the whole body; eczema, following suppressed gonorrhœa; sticking sensation when touching the skin; aggravated from washing and from the heat of the bed.

Conium..—Eczema of old people from being overheated; on face, arms and mons veneris; urine flows, and stops and flows, and stops at each emission; vertigo when turning the head, when looking up or when turning

over in bed; gluey, sticky discharge; aggravated from scratching.

Cornus alternifolia.—Dr. Lutze reports on the use of the *swamp walnut*, and sums up the following as indications for the remedy: Eczema when the skin was cracked everywhere, but especially where it had a fold or crease, exuding a sticky, watery fluid from these cracks; use locally and internally.

Creosote.—Eczema capitis and mammæ, with violent burning after scratching; heavy scabs.

Crotalus.—Vesicular eruption on the septum narium; sour, acrid eructations; painful retention of urine.

Croton tigl.—Any form of eczema uncomplicated with disease of other organs; watery diarrhœa gushing out forcibly; excessive itching, but the patient cannot bear to scratch very hard as it hurts; a mere rub suffices to allay the itching.

Condurango.—Especially when rhagades are present, oozing out a fetid fluid; cachectic or syphilitic dyscrasia.

Cuprum.—With convulsions, or when convulsions follow the suppression of eczema.

Cyclamen.—Eczema faciei; when there is stinging itching, aggravated in the evening in bed by eating fat food, and ameliorated by scratching or by wiping with the hand.

Dulcamara.—Eczema on the face and extremities preceding the menses, oozing a watery fluid and bleeding after scratching; after its disappearance, faceache and violent asthma; desire for cold drink, eructations, vomiting in the morning; persons who get angry easily; aggravated in cold weather, after taking cold, from cold, and evening when at rest; ameliorated while moving in warm air.

Fluoric acid.—Eczema on the face, scalp, neck and chest; *dry* eruption with itching and burning; painful rhagades after washing; brittle nails.

Graphites.—Thick crusts and a raw surface with deep rhagades; eczema of fat people, of blonde complexion who take cold easily; on and behind the ears with constant profuse oozing of a sticky fluid; thick crusts sometimes; falling out of the hair; on the face and chin, with considerable itching and increased discharge after scratching; on genitals and in bends of limbs, especially of women with delayed and scanty menses; humid eruption with secretion of corrosive serum smelling like herring brine; great soreness of the skin, after scratching, with oozing of a sticky moisture; on the hands, with sticky and profuse secretion; itching worse in the evening and at night; skin dry, never perspires, and is inclined to crack; disease apt to become purulent; aggravated from cold and in the evening; and, when at rest.

Helleb.—Eczema of the fingers, lips or head, continuing moist for a long time and then covered with scurf. Aggravation of symptoms from 4 to 8 P. M.; in the evening, in cold air, ameliorated in warm weather.

Hepar.—Eczema pustulosum, with glandular enlargements, severe itching and scratching, œdematous swellings; eczema behind the ears and on the scalp, burns and smarts after scratching, and is very sensitive to the touch; after the abuse of mercury; sleeplessness after midnight; aggravated at night, from cold air and from contact; ameliorated from wrapping up warmly.

Hydrocyanic acid.—Itching, burning vesicles on neck and arms; weakness and anæmia; constant drowsiness.

Hydrastis.—Eczema along the border of the hair in front; aggravated on coming from the cold into a warm room; oozing after washing; constipation with hemorrhoids.

Hypericum.—Eczema on the face and hands; yellowish-green crusts with violent itching; excessive itching, especially in the sacral region when undressing; the eruption is sometimes dry, and at times fiery red; roughness of the skin.

Iris vers.—Eczema on the face; pustular eruption around the nose and lips, and on the cheeks; worse in the evening and at night; gastric and bilious derangements.

Juglans cin.—Vesicular eruption on the upper and front part of the chest with burning and itching; violent itching over the whole body, in spots, worse when being heated from over-exertion; stitch-like pain under the right scapula.

Kali carb.—In persons inclined to pulmonary difficulties; take cold easily; sensitive to cold; sticking pains all over; eruption dry at first, but when scratched exudes a moisture; comes on in warm weather; puffy and baggy swelling of the upper eyelids (*Ars.*, lower lids); great dryness of the skin; deficient perspiration (*Graph.*, *Alum.*, *Led.*); yellow, scaly, violent itching spots over the body, especially over abdomen and around the nipples. Aggravated between 2 and 3 A. M., from cold air (*Hep.*), from becoming cold. Ameliorated in warm air and on getting warm.

Lachesis.—Very obstinate cases when seated on the legs; ulcers on the lower extremities; pricking, pulsating tearing pains; variable appetite; burning in the palms and soles; often useful in women during the climacteric period.

Lappa maj.—The lesion is at first vesicular, then a scurf, and afterward a greenish-yellow crust, and is always accompanied with such intolerable itching that the child has to be tied or mittened to keep it from maim-

ing itself; sometimes the crust comes off in large patches, leaving the surface raw and exposed; the eruption smells offensive; swelling and suppuration of the axillary glands; disposition to boils. I have cured some very bad cases with this remedy, used as follows: Internally I use the $\mathfrak{r}\mathfrak{x}$ three times a day, and apply locally the following lotion:

\mathfrak{R} . Lappa major, \mathfrak{z} ij.
 Glycerine, \mathfrak{z} j
 Aqua destillata, q. s. ad \mathfrak{z} iv.
 \mathfrak{M} . Sig.: Apply to scalp on retiring.

Ledum.—Eczema only on covered parts; eczema of rheumatics or drunkards; gnawing, itching of the skin; the pain commences in the feet and goes up; aggravated from heat and motion, and heat of the bed.

Lycopodium.—Obstinate cases when the eruption bleeds easily and has a thick, badly smelling discharge; parts affected—back of head, face, neck, hands and right fore-finger; bowels constipated; no appetite, a few mouthfuls satisfy him; great debility while at rest; bleeding after scratching; humid suppurating eruption, with thick crusts and profuse fetid discharge underneath; aggravated from 4 to 8 P. M., after getting heated, and from wet poultices; ameliorated from cold, from uncovering one's self.

Mercurius sol.—All forms of eczema, especially of the hairy parts in persons who perspire easily, but obtain no relief from perspiration; tendency to inflammation of the lymphatic glands; increase of saliva; enlargement of the tongue, showing the imprints of the teeth; scorbutic gums; after scratching, bleeding and smarting; sleeplessness before midnight; aggravated at night; after getting warm in bed; after scratching; ameliorated in the morning.

Mercurius iodat.—When other remedies fail and there is a decided syphilitic taint; swelling and induration of the glands; troublesome itching over the whole body; all symptoms are worse at night.

Merc. precip. ruber.—Eczema of the hairy parts, and of the anus with fissures; eczema of the umbilicus; pustular eruption with slight itching; oozing of pus from beneath the crusts; glandular swellings.

Mezereum.—Eczema crusts with white scabs, itching intolerably, bleeding and burning like fire on being scratched; honey-like scabs around the mouth; discharges profuse, excoriating the surrounding parts; head covered with a thick, leathery crust, under which pus collects and mats the hair; constant chilliness; pale urine; thirst, but drinks only a little at a time. Scrofulosis.

Natrum mur.—Eczema behind the ears, back of head and neck about the edges of the hair, anus, bends of the knees and elbows; humid eruption, with gluey discharge, matting the hair; raw, inflamed surfaces, with constant corroding discharge, which eats away the hair; craves salty food; difficult expulsion of stool fissuring the anus, with flow of blood; morning headache; cutting in the urethra after micturition; white, coated tongue; lips and corners of the mouth ulcerated and cracked; eyelids raw and ulcerated; aggravated in the forenoon and from exercise; ameliorated after lying down.

Natrum sulph.—Very moist eruptions, with much oozing of fluids, the secretions more watery than sticky.

Nitric acid.—Eczema of gouty origin, about the head, ears and genitals; pustular eruption of the face, with large red margin, and heavy scabs; vesicles on the inner side of the left hand; soreness of the feet from profuse, offensive perspiration; dry, scaly skin; moisture and itching in the anus; syphilitic ulcers after abuse of mercury;

swelling of sub-maxillary glands; strong smelling urine; in dark-complexioned old people; aggravated at midnight.

Nux juglans.—Burning itching vesicles upon a cracked surface, with a greenish discharge which stiffens the linen; numerous, large, painful boils; itching worse in the evening and at night.

Oleander.—A humid, scaly eruption of the scalp, with gnawing itching, temporarily relieved by scratching, soon followed by burning and increased itching; smooth, shining surface, with drops of serum standing out here and there; humid fetid spots behind the ears, red, rough spots in front; very sensitive skin; it becomes sore, raw and painful merely from friction of the clothes; aggravated when undressing. Marked weakness of the lower limbs, and a gloomy irritable mental state.

Oxalic acid.—Exceedingly sensitive skin, with vesicular eruption. Suffers from the use of sugar, and sweets in general. All symptoms worse while thinking of them (reverse, *Camph.*).

Petroleum.—Eczema with red, raw, moist surface; burns like fire; great itching; oozing after scratching; ulceration after scratching; small wounds spread and ulcerate; obstinate dry eruption on genitals and perinæum, inside of thighs; skin of the hands cracked and rough; eruption between the toes; skin heals with difficulty; aversion to open air; aggravated in the open air and during a thunder-storm; ameliorated from warmth and warm air.

Phosphorus.—Dry eruptions, burning and itching; the gums separate from the teeth and bleed easily; ecchymosed spots on the body; slight wounds bleed much, aggravation at night before midnight; during a thunder storm; ameliorated after scratching; after sleeping.

Piper methysticum.—Skin dry, scaly, cracked and ulcerated, especially where it is thick, as on the hands and feet.

Piper nigrum.—Eczema on the lips.

Psorinum.—Dry and scaly eruption, with little pointed vesicles around the reddened edges, disappearing during summer, but reappearing when the cold weather comes on; violent itching, worse by heat of bed and scratching; dirty, greasy-looking, foul-smelling skin. This remedy should be thought of in cases which do not yield to the well-selected remedy and compared with *Sulphur*.

Ranunculus bulb.—Vesicular eruption on face in clusters, as from a burn; smarts as if scalded; aggravated in the evening, from change of temperature, from touch and motion.

Rhus tox.—Eczema inner side of thighs, particularly after vaccination, with much itching and thirst; the eruption is generally moist, the surface raw, and the parts swollen; a red, inflamed, swollen rim from subcutaneous infiltration surrounds every portion of the eruption (*Ars.*, black rim around the eruption); white, thick, moist crusts form, which smell offensively, and itch, especially at night; cheeks, face, and scalp affected; falling off of the hair; milk crust on face, humid, angry-looking, with hard, brown crusts; eczema of the scrotum, with intolerable itching. The child is restless, wants to be moved continually, especially after midnight, when the itching is intense, but this is relieved for a time by scratching; the cold fresh air is not tolerated on the head; it seems to make the scalp painful; hence the child likes to have its cap on in the open air (compare *Silicea*).

Rhus venenata.—Fine vesicular eruption on the upper extremities; groups of watery vesicles on the fingers; fissures on the ends of the fingers; *upper lip swollen* and covered with vesicles.

Sarsaparilla.—Eczema on the nose and face; thick scabs on the face; scabby eruption on the nose and face, like *milk crust*; intolerable itching, worse at night, and after getting heated; child cries a great deal and is extremely restless.

Sepia.—Eruptions during pregnancy and nursing; itching of skin, changing to burning when scratched; sensation as of ants crawling over the skin; soreness of the skin and humid places in the bend of the joints and behind the ears; pruritus, with vesicles on a red base over all parts of the body. Dry ringworm, especially on the face of children; dry offensive eruption on the vertex and back of head, itching and tingling, with cracks behind the ears; pruritus, with vesicles on acrid base over all parts of the body, face, eyelids, hands, feet, armpits, vulva, anus, ears, hairy parts. Great indifference or sadness; wakes about 3 A. M. and lies awake for hours; patient has dark hair, thin, delicate skin, brown discoloration of the forehead, and passes putrid urine (compare *Calc. os.*, *Benz. ac.*); aggravated in the open air, from application of cold water; ameliorated from warmth in general.

Silicea.—Eczema capitis, with humid itching eruption in scrofulous children; pale, cachectic countenance; enlarged cervical glands; leucorrhœa, backache; menses too profuse; eruption on the back part of the head, either moist, or dry and scaly; offensive; scabby; itching during the day and evening, never at night; soreness after scratching; burns; pustules form and discharge copiously. Child cries when spoken to; big-bellied children, with weak ankles; emaciated frame, and irritable tempers, with perspiration about the head towards morning; offensive perspiration on the feet and genitals; aggravated during day and evening, and about the new moon; ameliorated from warmth in general.

Staphysagria.—Eczema with yellow, moist, offensive scales, with considerable itching, disappearing after scratching, but soon returning; oozing after scratching; humid scabs with bad smell; yellow acrid moisture oozes from under the crusts; scratching sometimes changes the locality of the itching; scalp painfully sensitive; skin peels off with itching, hair falls out; itching of the margins of the lids. Face sunken; nose pointed and blue rings encircle the eyes; the child is irritable, and indignantly throws things away from it which were desired but a moment before. Aggravated from scratching, from touching the affected parts, from abuse of mercury. Ameliorated from walking in the open air.

Sulphur.—Sequela of a suppressed eruption; voluptuous itching, with soreness after scratching; eruption on back of head and behind the ears, around the margin of the hairy scalp from ear to ear posteriorly; dry, offensive, scabby, with cracks, easily bleeding, burning and painful; or humid, and offensive, discharging thick or thin acrid pus, which forms into yellow crusts; chronic cases; the child cannot bear to be washed; is most comfortable when dirty; morning diarrhœa, or bowels moved regularly, but always with great pain. Aggravated from getting warm in bed, from washing, from wet poultices; ameliorated from heat, in dry weather; after rising.

Sulphuric acid.—Moist eczema after suppressed gonorrhœa, with pricking of the skin; on scratching the itching changes locality; aggravated in the open air.

Sumbul.—Eczema on the left side of the scalp in infants.

Terebinthina.—Infantile eczema in front of ear, tending to affect the eyelids (*Graph.*, behind ear), often alternating with otitis.

Thuja.—Itching vesicles, with shooting pains; skin

extremely sensitive to touch; burns violently after scratching; dry, scaly eruptions on head, extending to the temples, eyebrows, ears and neck, with itching, tingling and biting; dryness of covered parts; perspiration of parts uncovered, smelling like honey; eruption only on covered parts; after vaccination the eczema is worse (*Sil.*); eruption is white, scaly, and desquamating; offensive perspiration of the feet; wants head and face wrapped up warm (*Sil.*). Aggravated from cold, wet, heat of bed, about 3 A. M.; ameliorated from gentle rubbing (itching); from warm wet (reverse, *Lyc.* and *Sulph.*); from a development of coryza.

Vaccination.—Several cases have been reported cured by vaccination; I have had no personal experience with this agent in this disease.

Vinca minor.—Eczema on head, face, and septum of the nose; humid eruptions, itching at night, with burning after scratching; offensive moist verminous eruption with biting itching; eruptions appearing in spots, moisture oozes therefrom and the hair becomes matted.

Viola tricolor.—Eczema impetiginoides, exudation of yellow viscous pus; the eruption burns and itches, especially at night; thick crusts form; swelling of cervical glands; urine smells like cat's urine; eczema capitis or faciei, in scrofulous children.

CHAPTER IX.

BULLOUS DISEASES AND ANOMALOUS FORMS OF BULLOUS ERUPTION.

Under this head we include the diseases which are especially characterized by the occurrence of the bullæ as primary and essential phenomena. A bulla is a large portion of the cuticle detached from the skin by the interposition of a transparent watery fluid. In fact, a bulla is a large vesicle. In the wide sense of the term several diseases are really bullous, such as erysipelas, herpes, pemphigus, rupia, eczema of the fingers, and impetigo contagiosa. But of these there are only two that really rank under the term bullous—i. e., herpes and pemphigus. Erysipelas belongs to the class of zymotic diseases; rupia is always syphilitic, and of course it is grouped under that head; the bulla produced by the coalescence of vesicles in eczema is an accidental and secondary phenomenon; and in impetigo contagiosa, the primary stage is a vesicle and not a bulla, the secretion subsequently becoming sero-purulent, whilst the general behavior and outward aspect of the disease are those of an impetigo. Besides, herpes and pemphigus are peculiar and like in regard to the influence of the nervous system in their production. Therefore, true bullous diseases, or those which are probably of neurotic origin, and in which the bullæ are primary, with transparent contents, are herpes and pemphigus.

Herpes and pemphigus might have been placed under

the head of neurotic diseases, but then many others must have been included, such as urticaria, pityriasis rubra, etc., with them, if we carried out the idea of collecting together under one head all those diseases which primarily originate in disturbance of the nervous system and arranged them upon a pathological basis. As we have classified diseases, however, clinically, we place herpes and pemphigus under the convenient but most unscientific term, "bullous inflammation," because it is to changes implied by that term that the practitioner first directs his attention in the matter of diagnosis and treatment.

Some anomalous forms of eruption will be noticed at the latter part of this chapter.

Herpes.

The term *herpes*, used by itself, has little significance, but the expressions *herpes zoster*, *herpes labialis*, *herpes pro genitalis*, etc., refer to definite and distinct affections. The first of these we will describe under the name of *Zoster*, but the other two will be considered here.

Herpes Labialis.

Herpes is an affection of the skin, characterized by the development of small clusters of vesicles, usually situated on a slightly reddened or inflamed surface, and in the immediate neighborhood of the mouth.

The vesicles appear unattended with any pain other than a slight burning or itching sensation, and last for a few hours or a day or two. They then rupture and give exit to a slight serous discharge, when they dry up and leave a surface which heals in a short time without scars.

Herpes labialis usually attacks children or women, but is not commonly met with in men. It frequently comes

on as a sequel of a cold, or slight febrile attack, and on this account has received the names "cold sore," "fever-sore," etc.

There may be a single group of vesicles, or there may be several, each group containing four or five vesicles. The eruption may be confined to one side of the face, affecting either the upper or lower lip, or both, or just as frequently it may appear on both sides of the mouth. A true zoster may appear on the face and invade the same regions as herpes labialis, except that the eruption is almost invariably unilateral.

The local treatment of herpes labialis involves nothing more than a little absorbent powder, or a sedative lotion—a little camphor-water being a favorite application.

The internal treatment will be taken up in the next article.

Herpes Progenitalis.

The term *herpes progenitalis* includes the herpetic affections of the genital organs of both sexes, and, when occurring in the male, is called *herpes preputialis*, and in the female *herpes vulvaris*.

Herpes preputialis most frequently occurs in young men between the ages of 20 and 40, and is not often met with as a first attack after that age. The vesicles may form on both the cutaneous and mucous surfaces. Owing to the anatomical situation of these parts, and to the friction to which they are more or less subject, the vesicles last for but a few hours only, breaking and giving rise to superficial erosions, which from neglect or uncleanliness may run into slight ulceration.

In herpes vulvaris the lesions may be upon the labia majora or the labia minora, or upon the prepuce of the clitoris, running the same temporary course as the other varieties of the affection.

Herpes progeneralis is not usually accompanied with much pain, unless the parts are subjected to undue friction. As in the male, herpes of the female organs is most frequently met with between the ages of 20 and 40. A single attack lasts for a few days only, but with many patients herpes proves to be a relapsing affection, and causing on this account serious inconvenience to those who are subject to it. In men, relapses may occur after almost every act of sexual intercourse, but curiously is much less frequent in married men than in those who indulge promiscuously and at irregular intervals only. In women of the town the affection is by no means uncommon, but is very rarely met with in married women or virgins, except when the attacks coincide with menstrual periods.

In this connection I will quote from an article in the *Journal*, Cutaneous and Venereal Diseases, August, 1883, where Dr. Unna reports his experience. He has met with 200 cases in the female. He says: "In France, where prostitution is under surveillance, and where excellent syphilographers abound, herpes progeneralis early attracted attention and was ascribed to an unnatural irritation of the sexual organs to which prostitutes are subject. Venereal diseases cannot be the cause, for in married women suffering from syphilis or gonorrhœa herpes is not found. In prostitutes, herpes occurs as often in those without as those with syphilis. Acute and chronic blenorrhœa often exist as factors in the development of herpes progeneralis, by the congestion of the parts which they induce. There are prostitutes who have an attack of herpes every time they menstruate. Less frequently pregnancy and the puerperal state induce a disposition to herpes progeneralis. Bruneau must be given credit for having shown that in women suffering with chronic

metritis, cervicitis, etc., every herpetic eruption is preceded by increased sensibility and signs of heightened congestion of the pelvic organs. While the vesicles are still intact, the diagnosis is easy. The vesicles are yellowish, translucent and arranged in clusters. When the epidermis has given way, the surface crusted over, erosion present, the surface must often be first carefully cleansed before we can say whether the disease be a superficial wound, a burn, eczema, chancre or herpes. Herpetic erosions are all well defined and of a bright reddish hue. They are discrete, coalescent or confluent. In any case, the sharply defined contour and crescentic arrangement make herpes easy of diagnosis. The parts most liable to this affection, in order, are the labia minora, prepuce of the clitoris, labia majora, introitus vagina, and caruncula myrtiliformis. The disease may be unsymmetrical when such organs as the prepuce of the clitoris, perineum, etc., are attacked. Pain usually precedes the eruption by several days."

The etiology of herpes progenitalis is obscure, and no adequate explanation has yet been given to account for the attacks.

Diagnosis.—The diagnosis of herpes progenitalis presents little difficulty, but care should be taken to distinguish it from mechanical abrasions and from contagious venereal lesions.

The treatment of this affection is simple. As a rule, nothing more is required than a little dressing-powder, or a sedative lotion; and if the parts are left at rest the erosions will be covered with new epithelium in a few days. Should ulcerations have occurred, they may be lightly touched with the solid nitrate of silver, and small pieces of linen may be placed between folds of mucous membrane that are lying in contact. These should be

frequently changed, and the parts kept clean with warm water and soap.

When the affection assumes the relapsing form, patients will go from one physician to another, seeking a permanent cure, which we regret to say they will rarely attain until they reach the age at which the trouble tends to disappear spontaneously.

The internal treatment and the indications for the remedies are as follows:

Aconite.—In the earlier stages with catarrhal fever.

Agnus castus.—Herpes on the cheeks with gnawing itching, worse from getting wet.

Alnus rubra.—Chronic herpes.

Apis mel.—Large confluent vesicles; burning *stinging* pains; vesicular eruption on the lips; cold sores.

Arsen. alb.—Red herpetic skin around the mouth, with *burning*, worse from scratching and after midnight. Herpes iris.

Aurum mur.—Herpes on the prepuce and vulva. Herpes accompanied by intolerable itching.

Bufo.—Herpetic eruption after a cold.

Causticum.—Burning vesicles under the prepuce, which become suppurating ulcers. Burning vesicles on the face which, when touched, exude a corrosive water, afterward they dry up to a scurf.

Cantharis.—Large, burning painful blisters with erysipelatous inflammation of the parts. Burning, tearing ulcerative pains, worse on the right side. Urinary complications.

Clematis.—Itching blisters on the lower lip. Gnawing itching not relieved by scratching. Worse during increasing, better during decreasing moon.

Graphites.—Herpes in females with scanty menstruation; burning blisters on the lower side and tip of the tongue; dryness of the skin.

Hamamelis —Herpes on the nose. Profuse epistaxis.

Helleb. nig.—White vesicles on the lips; aphthæ in the mouth; in scrofulous children.

Hepar.—Herpes which tend to recur; herpes on the prepuce, exceedingly sensitive to the touch; small ulcers form around the large one; unhealthy suppurating skin, after mercurial poisoning.

Kali bich.—Herpes after taking cold; fluent coryza; all the secretions are of a stringy and ropy character.

Mercurius sol.—Herpes on the prepuce with a tendency to suppuration; ulcers on the glans; itching of the genitals.

Moschus.—Herpes, with excessive burning, in hysterical subjects; menstruation too early and too profuse.

Natrum mur.—Herpes occurring during fevers; eruption on the lips and flexures of the joints; vesicles on the tongue; itching and pricking in the skin.

Petroleum.—Herpes on the perineum and genitals; itching worse in the open air.

Rhus tox.—Herpes upon the hairy parts with burning and stinging; itching worse after scratching; rheumatic pains with great weariness.

Sepia.—Herpetic eruptions around the lips; herpes during pregnancy; circular form of epilepsy.

Sulphur.—Herpes about the mouth and nose with itching and burning, aggravated by warmth. Hot palms and soles.

Sarsaparilla.—Herpes on the prepuce; after abuse of mercury.

Upas.—Herpetic eruption on the upper lip, on the left side.

Zoster.

Zoster is an acute affection characterized by the development of one or more groups of large-sized vesicles. When there are several of these groups, it will be noticed that they are arranged along the course of one of the larger nerve-trunks whose filaments are distributed to the skin.

The most frequent and perhaps the most typical seat of the eruption is on the chest, where it may form a semi-girdle corresponding to the area supplied by one of the intercostal nerves. Zoster, however, is by no means confined to the thoracic region, but may appear on the abdomen, the face, in connection with the trigeminal nerve, on the shoulders and arms, and on the thighs and legs.

The eruption may or may not be preceded by prodromal symptoms, which may partake of a mild febrile attack of one or two days' duration, or, instead, of a more or less severe neuralgia, without fever; or neither of these phenomena may be present, the eruption itself being the first indication of the affection.

Each group or patch of vesicles may consist of from four or five to a dozen separate, non-confluent lesions situated upon a reddened, raised, and inflamed base. Occasionally the vesicles themselves may be absent, and nothing is to be seen except the circumscribed reddened patch. The several groups of vesicles constituting the typical eruption do not usually appear at the same time, but the patches may appear in succession, so that several days may elapse before all the lesions have developed.

The eruption having appeared, is accompanied with more or less pain of a neuralgic character, together with some soreness of parts if the vesicles rupture. As a rule, the lesions remain intact until after a week or so, when



ZOSTER.



the fluid contents become absorbed, and the uplifted epidermis desquamates, leaving a reddened macule, or in some cases a small cicatrix, to mark the site of the lesion.

A striking peculiarity of zoster is the fact that it is strictly unilateral (with exceedingly rare exceptions). Cases of double zoster, in which both sides of the body have been involved at the same time, have been reported. Another feature of this affection is the extreme rarity of a second attack, resembling in this respect the eruptive fevers.

The neuralgia which precedes or accompanies zoster may exhibit any degree of severity, and may indeed persist for an indefinite period after all symptoms of cutaneous irritation have disappeared. Instead of neuralgia, a more or less intense pruritus may be present, confined to the affected region, and persist for a long time.

As a rule, zoster is an affection of little gravity—that is, in persons who when attacked are in ordinary health. In those, however, who are aged or feeble, the prognosis is not always so favorable, as the vesicles may be followed by more or less severe ulceration. When the eruption appears on the head, and especially in connection with the branches of the trigeminus that are distributed to the eye, ulceration of the cornea, and even destruction of the sight, may ensue.

Etiology.—It has been very clearly demonstrated that the majority, if not all cases, of zoster appear in connection with irritation or inflammation of the ganglia attached to the roots of the sensitive nerves; but what sets up this primary irritation is not always clear. Zoster has been known to appear, after exposure to cold, in connection with pleurisy, after traumatism, and after the internal administration of arsenic. Quite recently, bacilli are said to have been found in the inflamed

ganglia, but how they got there does not appear very clearly.

M. Fere reports four cases of herpes zoster, which occurred nearly contemporaneously among his 150 epileptic patients at the Bicetre. The first was a young man of nineteen, who had had a few violent epileptic attacks without any unilateral symptoms. The herpes was confined to the left side of the thorax and the left side of the face, and along with it he had some spasms of the left corner of the mouth, illusory impressions of persons approaching him from the left side, and some contractions and sluggishness of the left pupil. The left side of the tongue also was much more thickly furred than the right. The temperature ran up to 107° F. at first, but all the morbid symptoms gradually subsided in a week. In the three other cases, in middle-aged men, the most prominent symptom was severe pain, with tenderness on pressure, down the spinal column. M. Fere is led to conclude from these and similar observations that the most probable cause of the herpetic eruption is a slight epidemic cerebro-spinal meningitis, which may be widespread, but perhaps only of sufficient irritative power to cause the herpes at the root of one or two nerves. Such a pathological condition would not be surprising in infectious diseases, for in them some forms of meningitis are not rare.

Zoster may follow influenza; Dr. Finzi reports a case in a girl of fifteen, who, after recovering from a severe attack of influenza, was seized with neuralgic pain, accompanied with a pricking and burning sensation shooting from the back around the right side. On being seen five days later, a chain of herpetic vesicles was found extending along the seventh intercostal space, the lymphatic glands in the axilla being swollen and tender,

and pressure along the course of the seventh intercostal nerve, making the patient scream with pain. In from eight to ten days the vesicles disappeared, the whole duration of the symptoms having been about a fortnight.

Another case is reported of a case of zoster corresponding to the eighth intercostal nerve of the right side in a girl of eighteen, in whom the disease appeared at the beginning of an attack of influenza and lasted a month.

The writer had a case occurring in a girl of twelve corresponding to the eighth intercostal nerve of the left side, in which the eruption made its appearance three days after the beginning of an attack of influenza of a severe form, and the eruption lasted two weeks.

Treatment.—The chief indications are to preserve the integrity of the vesicles until their contents are absorbed, and to give relief to the neuralgic pain. We may attempt to carry out the first by the application of several coats of flexible collodion, or *traumaticin*, or we may brush the lesions over with oil, and then cover them freely with some indifferent dusting-powder. The neuralgia is to be treated exactly in the same way as if it were not accompanied with the vesicular lesions.

Zoster of the mucous membranes is not an infrequent affection. Three cases are reported in which the region supplied by the trigeminus was affected. In one of the cases the vesicles were located upon the mucous membrane of the left cheek; in the second case upon the conjunctiva of the right eye; and in the third case on the left half of the tongue.

The galvanic current, from four to eight cells of a battery of ordinary strength, has been found very beneficial if the pain is sharp, when applied from fifteen to twenty minutes daily.

The principal internal remedies and their indications are as follows:

Aconite.—In the earlier stages, when the neuralgic pain is accompanied by febrile symptoms.

Apis.—Burning and stinging pains with swelling; large vesicles, sometimes confluent; better from cold applications.

Arsen. alb.—Confluent eruption with *intense burning* of the blisters; worse after midnight, and from cold applications; neuralgia; in debilitated constitutions.

Cantharis.—Large blisters, burning when touched; smarting and stinging; mostly on the right side; worse in the open air.

Cistus.—Zoster on the back; neuralgic symptoms; in scrofulous subjects.

Comocladia.—Zoster on the legs; rheumatic pains aggravated by rest; relieved by motion.

Dulcamara.—Zoster after taking cold from damp air; moist, suppurating eruption; glandular swellings in neighborhood of eruption; eruption precedes the menses.

Graphites.—Zoster on the left side; large blisters from the spine to the umbilicus, burning when touched; worse indoors; better in the open air; dry skin, tendency to ulceration; in blonde individuals inclined to obesity.

Iris vers.—Zoster, especially on the right side; following gastric derangement; pain in the liver; neuralgic pains.

Kali mur.—Zoster; vesicles encircling half of the body like a belt; white tongue.

Kalmia lat.—Facial neuralgia remaining after zoster; worse at night; palpitation of the heart; rheumatic pains.

Lachesis.—Zoster during spring and fall; the vesicles turn dark and are very painful; all symptoms are worse after sleep.

Mercurius.—Zoster on the right side, extending across the abdomen; worse at night, from the warmth of the bed; tendency to suppuration; easy perspiration without relief.

Mezereum.—Zoster in old people; constant chilliness; neuralgic pains; worse at 9 P. M.; burning, changing location after scratching; in scrofulous persons.

Natrum mur.—Eruptions occurring through the course of any disease.

Peppermint Oil, when applied locally, rapidly allays the pain of zoster.

Prunus spinosa has succeeded in removing the very troublesome neuralgic pain which often remains when the eruption of shingles has disappeared, by means of *Prunus spinosa* 30x.

Ranunculus bulb.—Zoster aggravated by change of temperature; neuralgic sequels; in rheumatic subjects.

Rhus tox.—Burning and stinging pains aggravated by scratching. Small burning vesicles with redness of the skin; confluent vesicles; worse in cold weather; rheumatic pains during rest; sleeplessness with restless tossing about; zoster brought on by getting wet, while overheated.

Sempervivum tect.—In obstinate cases; may be used internally and locally.

Thuja.—Zoster with eruption only on covered parts; better from gentle rubbing; in individuals of lymphatic temperament.

Zincum.—Neuralgia following zoster; pains relieved by touching the parts; worse after dinner and towards evening.

Zincum phos.—When other remedies fail; following brain-fag in literary persons.

Pemphigus.

Under this name a number of widely varying diseases have been described, and one of the earlier writers mentions upward of a hundred varieties of the affection. We will confine the name to a single disease, embracing but two varieties—namely, *pemphigus vulgaris* and *pemphigus foliaceus*.

In childhood two forms are observed; *pemphigus acutus neonatorum*, appearing during the first two weeks. The whole body is covered with bullæ, some of the size of a hazel nut, and its course usually benign. A second form stands in close relationship to acute exanthemata.

In general *pemphigus* is characterized as regards eruption by the appearance of little separate blebs, usually grouped in threes or fours, seated upon slightly inflamed bases, which are quickly covered over by the enlarged bullæ. These blebs may attain a size varying between that of a pea and a hen's egg. They are distended with fluid, which is at first very transparent, but soon becomes milky. The fluid may be quickly re-absorbed, or the blebs or bullæ simply shrivel, the distended globe becoming flaccid. Very often the blebs burst in a few days, and then the contained fluid dries into crusts of lamellar aspect, beneath which is very slight ulceration. The contents are sometimes sanguinolent. The bullæ generally occur in successive crops; they develop in the course of a few hours; their outline is generally round or oval; they may be confluent, but are usually distinct. Now and then a species of false membrane is contained in the bullæ. The reaction of the fluid is generally alkaline, but with the turbidity comes acidity. The local symptoms are, slight itching and smarting at the outset, and more

or less soreness. The healing process in pemphigus is sometimes tardy, a thin ichor being secreted by the surface originally blebbed, and so a quasi-impetiginous crust is often produced. In rare cases, in cachectic subjects, sloughing may occur. The disease attacks all parts of the body—but rarely the head, the palms of the hands, or the soles of the feet. Sometimes the mucous surfaces—for example, the intestines, vagina, etc., are the seat of bullæ in pemphigus.

Pemphigus Vulgaris.

This variety is characterized by an eruption of bullæ of varying size, some of which may be as large as a pigeon's egg. They may exist singly or in considerable number, and successive outbreaks may prolong the affection for an indefinite period.

In pemphigus vulgaris the bullæ are well distended with a thin, not very plastic fluid, and usually remain intact for several days. Sometimes the fluid is resorbed, and the uplifted epidermis applies itself to the skin, without, however, becoming permanently attached, but exfoliates as soon as a new stratum corneum has formed beneath it.

More frequently, however, the bulla ruptures and becomes detached, leaving a raw and reddened surface, giving rise to a slight serous discharge. This gradually lessens, however, until a newly-formed, horny layer replaces the old.

Solitary bullæ may succeed each other at more or less regular intervals, or there may be crops of smaller bullæ, appearing weeks or months apart.

The disease may persist unchecked for several years, terminating in spontaneous recovery, or quite frequently ending fatally.

Pemphigus Foliaceus.

In this variety the bullæ, instead of being freely distended and tense, are only partly filled with fluid, and are flaccid, and often attain a considerable size. As a rule, they are accompanied with more or less debility and impairment of the vital forces. Contiguous bullæ may coalesce, thus forming a large, flat, watery tumor, containing a lymphic exudation. The prognosis of *pemphigus foliaceus* is grave, as the majority of cases go on to a fatal termination.

In some instances *pemphigus foliaceus* is said to begin as a single blister, which continually enlarges until the whole surface of the body is skinned and covered with a brownish crust; it is always fatal.

The causes of pemphigus are involved in obscurity.

Prognosis.—The cure is not rapid, but slow; recurrence of the disease is frequent. In old people, where the disease is general, and in children, when there is ulceration, the issue of the case is often unfavorable. The general condition of the patient must be the guide, and in these cases a cautious opinion should always be given.

Diagnosis.—Pemphigus can scarcely be confounded with anything else, the bullæ are so diagnostic a sign. In eczema of the hands, bullæ may be produced secondarily by the confluence of vesicles, but their origin is readily traced, and co-existent eczema is to be found elsewhere. Pemphigus is rare on the hands and fingers, *per se*. General eczema and P. foliaceus should not be confounded; in the latter abortive bullæ are present, the scales are larger and peculiar, and the skin is not infiltrated.

In *ecthyma cachecticum* the pustules contain bloody fluid; there are no true bullæ in the disease; the crusts are also thick and dirty; whilst the ulceration is deep. In *rupia*, the bullæ are smaller and flatter, the contents sanious, the crusts thick, dark, prominent—cockleshell like; the ulceration deep and foul. *Pemphigus foliaceus* resembles *pityriasis rubra*; but in the latter there is no history of bullæ; the scales are altogether smaller, and they are imbricated in a peculiar manner.

Sometimes in *impetigo contagiosa*, the bullæ become somewhat large, but they are never distended as in pemphigus, but flat; the contents soon become purulent, and flat yellow scabs form, which are characteristic. The disease is clearly pustular.

Treatment.—The patient should be placed on a full animal diet, with plenty of fresh air and exercise. Means must be taken to bring the health up to a normal standard.

Locally, bran, starch or gelatine baths are of decided benefit. The continuous bath, as recommended by Hebra, may be resorted to in some cases.

The old school rely upon quinine, the mineral acids, and arsenic, as internal remedies. They recommend cod-liver oil, combined with either of the above, it is a favorite prescription with many.

Dr. Cooper has cured pemphigoid eruptions, particularly those occurring in the ears, with an ointment of *scrophularia nodosa*. The same medicine was very useful in bullæ surrounded by an inflamed ring.

Dr. Pope ameliorated a distinctly pemphigoid eruption with *Cantharis* 3x. Later in the case—one of disseminated sclerosis—the eruption reappeared, and passed away without rupture under *Phosphorus* given on general indications for that drug.

The indications for the principal internal homœopathic remedies are as follows:

Ammon. mur..—Blisters the size of peas on the right shoulder with itching; burning at small spots on the chest; chilliness, especially when walking; fat body but thin legs.

Arsen. alb..—Black blisters, burning and very painful; great restlessness and typhoid symptoms; pemphigus foliaceus or when gangrene sets in.

Belladon..—Painful, watery vesicles on the palm of the hand sensitive to the touch; chill in the evening, mostly on the arms, with heat in the head.

Cantharis..—Pemphigus presents a very exact image of the lesion produced by the external application of cantharides; active inflammation, with blisters containing serum, burning more than itching; more on right side.

Causticum..—Large painful blisters on the left side of the chest and neck, which become flattened; with the eruption, there is difficulty of breathing, fever, heat and sweat; very sensitive to cold; corpulent children, with tendency to enlargement of glands; involuntary urination when sneezing or blowing the nose.

Chamomilla..—Extreme irritability of the nervous system and great sensitiveness to pain, or to wind or currents of air; darting and lancinating pains.

China..—Great nervous irritability; the contents of the vesicles becomes ichorous with a putrid smell; where there is a tendency to gangrene.

Clematis..—Burning throbbing pains; yellow corrosive ichor; great emaciation.

Dulcamara..—Burning pains, restlessness, thirst and emaciation; the bullæ break forming corroding ulcers.

Gummi gutti..—May be used when other remedies fail.

Kali carb.—Burning, itching and stitch pains; blisters with tendency to spread; pemphigus foliaceus.

Iodine.—Gangrenous tendency, after mercury.

Lachesis.—Gangrenous tendency; bullæ and blisters; tossing and moaning during sleep, and aggravation of symptoms on awaking.

Mercurius.—The bullæ have a tendency to spread, with discharge of burning ichor, worse at night, particularly from warmth of the bed; profuse sweat which does not relieve.

Natrum carb.—Blisters with oozing of purulent fluid; the whole skin becomes dry, rough and chapped.

Natrum mur.—Fluid from blisters and blebs like water.

Natrum sulph.—Watery vesicles or blebs all over the body.

Phosphoric acid.—Deep hard bullæ on the ball of the thumb; blisters on the balls of the toes; great drowsiness and apathy; in debilitated individuals; after sexual excesses.

Phosphorus.—The blisters are full to bursting, painful and hard, but not itching; tall fair children with tendency to tuberculosis; languor and nervous itching; chilliness every evening with shivering; arms and hands become numb; regurgitation of food; small wounds bleed much.

Ranunculus bulb.—Blisters on the fingers the size of a hazelnut, followed after healing by small deep transparent dark-blue elevated blisters the size of ordinary pin-heads; this remedy has cured pemphigus in new-born children.

Ranunculus scel.—Vesicles, which emit a thin acrid, yellowish ichor, and form obstinate ulcers; itching, boring, gnawing and biting pains; sleeplessness, with debility and anxiety.

Raphanus.—Blisters full of water on the breast, without inflammation, redness or pain.

Rhus tox.—Acute form, with much itching and burning; confluent blisters with milky or watery fluid and peeling of the skin.

Sepia.—Pemphigus on the arms and hands; heaviness of the limbs; sensitive to cold air; arthritic pains in the joints.

Tartar emet.—Vesicles filled with bloody serum, collapsing and bursting, turning blackish and changing to malignant broad deep ulcers; gastro-intestinal irritation.

Thuja.—Pemphigus foliaceus, with offensive odor, and formation of scales.

Anomalous Forms of Bullous Eruption. Hydroa.

Under the head of neurotic diseases, and in connection with herpes, attention may be directed to certain vesicular or bullous forms of eruption, which have been described by Bazin under the term of arthritic hydroa. He distinguishes three varieties of hydroa: 1. Hydroa vesiculeux. 2. Hydroa vœciniforme, confounded with aphthæ chronique. 3. Hydroa bulleux.

Hydroa vesiculeux is generally confounded by authors with erythema papulatum. First, as regards *Seat*, "It is developed on the cutaneous and mucous surfaces. On the *skin* it exists ordinarily on the uncovered parts—back of the hands and wrists and on the front of the knees, etc. In most cases the buccal mucous membrane is affected, and then the eruption occupies by preference the lower lip and the inside of the cheeks, and appears after its development on the skin. However, in one of our cases, the base of the uvula was surrounded by a circle of vesicles. The conjunctiva may also be the seat of this eruption."

Symptoms.—"It is sometimes preceded by malaise,

anorexia, and a slight febrile attack, but these prodromic symptoms are often wanting, or are so little marked that the attention of the patient is first attracted by the development of the vesicles.

Whatever be the seat of the eruption, it presents the following characters:—

There is seen at first spots of a deep red color, small, rounded, a little raised, and with their edges clearly defined. These spots vary in size from that of a lentil to that of a twenty-five cent piece; they are sometimes surrounded by a rose-colored areola; they show soon in their centre a small vesicle filled with transparent yellowish liquid. This vesicle appears the day following that of the red spot. It dries rapidly from the centre, which is occupied by a small blackish scab, whilst the liquid is absorbed from the circumference. The phenomena takes place towards the second or third day of the eruption.

The subsequent phenomena are as follows:—The liquid in the circumference of the vesicle is reabsorbed, whilst that which occupies the centre becomes a blackish scab. At last it may happen, especially during cold weather, that the fluid exuded in the vesicle is absorbed rapidly. It will then have only a small whitish or yellowish macula, placed in the centre of a red disc, and formed by loosened epidermis. In this case it is that the affection has been confounded with erythema papulatum. On the mucous surfaces the vesicles are whitish and surrounded by a violet-colored areola—the scabs are detached sooner. The red discs and vesicles are more or less numerous. They are generally separated by intervals of sound skin; sometimes they are disposed in groups of two or three, touching at their circumference. They do not all appear at once, but by successive crops during many days. The affected parts have scarcely any itch-

ing. The febrile symptoms which exist rarely at the commencement cease when the eruption is developed.

The duration of *hydroa vesiculeux* is from two to four weeks; each element in the eruption taken by itself runs through its course in four or five days. The affection is prolonged for many weeks only by the eruption of fresh crops of vesicles. A relapse may take place.

The disease is seen in both sexes, but more frequently in the male. It appears among adults from twenty to thirty years of age. It is more frequent in spring and autumn; cold and variation of temperature have a marked influence on its appearance and course. Finally it is always seen amongst people who have had still symptoms of gout."

"*Hydroa vesiculeux*," says Bazin, in continuing his description, which we have given above almost at length, "is essentially arthritic—at least we have always found it among arthritic subjects, and it has steadily presented clear relation to gouty manifestations."

Prognosis.—"This affection is not grave; it disappears of itself in four or five weeks. It is subject to recur."

Hydroa vacciforme is the same, only that the vesicles are varioliform.

Hydroa bulleux (pemphigus with little bullæ) is an arthritic affection which is generally little known.

The eruption shows itself by bullæ, which present one important character—the inequality of their size. Some are as large as a lentil; the largest do not go beyond the size of a pea. These bullæ are rounded, arranged in an irregular manner, in groups of three or four; they are filled with transparent fluid, which grows thick quickly and takes a yellowish color; finally they are placed on a red surface, which extends from their base in the form

of an areola. Whilst new bullæ are developing, the old ones dry up and are replaced by a yellowish scab; and if one of these is rubbed off by scratching there appears a violet-colored, slightly excoriated surface. In the interval of the crops of bullæ there is no morbid phenomenon observed except the ordinary well-marked itching. The patient preserves his appetite, and the nutrition is not at all altered. Bazin states that the course is chronic, that the disease appears in successive crops, and lasts generally from five to six months; that it is more frequent in men than in women, and appears in adults from twenty to forty years; that the seasons and variations of temperature have a marked influence on its development; that it is most common in the spring, and is excited by gout.

Diagnosis.—The characters of hydroa bulleux permit always of its being recognized. It is important to establish well the differential diagnosis between this disease and pemphigus. In the former the bullæ are small, and do not go beyond the size of a pea; they are further remarkable for the inequality of their size, they occupy regions sufficiently well circumscribed. The bullæ of pemphigus are larger—they may attain the size of a nut, or even of a hen's egg; they exist in various parts, and extend sometimes over the chief part of the skin.

The diseases which it in a measure resembles are, urticaria and the various forms of erythema, and perhaps mistakes might be made between it and the vesicular syphilide, varicella, and variola. As a rule, it has a definite duration, and disappears spontaneously in a few days, and may be accompanied by slight fever. *The first phenomenon noticed is a faintly-marked, rosy spot, which is soon replaced by a single vesicle, which may remain intact or may become umbilicated, or may dry up and become an*

umbilicated crust of a yellowish-white color. Around this vesicle inflammatory changes very soon take place; a zone of a color varying from red to violet, with a well-defined, slightly elevated periphery, forms, and then around this perhaps a ring of small vesicles, which may coalesce and form a circumferential bullæ. These spots vary in size from a line to four or five, or even more. There is no hyperæmia between the patches, as the inflammatory action is sharply confined to them. This condition differs from that of herpes phlyctenodes, in which the inflammatory areola is not thus sharply defined. There is usually no pain or itching, merely a little heat or a feeling of tension. The same appearances, somewhat modified, have been observed upon the buccal mucous membrane. The eruption disappears by the fall of the crust, which is formed from the vesicle, and is generally seen in the centre of each patch, and then there remains a more or less well-marked hyperæmia with slight infiltration. The sites of election are the back of the hands, the forearms, face, neck, and also the trunk and lower limbs. It is generally symmetrically developed.

The practitioner may meet with cases in which, with or without some slight antecedents, malaise, or pyrexia, a few scattered spots answering as regards eruptive features to Bazin's hydroa vesiculeux occur—that is to say, a few red irritable spots appear, having in the centre a small oval or roundish bulla, which may enlarge to the size of a split pea, but is generally not so large, and dies away in the course of a few days. These spots appear on the back of the hands, the arms, the legs, and the shoulders. The disease may last, by the development of successive crops of solitary vesicles, for ten days or more.

The more exaggerated form of this disease is that in which small bullæ are developed rapidly over a large extent of surface, or even the whole body.

In some instances in which this quasi-herpetic or pemphigoid disease makes its appearance the eruption is preceded by an unusual amount of irritation, and it is complicated or followed by true pruriginous rash. This is very probably the disease termed pemphigus pruriginosus.

We may therefore sum up the foregoing remarks by saying that there is a form of disease which seems to stand midway between herpes and pemphigus, the features of which ally it, now to herpes, now to pemphigus. It may consist of solitary small bullæ seated on a red base, and scattered here and there over the body, or the bullæ may be surrounded by small vesicles; or these two dispositions of the bullæ may be seen in one and the same case, the eruption being localized to a certain part of the body, or generally distributed and accompanied in severe cases by pyrexia and marked constitutional disturbances, which is often the result probably of malarial poisoning. The eruption may recur more or less periodically; and lastly it may be complicated or followed by prurigo, and in that case will answer to the designation of pemphigus pruriginosus.

Diagnosis.—The characters I have given are sufficient for diagnostic purposes. The only disease with which they might be confounded is urticaria bullosa, and I do not know that any mischief would accrue to the patient from such a mistake.

Treatment.—The first care of the physician is to attend to the general condition of the patients as regards their emunctory organs and their hygiene. Anxiety, worry, and depressing influences must be neutralized. The patient must be ordered to get good air, to take plain nourishing food, and to avoid luxuries of the table, overwork, and fatigue of all kinds.

Locally I know of nothing better than, first of all, vapor baths to encourage the skin to proper action, and the

use of a weak lotion made of liq. carbonis detergens ʒj to ʒss with aquæ ʒvj applied night and morning. Subsequently sulphuret of potassium baths may be regularly given for a long time, and followed up by the drinking of some sulphurous or iron waters.

According to old-school authorities, the main remedy is quinine; iron, nux vomica and cod-liver oil are also recommended.

The principal internal homœopathic remedies are: *Potassium iodide*, *Kreasote*, and *Magnesia carb.*

CHAPTER X.

SUPPURATIVE INFLAMMATION, OR PUSTULAR DISEASES—IMPETIGO—CONTAGIOUS IMPETIGO—ECTHYMA—FURUNCULUS—ANTHRAX, OR CARBUNCLE—MALIGNANT PUSTULE, Etc.

General Remarks.

In many very different diseases of the skin pus is present, and if the term pustular were used in its widest sense a large number of diseases would have to be included under it; for instance, acne; favus; scabies; pemphigus; variola; farcy; varicella; and so on. But in the diseases just named the presence of pus is often not a primary or even essential condition, and its importance is thrown into the shade by the prominence of other features. In those affections which may more strictly be called pustular, the suppuration is the leading and the primary condition, the particular morbid condition the practitioner has to recognize and to remedy. Now under the term pustular diseases, thus defined, are usually comprised impetigo, ecthyma, and furuncular affections,—the latter term including furunculus, or boil; anthrax or carbuncle; and pustular maligna, or malignant boil. Delhi boil would come under this division, but, owing to its rarity in this country, will not be treated of.

Impetigo Contagiosa.

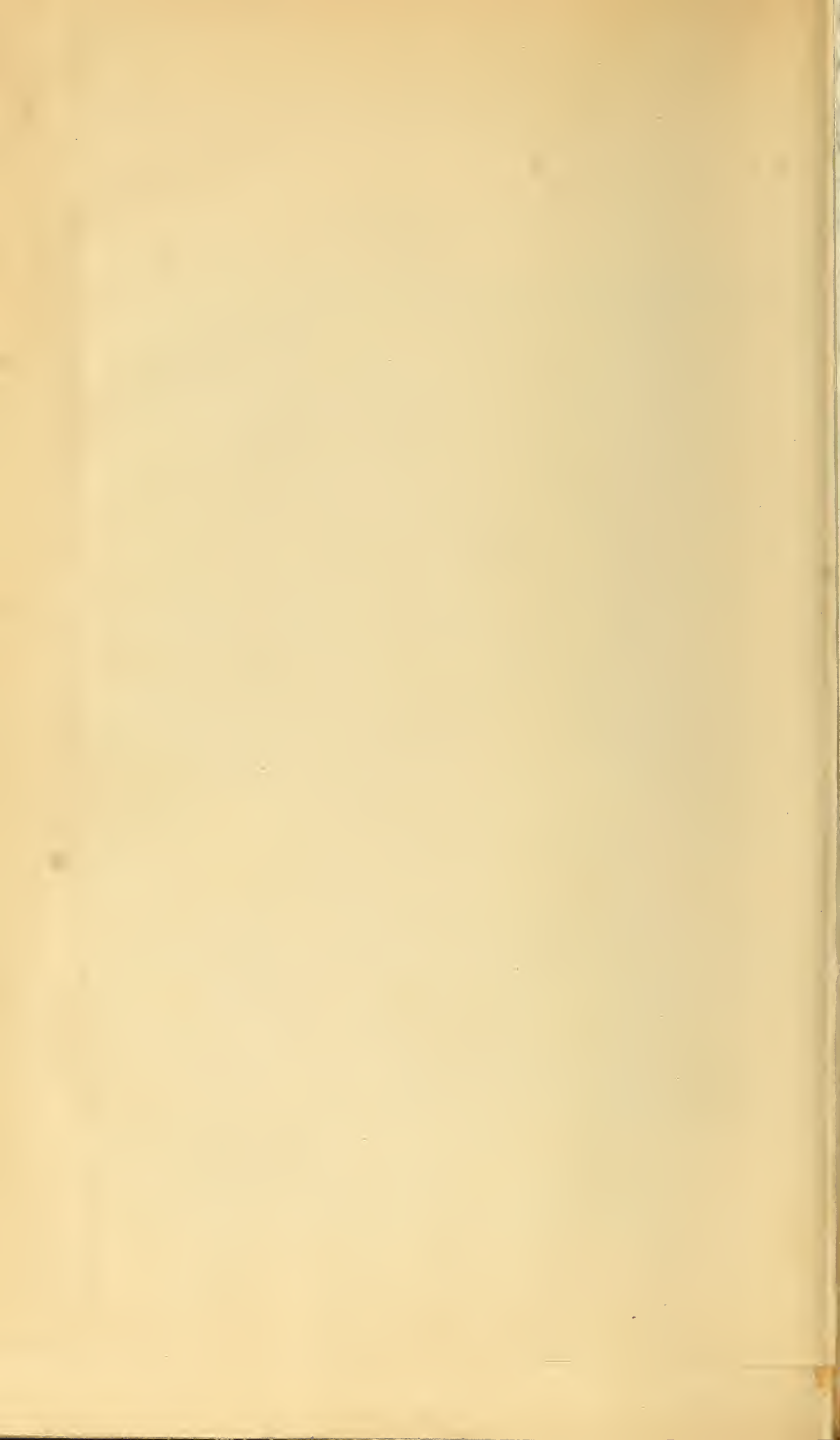
This disease is characterized by the appearance of mild pyrexial symptoms, followed in two or three days by the appearance of one or more small vesicles. They slowly enlarge, but soon dry into thin, light-yellow crusts, or scabs. These lesions may be few or numerous, and successive outbreaks may prolong the affection for several months. The affection is unquestionably contagious, and, when it once appears upon an individual, other members of the family, either children or adults, may contract it. In not a few instances the eruption has appeared within a couple of weeks or so after vaccination. If the crust, which has the appearance of being "stuck on," is removed, a slightly reddened but not eroded surface is revealed, from which but little or no moisture is exuded.

The disease is seen amongst children of the lower orders especially, probably in great measure because the disease spreads by contagion freely amongst them. It occurs also in those who have all the advantages of social position and good hygiene.

The eruption in the disease in the majority of cases appears first of all on the face, sometimes on the top or back of the head, and in the form of "little watery heads" (vesicles) that enlarge into flat bullæ if they are not injured by scratching. Sometimes the hands are attacked at the outset, and look as if burnt here and there; phlyctenæ may also arise out of and around the remnants of vaccinia, or about cuts or bruises. The disease then extends to other parts, the back of the neck, buttocks, feet, etc. The vesicles are always isolated. In five or six days the bullæ may reach the size of a sixpence or



IMPETIGO CONTAGIOSA.



shilling unless ruptured, and are then flat and depressed in the centre, their contents becoming turbid. Usually the vesico-pustule is the size of a large split-pea or thereabouts. The secretion consists of lymph-like fluid, granular cells, and subsequently pus-cells.

Scabs commence to form a few days after the appearance of the disease. They are characteristic of the disease, varying in size from that of a split pea to a shilling; they are flat, straw-colored, dry, and granular-looking, and appear as if "stuck on" to the part; they present, as a rule, no inflammatory areola around their circumferences, though this is the case in severer instances of the disease. If removed, little sores are observed beneath, more or less filled in by gummy-like secretion, or a little pellet of splastic lymph, and when the scabs fall off there is an erythematous base left behind, the hue of which gradually fades away. The disease may be spread from spot to spot by direct inoculation with its secretion in the act of scratching. The crop of vesicles is to some extent successive, though the majority of the places "come out" in the first week or so. In some instances the disease resembles vaccinia very slowly. There is always a uniformity about it; it always commences by vesicles; there are no papules present at the height of the disease. On the face the spots may be confluent, and then the disease resembles eczema impetiginodes; but the patches are made up of the elements described above. On the scalp the disease consists of circular, mostly isolated, flat-scabbed spots about the top and back of the head, the hair being matted by the crusts. Usually, no pediculi and no offensive smell are present. Now it is very important to note that an eczema may be readily excited in fair children by scratching or the irritation of the discharge, in connection

with impetigo contagiosa—and then the characteristic features of the latter disease are masked. The result of neglecting to attend to this point is that the practitioner regards the disease present as solely and entirely an eczema. The error, too, is a very common one.

The mucous membranes of the eye and the nose are sometimes implicated; then inflammation is produced by the development of little ulcers, that take their origin in the formation apparently of vesico-pustules, identical with those seen on the surface of the skin. The eye may look as though affected by slight purulent ophthalmia, but soon recovers itself.

The disease may complicate eczema, scabies, and other affections, and *vice versa*.

Diagnostic features are—its apparently epidemic character in many cases; the antecedent febrile condition; its attacking children; the origin from isolated vesicles, which tend to enlarge into blebs and to become pustular, the bleb having a depressed centre, and, it may be, a well-defined, slightly raised, rounded edge; the *isolation* of the spots; the *uniform* character of the eruption, and its general and scattered condition; its frequent seat and commencement about the face or head; the circular, flat, granular, yellow crusts looking as if stuck on; its contagious nature and inoculability; its frequent following in the wake of vaccination; the absence of pain, and especially troublesome itching at night.

Contagious impetigo may be confounded with *eczema*; but the history is altogether different, and the isolation, the small scabbed patch, the characters of the crusts, and the facility of cure at once distinguish it. *Impetigo sparsa* does not arise from a vesiculation, but is primarily pustular, made up of aggregated pustules; it does not phlyctenoid; it is not contagious nor inoculable; it does

not run a definite course; it is not confined to the young; it is not so amenable to treatment.

Pemphigus.—In this disease the blebs are larger, more persistent, oval, and distended; the contents are watery and acid. Pemphigus is non-contagious; it does not occur especially on the face or the head; it is less inflammatory, and wants the characteristic scabs. *Ecthyma.*—This is primarily a pustular disease; it is seen also in adults; there are more induration and swelling, and a good deal of pain in connection with the formation of pustules; it is non-contagious; the scabs are heaped-up and dark. *Pustular scabies.*—This is the disease with which contagious impetigo is at times confounded. It must be remembered that the two diseases may coexist. *In children* both attack the buttocks frequently; both may exist about the hands and feet; but the distinctions are really very clear. In scabies there is no febrile condition; the eruption is *multiform*. If there be ecthymatous pustules, like impetigo contagiosa, they are covered by dark thick crusts; there are plenty of characteristic vesicles, with cuniculi and papules. If the impetigo contagiosa begins about the buttocks, it appears presently on the face or the head, or both. There is no irritation, nor are the effects of scratching visible about the body as in scabies; the bullous origin of the disease is distinct, and the scabs are characteristic. The hands are not specially affected in scabies in the child, but even impetigo contagiosa may attack the hands and feet markedly; still there is no *multiform* eruption, and there are no cuniculi in the latter.

When a correct diagnosis is made, the treatment is easy. *The natural course of the disease is a short and definite one* The secretion is an active agent, by means of inoculation self-practiced by the patient in scratching, in transmitting the disease from one part to another. There-

fore it is of first importance to destroy the activity of the pus, and to alter the behavior of the surface that secretes it. A very active agent in procuring this result is an ointment containing five grains of the ammonio-chloride of mercury, and apply it to the surface beneath the scabs, which must be removed by poulticing or fomentation with warm water. A sulphur ointment is also beneficial. The patient must be well-nourished, and strict hygienic treatment adopted. Cleanliness is all-important.

The old-school rely principally upon the external applications.

The indications for the internal remedies are:

Antimon. crud.—This is the principal internal remedy. Eruption forming thick, heavy yellow crusts, with burning; eruption about face; worse from bathing the parts; better in open air; chronic cases.

Arsen. alb.—Black pustules, filled with black blood and fetid pus; painful sensation on scalp and face, as from cutaneous ulceration; worse from cold and touch; better from warmth.

Baryta carb.—Especially old people; thick crusts behind the ears; fat dumpy children, with swollen lymphatics; sore throat, with swelling of tonsils after the least cold; worse at night and when thinking of it; better in open air.

Calcareo carb.—During dentition; dry crusts; sweat of forehead, particularly in the evening; sensitiveness of the roots of the hair.

Cicuta vir.—Impetigo sparsa; eruption on chin and lower part of face, forming thick yellow crusts; honey-comb-like crusts, which fall off and leave a bright-red smooth surface; painful eruption on scalp.

Clematis—Psoric constitution; pimples on forehead, root and sides of nose; pustules about lips, tender to

touch; large pustules about loins; eruption changes character during the changes of the moon; worse in bed, washing, and towards morning; feels exhausted on waking.

Conium.—Sero-purulent eruption in aged people, old hypochondriac maids; vertigo when turning over in bed, looking up; old, weak, and feeble men; scrofulosis, with engorgement of lymphatics; eruption around *mons veneris*.

Croton tigl..—Pustular eruption upon an inflamed base, with itching and stinging pain upon *septum nasi*, plugging the nostril; eruption on abdomen; sore nipples of nursing women.

Euphorbium is indicated when there is an irritable skin, with swelling of the face and pea-sized yellow vesicles.

Graphites.—Scabby eruption, with excessive oozing; eruption around mouth and nose or the whiskers; hair falls out; corrosive blisters about extremities, toes, and fingers; dry skin; very sensitive to cold; cold hands and feet, with scanty menses; rhagades.

Hepar.—Eruption after mercurialism; sensitive to touch; tendency to ulceration; humid scabs and pustules upon the head, oozing a fetid substance; swollen cervical glands; cracks behind ears; hands cracked and dry.

Iris vers..—Impetigo capitis, with gastric complaints, nausea, and vomiting.

Kali bichrom..—Dry eruption; pustules disappear without bursting. Stands next to *Antim. cr.* as a remedy.

Kreasotum.—Painless pustular eruption all over body, especially on chin and cheeks; sticking pain, especially on points; sad and weeping; worse in open air.

Lycopodium.—After abuse of mercury; itching and suppurating eruption on head and face; full of deep cracks;

abundant and fetid discharge; fetid and moist scabs behind ears; humid tinea capitis.

Mercurius.—Swelling and suppuration of glands; gastric derangement; moist scabs, with excoriation of the scalp and destruction of the hair; yellowish scabs on face, with fetid discharge; yellowish scabs, especially around mouth.

Mezereum.—Deep inflammatory redness of face; eruption fat and moist; ichor from scratched places excoriates other parts.

Nitric acid.—Eruption on head, pricking on being touched; pustular eruption on face, with large red margin and heavy scabs; mercurio-syphilis.

Rhus tox.—Small pustules on black base; greenish pus, with violent itching at night; humid eruption, with thick scabs on face and head, destroying the hair, with fetid smell; eruption on nose, extending to face.

Silicea.—Eruption resembling varicella; violent itching of scalp; moist scald head; growing pains; better warmth, worse from cold.

Sulphur.—Dry, thick, yellow scabs on scalp, with profuse discharge; great itching relieved by scratching; purulent eruption on elbows.

Tartar emet.—The remedy when the disease is exceedingly pustular.

Thuja.—Eruption all over the body; itching and shooting, especially at night; pustular eruption about the knee; better from gentle rubbing.

Viola tricolor.—Pustules and scabs upon face, with burning and itching, and discharging fetid pus; sensation as of tension of the integument of face; urine smells like cat's urine; worse at night. Recent cases.

Ecthyma.

This disease is described as consisting of isolated phlyzaious pustules—namely, those which are “large, raised on a hard base, of a vivid red color, and succeeded by thick, hard, dark-colored scabs, beneath which there is ulceration.” The pustules are generally distinct, round, and isolated; they are mostly general, but may be partial, and leave cicatrices behind. The shoulders, buttocks, and limbs are the parts usually attacked. There are two chief forms described—acute and chronic.

Acute general ecthyma is rare. The ordinary scattered ecthyma is practically always the result of the action of some irritant upon the skin, in an unhealthy or badly nourished subject; and so ecthymatous pustules frequently occur in connection with scabies and phtheiriasis, and more rarely in pruri, or eczema, and other diseases.

Acute ecthyma commences with slight febrile disturbances, and occasionally sore throat; locally, there is first a sense of heat and burning, followed by the appearance of reddish raised points, with hard, indurated bases, and distinct vivid areolæ; these points, which vary in size from that of a pea to that of a shilling, quickly pustulate, and are often accompanied by acute, sharp pain. In two or three days the pustules give exit to discharge, which dries into hard, adherent, dirty, discolored scabs, covering over circular ulcerations; the crusts fall off in a week or so, leaving behind dark stains. The ecthymatous spots may be few or many; in the latter case a good deal of irritation is set up; the patient may be unable to sleep from pain, and the glands and lymphatic vessels may become inflamed, small abscesses forming subsequently. The disease is generally protracted by successive crops of pus-

tules, or it may relapse into a chronic state. The limbs, shoulders, and trunk are chief seats of the disease.

Chronic ecthyma generally results from the action of some irritation, as in scabies, in connection with pediculi, and from scratching and badly nourished subjects. The ecthymatous pustules in the chronic disease are of similar character to those of acute ecthyma. They are painful, with hard, inflammatory bases and a small central collection of pus. When they occur on the limbs, especially the legs, in old people they are followed sometimes by troublesome ulcers.

In ecthyma the seat of disease appears to be the uppermost layer of the derma, not unlikely about the glands of the skin, the depth of surface involved being less than in furunculus, and there is no "core," otherwise ecthyma would be well classed with boils. The tendency to ulceration and sloughing, the lividity of the inflammatory areola, the disturbance of the general system, all point to a cachectic condition.

Causes.—The predisposing causes are always such as lead to debility and an impoverished state of blood. They are, in infants, bad nursing, suckling by mothers much out of health, scabies, bad clothing, damp dwellings; in adults and others, over-work, fatigue, convalescence from acute diseases, bad food, privations, various occupations that induce irritation of the skin, as bricklaying, excesses of all kinds, debauchery, uncleanness, night-watching, overcrowding in public institutions—work houses, jails, and such like. The immediate *exciting* causes are scabies, phtheiriasis, the use of acrid medicinal applications, and *scratching*.

Prognosis is to be made according to the general condition of the patient. The ecthyma, *per se*, is of little gravity, save when it is accompanied by sloughing, as in old people; then it is grave.

Diagnosis.—The distinct, large, isolated pustules, with an inflamed areola and hard base, distributed over the body, are very distinctive of the disease. It may be confounded with *impetigo sparsa*, but in this disease there are rather sero-pustules than pustules, which are very superficial; the discharge is viscid, yellowish; these are as dark scabs, no indurated, inflamed, and painful bases. *Furunculus* is deeper, it runs a slower course, and contains a central "slough" or "core," as it is called. It is more circumscribed, and there is little scabbing.

Treatment.—Locally a good application is an ointment made by rubbing together an ounce of lard, and half a drachm or so of Friar's balsam. The crusts may be removed after soakings with oil, and the affected parts dressed with an ointment made by adding five to ten grains of white precipitate to the ounce of cosmoline. After the pustules burst, if the ulcers show but little tendency to heal, a weak carbolized wash may be used.

The patient should be well hygiened and given a good generous diet.

The appropriate internal remedy may be selected from the following:

Anacardium.—Hard, red pustules, itching worse after scratching; crossness and irritability with weakness of mind; sensation of a hoop around the affected part.

Antimon. crud.—Pustules on the face in fat people; yellowish or brownish scabs on the face; desire for acids.

Arsen. alb.—Red or white pustules, with intense burning; painful black pustules, gnawing, burning, and itching; eruption on the scalp, forehead, around the eyes, cheeks, arms, shoulders, and upper part of the chest, terminating in thick crusts, and leaving well-marked scars.

Aurum.—Pustules on the face, neck and chest, with irritability and melancholy.

Bellad.—Pustules surrounded by a whitish areola. Burning and itching with great sensibility to touch.

Caladium.—White pustules with red areolæ, sore to the touch and itching; better from sleep in the day time.

Calcarea carb.—Heat, thirst and loss of appetite accompany the eruption. Scrofulous children and during dentition.

Cantharis.—Tendency to ulceration and gangrene, after or with the exanthemata; debility and emaciation.

Cicuta.—Burning suppurating eruption about the face, with yellowish crusts.

Croton tigl.—Confluent pustules with oozing and burning; greyish-brown crusts on the abdomen; pustules with scarlet redness of the skin; itching followed by painful burning; pains relieved after sleep; intense itching, but cannot bear to scratch on account of the pain it causes.

Cyclamen.—Pustules on the feet and toes.

Hepar.—Great sensitiveness of the pustules to the slightest touch; redness or little pimples around the ulceration.

Kali bichr.—Pustules all over the body, in the early stage having a small brown scab on the top; pustules at the root of the nails spreading over the hand; pustules, with violent itching, which dry without bursting, forming scabs which sting and burn; pustules resembling small-pox, with a hair in the middle, leaving after the scab comes off a small dry ulcer, which heals in about a fortnight, leaving a colorless depressed cicatrix; eruption more in hot weather. Light-haired children inclined to grow fat.

Kali hyd.—The eruption is profuse, over the body.

Great desire for the open air. Catarrhal fever with violent thirst.

Kreasotum.—Large, fat greasy pustules, with violent itching towards evening; sensation in the skin as from ulceration, especially on face and chin.

Lachesis.—Eruption more on the arms and left side; constitutional taint; feels worse after sleeping.

Mercurius.—Suppurating pustules, which either run together, discharging an acrid humor, or which remain sore, become hollow, and afterwards raised and cicatrized; pustules bleed easily and are painful to the touch; itching and burning from the warmth of the bed; sweats easily without relief.

Nitric acid.—Feeling as of a splinter sticking into the pustules when touching them.

Petroleum.—Itching and burning pustules, with great weakness on exertion; great lassitude; worse in fresh air.

Piper nigrum.—Large pustules leaving marks on the face.

Rhus tox.—Pustules seated upon a red base; black pustules, forming hard scabs, with burning and itching; worse at night and in cold and stormy weather.

Secale corn.—Cachectic females, with rough skin; pustules on the arms and legs, with tendency to gangrene.

Silicea.—Pustules all over the body, especially on the back part of the head, sluggish, and do not suppurate or dessicate; sensitive to contact; burning and soreness after scratching; aversion to warm food; worse in cold. Scrofulous diathesis.

Sulphur.—Dry, thick, yellowish scabs all over the body, especially on the scalp; always attended with great itching; painful to touch; aversion to washing.

Tabacum.—Eruption most on neck and upper limbs; weariness, languor and debility; death-like paleness, nausea worse on least motion.

Tartar emet.—Eruption over the whole body. Pustules are full, large, round, burning and painful with red areolæ, soon drying up and leaving deep malignant ulcers. Pale, livid, blackish, depressed pustules filled with blood or bloody serum collapsing on bursting and changing to broad, deep ulcers.

Thuja.—Suppurating pustules, especially on lower extremities; worse from touch; relieved by gentle rubbing.

Furuncle.

A furuncle, or common boil, needs little in the way of description, the features being so familiar to all. Pathologically considered, it may be described as an acute and painful localized inflammation, differing, however, from a simple abscess by the fact that in the furuncle we find a central core of necrosed cutaneous and connective tissue, around which the inflammation is developed. Modern investigation leads us to the supposition that a micro-organism, having gained an entrance into one of the follicular openings, sets up changes which result in the death of the tissue in the immediate vicinity. This necrosed tissue acts as a foreign body and excites inflammation, as would a thorn, and after a few days the hard, painful, red tubercle exhibits a drop of pus at its summit, which gradually increases until the entire lesion softens, and finally breaks, with exit of pus, together with the core referred to.

The pus which is discharged from a furuncle appears to be capable of exciting new lesions of a similar nature, and crops of boils may follow each other in an extremely persistent and disagreeable manner.

Abortive Treatment.—If a furuncle comes under the treatment at the beginning, there is little doubt but that

it can be aborted; and one way to do this is to insert the sharp point of a Paquelin cautery, or a lance-shaped galvano-cautery. If neither be at hand, a pointed stick of nitrate of silver should be thoroughly bored in. This is painful at the moment, but it saves pain later on, and may be the means of preventing the formation of new boils. Another method recommended is to scrape the skin over the threatened seat of invasion with a scalpel until a drop or two of blood exudes on pressure. Another:

R. Hydrargyr. oxid., 0.10; lanolin, 10.0. S. To be well rubbed in three or four times daily. This will frequently be successful in aborting a boil.

Sen recommends the following abortive treatment for furuncles: 1. Carbolic acid in hypodermic injections. 2. The acid must be used early before suppuration appears, in which case the furuncle will be aborted without any connective tissue necrosis. 3. In advanced cases the adoption of the same treatment will prevent serious scarring. 4. A three per cent. solution is of more value than a weaker one. 5. Patients can follow their usual occupations during the progress of the treatment.

Furuncles should never be opened with a knife until they are "ripe"—that is, until the accumulation of pus has been sufficient to loosen the central core. When opened, however, the pus should be evacuated as thoroughly as possible, and the central core removed. The parts should then be thoroughly cleansed with mercurial solution, and an antiseptic dressing applied. The sulphide of calcium given internally, in doses of one quarter of a grain, hastens the maturation of the lesions.

When a boil is tense and hard, the best local treatment consists in applying hot, limited flax seed meal, or pulverized slippery elm, or tomato poultices. Poultices

should not be continued after the boil opens, as if too long used they rather encourage the formation of new boils. Gelsemium or lappa cerate is a good after-dressing.

The appropriate internal remedy will usually be one of the following:

Absinthium.—Eruption of furuncles over the whole body.

Aethusa.—Painful boil on the small of the back; hepatic derangement; intolerance of milk; in children during dentition.

Ammon. carb.—Boils on the cheeks and around the ears; in scrofulous children and in old people.

Antimon. crud.—Boils on the perineum; burning pain for some distance around; gastric derangement.

Arctium lappa.—When crops of boils persistently occur; hordeolum and ulcerated eyelids.

Arnica.—Many small boils on the face; eructations bitter and like rotten eggs; general lassitude.

Apis.—Boils on the pubis; burning, stinging pains; great sensitiveness to touch and pressure.

Bellad.—In early stages, if boil is inflamed and painful; red, hot, shining swelling; boils on the shoulders every spring; after measles.

Bellis per.—Boils beginning as slight pimples, and increasing to large dark colored swellings, with aching pain. Mostly on the neck and lower jaw.

Berberis vulg.—Hastens suppuration in boils, and prevents their recurrence.

Bromide of potassium causes an eruption of *small boils*, in successive crops, chiefly over the face and trunk, with troublesome itching.

Bromine.—Boils on the arms and face. In light-haired, blue-eyed persons.

Cadmium sulph.—Boils on the nose and buttocks.

Calcarea carb.—Boils on the forearms and hands, with lancinating pains; cramps in the arms; glandular swellings. In scrofulous persons.

Calcarea mur.—As a preventative.

Carbo an.—Boils at the anus; burning, tearing pain. In scrofulous subjects.

Cina.—Boils on the head and face in children; child is very fretful; bores in the nose with the fingers; burning heat of the face with a glowing redness of the cheeks.

Cistus.—Boils beginning with a blister.

Gelsemium.—Large boils on the face and neck; great muscular prostration; sleeplessness from nervous irritation; dizziness and blurred vision; heat of face and head.

Hepar.—When boils mature slowly; violent throbbing gathering pain; stinging soreness; after injuries. *Hepar low* to promote suppuration, and *high* to prevent suppuration.

Kali iod.—Papular eruption, or other eruptions with strumous or syphilitic taint.

Kalmia lat.—Red inflamed spots like incipient boils.

Lappa maj.—Boils on the face, eyelids and all over.

Ledum.—Boils on the forehead, itching, pricking tearing pains worse in the evening before midnight. After mosquito stings. In drunkards.

Lycopod.—Boils on the nates; periodical boils; aggravated by warm, wet poultices; after excessive wine drinking.

Manganum.—Small boils; every injury tends to suppurate.

Magnesia mur.—Boils on the nose which suppurate in one day; boils on the false ribs; menstrual derangements; diarrhoea in children.

Merc. sol.—Boils on the ankles; coldness of the hands and feet; foetid ulcers on the legs, with gnawing itching;

shooting tensive pains, worse at night; especially when complicated with bilious or mucous diarrhœa.

Natrum carb.—Boils behind the ears; ulcers on the limbs; burning in the feet when walking; sour eruptions.

Nitric acid.—Numerous large boils on the scapulæ, nape of the neck, nates, thighs and legs; tensive pains worse in the evening and at night; aggravated by drinking milk.

Nitrum.—Boils on the thumb.

Nux juglans.—Boils on the right arm; indurated boils; blood boils; violent itching and burning.

Nux vom.—Boils on the knees; gastric derangement; constipation.

Phos. acid.—Boils in the axillæ, and on the nates; burning, stinging pain; skin feels sore all over. In young people who grow rapidly.

Phytolacca.—Boils on the back.

Rhus rad.—Boils on the face which do not mature; blind boils.

Silicea.—Boils on the posterior portion of the thighs, and on the calves; disposition to boils; constipation.

Stramon.—Boils on the feet; coldness of the limbs in children.

Sulphur.—Boils in the ear; stinging itching with smarting after scratching; after suppressed menstruation; disposition to boils.

Zincum ox.—Boils on the abdomen, aggravated by use of wine; worse before and during menstruation.

Hordeolum, or Stye,

Is a small boil seated at the edge of the eyelids and involving a Meibomian gland. It is not an active kind of boil, but progresses sluggishly, the pustule centre being small. It is painful, and some time lapses before all

traces of its existence go. There may be one, two, or more on one or both eyelids. Some persons are subject to repeated outbreaks of this furuncular inflammation. We find it most frequently in youthful individuals of rather delicate health with a tendency to acne, or in persons addicted to free living or dissipation. If by frequent relapses it induces inflammatory changes in the Meibomian glands, and is followed by fatty or chalky degeneration of their contents, it is called *Chalazion*.

Indications for the internal remedies are:

Graphites.—Frequent recurrence of styes, ulcerations of the margins of the lids; biting lachrymation.

Lycopod.—Styes on lids near internal canthus.

Pulsatilla.—More in affections of *lower lids*, conjunctiva injected, agglutination of lids in the morning; much swelling of lids; burning, drawing pain, worse evenings, in warm room, and in a cold draft, better in fresh air; catarrhal states tending to suppuration.

Staphisagria.—Affection of both lids, especially the *upper* ones; consequences of *nervous exhaustion*, the affection does not spread to the surrounding tissues; shooting, lancinating pains or tearing, mostly in paroxysms, worse during night; new ones form continually and leave small hard nodules at the tarsal edge.

Anthrax, or Carbuncle,

Is a multiple furuncle. It arises as a hot, hard swelling, not so conical as that of the boil—more indurated, however, the cellular tissue around being much more extensively indurated; its color is dusky, the sensation burning, dull, throbbing; the carbuncle varies in size, the swelling becomes “brawny,” from the meshes of the cellular tissue becoming filled with a plastic lymph. The next step is the formation of a *quasi*-abscess; the central

part of the swelling softens, and feels boggy; the skin becomes thin over the surface, and at several points openings occur, through which slowly issues more or less sanious pus; and the little holes are seen to be plugged up by small white cores, which presently loosen and come away; the apertures are red and papillated, the edges indurated and everted, particularly when several openings coalesce, so as to form one or more large openings. Gangrene may set in. The healing process is often indolent, the parts remaining undermined, brawny, dusky, shreddy, and also sloughy. Carbuncles are generally solitary. The patient, if the attack be severe, gets into a very depressed state. The posterior aspect of elderly people is the selective seat of carbuncle.

In carbuncles there are similar changes to those in boils, but a much severer degree of disease. Here a group of sebaceous glands is involved, and in consequence of the more cachectic state of the nutrition the reparative attempt is less perfect, the inflammation is of a lower type, and the cellular tissue sloughs and dies to a much greater extent. The nutrition is not only unequal to prevent the local disorder, but also incapable of putting repair in proper operation; and there is one disposition in carbuncular subjects that perhaps has a peculiar influence in disposing to sloughing and gangrene of the cellular tissue; this is the tendency to, or an actual, diabetic habit. Sugar occurs in the pus of the carbuncle, and it is a curious fact that when anthrax develops the sugar is diminished or disappears from the urine.

In summing up the conditions under which boils occur, it will not be difficult to classify the main ones as follows: 1. during seasonal changes in spring and summer; 2. from eating diseased meat (frozen); 3. when any special alteration is made in the ordinary habits and economy of

the body, as in the training of prize-fighters; 4. from the influence of cadaveric poisons; 5. from sudden change of diet; 6. after fatigue of long duration; 7. during convalescence from debilitating diseases; 8. as a consequence of the action of septic poisons, as in fevers, etc.; 9. in albuminuria; 10. in the diabetic habit; 11. during adolescence, and in the first stage of manhood. In most of these cases there are "debility" and an overloaded state of system—for example, the circulation of urea, of sugar, of septic poison, or of effete matter which is plentiful during convalescence; and it only needs the action of some local irritant to determine the development of furunculi in the parts to which that irritant is applied.

Diagnosis of Boils and Carbuncles.—No error can possibly be made in respect to these two diseases; in the former the hard, deeply-seated induration, the pain, the central suppuration, and the "core," are distinctive. The manifold openings, the boggy feel, the sloughing, the grumous discharge, and the implication of the cellular tissue in carbuncle are very peculiar. Furunculi are sometimes epidemic.

Treatment.—I would add one word of caution in regard to the use of poultices: The poultices should be confined as much as possible to the exact seat of local inflammation. Nothing is more common than the springing up of fresh around old boils from the neglect of this precaution. The same local measures as recommended in furuncles are useful here. In addition consider the following:

The early application of ice and salt bags to the swelling is said to lessen the extent of the disease. If the sloughing is extensive charcoal and yeast poultices may be used. The sloughs should be picked out as fast as they

loosen, and the ulcer washed out once or twice a day with a weak solution of carbolic acid, or peroxide of hydrogen.

Dr. Owen, of London, treats large carbuncles with extensive sloughs by removing the sloughs, under an anæsthetic, scraping the sores and the diseased undermined skin with Volkmann's spoon and trimming off the ragged edges. The wounds are then washed with a 1-1000 sublimate solution, dusted with iodoform, and covered with moist perchloride gauze and blue wool. Do not use the knife to open a carbuncle.

The indications for internal remedies are as follows:

Aconite.—As an occasional remedy, when there is much inflammation with high fever.

Anthracinum.—When the burning pain is violent and not relieved by *Arsenicum*; cerebral or typhoid symptoms; evidences of blood poisoning; sloughing, abundant discharge of ichorous, terribly smelling pus.

Apis.—Continued extension of the erysipelatoid inflammation with stinging burning.

Arctium lappa.—Has great reputation; used both internally and locally.

Arsen. alb.—Large, painful and malignant carbuncles; great prostration; great restlessness; great thirst, drinking but little at a time; all the symptoms are worse in the night, and better from external warm applications.

Bellad.—Bright redness, with throbbing pain; when cerebral complications arise; erysipelatous inflammation around the carbuncle; drowsiness with inability to go to sleep.

Bufo, at the commencement very efficient.

Carbo veg.—Dark blackish appearance of the sore; fetid odor of the discharge; hippocratic face; blood poisoning.

Cinchona.—When the asthenic character of the disease is well marked; debility from excessive suppuration.

Hyoscyamus.—When there is great restlessness, caused by excessive nervous excitement; itching around the swelling; in nervous and hysterical individuals.

Lachesis.—Bluish purplish looking carbuncles, with evidences of blood poisoning; nightly burning, obliging one to rise and wash parts in cold water; inability to bear any bandage around the neck; cerebral symptoms.

Muriatic acid.—Carbuncles in scorbutic individuals, with ulcers on the gums; frequent desire to urinate with profuse emission of clear urine.

Nitric acid.—When there is a predisposition to anthrax.

Phytolacca.—Tendency to carbuncles, especially on the back and behind the ears.

Rhus tox.—Great restlessness; feels somewhat relieved of the violent pain as long as he is in motion; burning itching around the carbuncle, with vertigo; bloody, or serous, frothy, diarrhœa; typhoid symptoms.

Secale corn.—Carbuncles on the arms; aggravated by warm applications; gangrenous tendency.

Silicea.—During the process of ulceration, to promote healthy granulation.

Pustula Maligna, Malignant Pustules,

Also called *Carbunculus contagiosus*, is characterized by the appearance of an angry-looking pustule, associated with gangrenous destruction of the surrounding parts which owes its origin either to a direct inoculation of the poison from an animal affected with the disease called *Anthrax*, or Charbon, or to a transmission by flies of the poison, or to inoculation of the poison from man to man, or to the eating of the flesh of diseased animals. It is therefore most frequently found among persons who have to do with diseased animals, or who work in manufacturing establishments, where the products of such animals

(hides, horsehair, wool) are prepared for different uses. The infection takes place principally on the uncovered parts of the body which are exposed to the entrance of the poison. The eating of diseased flesh first causes general malaise and intestinal troubles, after which, in about eight or ten days, anthrax carbuncles appear, by preference on the arm, forearm and head.

After an incubation of from a few hours to several days, there is at first felt on the spot where the poison took hold a slight burning and itching, as if from the bite of an insect, and one can see a little red speck with a black point in its centre. This soon becomes changed into an itching papule, capped with a small, generally reddish or bluish vesicle, which gradually enlarges. After bursting it discloses a dark red base, which becomes covered with a crust, while often, though not always, secondary vesicles spring up around it, which contain a yellowish, reddish or blackish fluid. At the same time the surrounding parts swell œdematously over a considerable area, the cellular tissue underneath also becomes infiltrated, and in many cases discolored lines mark the course of the veins, or red stripes the course of the lymphatic vessels in the œdematous region; the corresponding lymphatic glands also swell. The general symptoms correspond with the severity of the local affection; there is fever, great weakness, delirium, excitement, confusion; sweating, diarrhœa and pain in the extremities; in fatal cases collapse; in favorable cases after the dead masses have been removed by sloughing off, the wound gradually heals by healthy granulation.

The indications for internal remedies are few:

Lachesis.—Bluish color of the pustule and red streaks along the lymphatic vessels.

Anthracinum.—Blood poisoning.

Malandrinum.—Blackish diarrhoea; pain in back and limbs; pustule similar to a badly-looking vaccine pustule. Compare the remedies given under Carbuncle.

CHAPTER XI.

SQUAMOUS INFLAMMATION.

General Remarks.

There are two important diseases of the skin with which we shall deal in this chapter—namely, pityriasis and psoriasis. In the former malady, in its typical form, the surface of the body is deeply reddened (hyperæmic), and covered by large and freely imbricated scales or flakes; hence the term applied to it—*pityriasis rubra*. In the disease there is no real inflammation in the form of new products. Hebra allies it to eczema, and upon the ground that “we occasionally find moist excoriated patches on other portions of the skin, especially in the flexures of the joints.” But this is infinitely rare; from beginning to end, there need be nothing but hyperæmia and scaliness present in the disease.

There is not necessarily any change in the corium tissue or the connective tissue, though the hyperæmia, if persistent, may be followed by hyperplasia and thickening of these parts, but only as accidental epiphenomena.

In psoriasis a somewhat different state of things obtains; there is hyperæmia of the papillary layer of the skin, with hyperplasia of the epithelial elements, but I believe the latter to be the more important of the two; and in this respect psoriasis contrasts with pityriasis rubra—the former being essentially a disease of cell tissue, the latter rather an hyperæmia, primarily.

Pityriasis Rubra.

Under this title two distinct types of disease have been described—the one by Devergie and the other by Hebra. They both possess certain marked features which would entitle them to the designations they have received; but, as there are also marked differences in their course, and prognosis, they must and should receive separate consideration.

Pityriasis Rubra (Devergie).

This affection is chiefly met with in persons between the ages of forty and fifty, and commences by the appearance of well-marked redness, with a sharply limited margin on the anterior aspect of the trunk and limbs. As it advances new surfaces are invaded, the skin slightly thickens, and the increase may be so rapid that the entire skin may become involved in from two to four weeks. Accompanying this diffuse redness we find free desquamation or exfoliation of medium-sized epidermic scales, with more or less watery exudation, resembling sweat rather than the lymphy and plastic exudation of eczema. There is also an intense burning heat of the surface, so that the patient suffers from the warmth of his clothing and of the bed coverings at night.

The acute symptoms mentioned are tenacious, and the affection may persist in this condition for months, but in perhaps the majority of cases they gradually subside, and recovery takes place.

On the other hand, the acute phase of the disease may be followed by one that is subacute, but more persistent, and continue to harass the patient for years, gradually breaking down his health and terminating fatally,

through the supervention of chronic diarrhoea or the development of pemphigus.

The prognosis is in the main favorable, except when it occurs in aged or debilitated subjects, or assumes the distinctly chronic form.

Pityriasis Rubra (Hebra).

Under this name Hebra has described a disease that is wholly different from the foregoing, and the principal characters of which are as follows:

The skin presents a persistent deep-red coloration, distributed over the entire surface, but without papules, vesicles, or any exudation. Scales are found in small numbers, but do not become a prominent feature of the affection.

The local subjective symptoms are insignificant.

The progress of the disease is remarkably slow, and in its early periods the general health is not notably affected; but little by little there is a gradual weakening of the vital forces, and fatal marasmus marks the termination of the patient's sufferings.

It will be seen from the foregoing that the affections described under the same name by the eminent French and German authors differ from each other in every important respect, and are, in fact, quite distinct diseases.

Dr. Piffard has met with a number of cases of Devergie's disease, but only a single undoubted example of the malady described by Hebra.

If, as asserted by Hebra, pityriasis rubra is always and unnecessarily fatal, treatment other than palliative is out of the question.

In Devergie's affection, however, every effort should be made to cut short its progress, and benefit may be expected from baths, emollients, and therapeutics.

Soothing local applications, such as bran baths or a decoction of walnut leaves followed by oily inunctions, and later by oil of white birch, are important aids. Lotions with corrosive sublimate 1-1000, or with hydrate of chloral 1-50 or 1-100, constitute an excellent application in pityriasis capitis. Sulphurated pomades have been advised; flowers of sulphur 1-30 or 1-60. For pityriasis of the face a pomade of calomel 1-100 is often efficient.

Arsenicum album is the principal internal remedy used by both schools. It produces pityriasis by its physiological action; its well known characteristics indicate its use; feverishness, with restlessness and thirst, for small quantities, etc.

Natrum arsenicum.—This drug corresponds very closely to the leading peculiarities of this disease, and I have prescribed it successfully in several cases. Its skin symptoms read: "Squamous eruption, scales thin, white, and when removed leave the skin slightly reddened. If scales remain they cause itching, worse when warm from exercise."

Arsen. iod. and *Kali ars.* are preparations that may be occasionally useful. I have had no trustworthy experience with either.

Other remedies may be indicated as follows:

Antim. crud.—Brownish-red spots, like small hepatic spots, here and there.

Cantharis.—Itching, followed by burning, when scratching; tendency to formation of blisters; most suitable when the disease appears in children.

Cocculus.—Red, irregularly shaped spots on the skin, over the whole chest, and on the sides of the neck, behind the ears, *without heat or itching*, intolerance of both cold and warm air.

Conium.—Frequently recurring red, somewhat itching, spots on the body.

Graphites.—Pityriasis capitis, dryness of the skin, with cracking; localization of the eruption; tendency to cold from draughts of air; pains from changes of the weather; abundant desquamation from the hairy scalp.

Kreasotum.—Uneasiness during rest, with irritation throughout the body; child cannot sleep unless carried or fondled; scaly ulceration on face, elbows, wrists and fingers.

Lachesis.—Small reddish spots on face, neck and chest, which increase in numbers, become scurfy, and then disappear.

Ledum.—Aching, bruised feeling in the whole body; warm sweat of the hands and feet; bluish spots on the body like petechiæ; eruption itching, with anxiety; coldness in affected parts.

Mezereum.—Chronic pityriasis capitis, loss of hair and great itching, brownish miliary rash on the chest, arms and thighs; phlegmatic temperament, with light hair.

Phosphorus.—Brown, bluish-red, or yellow blotches on abdomen and chest.

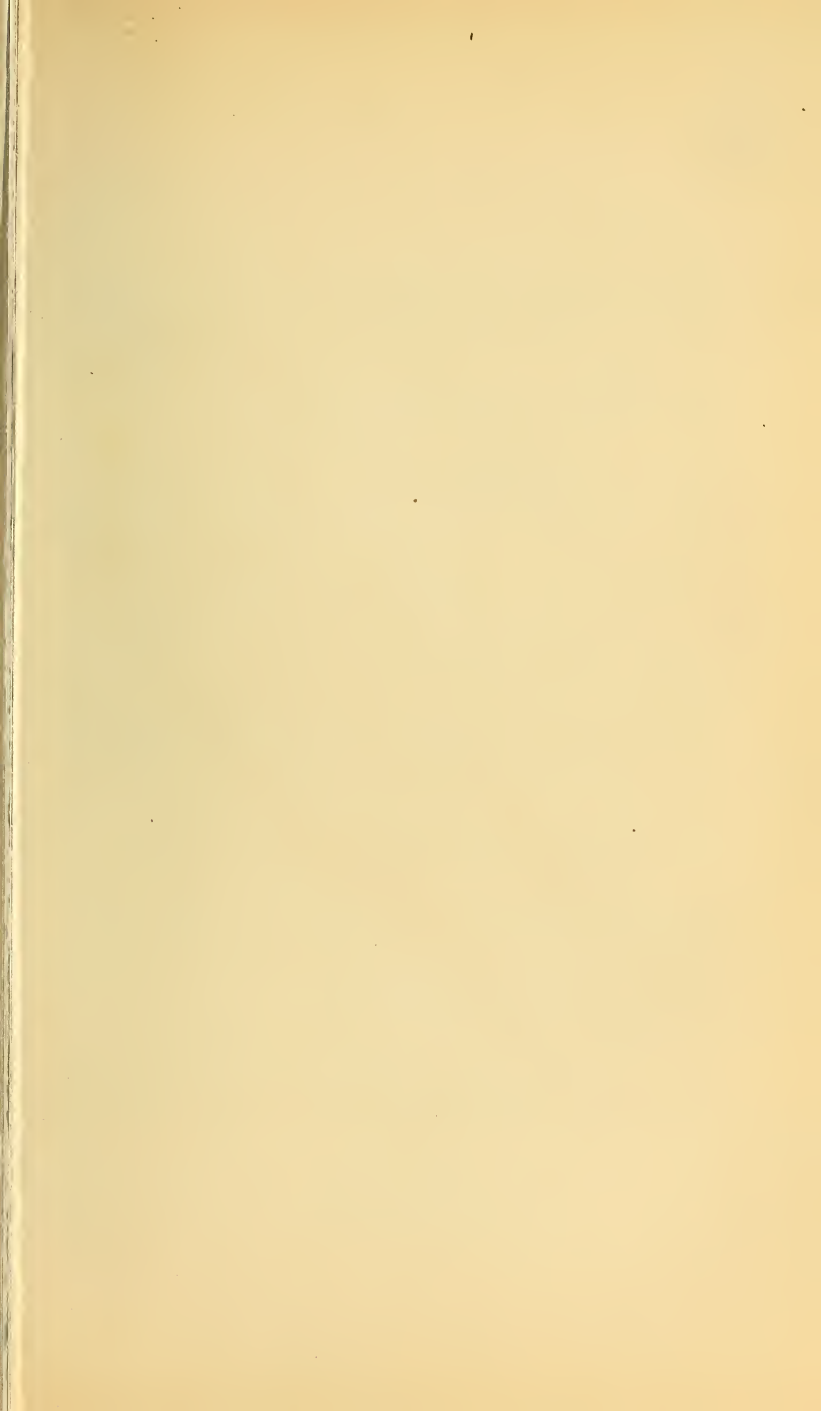
Sepia.—Brown-red hepatic spots on the skin.

Sulphur is advised by the two schools. Its pathogenesis contains the formation of furfur.

Tartar emet.—Eruption dependent upon gastric derangement, nausea and vomiting, with thick white coating on tongue.

Pityriasis Pilaris.

Devergie, who was the first to describe this rare dermatosis, states that in its most benign form it consists of a more or less localized eruption on the external aspects of the members, and especially the forearms and legs. The essential seat of the eruption is at the pilous orifices of the general surface, but not on the scalp. The only lesion is a minute papule, with a small adhering scale.





PSORIASIS.

In more severe cases it may become generalized, with slight thickening of the skin about the follicle, forming a small, red pyramidal papule decked with a white scale. The skin between the papules is apparently unchanged.

There is little or no pruritus, and it apparently causes but trifling inconvenience to the patient, except as it progresses from bad to worse.

It is exceedingly obstinate, and palliative and emollient treatment is our only resource.

When associated, as it may be, with pityriasis rubra, it presents a striking likeness to lichen, rubra and may possibly be in reality the same affection.

There is considerable discussion as to whether pityriasis is not a parasitic affection. Some observers claim to have discovered a special parasite in this affection, consisting of very minute spores, averaging a thousandth of a millimetre in diameter. The extreme smallness of the spores and their irregularity in size have induced M. Vidal to name the parasite *Microsporion anomæon* or *dispar*.

This is a point that has not been fully settled as yet, and I prefer to class the disease among the squamous inflammations until further light has been thrown upon the subject.

Sepia and *Natr. ars.* are the principal internal remedies for pityriasis pilaris.

Psoriasis.

Psoriasis is a constitutional disease, characterized by cutaneous lesions of the squamous type.

This affection may appear in the early years of childhood, or at almost any later period up to and including so-called middle life. It rarely appears at either of the extremes—that is, during infancy or old age.

Its first manifestations usually take the form of small

red papules, soon decked with a white scale. These may be few and scattered, or many and closely aggregated. The scaly papules increase at their periphery, becoming flattened patches from the size of a pea to that of a coin or even larger. When the progress of the disease continues, neighboring patches encroach on each other, and in time coalesce, giving rise to irregular gyrate forms. Coincident with the peripheral extension there is an increase in the infiltration or thickening of the skin, and the scales become large, imbricated, and more or less adherent. On forcible removal of the scales, a red infiltrated patch is brought to light, on the surface of which minute droplets of blood may be seen. After the disease has attained its maximum development, which may include the greater portion of the surface, it may remain stationary for an indefinite period, or may undergo a gradual involution and disappear. This is the course followed in not a few cases of mild type. A single attack of this sort, however, is exceedingly rare. In almost every instance the eruption reappears after a shorter or longer interval. In not a few cases of mild type there will be an appearance of the lesions at the beginning of the cold and a disappearance of them at the beginning of the warm seasons.

In cases even where the eruption is caused to disappear by treatment there is the same tendency to return, and this relapsing feature of the disease is one of its most important and most annoying characteristics. To such an extent is this true, that even with the most judicious treatment there is no certainty of a radical cure. As a rule, if a person once has psoriasis, he may expect to have it always—that is, with certain intervals of freedom. The reverse of this is rare, as it is extremely exceptional for a patient to recover permanently, or to enjoy immunity for a term of years.

The subjective symptoms are usually unimportant, amounting at most to a moderate degree of pruritus, though in many cases this is not sufficient to be complained of by the patient.

The eruption frequently exhibits a more or less symmetrical disposition, and prefers the extensor surface, with a special predilection for the elbows and knees. The upper half of the body usually presents more lesions than the lower. It very rarely affects the palms or soles. When situated on the genitals it may excite an analogous condition of the mucous membrane.

The features of the disease are the more characteristic if account be taken of its negative signs; for in it there is an entire absence of any discharge, vesiculation, or pustulation throughout the whole course of the disease. The characteristics above described constitute a primary condition.

The eruption affects (by preference) certain parts of the skin whose epithelium is thick, especially the elbows and knees. It may be partial or general. At the outset the disease may be attended by more or less pruritus. The increase of the patches is by centrifugal growth, and there is oftentimes a slightly red margin; the scales are shed, to be again replaced by others; in chronic cases the derma itself becomes very distinctly infiltrated and thickened. The general health is often apparently good. The disease is non-contagious, runs a chronic course, and is very prone to recurrence.

It is customary to make certain local varieties; they are:

Psoriasis capitis.—The head is one of the commonest seats of the disease, next to the elbows and the knees; the whole scalp may be affected, or there may be only one or two small points of eruption; when extensive, the

disease travels on to the forehead, forming a kind of fringe along it at the upper part. There is co-existent disease elsewhere. The hair on the scalp thins out frequently when psoriasis attacks it.

Psoriasis faciei.—In this local variety of psoriasis, the patches are often circular; they are less hyperæmic, less thick, and less scaly than when the disease attacks other parts of the body, and they present consequently much similarity to tinea circinata, except that typical patches of the disease are seen in other parts of the body.

Psoriasis palmaris and *psoriasis plantaris* are important local varieties. These local varieties are *infinitely rare*. Of course, instances of so-called psoriasis palmaris and plantaris are common enough, but they are practically always syphilitic. Non-syphilitic psoriasis may occur, though rarely, in connection with general psoriasis. But when such a condition exists as the sole disease, it is syphilitic and nothing else, and the concomitance of sore tongue and other evidences of constitutional syphilis at once make the diagnosis certain. The skin in the affected parts is generally thick, and dry, harsh, discolored; the scaliness is not very marked, but the superficial layers peel off from time to time. Presently the surface cracks and fissures, and healing is very tardy; occasionally the surface bleeds. The muscular movements of the hand may be painful.

Psoriasis unguinum is mostly a complication of the inveterate form of psoriasis, but it may exist alone. The nails (and several are usually affected) lose their polish, and soon become opaque, thickened, irregular, and brittle; they are then fissured and discolored in lines (from dirt), their matrix becoming scaly.

Psoriasis also affects the scrotum and prepuce occasionally; the parts are swollen, red, hard, tender, scaly, fis-

sured more or less, and give exit to a thin secretion, which adds to the scaliness; there are pain and pruritus; and the local mischief may be the sole, or part only, of general disease.

Psoriatic syphilides.—Nozo asserts that psoriatic syphilides always indicate the presence of a grave variety of syphilis and that they occur most commonly in cachectic subjects. In some cases they may appear as late manifestations of the disease; and their development is favored by old age, alcoholism, congenital or acquired dryness of the skin, and perhaps, also, by gout. Cases occur concerning which even the most expert diagnostician may be in doubt as to whether the eruption is the ordinary psoriasis or a specific eruption.

When psoriasis is in progress of cure, the scales lessen and the reddened elevated surface beneath comes more prominently into view; but this diminishes gradually till the eruption disappears, leaving oftentimes no trace of its former presence behind. It may leave, however, pigmentary stains, the result of the congestion. It is in the disappearance of patches of psoriasis that the centre rapidly clears, and the ringed form or *psoriasis circinata*, or the lepra of old authors is produced.

Etiology.—We possess no certain knowledge as to either the proximate or remote causes of the disease. It is not uncommon to find an extensive eruption in those who otherwise appear to enjoy the most robust health; while, on the other hand, it may appear only during periods of temporary debility, as in women during pregnancy and lactation. That the affection is constitutional and connected with similar conditions to those underlying eczema we have no doubt, and each year's experience more strongly confirms this opinion. Some have claimed that the eruption is purely local or due to the presence of

a parasite. Positive evidence of this is wanting. Others pretend that it is but a relic of syphilis handed down from a remote ancestor. This view also has little to support it.

Psoriasis is often hereditary. It attacks males more than females, and is most common between the ages of fifteen and thirty. Persons of sanguineous temperament are most liable to the disease perhaps, and it is seen in persons of all classes of society, and mostly in summer and winter.

Prognosis.—The disease is mostly difficult of cure and has a tendency to recur. The most obstinate cases are those of psoriasis mummularis of the back and buttocks, in which there is much elevation and thickening and deep redness; and psoriasis about the hands and feet.

Diagnosis.—In well-marked and typical cases there can not be the least difficulty in diagnosis, especially to any one who has already seen an example of the disease. Unfortunately, however, cases are not always typical; and we must learn to distinguish psoriasis from syphilis, eczema, and dermatitis exfoliativa. As we have already stated, eczema may closely resemble psoriasis. In like manner the latter disease may closely counterfeit the former in its outward appearance; and in this particular case the diagnosis will be by no means easy, nor arrived at at a glance, but only by careful consideration of the case in all its bearings. A squamous syphilide may closely resemble psoriasis; but here the history will aid us greatly if we bear in mind a few fundamental facts. In psoriatic cases of long standing we will have the history of repeated outbreaks of eruption, but they will all have presented the same general type—that is to say, a *repetition* of the same kind of eruption—a squamous

syphilide will probably have been preceded by other eruptive attacks; but these have been in all probability a different sort of eruption—papular, pustular, or what not. Syphilis rarely repeats itself in its manifestations. If in addition we learn from the patient the prior existence of the primary lesion, or if we find other co-existing lesions, as alopecia, mucous patches, throat trouble, etc., we should not long remain in doubt as to the nature of the eruption about which we have been consulted. The existence of squamous lesions on the palms and soles in connection with squamous patches on the general surface is evidence positive of syphilis. In psoriasis the epidermic proliferation or desquamation is much greater than in syphilis. We have known a case of exfoliative dermatitis to be mistaken for psoriasis; but if we recollect that the characteristic feature of the former disease is the exfoliation of quite extensive laminæ, of not very greatly thickened epidermis, sometimes several square inches in extent, there is no excuse for mistaking the one disease for the other.

Psoriasis and syphilis may of course coexist. There will be but little difficulty in differentiating the respective lesions.

Psoriasis may coexist with *eczema*, both presenting typical lesions, or we may have lesions of mixed character, in which it would be hard to say which disease predominated. Certain diseases of other organs appear to bear a close relationship to psoriasis. This is notably true of arthritic affections and also of asthma. As a rule, these do not coexist with the psoriasis, but manifest themselves during the time that the skin is free from eruption, alternating as it were with the cutaneous lesion.

Treatment.—It is but a few years since the chief re-

liance of the old school in the treatment of psoriasis was the internal use of arsenic and the external use of tar. Slow and tedious was the cure. Now, however, they possess an agent which they claim exhibits a remarkable energy in the control of the eruption. We allude to chrysarobin. This is employed in various ways, but the one seemingly most satisfactory is a mixture of thirty grains of the drug with one ounce of traumaticin (*liquor gutta-percha*). This should be painted on the spots daily until a considerable degree of local irritation is produced. Sedative applications should then be applied for a few days, and the skin allowed to recover from the effects of the drug. A single course of this sort will cause most of the spots to disappear—that is, as regards scale formation and infiltration—and these spots will usually appear distinctly white and anæmic in comparison with the surrounding skin, which has been darkened by congestion produced by the chrysarobin. Unless the eruption was limited both as to size and extent of the lesions, we will find many patches in which complete recovery has not taken place. These will require additional applications. Chrysarobin possesses the inconvenience of staining the surrounding skin (temporarily) and permanently staining the clothing; and a number of substitutes—naphthol, resorcin, antarobin, hydroxylamin, etc.—have been proposed. Some of these are dangerous, while others are inefficient, and none of them are equal in efficacy to chrysarobin. This drug, however, should not be applied to the face or scalp, and we must instead use milder applications, such as tar or some of the essential oils, as the *oleum pini sylvestris*, *oleum eucalypti*, etc.

The following is an excellent aid :

℞. Chrysarobin,
Acid Salicylici, āā gr. x.
Unquent Resinol, ℥j.

Sig. Apply thoroughly at night and bathe thoroughly next morning, or,

R. Tar,
Alcohol,
Soft soap, āā ℥j. M.

Sig. Apply locally, with flannel or a coarse piece of cloth, and is firmly rubbed into the part night and morning according to the effect.

The following is a very good application for an ordinary case of psoriasis which is passing on to the chronic stage.

R. Nitrate of mercury ointment, ℥j to ℥jj.
Powdered oxide of zinc, ℥jj.
Solution of lead (liquor plumbi), ℥ss.
Carbolic acid, fl. drops, jj.
Olive oil, ℥j or ℥j ss.

M. Sig. Apply nightly.

Another excellent application is made as follows :

R. Red precipitate, finely powdered,
White precipitate, āā gr. vj.
Lard, ℥j.

Mix. Sig. Apply night and morning.

Dr. Stern recommends for psoriasis capitis : Precipit. alb., 10.0 ; Sapon. nigr., 40.0 ; Lanoline anhydr., 50.0.

M. Ft. ung., S. Rub in every evening a portion the size of a filbert.

After four days all the scales are gone, and the affected parts become smooth and take on a natural appearance. It is usually advisable to continue the application of the lanoline alone for a time longer.

Dr. Patterson reports a case of psoriasis of fifteen years' standing cured in one month by an ointment of vaseline, oxide of zinc and Sanitas oil. He fails to give the proportions.

The pomade of tar is classical in the treatment of

psoriasis. Axunge or oil, with one-tenth part of tar. The pomade of oil of cedar has been employed in the same proportion. The immediate action of these pomades is a notable amelioration of this affection. But they never effect a cure.

In obstinate cases, unless the skin is very irritable, the oil of white birch may be used in the form of an ointment, one drachm to the ounce of vaseline.

The diet in psoriasis should be a generous one, and in it meat ought always to play an important part. Cod liver oil is generally needed.

The indications for the internal remedies are as follows: It is better to commence the internal treatment with *Sulphur*. Afterwards one of the following remedies may be given :

Ammon. carb.—White pea-sized spots upon the cheek, which continually exfoliate; skin very sensitive to cold; aversion to being washed; nose-bleed when washing the face in the morning; in weak, nervous individuals.

Arsen. alb.—Eruption red or white and scaling; skin dry and scaly; great restlessness with weakness and prostration, worse about midnight; burning itching; oppression of breathing; aggravated by eating fruit, ice cream, etc.

Arsen. iod.—Dry scaly burning itching eruption on various parts; persistent itching on the back; in obstinate cases.

Berber. vulg.—The eruption appears with itching, lymphatic swellings on the articulations; must scratch very hard.

Calcareo carb.—Scurfy spots on the leg; burning and itching; skin cracks; profuse sweat from the slightest exertion; large abdomen; blue eyes, blonde hair, fair skin.

Clematis.—The eruption is chronic and long lasting, and becomes redder and more humid with the increasing, paler and dryer with the decreasing moon.

Fluoric acid.—Roughness on the forehead like a rough line with its convexity upwards. Reddish spots above the eyebrows; desquamation on the eyebrows; nails brittle, edges bent in.

Hydrocotyle—Circular spots with slightly raised scaly edges.

Iodine.—Rough, dry and dirty yellow color of the skin. Nervous irritation, and emaciation, with good appetite; psoriasis circinata.

Iris vers.—Irregular psoriatic patches on the knees and elbows, covered with shining scales; eruption becomes hard and dry; skin fissured and irritable; digestive derangement, with nausea, and debility; starting during sleep; psoriasis diffusa.

Manganum.—In inveterate cases.

Mercurius.—Psoriasis of the hands; psoriasis in spots all over the body; scaling off and exfoliation of the finger nails; the scalp is painful to the touch; easy perspiration without relief; recent cases.

Mezereum.—Scurf-like scales on the back, chest, scalp and thighs; roughness and scaling here and there; pruritus increased by scratching or when undressing.

Muriatic acid.—Psoriasis of the hands; great sensitiveness to damp weather.

Natrum ars.—Thin whitish scales, which when removed leave the skin slightly reddened.

Nitric acid.—Burning, itching or stabbing pains, worse at night, from change of weather, or during perspiration; strong smelling urine, like that of horses.

Petroleum.—Skin of the hands cracked and rough;

unhealthy skin; aversion to the open air; extreme sensitiveness to slight touch; falling off of the hair.

Phosphorus.—Psoriasis of the arms and hands, and on the knees and elbows; arms and hands become numb; brownish or bluish-red blotches, with furfuraceous dry scaling; coldness of the knees at night in bed; falling out of the hair in large bunches; dry cough, with soreness in the chest; tall, fair children, with tuberculous tendency.

Phytolacca.—Surface of the skin shrunken and of a leaden color; squamous eruption; rheumatic pains in the extremities.

Psorinum.—Eruption dry and scaling, with itching, weakness, and debility; after acute diseases; profuse colliquative sweats.

Selenium.—Dry, scaly eruption on the palms of the hands, with slight itching.

Sepia.—Psoriasis on the face; red roughness of the skin; falling off of the hair; during pregnancy and nursing; dark complexioned individuals.

Silicea.—Elevated scurfy spots near the coccyx; small white scales on the face and neck; white spots on the cheeks; sensation of numbness in the extremities; brittleness of the nails; in scrofulous, large-bellied children.

Tellurium.—Psoriasis annulata, eruption over the whole body.

Teucrium.—Psoriasis on the index finger of the right hand.

CHAPTER XII.

DIATHETIC DISEASES.

I shall adopt the plan as outlined by Dr. Fox, and include under the head of diathetic diseases the strumous, the syphilitic, and the leprous diseases of the skin. There are some objections to this classification, but they do not outweigh the advantages of the arrangement. In struma, syphilis, and leprosy the changes in the skin are but a small part of the whole disease, and only evidence of a disposition on the part of the tissues of the body, as a whole, to become changed and disordered.

Scrofuloderma.

This disease does not require to be dealt with very elaborately. "It is scrofula of the skin," and only a part of the general diathetic condition, which is evidenced by the ordinary signs of struma in greater or less degree of expression. As regards the skin, scrofula is generally characterized by the appearance at the outset of indolent, dull red, soft, tubercular formations, that rapidly suppurate, and are soon covered over with darkish scabs, from beneath which oozes an unhealthy pus. Ulceration to a greater or less degree takes place, with the formation of exuberant granulations at times, and the healing is accompanied by distinct scarring. The whole disease is of the most chronic character. One can scarcely mistake the strumous ulceration for any other disease; it may spread and cover a large

extent of surface, and in this case the ulcerated surface is half covered by darkish irregular crusts, whilst the ulcers discharge a thin disagreeable dark pus, and granulations are flabby and pallid, bleeding freely on being touched; the edges of the ulcers are livid, and various attempts at repair are made. The mucous surfaces of the nose or eye may be inflamed and slightly ulcerated and onychia may be present. There are old scars of former strumous disease, and the whole aspect of the patient is a sufficient tell-tale of the disease.

The old school advises the use of cod-liver oil, iodide of iron, the phosphates of lime and iron, and locally an astringent ointment of tannin; or acetate of lead; or mercurial plaster; or iodide of lead ointment to the indolent ulcerated surfaces. Residence at the seaside is also advisable.

These patients should be allowed an abundance of fresh air, plenty of outdoor exercise, and a generous diet. When the ulcers have formed, dress them with the iodide of starch paste.

The indications for the homœopathic remedies are:

Alnus rubra.—Enlargement of submaxillary glands, strumous enlargement of tonsils; obstinate impetigo and porrigo, chronic diarrhœa; scrofulous disease of hip-joint; disease of mucous membranes, which arise from or alternate with eruptions of the skin.

Arsen. iod..—Diseases of mucous membranes, characterized by a peculiar and persistently irritating corrosive character of the discharges; constant susceptibility to take cold; excoriated nostrils and lips; swollen and covered with scabs

Arsen. met..—Great emaciation, clay-colored face, blue margin around the eyes; great weakness of all the limbs; want of disposition to do anything, and constant inclina-

tion to rest; lax muscles; swelling of the cervical glands; distended abdomen; diarrhœa; scurfy eruptions and ulcers; ophthalmia; carcinoma.

Asafetida.—Glands hard, swollen, hot, and throbbing, with shooting jerking pains; soft enlargement of bones, with curvature; ulcers with high hard edges, sensitive to touch, easily bleeding, pus profuse, greenish, thin, offensive, even ichorous; psoriasis when suppuration threatens; osteitis and caries; scrofulous ozæna; hardness of hearing, with thin purulent discharge of offensive odor; scrofulous, bloated, clumsy children, with phlegmatic temperament.

Asclepias tub.—Strong tendency to tubercular development; sharp pains in different parts of the body, with muscular soreness, changing from one part to another; impaired strength, rather feeble digestion and assimilation; glandular enlargement about neck; vesicles; pimples and pustules all over the body.

Aurum met.—Scrofula, ruddy complexion, light haired, sanguine temperament; glands painfully swollen; ozæna, with caries of nasal bones; fetid otorrhœa from caries of mastoid process; caries of cheek bones; tearing, boring, burning stitches in zygoma; red and swollen tonsils; profound ulceration in throat.

Badiaga.—Dandruff or dry, tetter-like appearance of scalp, with slight itching; scrofulous ophthalmia, with hardening of the Meibomian glands; tonsils red and inflamed; indurated inguinal glands; glandular swellings on left side of face, throat, and neck, some hard, some suppurating; small hard lumps along tibia; flesh feels sore as if it had been beaten, and very sensitive to touch or friction of clothes.

Baryta carb.—Physical and mental debility; atrophy, great weakness; face red and abdomen bloated, glands

swollen, indurated; fatty or encysted tumors; coryza, nose, and upper lip swollen, scurfs under the nose; chronic induration of tonsils; sensation as of a plug in throat, worse swallowing solids; crawling in rectum, expulsion of ascarides; cannot retain the urine; chronic cough, with swollen glands and enlarged tonsils; worse after slightest cold, with soreness in chest when coughing; chronic torticollis; pimples, ringworms, humid sores.

Bellad.—Hard, swollen, and ulcerated glands; muscular debility, with difficulty of learning to walk; photophobia, inflammation of eyes and eyelids; cough, with mucous râles; otorrhœa; emaciation and atrophy; ulcers; inflammatory swelling of nose and lips; frequent epistaxis; frequent sore throat, with swelling; distended and hard abdomen; enuresis day and night; premature development of mind; blue eyes and blonde hair.

Berberis aquifol.—This remedy is highly recommended by several physicians. Dr. Mallery uses the following prescription:

℞. Fluid ext. berberis,
Syrup simplex, āā ℥iv.
M. S. Teaspoonful every four hours.

Bromium.—Swelling and induration of the glands; enlargement of thyroid, in children with light hair, blue eyes, and fair skin; pimples and pustules; boils on the arms and face; hard swelling of left parotid, edges of opening smooth, discharge watery and excoriating, swelling remaining hard and unyielding; tonsillitis; swallowing of fluids more difficult than of solids; hard uneven tumor in right mammæ, firmly adherent to its surroundings, with lancinating pains, worse at night; stiffness of neck.

Calcarea carb.—*Malassimilation; tardy development of*

bony tissue; large head with open fontanel; curvature of the back and vertebræ or other rickitic affections; herpes, tinea, crusta lactea; hard or suppurating glandular swellings; ulcers, exostosis, or caries; hard and enlarged abdomen, with swelling of mesenteric glands; emaciation and voracious appetite; thirst constant, even after drinking; profuse perspiration of head; thin and wrinkled face, with dim eyes; dry and flaccid skin; difficulty of learning to walk; difficult dentition; red swelling of nose; bronchocele; swelling of upper lip; frequent bleeding of nose; feet cold and damp; craves eggs.

Calcarea iod.—Tendency to alternate diarrhœa and constipation; no thirst; pustular eruption, sore and painful, with desire to rub and scratch it, though it makes it worse; abdomen enlarged, breath offensive; cold sticky perspiration, feet cold and damp; restless, fretful, and irritable; pus from abscesses thin and ichorous; granular inflammation of membrana tympani; scrofulous ophthalmia.

Calcarea phos.—Emaciation, dirty-white or brownish complexion; skull soft, thin, crepitating when pressed, especially in occiput; craves bacon, salt meat, and potatoes; swelling of the epiphyses, difficult teething, slow closing of the fontanel; curvature of spine to the left, lumbar vertebræ bent forward; abscesses near lumbar vertebræ; incipient mesenteric tabes, with much fetid diarrhœa. Tendency to tuberculosis.

Chimaphila.—Glandular enlargement, especially of lymphatics; enlargement of mesenteric glands; ulcers of an indolent and flabby character; tumors in mammæ.

Cina.—Child feels uneasy and distressed, does not want to be touched, is not pleased or satisfied with anything, leaves his head side-ways all the time, rubs nose constantly; pale sickly-looking face; hunger and

thirst soon after eating, with gnawing sensation in stomach; abdomen hard and distended; itching at anus; ulcers with scanty discharge; inability to retain urine.

Cistus Can..—Glands swollen, inflamed, indurated, or ulcerated; drawing tearing pains in all joints; itching all over the body, without eruption; herpetic eruption of various parts; chronic scrofulous ophthalmia, feeling as if something was passing around in the eye, with stitches; watery, bad-smelling pus discharged from ears; tetter on and around ears; swelling of parotids; eczema of nose; caries of lower jaw, with suppurating glands in neck; cool feeling in stomach and abdomen; cool eructations; chronic diarrhœa; swelling and suppuration of glands of throat; scrofulous ulcers on back; desire for acids and acid fruit, but they cause pain and diarrhœa.

Conium..—Swelling of glands, with tingling and stitches; marasmus with frequent sour belching, worse during night; erratic itching of all parts of body; humid, burning, corroding, crusty herpes; blackish ulcers, with bloody, fetid, ichorous discharges, especially after contusions; ophthalmia with photophobia; blenorrhœa bronchialis; asthma; carcinoma.

Corydalis form..—Scrofulous cutaneous diseases, accompanied by feeble digestion and poverty of blood; scrofulous syphilitic diseases.

Cornus circin..—Scrofulous ophthalmia, herpes of eyelids; ulcerations of tongue, gums, and mouth.

Graphites..—Swelling and induration of glands; eczema capitis of entire scalp, forming massive dirty crusts, which mat the hair together; eczema beginning as a moisture behind left ear, and spreading over cheeks and neck; thick, yellowish, fetid discharge from nose; dry scabs in nose, with sore, cracked, and ulcerated nostrils; painful nodules on lower jaw; chronic catarrhs of

stomach and bowels; glandular swelling in groins; fissures and rhagades; turbid urine; unpainful swollen glands on nape of neck.

Hecla lava.—Scrofulous ostitis or periostitis, resting on a syphilitic basis, and especially affecting the bones of face and of antrum highmori; difficult dentition; rachitis; hip disease; white swelling; induration and infiltration of cervical glands, studding the neck like a row of pearls; toothache from swelling about the jaws; abscesses of gums from decayed teeth.

Hepar.—Glands inflame, swell, and suppurate; hard burning nodosities; unhealthy skin; slight injuries suppurate; stinging burning of edges of ulcers, discharging bloody pus; humid eruption of fetid odor, feeling sore, itching violently; nodosities on head, relieved by covering the head warmly and from sweat; discharge of fetid pus from ears; boils on face, lips, and chin; cancerous ulcers; disposition to phlegmonous sore throat, catarrh, or bronchitis; atrophy.

Hydrastis.—Chronic catarrhs of mucous membranes wherever situated; cancerous cachexia; cancers hard, adherent; skin mottled; puckered, with lancinating cutting pains; atony of muscles.

Hypophosphite of Lime.—One of the best remedies we have for so-called *scrofulous* manifestations. It fully answers Hahnemann's indications for the use of *Calc. carb.* in scrofulous affections, especially when occurring in children, namely, the overgrowth, the large head and open fontanel, the distended abdomen, the tendency to swelling of lymphatic glands, the tendency to brain affections, to catarrhal discharges, abscesses, etc.

Iodum.—*Emaciation*, in spite of the necessity of eating every few hours; swelling and induration of glands, the whole of the lymphatic system being involved; swelling

of mesenteric glands; bronchocele; scrofulous women, with dwindling and falling away of the mammæ.

Kali bichr.—Scrofulous ulcers and skin diseases; discharges from mucous membranes tough, stringy, sticking to the parts; caries of the bones of the nose; strumous ophthalmia; pustular diseases of skin, secreting a watery fluid when broken or drying up into a yellow tough mass; fat, chubby children; fat, light-haired persons.

Kali hydroiod.—It distends all tissues by interstitial infiltration; enlarged glands; tophi; exostosis; swelling of bones; necrosis; all worse at night; bronchial and submaxillary glands swollen, ulcerating, atrophied; goitre; papules on face, back; small boils on face, head, neck, back, and chest, leaving scars; pustules on cornea, without photophobia, redness, or pain.

Lithium carb.—*Skin rough as a grater, harsh, dry;* dry itching eruption like ringworms; milk crust; whole body, bones, joints, muscles, sore as if beaten.

Lycopodium.—Swelling and suppuration of glands; herpes and ulcers; humid suppurating eruptions, full of deep rhagades, breeding lice, itching violently; intertrigo; raw places, readily bleeding; boils which do not mature, but remain blue; scalp covered with scabs; chronic enlargement of tonsils.

Lapis albus.—Scrofulous affections, abscesses, and sores; enlargement and induration of glands, especially cervical; glandular tumors, where physiologically no glands are usually found; goitre; cretinism.

Mercurius.—Glandular swellings, with or without suppuration; cachectic affections; exostosis, curvature, caries, and other affections of bones; eruptions and corrosive herpes with crusts; tinea capitis; crusts in the face; *suppuration, especially if too profuse;* ulceration of tonsils.

Mercurius biniod.—This is one of our best remedies. It is especially in the relief of those tardy engorgements and ulcerations which follow the discharge of the softened scrofulous matter. It may be given during the growth or swelling of the gland with the hope of dispersion, as we cannot always surely know whether the enlargement is attributable to the presence of scrofulous matter or to simple congestion and engorgement.

Natrum carb.—Swelling and induration of glands; emaciation, with pale face, dilated pupils, dark urine; skin dry, rough, and chapped; suppurating herpes, with yellow rings; goitre; swollen cervical glands; humid herpetic eruptions and ulcers on nose, lips, and around mouth; burning fissures on lower lips.

Oleum jec. ars.—Only indicated in patients of a slender and lean figure, thin, transparent skin, with a frequent pulse, great excitability of the nervous system, and high specific gravity of the urine—all signs of an accelerated metamorphosis.

Petroleum.—Swelling and induration of glands; unhealthy skin; small wounds ulcerate and spread; polypi; salt rheum on arms and hands, red, raw, burning, moist, or covered with thick crusts; herpes on knees and ankles.

Phytolacca.—Swollen tonsils; indurated glands; glands and bones inflamed and swollen.

Psorinum.—Pale, sickly, delicate children, whose body always has a filthy smell, even after a bath; deeply penetrating, ichorous ulcers; skin dirty, greasy-looking, with yellow blotches here and there, at times itching; scratching gives temporary relief; hair dry, lustreless, tangles easily; pustules and boils on head; scalp looks dirty and emits an offensive odor; wants to have the head covered

even in hot weather; purulent offensive otorrhœa; sub-maxillary and lingual glands swollen, sore to touch.

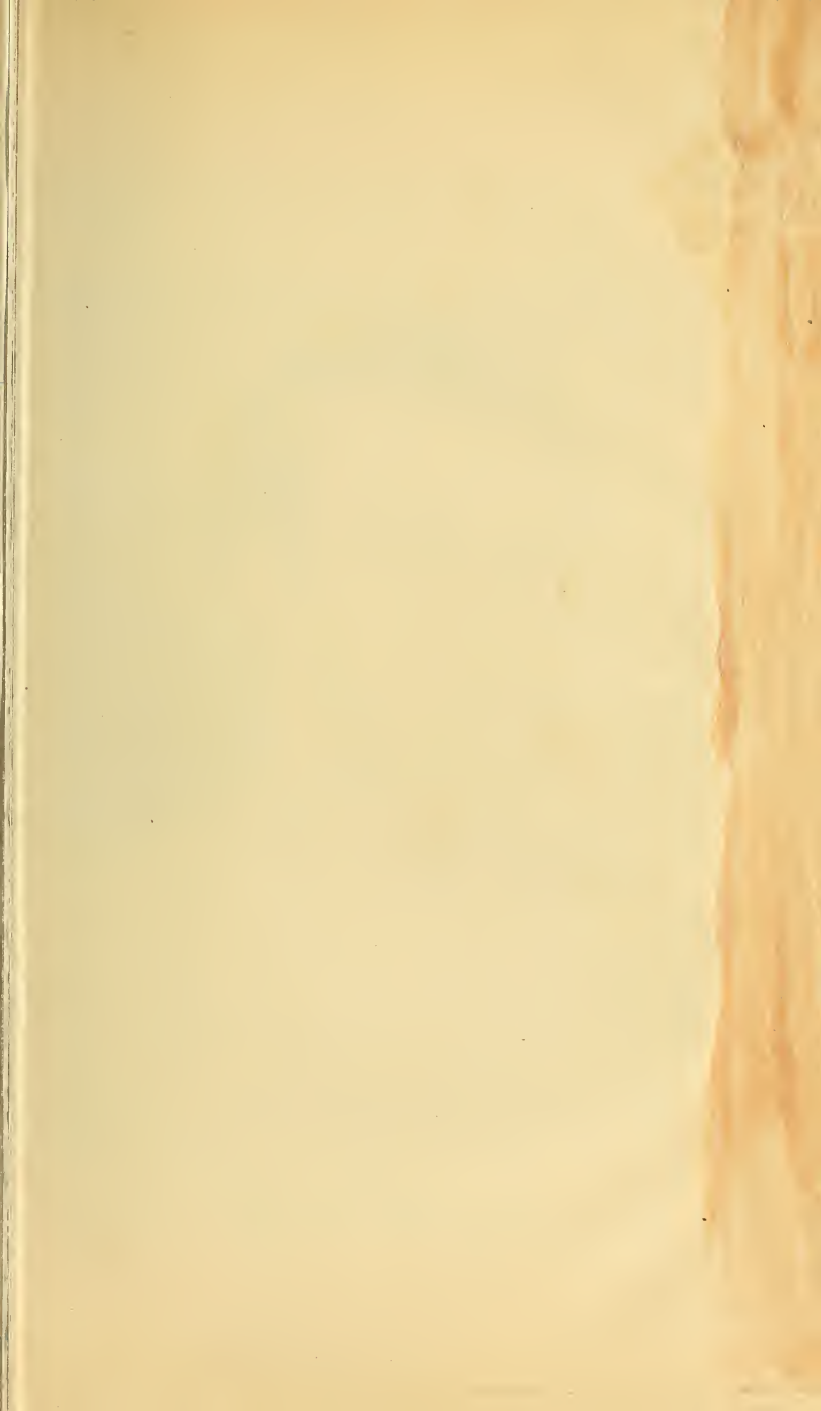
Rhus tox.—Swelling of glands; herpes in the face and other eruptions discharging pus or forming crusts; emaciation; hard and distended abdomen.

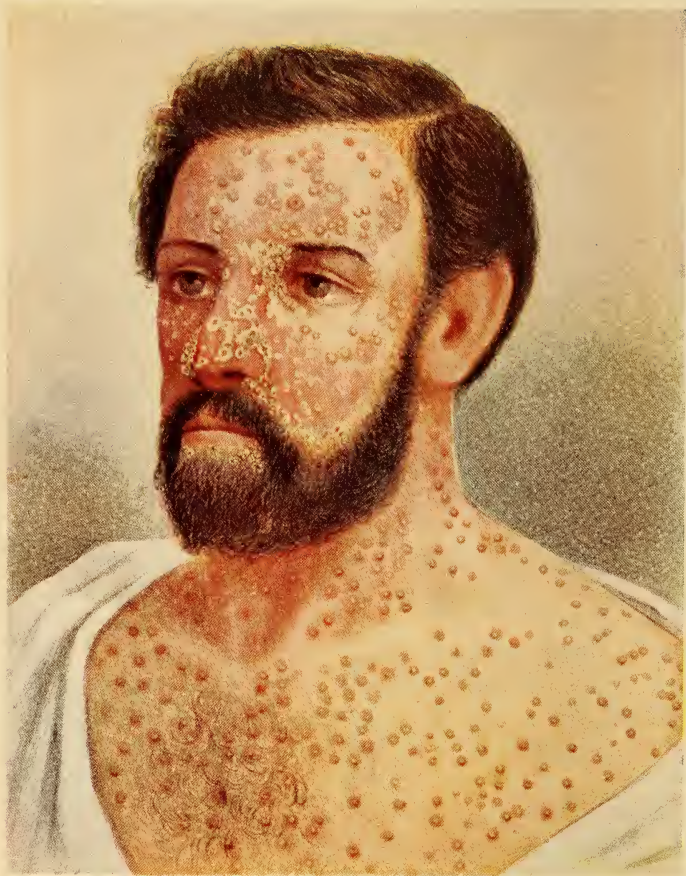
Sarsaparilla.—Great emaciation, skin shrivelled or lies in folds; herpetic circular ulcers, forming no crusts, red granulated bases, white borders; deep burning rhâgades; milk-crust; ophthalmia after checked tetter; *marasmus of children*; neck emaciated.

Silicea.—Swelling and suppuration of glands; exostosis; curvature, and caries of bones; pale and bloated; disposition of skin to ulcerate; eczema, impetigo, herpes; tendency to boils, which leave indurations; carbuncles; malignant pustule; blepharitis; otorrhœa; canine hunger, with nervous irritable persons; desires only cold things; swelling and induration of cervical glands and parotitis; *imperfect nutrition, not from want of food, but from imperfect assimilation.*

Spongia.—Swelling and induration of glands; skin and muscles lax; light hair; fevers; yellow scabby eruption; suppuration of external ear; insatiable appetite and thirst.

Sulphur.—Scrofulous and rickety complaints; emaciation of children, face has a very old look; dry flabby skin; glandular swellings, indurating and suppurating; ulcers, with raised swollen edges, bleeding easily, discharging fetid pus, surrounded with pimples; humid offensive eruptions, with thick pus, yellow crusts, itching, bleeding, and burning; ophthalmia and blepharitis; purulent offensive otorrhœa; painful eruptions around chin; lips dry, rough, and cracked; curvature of spine from softening of vertebræ; hangnails; burning of soles, wants





SYPHILODERMA PUSTULOSUM.

them uncovered; children dislike being bathed; especially suitable for lean stoop-shouldered persons.

Theridion.—Scrofula, rachitis, caries, necrosis, when other remedies fail to reach the root of the evil, and destroy cause; itching on scalp; itching behind ears, she would like to scratch them off; chronic catarrh of nose, discharge offensive, thick yellow or yellowish-green; phthisis florida, in beginning.

Syphilis.

Syphilis is a disease that involves, not only the skin, but every other organ and tissue of the body. Its cutaneous relations, however, are those which chiefly concern us.

The first visible lesion of syphilis usually appears in from ten to twenty days after an infective intercourse, as a small papule or erosion, going on to ulceration, and most frequently situated on the genital organs. Extra-genital chancre, however, may be met with in a variety of locations, more frequently, perhaps, about the mouth than elsewhere. This lesion is termed a *chancre*. In a short time a limited induration of the subjacent tissue occurs, so that the chancre when taken between the fingers appears to have a hardened base. This induration may be, and frequently is, absent in genital chancres in women, and the lesion may be altogether overlooked. In the course of two or three weeks after the appearance of the chancre certain of the lymphatic glands become involved, and take on enlargement and hardness. The glands chiefly noticeable in this respect are the inguinal, cubital, post-cervical, and post-auricular.

About this time, or a little later, we may expect a generalized outbreak upon the skin.

The various manifestations of syphilis on the skin, or

syphilides, as they are commonly called, present different types and degrees of severity, and involve the skin either superficially or deeply. We may, however, classify them to a certain extent, and in doing so will find that they partake of one or the other of the following characters, namely: macular, papular, tubercular, pustular, squamous, bullous, and gummatous, together with ulceration, occurring with, or following, any of the five types last mentioned.

The appearance of the first cutaneous eruption ushers in what is termed the *secondary* period of the disease.

As a rule, the first eruption is macular, and consists of small, rosy points or spots usually called syphilitic roseola. These present little or no elevation, and disappear under pressure, showing that they are little more than points of congestion. They usually pass away within a few weeks, with or without treatment. They are chiefly met with on the trunk and extremities.

Another and much rarer macular lesion is the pigmentary syphilide, which appears as dark-colored spots on the neck, and almost wholly confined to young females. After a time a portion of the pigmentary deposit fades away, producing a somewhat characteristic appearance somewhat resembling vitiligo.

After the macules of syphilis have disappeared, or even before they are quite gone, a generalized eruption of papules may appear. These are solid elevations, and not unfrequently present minute scales at their apices. Should the patient be broken in health, a tendency to pustulation and ulceration may be developed; and we may have the papules becoming purulent at their summits, or we may have a frankly pustular eruption from the outset. As the disease progresses there is a tendency to deeper involvement of the integument and larger size

of the lesions, so the papules are not uncommonly followed by tubercles, not perhaps as numerous as the papules, but still freely distributed over the entire surface. These not infrequently undergo ulceration and become covered with greenish-black crust.

In addition to the foregoing, we may have the appearance of reddish and not greatly elevated patches, covered with white scabs, constituting the so-called squamous syphilide. These various manifestations may occupy a year or more in their evolution, and embrace the secondary period of the disease. After the disappearance of these various eruptions, there is not infrequently a decided halt in the progress of the disease, and the patient may go on for a considerable period, for years even, without a fresh outbreak. When it does come, however, it ushers in what is known as the *tertiary stage* of the disease.

In the tertiary period of syphilis the eruptions are usually of a tubercular or ulcerative character, and, instead of being generally and somewhat evenly distributed over the surface, they are usually collected into groups; for instance, half a dozen or more tubercles may form a group or patch, and there may be *one* or several such patches. As a rule, the number of patches is limited. The individual lesions sometimes disappear by absorption, but very frequently undergo ulceration, and in either case leave indelible scars. In this stage of syphilis we meet with the lesion known as the *gumma*. It consists of a small tumor, which usually undergoes softening throughout its entire substance, and terminates by ulceration. This lesion is not confined to the skin, but may involve almost any organ of the body.

Concomitants of Syphilis.—The disease we are describing does not vent its entire energy upon the skin, but

early in its history it exhibits its presence on the mucous membranes by the development of rather large, flattish tubercles in the mouth and about the genital organs and around the anus. It is in females especially that the mucous patch or condyloma reaches its highest development.

Early in the disease, too, the hair may fall out, so that an almost complete alopecia of the scalp may occur before it is checked by treatment. This early alopecia, however, is not permanent, as the hair begins to grow again as soon as the patient is brought under the influence of proper constitutional treatment. During this period, also, inflammation of the iris is a not infrequent complication.

Ulcerations, more or less extensive, of the soft palate and tonsils, may supervene among the early or late symptoms of the disease.

In the tertiary period painful swellings are met with along the course of the long bones, especially the tibia and in the flat bones of the skull. These nodes, as they are called, are due to an inflammatory deposit beneath the periosteum, which is usually accompanied with considerable pain, worse at night. The gummy deposit, separates the periosteum from the bone, and, by depriving the bone-tissue of its proper nourishment, produces necrosis.

An interesting case is reported of ulcerating gummata of the scalp forty-four years after infection, as occurring in a man aged 63, who contracted syphilis when between eighteen and twenty years of age. Typical syphilides followed, relapsed a number of times and finally disappeared without treatment. When he was twenty-four years old (about five years after infection) he married. His wife miscarried once, but remained healthy, dying

at sixty. His eldest son developed psoriasis palmaris when seven yearsold and again when eighteen, which was caused by anti-syphilitic treatment; in other respects, as well as his younger sister, remained well. The patient himself was affected by herpes zoster in 1878. In 1886 a gumma appeared on the left parietal bone, which ulcerated and exposed the bone and caused necrosis. Gradually the bone was cast off, and necrosis of the diploe appeared. As, however, demarcation proceeded slowly and symptoms of pressure on the brain set in, trephining was decided upon, which exposed a collection of pus under the necrosed bone. Improvement set in on anti-syphilitic remedies. Soon, however, an attack occurred during which he lost consciousness; then the functions of the brain became disturbed, intelligence gradually waned, œdema of the extremities set in, new gummata appeared on the scalp, and the patient died. Post-mortem there were found thrombosis of the iliacs, caries and necrosis of the left parietal bone, thickening of the meninges, beneath it, but no pathological changes in the brain.

The ulcerations of syphilis are somewhat peculiar, and, once seen, can hardly be mistaken afterward. They are usually round, and with clean-cut margins, as if punched out, differing in this respect from the overhanging walls of scrofulous ulcers, or the sloping margins of the simple variety.

Late in the disease, and among the tertiary group of symptoms, we meet with a peculiar deformity of the phalanges, commonly known as *dactylitis syphilitica*, the appearance of which is so peculiar and characteristic that it should not be mistaken for anything else. This lesion is rare, however, and perhaps unknown to many physi-

cians, and the illustration best shows its characteristic features.

Necrosis of the nasal and palatal bones may occur late in the disease.

Syphilis is an all-pervading disease, and may involve the viscera as well as the more superficial organs. The liver, kidneys, lungs, brain, spinal cord, etc., may become the seat of gummy tumors, which, according to their location and size, may do more or less damage, even to the extinction of life.

Dr. Marchiafava thus describes the lesions found by him in the kidney in two cases of hereditary syphilis: "The organs were of normal size, but the cortical substance was of a grayish color, and dotted with minute whitish nodules, corresponding to the glomeruli. Under the microscope, the lesions were seen to proceed from a diffuse arteritis of the glomerular and afferent vessels. The arteries were contracted, and finally obliterated, and became converted into a hyaline mass. The vascular loops of the glomeruli were thus destroyed, as was also, at a later period, the epithelium of the convoluted tubules which derives its nourishment from the afferent vessels."

Dr. Ingram has observed, in twelve cases of congenital syphilis, concentric enlargement of the wrists. This enlargement has more the appearance as if two fine silk ligatures had been tied around the wrist immediately above the joint, the strands being placed about half an inch apart and tied tight enough to hide themselves in the flesh. To the touch they have all the dense hard feeling that callus does when thrown about a fracture.

Etiology.—The original first cause of syphilis is unknown. We know, however, that at the present time it is propagated from one to the other by contact. The

blood and the secretions from early syphilitic lesions are the medium of contagion, and the contact of these with an abrasion of the skin or with an even unabraded mucous surface is sufficient to transfer the disease. Whether a bacillus is an accidental or an essential feature of the process may as yet be considered unsettled.

In the vast majority of instances syphilis is contracted during sexual intercourse; occasionally, however, the buccal cavity is made to serve the ordinary purposes of the vagina, and the disease is transferred from or to the mouth. There are, however, many innocent ways of contracting the disease; for instance, using drinking-glasses, cups, spoons, pipes, etc., which have been previously used by a syphilitic, etc.

Sternback reports a severe attack of syphilis in an army surgeon, acquired in a peculiar manner. While attending a case of blenorrhœa of the eye he was attacked by the same disease and had leeches applied to the temple to combat the acute inflammatory symptoms. One of the leech-bites became the site of the initial sclerosis of syphilis, to be followed later by the usual secondary manifestations. After six months iritis developed, and shortly afterwards symptoms of severe cerebral syphilis. How the leech-bite was infected by the syphilitic virus is unexplainable.

It is altogether probable, however, that in tertiary syphilis, especially if a considerable number of years have elapsed since the first contraction of the disease, neither the blood nor secretions are contagious.

Syphilis may also result from hereditary transmission. Should the father alone be syphilitic, the offspring usually escapes; but if the mother be affected, the child will almost certainly suffer. In the majority of cases, when infection of the mother occurred but a short time

before conception, the fœtus will die *in utero*, and be expelled before time. A second or third abortion may succeed, but ultimately the mother may give birth to a living child, which, however, may soon succumb to the disease. As the period of time from the date of infection becomes greater, the less does the poison affect the offspring, until a time arrives when the offspring of parents who have both been previously syphilitic may be born without apparent taint and grow up healthy children, reaching adult life without mishap. The symptoms of hereditary syphilis may be manifested shortly after birth by erythematous blotches, bullæ, coryza, and marasmus, or may be deferred until about the period of puberty. In this event, interstitial keratitis, or various ulcerations, may be the chief features presented by the disease.

An interesting case was reported in 1889 of a child four months of age, whose parents had acquired syphilis fourteen years before. Though anti-syphilitic treatment had been insufficient, their syphilis ran a very mild course, and they experienced very few syphilitic manifestations. Their first child, born three years after their marriage, died from meningitis at the age of seven years; the second had a syphilitic eruption at the end of the second month; the third succumbed to cholera infantum; the fourth died in its first month, of bronchopneumonia; the fifth had an interstitial keratitis three days after its birth. This, the sixth child, showed an extensively distributed papular syphilide. At the time of conception, the parents did not show any syphilitic symptoms. Other cases have been met with of syphilitic infection from parents to children even twenty years after the primary infection in the parent.

Dr. Mackenzie gives the history of a case of congenital syphilis in which ulceration of the throat was a marked

phenomenon. This progressed in spite of the remedies employed to check it, until the child was taken with a mild form of scarlatina, when the ulceration at once began to heal. When the stage of desquamation was reached, cicatrization was complete. In his remarks on the case, which is but typical of a class, he says that frequently specific ulcerations in children stubbornly refuse to cicatrize. Under such circumstances when remedial measures are apparently of little or no avail, they sometimes cicatrize, as if by magic, on the accession of an acute disease. While congenital syphilis affords no absolute protection against certain acute infectious diseases, its existence in the individual seems often, other things being equal, to mitigate their severity and exert a favorable influence on their course. Certain acute diseases, accompanied by an exanthem, favor the dissipation, at least temporarily, of the throat and other manifestations of syphilis. While at no period of the disease is the child exempt from these affections, they are more liable to be contracted during the period of latency, that curious interval of apparent health in congenital syphilis, which Cazenave has poetically called the sleep of the virus. These remarks are limited to scarlet fever, measles and chicken-pox, but they could doubtless be extended to embrace others of the exanthemata; or, in other words, to those diseases which present a certain analogical resemblance to syphilis. They do not apply, for obvious reasons, in the case of excessive virulence of the syphilitic cachexia or malignant epidemic influence of the inter-current disease. Of special interest is the effect produced by acute febrile disease upon the throat lesions of congenital syphilis. Chronic inflammatory conditions and ulceration of the larynx, pharynx, and nasal passages are often influenced in a remarkable manner through the

presence in the individual of an inter-current febrile affection. This is, moreover, eminently true of those acute blood diseases with special tendency to local manifestations in the throat, such as scarlet fever, measles, diphtheria, etc. According to personal experience, scarlatina and measles exert, as a rule, a favorable influence on the course of the throat affection, their super-vention being of itself sufficient to cause its complete disappearance. The poisons of the two diseases, in their circulation in these regions, appear to be mutually destructive and the throat escapes by virtue of such reciprocal antagonism. The cure here may be permanent, or relapses of the inflammatory or ulcerative process may follow the removal of the antagonistic influence of the inter-current disease. These remarks do not apply to diphtheria. When this affection supervenes during the existence of lesions in the throat, the patients rapidly succumb to the disease. The existence of syphilis in the child apparently increases the tendency to membranous formation; indeed in some instances, apart from the presence of the diphtheritic process, there seems to be a special tendency to fibrinous formation in the nose and retronasal space.

Diagnosis.—To commence at the beginning, the initial lesion or chancre is to be distinguished from the soft venereal ulcer (chancroid) by its long (two or three weeks) incubation, its plastic character, its indurated base and its slight tendency to secretion, and the single or very limited number of lesions.

The soft chancre, on the other hand, appears a few days after intercourse, presents a necrobiotic or ulcerative character, is not accompanied with the hard, infiltrated base, and may exist to the number of a dozen or more on the same patient.

In syphilis the initial lesion is usually accompanied with a number of moderately enlarged hard inguinal glands, while the chancroid may be accompanied with one or more very much enlarged and greatly inflamed and painful glands, which not infrequently go on to supuration. In addition, we have in syphilis the other glandular indurations already noticed.

There are very few cases in which the earlier syphilitic eruptions cause any great trouble in diagnosis. Taking the history into consideration, neither the macular nor tubercular eruptions are liable to be mistaken for anything else. The papular eruption of lichen planus, however, may sometimes closely resemble a syphilide. The squamous syphilide may in like manner be mistaken for ordinary psoriasis. In most cases, however, we will learn (if the case is psoriasis) that the patient has had previous attacks of the same form of eruptions, while in syphilis the previous eruptions will have been of a different type.

In late syphilis a patch of tubercular lesions may be mistaken for lupus. The history, however, again helps us, for a lupus patch will have been many months, perhaps years, in forming, while the syphilitic lesions might have reached the same development in a few weeks.

The real difficulties that surround the diagnosis of syphilitic eruption, however, do not so often occur in simple, uncomplicated cases as in those where a syphilide coexists with some other eruptive affection. Thus we have seen at the same time a syphilide and an eczema, a syphilide and a psoriasis, a syphilide and leprosy, a syphilide and scabies, etc., and each of these separate eruptions pursued its own course apparently unmodified by the presence of the other.

Treatment.—In former times it was a question

whether the disease or its treatment caused the greater inconvenience or suffering to the patient.

The treatment of a given case of syphilis will, of course, depend on the stage of the disease and the condition of the patient; but if the case comes at the beginning—that is, during the period of the chancre—the early or subsequent treatment may be pretty clearly mapped out in advance.

When a patient presents a venereal sore, the question of diagnosis must be settled at the outset, and settled in the most definite manner prior to the institution of a direct anti-syphilitic treatment. If the diagnosis cannot be made with absolute certainty, defer the specific treatment until the secondary eruption appears. Granting, however, that the diagnosis of syphilitic chancre has been made, let us first consider what shall not be done. Some have fancied that they could produce an abortion of the syphilis by early destruction of the initial lesions; and, to this end, the chancre was excised or cauterized. Experience shows that this hope can not be realized. Neither excision nor cauterization, no matter how early they are practiced, will prevent the further development of the disease, while they do add very materially to the discomfort of the patient. What, then, shall be done? There is but one drug, so far as known, that is positively and directly curative in this disease—namely, mercury; and the sooner the patient is brought under its influence the better. The two schools employ it in different ways. We will first look at the method employed by the old school, and afterwards the method as employed by the new school. An eminent writer of the old school, in speaking of the treatment of syphilis, uses the following language:

“ My own practice is to use this agent (mercury) both

internally and externally, believing as I do that the drug acts by virtue of its particles being brought into direct contact with the lesions, externally by means of lotions, salves, or other applications, internally through the medium of the blood and circulation. To the chancre, then, we may make a mercurial application, and the old black wash answers admirably, except that it should contain about four times as much calomel as the officinal preparation allows. This should be applied two or three times daily. At the same time mercury should be given internally. Before commencing treatment, however, it is my custom to have a distinct understanding with the patient on two points—namely, the use of tobacco and alcohol. If the patient is in a fair state of general health, and will consent to the absolute abandonment of these two substances, it will not be going too far to promise him a very easy time in connection with his disease, provided, of course, that he pursues the direct medical treatment with persistence and regularity.

“The choice of the mercurial preparation to be given is not a matter of indifference. During the early period of the disease—say, for the first six months or a year—metallic mercury or the protosalts are to be preferred to persalts. Later the persalts seem to be more useful. Metallic mercury, either in the form of blue-pill or in trituration, may be given, so that the patient receives a half-grain of the metal three or four times a day. The dose, however, should be pushed until the patient is on the verge of salivation, but never in the slightest degree beyond this. When this point is reached, we have a guide to the patient's tolerance of the drug, and omission of treatment for a day or two is recommended. It should then be resumed in somewhat smaller doses, and, with the gums and salivary glands for a guide and warning,

the drug should be administered with scrupulous regularity for weeks and months. In former times salivation was considered the sheet-anchor of safety. Now, we know that it is a danger to be avoided. Under this treatment many a patient will go on for a year or more with only the slightest inconveniences from his disease. Instead of metallic mercury, the protoiodide may be employed; and this, indeed, is the favorite with most venereal surgeons. After this period, if all has gone well, I prefer to give either the bichloride or the biniodide. Some cases, however, will not go well, and, instead of superficial and not very serious eruptions, we find a tendency to ulceration developing quite early. This opens the gate for another drug—namely, the iodide of potassium. There are physicians who appear to be afraid of mercury, and who, believing the iodide to be comparatively a benign and innocent drug, give it in even the earliest stages of the disease. Personally I regard the early administration of this drug as harmful. The iodide of potassium, in the writer's judgment, does not exert the slightest curative influence on the disease itself, or tend in the slightest degree to eradicate it from the system. It does, however, possess a wonderful power over certain manifestations of the disease. In syphilitic ulcerations, in gummatous lesions, and in periostitis, the effects of the iodide are not only positive but marvelous. *Per contra*, in early superficial lesions and in late necrotic affections of the bones, it is not only useless but harmful. In syphilis we have two types of ulceration. In one the process is sluggish, and in the other active and rapid in its destructive effects. In both of these the iodide should be employed. In the former it should be given in small doses—say, five to ten grains three times a day—and combined with small doses of either the bichloride or binio-

dide; while in the rapidly destructive forms of ulceration the mercury should be omitted, and the iodide given in full and increasing doses.

“As soon, however, as the particular lesions for which the iodide is given are brought under subjection, the drug should be given in diminished doses and soon discontinued, and mercury in small doses substituted for it.

“In the sluggish ulcerations of cutaneous syphilis there is no question as to the benefit to be derived from local mercurial applications, and a favorite with the writer is fifteen grains of the protoiodide to an ounce of simple ointment.

“Instead of administering mercury by the mouth, it may be used in the form of blue ointment rubbed into the groin or axilla. Or it may be given in hypodermic injection, employing either a soluble or an insoluble preparation. There are, doubtless, occasional cases in which these methods may be preferred; but as habitual or routine methods of treatment they are mentioned only to be condemned.

“There remains one drug, however, that is useful in certain syphilitic conditions, but of which very little mention is made in modern text-books. I allude to gold. In necrosis of the bones, especially the nasal and palatine, gold unquestionably hastens the separation of the sequestrum by promptly determining the line of demarcation between the healthy and the diseased tissues. A grain of the chloride of gold and sodium may be dissolved in an ounce of water, and five to ten drops be given once or twice a day. No advantage, we believe, will be derived from increasing this dose. It should be continued for a short time after the separation and removal of the bone, as it seems to decidedly promote the healing process.”

In contrast with this heroic treatment comes the recommendation of Hahnemann to use *Mercurius vivus* in the 30x potency, one dose of which will usually be sufficient to establish a cure.

Later, we will give the indications for the homœopathic remedies indicated in the different forms of syphilis.

Just here I wish to call attention to the mechanical treatment of the syphilitic affection of the tongue and mouth known as keratosis or ichthyosis linguæ, or as leukoplakia specifica, which is due to unequal development of epithelium over different papillæ, and which is by no means a very easy affection to treat successfully, caustic, astringent, and disinfecting applications having but little effect upon it; according to Dr. Horwitz, it is best managed by mechanical scraping. He uses a sharp spoon, with which he removes the thickened epithelium; in order to accomplish this, several sittings may be required. He scrapes away the indurated tissue until the surface presents the appearance of a multitude of minute-bleeding points, showing that the vascular loops in the papillæ of the dermis have been reached. Iodo-glycerine, glycerine of borax or a ten per cent. solution of sulphate of copper is applied to the raw surface. The pain is usually not severe, but in the case of sensitive persons cocaine can be used.

Indications for the homœopathic remedies useful in syphilitic affections:

Arsenicum.—Inflammation and swelling of genitals; phagedenic and gangrenous chancres; copper-colored eruptions on genitals; burning pimples or pustular eruptions on skin.

Asafætida.—Tertiary syphilis, especially after abuse of mercury; ulcers, particularly when affecting the bones,

discharging ichorous, fetid, thin pus; syphilitic caries and necrosis, with fetid and bloody suppuration; ulcers very sensitive to touch; extreme nocturnal pains.

Aurum.—Secondary syphilis; low-spirited; bones of skull painful when lying on them; exostosis on head; caries of mastoid process of temporal bone, with fetid otorrhœa; caries of nose, with offensive discharge of pus from nose; inflammation of bones of face; putrid smell from mouth, with caries of palate; ulcers which attack the bones; headache from topi in different parts of cranial bones.

Auri et sodii chloridum.—Syphilis, after abuse of mercury, or when, during secondary or tertiary stages, the bones of the nose are affected, or the throat is ulcerated.

Badiaga.—Syphilitic bubo, as hard as a stone, uneven, ragged, at night violent lancinations, as if with red hot needles, even when decided fluctuation has already set in.

Belladonna.—Large and painful buboes, with intense inflammation of integuments, presenting a deep-red hue, and extending over large surfaces; phlegmonous phimosis and paraphimosis; erysipelatous balanitis; painful eruptions.

Berberis aquifolium.—Inveterate cases of tertiary syphilis.

Calcareæ fluor.—Chancres hard and indurated.

Calcareæ sulph.—In bubo to control suppuration. Chronic suppurating stage of syphilis.

Carbo an.—Indurated buboes, with lancinating or cutting pains; chancre: nasal syphilis.

Carbo veg.—Syphilitic ulcers with high edges that become irritable from topical treatment; margins of sores sharp, ragged, undermined; discharge thin, acrid, offensive; ulcer painful and liable to bleed freely when

touched; vesicles or blisters on prepuce; burning of labia; burning eruptions on skin.

Cinnabaris.—Swelling of penis; redness and swelling of prepuce, with painful itching; violent itching of corona glandis, with profuse secretion of pus; small shining red points on the glans; blenorrhœa of glans; syctic excrescences; violent erections in the evening; small ulcer on roof of mouth, on the right side of tip of tongue, and on tip.

Coral. rubr.—Chancre and gonorrhœa of glans.

Corydalis.—Syphilitic nodes on skull; ulceration of fauces; profuse morbid secretion of mucus; tongue coated, with fetid breath.

Ferrum phos.—Bubo with heat, throbbing or tenderness.

Hecla lava.—Destructive ulceration of the nasal bones.

Hepar.—Mercurius-syphilitic diseases of gums; pains in bones; chancres not painful, but disposed to bleed readily; margins of ulcers elevated and spongy looking, without granulations in their centre; buboes after mercurial treatment; phimosis, with discharge of pus, accompanied by throbbing; itching of penis, glans, and frænum; ulcers like chancres on prepuce; humid soreness on genitals, scrotum, and folds between thigh and scrotum; humid, suppurating herpes præputialis.

Hydrastis.—Ozæna, with ulceration, bloody or mixed purulent discharge; mercurial salivation.

Kali bichr.—Syphilitic affections of mouth and fauces; bone pains, with stitches as if from sharp needles; periodical wandering pains all over the body; pustular syphilderma; indurated chancre.

Kali hydroiodicum.—Secondary and tertiary syphilis; abuse of mercury.

Kali mur.—Soft chancre, 3x tr. internally, and also

externally as a lotion; chronic stage of syphilis. In bubo for the soft swelling.

Kali phos.—Phagedenic chancre and bubo.

Kali sulph.—Syphilis, with yellow, slimy coating; tongue coated yellow; aggravation in the evening. Chronic syphilis.

Lachesis.—*Phagedenic chancre*; gangrene of glans and mons veneris; ulcers in throat and inflamed tonsils; caries of tibia; flat ulcers on lower extremities, with blue and purple areola.

Lycopodium.—Chancres with raised edges; *indolent chancres*, with thick, rounded, prominent margins, granulations flabby or absent; eruptions on glans; condylomata; syphilitic ulcers in mouth.

Mercurius corros.—Excessive pain, swelling, and inflammation; regular indurated Hunterian chancre with lardaceous bottom; swelling and redness of nose, ozæna; margins of soft chancre dark-red, painful, and easily bleeding; neighboring parts œdematous, hot, and painful; chancres on inner surface of præputium or corona glandis; chancres with ichor adhering to the bottom of ulcer so firmly that it cannot be removed by washing; ulcers with thin pus, leaving stains upon the linen, as from melted tallow; phagedenic ulcers in mouth, gums, and throat, with fetid breath; tonsils swollen and covered with ulcers; bubo and swelling of glands generally.

Mercur. iodat. rubr.—*Hunterian hard chancre*; threatened gangrene of glans in paraphimosis; soreness of bones of face; sharp shooting stitches in the end of penis through the glans; old buboes, discharging for years.

Mercur. vivus.—Red chancre on prepuce; spreading and deeply penetrating ulcer on glans and prepuce; pale-red vesicles, forming small ulcers after breaking, on glans and prepuce; painful bleeding chancres, with yel-

lowish, fetid discharge; small chancres, with a cheesy bottom and inverted red edges; ulcers of glans and prepuce, with cheesy, lardaceous bottom and hard edges.

Mezereum.—Syphilitic periostitis; constant headache from topi of skull; pains through whole body, with nightly pains in the bones, brought on by syphilis, mercury, or both combined; bones inflamed, swollen, especially shafts of cylindrical bones; fainting sort of vertigo; weary of life.

Natrum mur.—Chronic syphilis, serous exudations, etc.

Natrum sulph.—Condylomata of anus, syphilitic in origin, externally and internally.

Nux vom.—*Chancroid*; shallow and flat-bottomed ulceration, showing a disposition to spread irregularly and indefinitely, exuding a thin, serous discharge.

Nitric acid.—*Phagedenic chancres*; ulcers in urethra, with purulent or bloody mucous discharge; ulcers bleed when touched, with exuberant, but pale and flabby granulations, irregular edges; moist condylomata, like cauliflower, or on thin pedicles; ulcers in vagina, looking as if covered with yellow pus, with burning pain or itching; copper-colored spots on anus; syphilitic ulcers in mouth; syphilitic epilepsy and melancholia.

Phosphoric acid.—Chancres with raised edges; chancres like an indolent ulcer, edges thick, rounded, and prominent; granulations pale and flabby, or absent; corroding, itching herpes præputialis; blisters and condylomata on glans; syphilitic excrescences, chronic, with heat, burning and soreness, when sitting or walking; figwarts, complicated with chancre; painless swelling of glans; interstitial ostitis of mercurio-syphilitic origin, with nocturnal pains, as if bones were scraped with a knife.

Phytolacca.—Secondary syphilis; ulcers in throat and genitals; syphilitic rheumatism and syphilitic eruptions;

pains shift; joints swollen, red; periostitis; pains in middle of long bones, or attachment of muscles, worse at night, and in damp weather; glans inflamed, swollen; ulcers with appearance as if punched out, lardaceous bottom; weakness and prostration, but no paralytic symptoms.

Sepia.—*Indolent chancre*; burning itching, humid, or scurfy herpes præputialis; chappy herpes, with a circular desquamation of skin; eruptions on glans and labia; itching and dry eruptions on genitals; chancres on glans and prepuce.

Silicea.—Chancres with raised edges; inflamed, painful, irritable chancres, with discolored, thin, and bloody discharge, granulations indistinct or absent; painful eruptions on mons veneris; itching, moist or dry eruptions of red pimples or spots on genitals; chronic syphilis with suppurations or indurations; ulcerated cutaneous affections where mercury has been given to excess, nodes in tertiary syphilis; caries and necrosis with discharge of offensive pus.

Staphisagria.—Soft, humid excrescences on and behind corona glandis; dry, pediculated fig-warts; excrescences and nodosities of gums; female sexual organs painfully sensitive, especially when sitting; mercurialism.

Stillingia.—*Secondary syphilis*; extreme torture from bone-pains; nodes on head and legs.

Sulphur.—Inflammation and swelling of sexual organs, with deep rhagades; burning and redness of prepuce; deep suppurating ulcer on glans and prepuce, with puffed edges; phimosis, with discharge of fetid pus; glandular swellings, indurated or suppurating.

Thuja.—Chancres, with pain as from a splinter sticking; sycotic moist excrescences on prepuce and glans; moist mucous tubercles; itching ulcers with unclean bottoms, or whitish chancres with hard edges.

Condylomata, Sycosis, Fig-warts.

These excrescences are a morbid growth of the skin and mucous membrane, or, better defined, of the subcutaneous and submucous cellular tissue. They are of different external appearance, according to their coating. When they are covered by the epidermis they appear dry, hard, horny, like common warts; when covered with thin epithelium, or when they are entirely bare and excoriated, they appear soft, moist and secrete more or less of a slimy, acrid, badly-smelling fluid. These latter are the *genuine syphilitic condylomata* or *tubercula mucosa*.

Their forms are likewise various; some are flat, upon a broad basis; others are conical, growing on a pedicle; others appear like a cock's comb. The *flat* fig-warts are chiefly found around the anus, between the glutens muscles; on the perineum, scrotum, external skin of the penis, glans penis, and on the external surface of the labia in women; whilst the *conical* and *pediculated* are usually found in the entrance of the vagina, on the clitoris and even far back in the vagina, and on the neck of the womb; in males on the interior surface of the prepuce; also between the nates. They sometimes grow so luxuriantly that the whole vagina and interior surface of the prepuce is covered by them. A third kind is quite small, in the shape of pin-heads, which are generally found around the corona in men, and on the interior surfaces of the labia in women. In secondary syphilis they appear also in other localities, especially on the tongue, corners of the mouth, chin, face, forehead, eyelids, iris, scalp, meatus auditorius, axillæ, nipples, and between the toes. Soon after the outbreak of this pest in the middle ages we read of condylomatous excrescences in the face, which were of a finger's

length, and which caused, for their bearers, more ridicule than compassion.

Treatment.—Keep the parts clean and dry. If the excrescences are troublesome, excise them with the knife and afterwards apply a mercuric bichloride lotion, strength one to two grains to the ounce of water. The principal internal remedy is *Thuja*.

Therapeutic Hints.—For the *mucous tubercles* the main remedies are: *Cinnba.*, *Nitr. ac.*, *Thuja*.

Fig-warts, when complicated with *gonorrhœa*, require *Thuja*, *Cinnba.*, *Nitr. ac.*, *Sulph.*, *Lycopodium*.

When complicated with *chancre*, *Cinnab.*, *Nitr. ac.*, *Phos. ac.*, *Staph.*, *Thuja*.

When *flat*, *Magnes.*, *Nitr. ac.*

When *exuberant*, like cauliflower or mulberries, *Thuja*, *Staph.*

When *fan-shaped*, *Cinnab.*

When *growing on pedicles*, *Lycopod.*, *Nitr. ac.*

When *conical*, *Merc. solub.*

When *dry*, *Thuja*, *Staph.*, *Merc. solub.*, *Nitr. ac.*, *Lycopod.*

When *moist*, *suppurating*, *Nitr. ac.*, *Thuja*, *Sulph.*, *Euphras.*

When *soft*, *spongy*, *Sulphur*.

When *intolerably burning and itching*, *Sabina*.

Cinnabar.—Fan-shaped fig-warts accompanied by tetter. In scrofulous infants and children.

Euphrasia.—Fig-warts at the anus.

Mercur. cor.—Dry fig-warts, or else fig-warts accompanied by acrid discharges. Soft, flat condylomata.

Mercurius nit.—Filiform fig-warts.

Mercurius præcip. ruber.—Fissured condylomata.

Mercur. sol.—Conical fig-warts; small, itching pimples which ulcerate and become incrustated; mild types.

Nitr. ac.—Pediculated and pen-shaped, moist condylomata; fig-warts on the glans.

Sabina.—Condylomata attended with itching and burning.

Sarsaparilla.—Flat fig-warts.

Staphisagria.—Cock's-comb-shaped fig-warts.

Sulphur.—Soft, spongy fig-warts.

Thuja.—Cauliflower excrescences. Condylomata on the penis, vulva and about the anus; broad, flat condylomata; after iritis, tubercles or warty excrescences on the iris.

Leprosy.

Leprosy is a disease that has been known from the earliest ages, and has prevailed among all races and in all climes.

At present it is most wide-spread in countries lying both to the north and to the south of the temperate zone and among the less enlightened people of the earth. To a limited extent, however, it is met with in Europe and the United States.

The disease manifests itself in three chief forms or phases of development, known as the macular, tubercular, anæsthetic. The first is characterized by the development of brownish discolorations of varying size and number. These, after an existence of months or years, may lose their heightened color and become pigmentless, and the cutaneous nerves in the affected parts lose their sensibility.

The tubercular form is characterized by the development of tubercles upon various parts of the body. These exhibit a slightly heightened color, becoming later somewhat copper-colored, and affect a preference for the face, especially just above the eyebrows and upon

the nose and ears, but may, and usually do, appear upon the extremities.

In the anæsthetic form, bullæ, usually solitary, develop upon various parts of the integument. They persist for a short time only and leave behind them discolorations, which in time may become whitened and anæsthetic. In this form of the disease there is grave implication of the principal nerve-trunks of the extremities. This is notably the case with the ulnar nerve, which in cases moderately advanced may be readily perceived as a thickened cord just above the head of the bone whose name it bears. In this form, especially, pain in the extremities is a more or less prominent feature. Connected with the development of the disease, anæsthesia of the integument, chiefly of the extremities, becomes a prominent feature. The gradual destruction of the ulnar nerve leads to impairment of its functions and atrophy of the more distant parts to which it is distributed. This atrophic action is most distinctly manifested in the fingers and toes. Fissures occur in the integument, and absorption of the phalanges takes place and leads to loss of these parts. The separation usually occurs at some point between the joints rather than at the joints themselves. A continuance of the morbid action may result in loss of all the phalanges, and even of some of the metacarpal and metatarsal bones.

Leprosy is essentially a chronic disease. Before the appearance of cutaneous or nervous lesions there usually exists a prodromal period of several years' duration, without definite symptoms other than impairment of the general vigor. During this period it is hardly possible to make a diagnosis of the impending trouble. After the disease, however, is fully developed, ten, fifteen, or twenty years may pass before the fatal termination.

After careful investigation Drs. Fox and Graham arrive at the following conclusions concerning leprosy:

1. Leprosy is a constitutional disease, and, in certain cases, appears to be hereditary.
2. It is undoubtedly contagious by inoculation.
3. There is no reason for believing that it is transmitted in any other way.
4. Under certain conditions a person may have leprosy and run no risk of transmitting the disease.
5. It is not so liable to be transmitted to others as is syphilis in its early stages. There is no relation between the two diseases.
6. Leprosy is usually a fatal disease—its average duration being from ten to fifteen years.
7. In rare instances there is a tendency to recover after the disease has existed many years.
8. There is no valid reason for pronouncing the disease incurable.
9. Judicious treatment improves the condition of the patient and often causes a temporary disappearance of the symptoms.
10. There is a ground for the hope that an improved method of treatment will in time effect the cure of leprosy, or at least that it will arrest and control the disease.

Dr. Perry has arrived at the following conclusions, after years of study and residence in India:

1. Leprosy is an endemic disease, malignant, constitutional, progressive; evidenced by tubercular degeneration of the tissues, and accompanied by anæsthesia, ulceration, and gangrene; terminates in death from exhaustion, pyæmia, or rupture of the arteries.
2. That it is due to a specific bacillus he considers an unsettled point.
3. That leprosy is contagious only by inoculation, the

direct transmission of the virus into the blood of healthy persons. This assertion does not exclude the transmission of the disease by clothing, tools, etc., which have been used by lepers.

4. The disease is practically limited to people living upon a fish diet *along the sea coast*.

5. It is incurable. The best treatment is only palliative. His experience with iodide of potash, iodoform, mercury, and other so-called antisyphilitics having been as satisfactory as with chaulmoogra oil and other rarer and costlier drugs.

6. The average life of the leper, after the full development of the disease, is from ten to fifteen years. This does not include the prodromal stage. Some cases die sooner, and some live much longer.

7. The period of incubation is less than one year; the prodromal stage may last for five or more years. Leontiasis may develop in twelve months, and may be the only hint of the latent disease for years, until some exciting cause brings it out.

8. Hereditary leprosy does not usually develop until the age of puberty, unless there be some exciting cause. This exciting cause may be inflammatory skin disease, suppurating wound, or prolonged illness.

Etiology.—If we may judge from Holy Writ, the ancient Jewish lawgivers regarded the disease as contagious. Modern science declares that it is not. The discovery in recent times of a peculiar bacillus by Hansen gives a clue to the medium of contagion, and corroborates the results of careful clinical observation. While we cannot doubt the possibility of contagion, we must admit that within the temperate zones the direct transfer of the disease from one person to another has been very rarely observed. It is by no means unusual for a Caucasian to

contract the disease when dwelling among the natives where it is endemic; but it is extremely rare for him, on returning to his native country, to convey the malady to those with whom he associates. During the past several years there have been a large number of lepers who have passed months and sometimes years in the hospitals of New York, and yet not a single case of leprosy has developed in this city.

Fox says: "The causes of propagation are mainly these:

1. Intermarriage of the leprous or with the leprous.
2. Hereditary transmission.
3. Inoculation and cohabitation.
4. Vaccination (?).

As to intermarriage, little need be said. It sufficiently accounts for the occurrence of a large number of cases of leprosy in the offspring of lepers, and the continuous intermarriage of people of the same caste in India, enforced rigidly by custom and superstition, tends greatly to the spread of leprosy hereditarily.

Secondly.—As regards hereditary influence, this is most marked in children who are begotten by lepers far advanced in the disease.

Thirdly.—As to cohabitation and inoculation. Of course, these are not such potent causes as intermarriage and hereditary tendency in spreading leprosy, but still it is probable that they may account for a certain number of cases.

It has been said that leprosy may be communicated by vaccination, but if so it must be infinitely rare and scarcely worthy of being taken into account.

Prognosis.—The prognosis is uniformly unfavorable—that is, when the disease is left to its natural course. Spontaneous recovery, if it ever occurs, is extremely

rare. A few cases of cure have been reported, but a shade of doubt hangs over them. Mitigation of the affection, and even abeyance of the symptoms for a time, are by no means uncommon.

Treatment.—Good food and good hygienic surroundings are of the first importance in the treatment of leprosy. Strychnine and chaulmoogra-oil are highly recommended by the old school. They claim that with these four means at command the majority of cases of leprosy can be greatly benefited. They give the drugs in full doses, the oil being applied externally as well as internally.

Surgeon-major Peters gives as the result of two years' experience at a leper asylum in India, with twenty-nine cases, improvement in all the cases by the following plan: The patients had to rub the body for two hours early in the morning with Carbolic oil, 1 to 40; then bathe in warm soap and water. Afterwards an emulsion composed of Gurgium oil and lime water was rubbed into the affected parts only, any ulcerations being filled with cotton smeared with the same. Under this treatment the ulcers healed rapidly, while the anæsthetic parts and nodules remained unimproved. They, however, were benefited by Cashew-nut oil rubbed on to blistering. Internally, the remedy administered was as follows:

- ℞. Chaulmoogra Oil, m. v.
 Sodæ Bicarb., gr. v.
 Aquæ Menthæ Pip., ℥j.
 M. Size of dose not stated.

Locally, warm baths with Gurgium oil are highly recommended.

The principal homœopathic internal remedies are *Hydrocotyle*, *Hoang nan* and *Piper methysticum*.

Others may be indicated as follows:

Anacardium.—Numbness and feeling of pins and needles in affected parts, which are cold; patches of raised and hardened skin on face and arms; perfect anæsthesia of affected parts; weakness and prostration.

Alumina.—Copper-colored tubercles in face; leprous spots on legs; lips swollen; nose heavy; husky voice; hyperæsthesia; ulcers on *planta pedis*.

Arsenicum.—Yellow or white spots; tubercular swelling in nose; burning ulcers at the ends of the fingers, at the toes, soles of feet, navel, cheek; raised up tubercles; loss of hair and eyebrows; livid tubercles on any part of the body; hyperæsthesia and anæsthesia alternating; general prostration.

Arsen. iod.—Pricking sensation in the skin; loss of the voice; enlargement of the glands; hoarse cough; falling off of the fingers and toes; *ozæna*; tubercles dirty looking.

Aurum.—Melancholy disposition; discharge from the nares very offensive; absorption of the bones of the nose; has no desire to talk about sickness.

Calotropis gig.—Tubercular leprosy; lassitude, indisposition to move; loss of energy; apathy and obstruction of the capillaries; intolerable itching over the whole body.

Carica papaya.—Tubercular leprosy.

Colocynth.—Desquamation of the whole epidermis; abscess of axilla.

Crotalus.—Swelling of the limbs or body; spots appearing like gangrene.

Cuprum.—Leprous eruptions; cramps; suffocating spells.

Graphites.—Leprous spots, coppery, annular, raised on the face, ears, buttocks, legs, and feet; ulcers on toes,

crusts in nostrils ; skin cracks and discharges a sticky fluid.

Hydrocotyle.—Well-marked cases of tubercular leprosy ; leonine face ; nose flattened and swollen ; lobes of the ears pendulous and swollen ; ulcers in the alæ nasi and corners of the mouth ; ears discharge ; hands and feet swollen so that fingers and toes spread apart ; itching of any part of body ; feeling of lassitude ; yellowish or reddish spots on the trunk and extremities.

Iodum.—Emaciation marked ; swelling of the glands ; when mercury has been taken in large quantities ; loss of voice and hoarseness ; voracious appetite.

Kali bichrom.—Brownish colored spots ; ulcers with an unhealthy look ; blisters on the extremities ; little boil or pustules on any part of body ; thick, tough discharge from nose ; hard plugs in nose ; thick, yellow, putrid discharge from the ears ; ulcers on tongue and on cornea.

Kreosote.—Soreness on the nose ; swollen gums ; painful ulcers ; wheals like urticaria ; numbness in different parts of the body.

Lachesis.—Spots yellow, red, green, lead and copper colored, pale livid ; hard and pale swelling ; large boils ; ulcers surrounded by nodes and vesicles ; the muscles fall off in shreds from the bones ; bloody serum discharge from the nose, ears and mouth ; obstinate ulcers with black spots in the granulations.

Madaru album.—The whole surface of the skin becomes leprous ; livid and gangrenous tubercles ; thickening of the whole skin.

Mercurius.—Falling out of the teeth ; absorption of the small bones ; swollen gums ; sore tongue ; flat indolent ulcers.

Natrum carb.—Spots and tubercles all over the face,

arms, thighs, legs, which ulcerate ; ulcers in the nostrils and on the heels.

Petroleum.—Tubercles on the face; herpetic and tuberculous spots on the body; ulcers of fingers, tibia; unhealthy skin with brown spots; skin dries and forms deep cracks; falling out of hair; hyperæsthesia of scalp and ears followed by anæsthesia; hoarseness, suffocating cough, numbness of extremities.

Phosphorus.—Later stages of the disease; brown spots on an even base; boils; spots like blood blisters on the body; tubercles on the trunk, buttocks; thick patches on face and arms; discolored borders around the white spots; hair falls out; tension in the fingers, and dullness towards the end; great debility with increase of sexual desire.

Rhus tox.—Scalp sensitive, cannot bear to have the hair touched; pulsation in the ears; loss of smell; swollen face so that patient is not recognized; tubercles with sharply defined margins; bright red skin, violent itching; hardness and thickening of skin on any part of body.

Secale.—Can hardly talk, the tongue will not respond to the will; fingers and toes drop off; falling out of the hair; eyes look sunken; cold, dried-up-looking skin.

Sepia.—Swelling of forehead, around temples; face thick, covered with tubercles; leonine face, pendant ears; eyes red, dull, weeping; purulent discharge from nose; tubercles and spots all over the body; gnawing ulcers on fingers and toes; excoriation at the tip of tongue; discharge from the swollen ears; nose and lower lip swollen; red herpetic spots at the elbow and hip; herpetic sores; white spots and ulcers on the articulations of the fingers; coppery tubercular spots all over the body, especially on the buttocks, arm-pits; tubercles on the face, trunk, buttocks, prepuce; brownish spots on face;

skin peels off from hands and feet; nails look dried up and deformed; falling out of the hair and eyebrows; loss of smell; breath offensive.

Silicea.—Induration of nose, with ulceration and discharge; palsied hands; white spots on cheeks; coppery spots and hard tubercles on testicles and buttocks; ulcers at tips of fingers; shortening of the hamstrings.

Sulphur.—The usual antipsoric indications.

Woorali.—Obstinate boils, that will not heal; slowly forming and suppurating pimples; dirty looking skin; blood oozes through the skin; tubercles on nose; stoppage of nose, with swelling of parts; falling of the hair; swelling of the lobes of ears; falling out of the teeth; discharge of matter from the ears; tonsils inflame and suppurate.

Hura Bras., *Guano*, *Helleborous fœtidus* and *Veronica* may be compared.

Morvan's Disease.

Morvan's disease must be differentiated from Sclerodactily, from Lepramutilans, and from symmetric gangrene of the extremities.

The analgesic paresis with panaris of the superior extremities was first described by Morvan. The patient complains at first of neuralgiform pains in the fingers, which are soon followed by a paretic state with muscular atrophy, more or less pronounced, in the hands and forearms, sometimes spreading through the whole arm and other parts of the body. There is at the same time analgesia and anæsthesia, especially for the touch, for pain and temperature (here it is necessary not to mistake it for syringomyelia, where there is no anæsthesia, but only a relative analgesia and especially thermo-anæsthesia). This state is followed by panaritiæ, which start,

like any other plain panaritium, with redness, heat and swelling, but it soon shows its malignant character, as necrosis of the bone follows, destroying not only the upper phalanx, but sometimes also the others, resulting in mutilations. We meet here also multiple panaritiæ, attacking nearly all the fingers, which may follow one another at shorter or longer intervals, so that years may intervene between them. Though the first panaritium may be painful, the subsequent ones are usually painless. Trophic troubles are more or less observed, as more or less deep rhagades, ulcerations in the folds of the skin, extending to the tendinous sheaths, which are bathed in suppuration, but all is of an indolent character. The nails fall off or become deformed as in no other affection. Finally the whole hand becomes livid and its temperature below the normal.

Prognosis in relation to the use of the upper extremities is bad, as the disease leads to incurable deformities and mutilations. It attacks more often males than females, of all ages, and whether traumatism is to blame for it remains more than doubtful.

It is easy to differentiate it from Ball's sclerodermitis, for here one never meets necrosis of the bone, nor are bone pieces discharged; the mutilations take place gradually by a kind of absorption of the tissues of the fingers; nor is there any paresis or anæsthesia. Finally the sclerodermic mark is specific, and can never be mistaken for anything else.

In relation to anæsthesia with its atrophy the patient's hands become very similar to those of the monkey, and the lesions are mostly symmetric. The same trophic troubles may be found anywhere on the body and ulcerations are frequent, and the leprous spots on the skin of such patients are characteristic and known as morphea

alba or rubra. Lepra is an exotic plant and so far confined to few countries.

Nor can Morvan's disease be mistaken for syringomyelia, characterized, as it is, by more extensive muscular atrophy, and though the sensation of contact is preserved, the sensibility to heat and cold is abolished over large surfaces of the body, a characteristic which is only partially met with in hysteria. The rhagades, the arthropachies and the scoliosis belong to both, but a panaris is an exception, while in Morvan's disease it remains the predominant phenomenon.

Abnormal sensitiveness of the fingers, painful at first, with redness and swelling, then bullæ which break and dry up, followed by atrophy of the upper phalanx, which becomes deformed and absorbed.

Nobody as yet has discovered the origin of the malady, and none has yet given a treatment for it. We may claim that constitutional treatment may eradicate the poison and Homœopathy is rich in resources.

Thuja, *Fluoric acid*, *Silicea*, *Sulphur* and others are of great assistance.

Thuja.—Erysipelatous swelling of the tips of the fingers and of the fingers; nails are crippled, discolored, crumbling off; twitchings of the muscles of the arms; coldness and sensation of deadness of the fingers and tips of the fingers; stinging pains in the arms and in the joints; emaciation and deadness of the affected parts dirty and brownish color of the skin.

Silicea and scoliosis go hand in hand, and according to some authors it is found in nearly half the cases of Morvan's Disease. It is also complementary to *Thuja*, and in most cases where *Silicea* suits there is a tendency to chronicity of the disease; emaciation and atrophy of affected parts; paretic states; nails rough and yellow;

pain as if panaritium would form on left index; dryness of tips of fingers; ulcers about nails; felons with violent shooting pains deep in the fingers, with great restlessness and irritability.

Sodium sulphate is also correlated to *Thuja*. Perhaps it may come in at a later stage when the paronychia sets in painless or with hardly any pain. Among its symptoms we read twitchings of the hands, trembling of the hands on waking, and also when writing; loss of strength of the hand, is unable to hold anything heavy; tingling, ulcerative pain under the nail; internal coldness; with yawning and stretching.

Graphites has emaciation of the hands, distortion of the fingers, gouty nodosities on the finger-joints; thick and crippled nails; soreness between the fingers; sensation of debility without pain and liability to take cold. Cracks and fissures anywhere are often the key-note to the use of this drug, and as it has a long action, it ought certainly be of benefit in such a chronic affection as Morvan's Disease.

Sepia also has diseased and crippled nails with painless ulcers on the joints and tips of the fingers and paralytic drawing and tearing in arms and fingers. Venosity and stagnation is the red thread which goes all through the pathogenesis of the drug; it is also a long lasting remedy, hence the neuræsthenia and the parietic condition, and the more we consider all these diseases, except lepra, of constitutional origin, the more will we be able to prevent the deformities which, when once present, are out of the pale of therapeutic measures.

CHAPTER XIII.

HYPERTROPHIC AND ATROPHIC AFFECTIONS.

Under the terms hypertrophy and atrophy may be included all cases of development in excess of the normal tissues of the skin on the one hand and wasting on the other; the atrophy and hypertrophy being in each case primary conditions.

The maladies ranking under these two classes may be arranged as follows:

A. Hypertrophic diseases, comprising:—1. Diseases of the epithelial layer of the skin, including callosities, corns, and horns, in which the epithelial tissue is specially affected. 2. Diseases involving the dermic portion, in which the true skin is affected with or without the epithelium. In some cases the papillary layer is chiefly affected, but in connection with augmented production of the epithelium also, as in ichthyosis and xeroderma. In other cases the fibro-cellular tissue of the corium proper is the special seat of change, as in the diseases termed scleroderma, keloid, fibroma, Elephantiasis Arabum, and dermatolysis. 3. Diseases seated in the vascular structures, including such growths as vascular nævi.

B. Atrophic diseases, including general wasting and senile atrophy, and local or linear atrophy, which will be incidentally noticed together with morphœa.

Hypertrophic Affections.

We will first deal in detail with hypertrophic affections. It will be understood that no reference is made in this chapter to secondary or accidental hypertrophy—the consequence of congestion or inflammatory conditions, but to those diseases in which hypertrophy is the prominent or only condition.

Corns.

These are composed of an accumulation of the cells of the horny layer, which, generally, are pressed together into a conical mass that dips deeply downwards. The papillæ beneath may be enlarged, but are usually atrophied. The corn mass presses even upon the rete cells, and it also obliterates more or less the sweat glands. Corns are caused by pressure and friction; they are of two kinds—the hard ordinary corns, and soft corns. The soft corns occur between the toes, and being saturated with the secretion of the part, are moist and soft; generally there is some serosity effused under the upper layers or the bursæ normally found at the parts over the joints of the toes where the corns form, enlarge and pour out fluid, which is discharged from a little central aperture.

Treatment.—The shoes or boots worn must fit the foot—neither too small nor too large. The corn may be gotten rid of by soaking it in warm water, after which the outer layers may be removed by a sharp knife, and a slice of lemon bound upon it, and worn during the night. This treatment continued for three or four nights, the corn can be removed with but little pain.

Flexible or arnicated colloid may be used as a dressing for painful soft corns.

Ringed corn plasters will protect the corns from pressure.

If the corns are inflamed and painful, a veratrum viride or arnica lotion, one part to two, may be used.

A lotion, composed as follows, applied once or twice a day with a camel's hair brush, has been used with great success in removing corns:

- ℞. Salicylic acid, drachm j.
Ext. Cannabis Ind., grs. x.
Collodion, ℥j.
M. S. Apply as directed above.

Another excellent application is as follows:

- ℞. Acid Salicylic, drachm j.
Emplast. Saponat, ℥ijj.
M. f. empl. Sig.: Apply on lint.

Antimon. crud. is the principal internal remedy for hard corns, and *Sulphur* for the soft variety.

Dr. Berridge reports a case of soft corn between fourth and fifth toes of right foot; the corn shoots and burns; also, dull aching in outer side of right ankle extending up to hip, as cured by the internal use of Wiesbaden 200, a dose every other day for fourteen days.

CALLOSITIES are merely hardened conditions of the skin produced by pressure, differing from corns rather in the fact that they are on a larger scale than by any other feature.

Hypertrophy of the Papillæ and Epithelium Conjoined.

Horns.—These may be sebaceous in origin; usually, however, they are made up of hypertrophied papillæ, each containing one or more vessels and being covered by epidermis; on section they have a granular texture pierced with small orifices, and when dry, numerous con-

centric cracks. These orifices are the sections of little blood-vessels; a clear amber-colored circular area surrounding each of the vessels, which are separated by the general granular structure of the mass, incapable in the compact part of the horn of being reduced to its ultimate original elements. The central parts of the horn are more compact and less vascular than the outside.

Verrucæ, or Warts.

These are little raised tumors, sessile or pedunculated, hard, generally round, rugose, and mammillated. They are made up of coherent and enlarged papillæ, each containing a loop of blood vessels, and more or less nerve-tissue, especially at their base. The sessile warts, or the true hypertrophous papillæ, are seen mostly on the hands in children; they may be multiple, solitary, or aggregated in clusters. They may form a flat mass or present a digitate appearance. Warts are often the result of syphilis about the anus, vulva, penis, but they may also arise from simple irritation.

Venereal warts are pinkish or reddish vascular vegetations, and occur for the most part on the genitals, preferably on the penis and labia. They may also form about the mouth and anus, in the axilla and between the toes. They are apt to grow very rapidly, and may attain considerable size. They are caused by the contact of irritating fluids, and may be either dry or moist, according to their location. They may occur in connection with gonorrhœa, but are never like the condylomata, a sign of constitutional syphilis.

The causes of warts are unknown; they appear sometimes to be contagious. The local treatment consists in destroying the abnormal growth by caustics—the acid

nitrate of mercury, caustic potash, arsenical paste, perchloride of iron, or chromic acid. The smaller warts may be removed by the curved scissors, and the larger and more vascular ones by the curette, ligature or galvano-caustic wire.

Venereal warts need the strictest cleanliness. The dry ones may be treated locally by thuja or mercuric bichloride lotion. The moist ones respond best to dusting with the mercuric chloride.

Thuja externally and internally has great reputation in removing all kinds of warts.

Moles may be removed by the topical use of the acid nitrate of mercury.

The following repertory of warts and condylomata, prepared by Dr. Olin M. Drake, is so complete and excellent, that I transcribe it here:

Warts, confinement, following, small: Calc. c.

girls, upon young: Sep., Sulph., Thuja.

horses, upon: Lach., Thuja.

upon, about the head and ears; bell-shaped, small at the attachment and one to one-and-a-half inches long: Thuja.

imagines w. upon the body: Mez.

internal: Caust.

isolated: Calc. c., Caust., Lyco., Natr. c.

onanists, upon: Nitr. ac., Sep., Sulph., Thuja.

salt, from abuse of: Natr. mur., Nit. d. s.

LOCALITY.

Anus, about: Aur., Thuja.

Arms, upon: Ant. cr., Ars., Calc. c., Caust., Dulc.,

Ferr. ma., Lyc., Natr. c., Nat. sulph., Nitr. ac.,

Rhus tox., Sep., Sil., Sulph., Thuja.

left forearm: Sulph.

- bend of elbow: Calc. c.
 wrist (left): Ferr. ma.
 Back: Nat. c.
 Body: Caust., Medor., Thuja.
 Buttocks, small, scattered, flat, grayish-brown: Con.
 Cheek (left): Calc. c., Sep., Thuja.
 Chest: Aur., Calc. c., Nit. ac.
 Conjunctiva: Thuja.
 Cornea, warty in appearance: Sil.
 Ears, behind: Calc. c., Thuja.
 wart-like growths: Calc. c.
 Eyeballs, sensation as though was studded with:
 Euphr.
 Eyebrows, upon: Anac., Caust., Thuja.
 Eyelids: Calc. c., Caust., Mag. s., Nit. ac., Sulph.,
 Thuja.
 upper: Calc. c., Mag. s., Nitr. ac.
 Eyes, under: Sulph.
 Face, upon: Alco., Am. m., Calc. c., Caust., Dulc.,
 Ka. bi., Ka. c., Mag. s., Natr. m., Nitr. ac., Sep.,
 Thuja.
 Feet: Calc. c., Sulph.
 soles: Sep.
 Fingers: Ambra, Ars., Bar. c., Berb., Calc. c., Carb.
 an., Caust., Dulc., Ferr., Lac c., Lach., Lyco.,
 Nat. m., Nat. sulph., Nit. ac., Ox. ac., Pal., Petrol.,
 Psor., Ran. b., Rhus t., Sars., Sel., Sep., Sulph.,
 Thuja, Verrucinum.
 index finger: Caust. (right), Lyco. (left), Thuja.
 little finger: Caust., Lac c.
 middle finger: Berb., Lach.
 finger, back of: Lach.
 ring finger: Nat. sulph.
 back of: Dulc., Lach.

side of: Calc. c., Sep., Thuja.

tips of: Caust., Thuja.

joints, around: Sars.

knuckles, on: Ox. ac., Pal., Sal.

close to the nails: Caust.

rudimentary: Berb.

thumb: Lach., Ran. b., Thuja.

left hand: Psor.

Forehead, upon: Nitr. ac.

Genitals, upon: Calc. c., Cinnab., Eucalyp., Nit. ac., Pho. ac., Sec. c., Thuja.

upon glans penis: Nit. ac., Pho. ac., Thuja.

os uteri: Calc. c., Nit. ac., Sec. c., Thuja.

stinging and burning, when urinating: Thuja.

papilloma urethræ: Eucalyp., Thuja.

prepuce, frænum and inner surface, bleeding when touched: Cinnab., Eucalyp.

Hands, upon back of: Ars., Dulc., Ferr., Nat. c., Nit. ac., Thuja.

left: Ferr. ma.

right: Ars.

ball of the: Berb.

inside of: Ruta.

knuckles: Ox. ac., Pal., Sel.

left: Ferr. ma., Psor., Thuja.

onanists of: Nitr. ac., Sep., Sulph., Thuja.

palm of: Anac., Nat. m., Ruta.

wart-like induration in the palm, after a long continued pressure on the part: Borax.

right: Ars., Caust., Nat. sulph., Thuja.

Head, upon: Caust., Sep.

Iris: Thuja.

Lips: Caust., Con., Nat. m., Nit. ac., Thuja.

upper, smart and bleed on washing: Nit. ac.

- drawing pain in an old w.: Con.
 Mouth and chin, about the: Calc. c., Calc. ph., Cun.,
 Ka. ca., Lyco., Medor., Psor., Sep., Thuja.
 thickly studding the mouths of sheep: Calc. c.
 Neck, upon: Ant. cr., Calc. c., Lyco., Nit. ac., Sep.,
 Syph., Thuja.
 right side, filled with blood: Thuja.
 Nose: Alco., Caust., Laur., Nit. ac., Thuja.
 Sternum: Nit. ac.
 Thighs, upon: Medor.
 Thumb, upon: Lach., Ran. b., Thuja.
 Toes, upon: Spig.
 Tongue, upon: Aur. m., Aur. m. n., Mang., Thuja.

Objectively considered.

- Bleeding: Calc. c., Caust., Cinnab., Ferr. ma., Lyco.,
 Natr. c., Nitr. ac., Pho. ac., Rhus t., Staph., Thuja.
 Breaking open: Calc. c.
 Brittle: Ant. cr.
 Cauliflower, like: Nitr. ac., Ran. b., Thuja.
 on outer side of terminal phalanx of right thumb:
 Ran. b.
 Cleft. See jagged.
 Color, almost the color of the skin: Calc. c.
 dark: Sep., Thuja.
 red: Ars., Bell., Calc. c., Caust.
 size of a bean: Calc. c.
 and angry looking: Ars.
 circles around with: Caust.
 streaks with: Bell.
 Flat: Ant. cr., Berb., Dulc., Lach., Ruta, Sep., Verru-
 cinum.
 Groups or crops, in: Dulc., Lach., Nat. m., Psor.,
 Sep., Thuja.

Hollow, become: Calc. c.

Horny or hard: Ant. cr., Borax, Calc. c., Caust.,
Dulc., Fl. ac., Graph., Lach., Nit. ac., Ran. b.,
Sep., Sil., Sulph., Thuja.

upper surface: Calc. c.

Incipient or recent: Nat. c.

Inflamed: Amm. carb., Ars., Bell., Bovis., Calc. c.,
Caust., Dulc., Hep., Lyco., Nat. c., Nitr. ac., Rhus
t., Ruta, Sep., Staph., Sulph., Thuja.

as if ulceration would set in: Hep.

Inveterate or old: Calc. c., Caust., Cun., Ka. ca.,
Nat. m., Nit. ac., Rhus t., Sars., Sulph., Thuja.
grow larger; Cun.

Isolated: Calc. c., Caust., Lyco., Nat. c.

Jagged (cleft, divided or indented): Calc. c., Caust.,
Euphr., Lyco., Nit. ac., Pho. ac., Rhus t., Sabi.,
Staph., Thuja.

surrounded by a hepatic areola, with bran-like
desquamation: Lyco.

Large or fleshy: Caust., Dulc., Ka. c., Lyco., Nat. c.,
Nat. m., Nit. ac., Pho. ac., Rhus t., Sabi., Sep., Sil.,
Thuja, Verrucinum.

Malignant: Ars.

Moisture, exuding: Calc. c., Caust., Lyco., Nitr. ac.,
Pho. ac., Rhus t., Sabi., Thuja.

a fetid humor: Nitr. ac.

Pedunculated: Caust., Dulc., Lyco., Medor., Nit. ac.,
Pho. ac., Rhus t., Sep., Staph., Thuja.

Small, all over the body: Caust.

with pin-heads, like button mushrooms, on various
parts of body and thighs: Medor.

Recent or incipient: Nat. c.

Rough, upper surface whitish and horny: Calc. c.

Round: Calc. c.

Rudimentary, on fingers: Berb.

Scrofulous: Aur.

Seedy: Calc. c., Caust., Medor., Nat. m., Sep., Thuja.

small: Bar. c., Berb., Calc. c., Caust., Cun., Dulc.,

Ferr., Ferr. ma., Fl. ac., Hep., Lach., Medor.,

Nit. ac., Psor., Rhus t., Sars., Sep., Sulph., Thuja.

Smooth: Ant. cr., Dulc., Psor., Ruta.

Soft: Alum., Ant. cr., Calc. c., Nit. ac., Thuja.

at the base, almost the color of the skin; upper

surface hard, rough, whitish and horny: Calc. c.

with thin epidermis, and moist: Nit. ac.

to touch, like lipoma and pointed, on neck: Thuja.

Solid body, with horny top: Caust., Rhus t., Sep.

Spongy: Alum. See soft.

Suppurating (see Ulcerating): Ars., Bovista, Calc. c.,

Caust., Hep., Nat. c., Pho., Sil., Thuja.

then healing: Calc. c.

a previously existing wart, developed a red point,

suppurated and disappeared: Bovista.

sensation as if they would suppurate; in the evening

in bed: Petrol.

Sycotic: Alum., Aur., Cinnab., Medor., Mil., Nat.

sulph., Pho. ac., Sars.

Old, dry; after mercurial treatment for gouty pains:

Sars.

Syphilitic: Aur., Cinnab., Ka. iod., Thuja.

Ulcerating (See Suppurating): Ars., Calc. c., Caust.,

Hep., Nat. c., Pho., Sil., Thuja.

Ulcers breaking out around warts: Ant. cr., Ars., Nat.

sulph., Pho.

having the shape of warts: Ars.

originating in warts: Thuja.

turning into warts: Calc. c.

SUBJECTIVE SYMPTOMS.

Burning: Amm. carb., Ars., Lyco., Nit. ac., Petrol.,
Pho., Rhus t., Sep., Sulph., Thuja.

Itching: Calc. c., Carb. a., Euphr., Hep., Ka. carb.,
Nit. ac., Pho., Psor., Sep., Sulph., Thuja.

Painful: Ars., Amm. carb., Ant. cr., Bar. c., Bovis.,
Calc. c., Caust., Con., Euphr., Hep., Ka. carb.,
Lyco., Nat. carb., Nat. mur., Nit. ac., Petrol., Pho.,
Rhus t., Sabi., Sep., Sil., Staph., Sulph., Thuja.

ameliorated on the appearance of menses: Thuja.

preventing rest at night: Ars.

like a boil: Calc. c.

cutting: Nat. mur.

drawing, in an old w. on upper lip: Con.

pricking: Ant. cr., Calc. c., Lyco., Nit. ac., Pe-
trol., Rhus tox., Sep., Sil., Sulph.

in the evening in bed: Petrol.

pulsating (beating or throbbing): Ars., Calc. c.,
Caust., Hep., Ka. carb., Lyco., Nit. ac., Petrol.,
Sep., Sil., Sulph.

shooting: Ars., Bovis.

with pains, sticking: Hep., Nit. ac.

stinging: Amm. carb., Ant. cr., Bar. c., Calc. c.,
Caust., Euphr., Hep., Lyco., Nitr. ac., Rhus t.,
Sep., Sil., Staph., Sulph., Thuja.

as if ulceration would set in: Hep.

tearing: Amm. carb.

throbbing: See pulsating.

extending up the arm to the axilla, from a malig-
nant wart on the hand, rendering the arm use-
less: Ars.

Soreness of: Ambra, Ars., Hep., Lach., Nat. carb.,
Nat. mur., Nit. ac., Petrol., Ruta, Sabi., Thuja.

Tickling (see itching): Sulph., Thuja.

Condylomata, mercury; after the abuse of: Aur., Lyco., Nit. ac., Staph.

women, particularly in: Merc. d., Sabi.

LOCALITY.

Anus, upon or about: Aur., Aur. m., Benz. ac., Euphr., Lyco., Merc. c., Merc. d., Mil., Nit. ac., Sabi., Sep., Staph., Sil., Thuja.

a growth, like a w., a quarter of an inch in height, and as thick as a pea, painless, itching, opening at the top and suppurating, in the ridge, close to the anus, lasting four weeks and gradually healed: Thuja.

Clitoris, upon or about: Thuja.

Eyebrows, upon or about: Thuja.

Eyelids, upon or about; either on the internal or external surface: Cinnab., Nit. ac., Thuja.

upon or about, lower: Nit. ac.

Frænum, upon or about: Cinnab.

upon or about, oozing, especially during new moon: Thuja.

Genitals, upon or about: Alum., Benz. ac., Lyco., Medor., Thuja.

upon or about, female: Merc. d., Thuja.

Iris, upon or about: Cinnab., Merc. sol., Thuja.

Labium, upon or about: Sulph., Thuja.

Larynx, upon or about: Merc. c., Nit. ac., Thuja.

Mouth, upon or about (inner): Phos. ac.

Neck, upon or about: Nit. ac.

Penis, upon or about: Ant. t., Aur., Aur. m., Cinnab., Ka. iod., Ka. mur., Lyc., Merc. c., Nit. ac., Nux v., Pho. ac., Psor., Sabi., Sanic., Sep., Staph., Sulph., Thuja.

glans: Ant. t., Cinnab., Ka. iod., Ka. mur., Lyco., Nit. ac., Nux v., Pho. ac., Sanic., Staph., Sulph., Thuja.

- Corona glandes, upon; after chancre: Ka. mur.
 around: Aur.
 upon and behind: Staph.
 surrounding: Sep.
- Prepuce, upon: Aur., Aur. m., Cinnab., Lyco., Nux vom., Merc. c., Nit. ac., Sabi., Thuja.
 edge of, itching and burning: Psor.
- Perineum, upon: Merc. d., Thuja.
- Scrotum, upon: Aur. m., Thuja.
- Tongue, upon: Aur. mur.
- Uterus, upon: Lach.
 cervix: Kreos., Merc. sol., Nit. ac., Tarent., Thuja.
 os: Calc. c., Kreos., Merc. sol.
 vagina, in: Medor., Nit. ac., Pho., Tarent., Thuja.
 vulva, upon: Merc. d.

OBJECTIVELY CONSIDERED.

- Bleeding: Arg. n., Medor., Nit. ac., Sulph., Thuja.
- Broad: Ac. ac., Euphr., Merc. d., Nit. ac., Thuja.
- Bulbous: Alum.
- Cauliflower or mulberry like: Staph., Thuja.
- Chancre, complicated with: Arg. n., Cinnab., Ka. bichr., Merc. sol., Nat. sulph., Nit. ac., Pho. ac., Staph., Thuja.
 after: Kali iod.
- Cock's comb shape: Euphr., Staph., Sulph.
- Conical: Ka. mur., Merc. v., Thuja.
- Dry: Ac. ac., Cinnab., Lyco., Merc. c., Merc. v., Nit. ac., Sars., Staph., Thuja.
- Fan-shaped: Cinnab., Thuja.
- Filiform: Staph.
- Flat: Ac. ac., Euphr., Nit. ac., Sars., Sulph., Thuja.
- Gonorrhœa, complicated with: Cinnab., Con., Ka.

mur., Lyco., Merc. c., Nit. ac., Pic. ac., Puls., Sars., Sulph., Thuja.

Moist (discharging): Ac. ac., Benz ac., Calc. c., Euphr., Graph., Hep., Ka. iod., Lyco., Medor., Merc. d., Nat. sulph., Nit. ac., Psor., Sanic., Staph., Sulph., Thuja.

discharging profuse: Benz. ac., Medor.

greenish: Nat. sulph.

offensive: Medor., Merc. d., Nit. ac.

smelling like fish-brine: Sanic.

herring-brine: Calc. c., Graph., Hep., Thuja.

old cheese: Calc. c., Hep., Thuja.

yellow fluid: Medorrh.

Moon, worse with the increase of the: Thuja.

Mulberry or cauliflower like: Staph., Thuja.

Old, long standing, in cachectic subjects: Ka. iod.

Pedicles, growing on. See pedunculated.

Pedunculated: Lyco., Nit. ac., Sabi., Staph.

Soft and spongy: Alum., Nat. sulph., Sulph.

Split: Lyco., Nit. ac., Thuja.

Strawberry-like: Medor.

Suppurating (see Moist): Ka. iod., Nit. ac., Thuja.

Tubular: Thuja.

Ulcers elevated, which have the appearance as if w.

would grow out of them: Cinnab.

Wart-shaped: Benz. ac., Nit. ac., Nux vom., Sars.,

Sulph., Thuja.

White: Lyco.

SUBJECTIVELY.

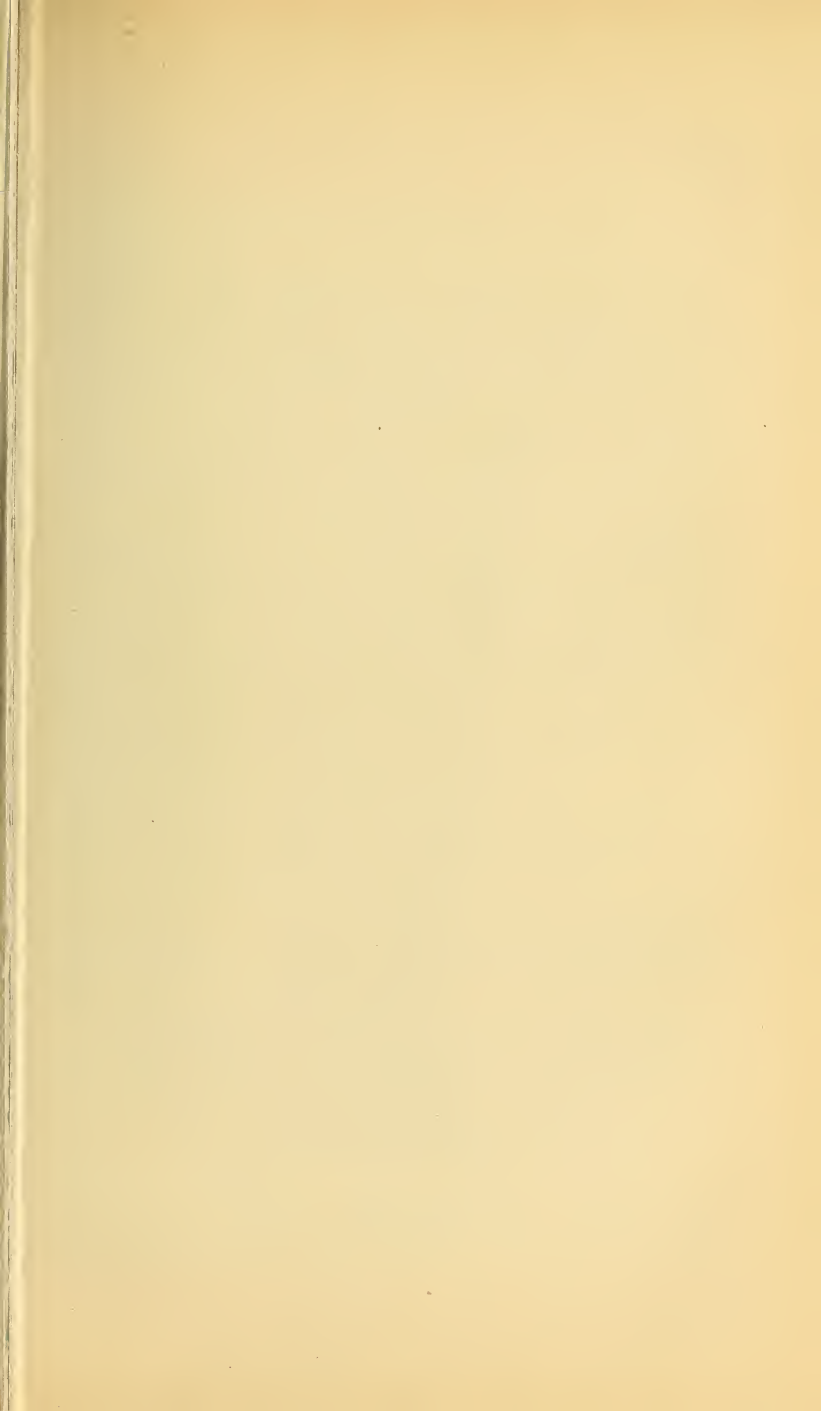
Burning: Euphr., Pho. ac., Psor., Merc. d., Sabi.

when touched: Euphr., Sabi.

Itching: Cinnab., Euphr., Phyt., Psor., Sabi., Thuja.

especially when walking: Euphr.

about the joints: Cinnab.





ICHTHYOSIS.

Painful: Euphr., Sabi., Thuja.
 even when free from contact: Sabi.

Painless: Lyco.

Pain in bones or bone pains, with: Pho. ac.

Sore; Euphr., Sabi., Thuja.

when touched: Euphr., Thuja.

Stinging: Thuja.

Stitches in: Euphr.

especially when walking: Euphr.

Ichthyosis.

Ichthyosis is a chronic disease of the skin, in which the epidermis is developed in excessive accumulations, usually accompanied by more or less hypertrophy of the papillæ, presenting a dry, harsh, and "scaly" surface, whence its name, and arising from a congenital or hereditary predisposition in the patient.

This disease is usually divided into two forms, according to the degree of development.

The mild form, called simplex, is more frequently found, and varies from a very mild xerodermatous to a decidedly scaly condition of the skin.

The severe form, called hystrix, shows its most advanced stage, with the papillæ enlarged and the cones between extended and capped with horny excrescences of various sizes and shapes.

While the characteristics of this disease are marked, particularly the objective symptoms, the subjective symptoms are almost entirely lacking.

Ichthyosis Simplex.

In this, the mild form, the skin of a new born infant is free from any apparent symptoms. It is usually not until after the lapse of a few weeks or months, and some-

times years, that the disease is sufficiently advanced to attract attention, when there is first noticed a dry, rough condition of the skin; its color, however, remains unaffected. The skin may be generally involved, or the affection may be confined to certain localities, such as the extensor surfaces of the limbs, and afterward extend over the whole surface of the body. By gradual development, the epidermis becomes slightly thickened, and the natural lines of the skin begin to deepen, and those become apparent which ordinarily can not be seen. In its further development the epidemic scales become larger and more abundant. The scales enlarge in area and thickness, their outline being limited and conforming to the natural lines and furrows of the skin, and form plates of various shapes; those on the extensor surfaces of the extremities are the largest and resemble the scales of a fish. The well-developed scales are detached about their edges, but are quite firmly attached in their centres, and can be removed with little difficulty without abrading the surface of the papillæ beneath, and blood following, as is the case in psoriasis. When the scales are thin and the skin kept clean, they present a white or pearly appearance. When more developed and thickened, this color is deepened, shading from yellowish to darkish-green or even brown or blackish. This is due partly to pigmentary deposits in the plates, but mainly to accumulations and incorporations of extraneous matter not removable by washing. Fissures or cracks are formed on the surface where it is thickest and most unyielding; but they extend only through the upper layer of the skin, and remain dry, thus differing from those found in eczema, which extend deeper, giving exit to a serous discharge which dries into crusts. The anidrotic or dryish state of the skin, so markedly shown here, is probably due to

a sparse and defective development of the sweat glands and follicles and to their functional inactivity in the parts affected; the unaffected parts remaining in the normal state.

Ichthyosis Hystrix.

This form is the more severe and rare manifestation of the disease, and presents a variety of developments. It is characterized by the excessive growth and accumulation of epidermis in the form of thick, irregularly shaped, variously colored, horny masses, which admit of being detached, exposing a dry and rough surface; or by more marked hypertrophied papillary growths which are surmounted by variously sized and shaped horny projections.

In some instances they take the semblance of the quills of the porcupine; hence the name, *hystrix*. Its distribution may extend irregularly over various parts of the body, or may be localized in one or more well-defined patches, as, for instance, about the axillary folds, the knees, elbows, neck, or other regions. This form is also of gradual growth, is the most advanced, and its degree of development increases with age.

The eruption is particularly severe and annoying in winter; and sometimes diminishes in summer, recurring again the succeeding winter.

Course.—The disease is progressive as age increases, until the climax is reached, usually at adult age, whereafter there is little change. A spontaneous cure has rarely, if ever, occurred. The two varieties of the disease may occur together.

Diagnosis.—Ichthyosis is so distinctly characterized as to render its diagnosis easy and certain. In its mild form it is to be differentiated from xeroderma, meaning *dry skin*, which properly refers to a condition not ichthyotic

in origin; from eczema, by the absence of pruritus; and from all other inflammatory disorders which tend to desquamation, by the absence of previous inflammation.

Prognosis.—The simplex form may often be ameliorated; but the hystrix form is rarely, if ever, more than temporarily improved. The general health is apparently unimpaired in either case; and there are instances where the mild form has decreased in development with increasing years; but it is a question if the disease once developed ever disappears or is cured radically.

Etiology.—Ichthyosis is an hereditary affection, and usually transmitted in the line of sex; but there are many exceptions to this rule, and numerous instances of the crossing of the sex. It is common to find several instances in the same family.

Treatment.—This disease is seldom, if ever, radically cured, but the condition of the patient can be considerably bettered. The general health is apparently unaffected. The treatment should be directed to the relief of the symptoms present. The anidrotic condition of the skin may be improved by the employment of such agents as will increase the sweat-secretion. For this purpose the old school recommend jaborandi, in the form of fluid extract, taken daily, in drachm-doses, and they claim that in some instances it has prompt effect, and at the same time loosening of the epidermic scales occur. The wet-pack has also been advantageously employed, or frequent washing and alkaline or other baths may be substituted with success for this purpose. After the removal of the epidermic accumulations, the newly exposed epidermis should be kept as soft and pliable as possible, by inunctions of some bland oil, to prevent a return to its former condition. Such treatment will afford relief, more or less permanent.

A generous diet should be allowed the patient.

An infusion of quillaya saponaris bark sometimes works well as a local fomentation.

Internal homœopathic remedies are:

Arsen. iod..—Dry scaly skin; itching and burning in scrofulous subjects with swelling of the lymphatic glands.

Clematis..—When there are fine scales with some itching, worse when getting warm in bed; painful swelling and induration of the glands. Eruption changes character with the changes of the moon.

Graphites..—Skin dry and inclined to crack; unhealthy skin; every injury tends to ulceration; thick and crippled toe nails; extremities go to sleep; itching of the genitals.

Iodine..—The skin has a brown dingy color; ravenous hunger; swelling and distension of the abdomen; emaciation in dark-complexioned, scrofulous children.

Mercurius..—Dirty, yellow color of the skin; itching, worse at night when warm in bed; dry, scaly spots; in syphilitic and scrofulous subjects.

Natrum carb..—Skin of the whole body becomes dry, rough and cracked here and there; frequent empty or sour eructations; great prostration.

Phosphorus..—Skin is dry and wrinkled; skin of hands is rough and dry; pains in the chest; desire for acids and spicy foods; falling of the hair; great indisposition; in tall, slender people.

Potassium iodide..—Skin dried up; rough, like hog skin; sensitive swelling of the thyroid gland; œdematous infiltration of the tissues; after mercury or syphilis.

Plumbum..—Dry skin; absolute lack of perspiration; obstinate constipation; paralytic weakness of the limbs.

Thuja..—Dirty, gray, cadaverous looking skin. Wart-

shaped excrescences; brittle or soft nails; lymphatic temperament.

Hypertrophic Diseases of the Corium.

Under this head are included all those diseases in which the fibrous tissue of the skin is in excess, and in which the disease extends to or involves the subjacent cellular tissue. These may be termed *fibro-cellular hyperplasiæ*. They are: Morphœa; scleroderma; keloid; fibroma; buenemia tropica; and dermatolysis.

Morphœa.

Morphœa, formerly called Addison's keloid, is a chronic cutaneous affection, characterized by the appearance of one or more discrete spots or patches, usually isolated and roundish in form, pinkish in color, and slightly elevated when hyperæmic and hypertrophic, surrounded by a tinted or violaceous border, later becoming whitish, anæmic, atrophic, and slightly depressed; and upon their surface, in the early stage, may be seen small streaks of dilated blood-vessels.

Forms.—This rather infrequent affection assumes various definite forms, according as the character of its development is mainly hypertrophic or atrophic.

Patches of the first form, which are mainly hypertrophic, enlarge until they are of the size of small or large coins, and are roundish in outline; after a preliminary hyperæmic stage, they gradually assume a lardaceous appearance, and later on show a distinct atrophic aspect.

Lesions of the second form, which is mainly atrophic, manifest little or no tendency to hyperplasia, and occur in small, pit-like, or slightly depressed, cicatriform or telangiectasia, isolated or grouped spots or steaks, forming *maculæ et striæ atrophicæ*.

Symptoms.—A typical case of morphœa usually makes its appearance by the formation of one or more roundish, circumscribed, hyperæmic, slightly elevated macules or patches, varying in diameter from one-quarter to a couple of inches; the centre gradually whitens, and is bordered by a tinted circle of violaceous or pinkish hue, composed of dilated capillaries, and often there is to be seen a plexus of small blood-vessels extending upon the surface of the lesion. The hyperæmia of the patch is soon succeeded by an anæmic state, which may be sometimes so decided as to cause a slight depression of the surface. The patch, from this time, undergoes a gradual change until it presents the characteristic smooth, lardaceous appearance, resembling inlaid wax, or old ivory. The connective tissue of the skin is increased and becomes condensed. The activity of its process of development becomes lessened during this stage of the disease and enters on a chronic course. The skin of the patch may be soft, or quite firm and inelastic.

In its further progress the affection may manifest atrophic changes in the tissues as well as of the glands and vessels of the affected skin, resulting in contraction and also depression of its surface, together with a lessening or cessation of the secretions of the sweat and sebaceous glands; and the skin feels stretched and thinned. These later changes may extend over a period of years and become permanent, or the affection, before it has become decidedly atrophic, sometimes displays its tendency to recovery by the disappearance of the lesion.

The distribution of the lesions is asymmetrical, and has been found upon various regions of the body, as upon the face, chest, back, buttocks, arms, and thighs. The shape of the patches, even in individual cases, is

irregular, and varies, being round or elongated, but usually roundish.

In its early stage, morphœa develops usually without any or with but slight attending subjective symptoms; later there may be more or less anæsthesia.

Diagnosis.—In its advanced stage, morphœa is so characterized that its diagnosis is readily made. Sometimes, however, it is so very like scleroderma that it is difficult to differentiate between them.

In scleroderma the patches are usually symmetrically distributed, and the affected skin is hide-bound, or can not be lifted up into a fold by the fingers, and feels hard. In morphœa the patches are asymmetrically distributed, and the affected skin feels soft or firm.

In scleroderma the patches are not circumscribed, but show a tendency to spread over a large surface, and at their border merge indistinctly and gradually into the surrounding skin. In morphœa the patches are often distinctly circumscribed, and confined to a limited area; and in their early stage are surrounded with a tinted border of pinkish or lilac hue, or the surrounding healthy skin is more or less pigmented.

When the pigmentless spots in vitiligo resemble the whitish spots of morphœa, it is only to be remembered that the former is due simply to the absence of pigment, while the latter is caused by an abnormal state of structure, and of vascular supply.

Patches of morphœa sometimes present appearances very similar to those of anæsthetic leprosy. The objective and subjective symptoms in the progress of these diseases are so different as to render the diagnosis between them certain.

Prognosis.—The prognosis of the disease is, to a certain extent, favorable, but depends largely on the degree

of development, particularly if it has not yet become atrophic. In this latter condition the lesions are lasting; but in its earlier stage, and especially when there is only moderate hypertrophic change in the connective tissue, there is a tendency to spontaneous disappearance.

Its course of development, when mainly hypertrophic, is quite short, as compared with the period elapsed during the atrophic stage, which is usually slow and chronic, extending over several years.

Etiology.—The cause of this disease is yet to be determined. From what is known concerning the functional disturbances and trophic changes that occur in the development of its lesions, and their appearances in the hypertrophic and atrophic stages, the disease is thought to be due to some disorder of the nervous system, and probably of tropho-neurotic nature. Its occurrence has been noted mostly in females, and is at times attended with symptoms of more or less nervous debility. Scleroderma, in some essential respects, resembles morphœa, and inferentially is very likely of a similar origin. Indeed, some view morphœa as merely a localized form of scleroderma.

Treatment.—In the treatment of this disease, locally, some mild stimulant may be applied, as a mercurial preparation, and electricity to promote resolution. Phosphorated oil inunctions are beneficial. The patient should be well-fed, and have a daily allowance of either cod-liver or chaulmoogra oil.

Phosphorus is the principal internal remedy.

Scleroderma.

Scleroderma is a chronic circumscribed affection of the skin, appearing on almost any part of the body, having been observed on the face, neck, upper and lower

extremities and elsewhere. It commences with slowly-forming infiltration, apparently permeating the entire thickness of the skin, with slight elevation of the affected area. The color is slightly heightened, with a brownish red tint. At the same time the integument becomes matted to the underlying connective tissue and fasciæ, and so tightly bound down to them that no motion of the skin over them is possible, resembling scleriosis in this respect. This condition remains for a varying period, with constant tendency to spread, usually in the form of a band. Thus, when it commences on one of the lower extremities, for instance, it slowly progresses upward, involving a breadth of integument equally perhaps one-fourth or one-third of the circumference of the limb. After a time the other limb, or one of the arms, may become involved. As the disease progresses, however, the parts first involved undergo a change. The infiltration subsides, and gradually reveals the fact that the normal connective tissue of the skin has in part disappeared. In other words, marked atrophy is manifest. The skin, however, has not loosened its hold on the underlying tissues, and still remains as firmly bound down to them as ever.

The affection is accompanied with very little pain or other local inconvenience, except so far as it interferes with the free action of the joints and muscles.

The *diagnosis* of scleroderma is not difficult, as the hide-bound condition above described is met with in but one other affection, namely, scleriosis. The history of the invasion and the course of the affection should be sufficient to enable it to be distinguished from Morphœa.

The prognosis of scleroderma varies. In some cases it may continue for many years without apparently compromising the general health, while in others its progress

may be more rapid, and possibly be the exciting cause of visceral troubles that ultimately prove fatal.

Treatment.—There are no drugs known to the old school which, given internally or applied externally, influence the progress of the disease in the slightest degree.

Frictions, massage, and the constant galvanic current, however, will sometimes result in very marked improvement in the condition of the affected parts.

Antim. crud., *Alumina*, *Berberis*, *Causticum*, *Mercurius*, *Pulsatilla*, *Rhus tox.*, and *Sulphur* may often be of service.

Scleriasis.

Scleriasis is an acute affection of the skin, characterized by the sudden development of a curious scleroid condition over an extensive surface. In a few days the greater part of the integument of the chest, abdomen, or back may, without change of color or any inflammatory symptoms, become rigid and firmly bound down to the tissues beneath. It appears to have absolutely lost its elasticity, and to be so firmly attached that it is as impossible to raise or pinch it up in folds as it would be to pinch up paint or varnish from a board.

This condition may exist in varying extent and of varying degrees of severity for several weeks, when a gradual return to the normal may ensue.

The prognosis is good, as the cases usually recover.

The etiology is obscure, but the affection is probably of rheumatic origin.

Treatment.—Little need be done in the way of special treatment, but proper attention should be given to the correction of any marked impairment of the general health. Turkish baths and massage, with or without

electricity, appear to shorten the course of the affection.

As internal remedies *Hydrocotyle*, *Phos.*, and *Stillingia* may be thought of.

Sclerema Neonatorum.

This is an affection of the skin met with in new-born infants, in which the greater part of the integument may become rapidly involved in a process which results in a generalized hide-bound condition, which interferes with motion of the limbs, and even restricts the action of the thoracic muscles. A fatal termination is usually to be looked for in a few days.

The nature of the disease is obscure—in fact, its exact etiology is unknown; but its general features point to a close relationship to the affection described as scleriosis, as met with in adults—the better prognosis in this latter disease being due to the greater resisting powers of the adult.

Treatment, other than sustaining, appears to be of little avail.

Keloid.

Keloid is characterized by the growth upon the skin of one or more rounded or oval, flat, smooth-surfaced tumors of varying size, from the margins of which irregular projections are frequently met with.

The development and progress of the affection is chronic, and is attended with but little pain or other inconvenience. The color of the skin is in some cases little changed, while in others it becomes paler and even completely blanched, like that of ordinary scar tissue.

The affection is said to arise spontaneously, and at other times at the site of some traumatism or wound of the skin; and the terms true and false keloid have

been applied to these two forms, which are to be distinguished only by their etiology.

Vidal reports the case of a 53 year old man in whom a keloid, nine centimetres long, three centimetres wide and one centimetre high, developed spontaneously in the sternal region. He did not have syphilis and no discoverable cause could be found. At first it increased in size, but slowly; since 1878, however, it grew more rapidly and became painful. A second keloid has lately developed in the flexure of the right elbow, also without visible cause.

We know, however, that keloid may arise from even the minutest wounding of the skin, as from the prick of a pin or lancet point.

Amicus reports the case of a young nervous woman who, from childhood, suffered from nervous symptoms. One year before coming under his observation she was attacked with a symmetrical eruption on the trunk and lower extremities, showing 318 keloids, the size of millet seeds. The lymphatics were normal; the urine showed nothing wrong. During her sojourn in the hospital she had several convulsions, retention of urine, etc. These so-called keloids were small pinkish elevations on the skin, which might be mistaken for sarcomata. No trauma preceded the trouble.

Mr. Hutchinson mentions some rare forms of keloid, in which he details several interesting cases, with the following conclusions:

1. That with keloid, as with other skin diseases, we must not expect too close a conformity to the type form.
2. That for clinical convenience, we may recognize several varieties of keloid, the prognosis as to spontaneous disappearance and proneness to return after excision differing much in each.

3. That the first and most typical is that in which keloid begins in very small, perhaps forgotten, scars, and slowly spreads far beyond their limits into sound skin. In most cases, the extension and duration are indefinite; and the hardness, glossiness, abruptness of outline, etc., are always well marked. The proneness to recur very quickly after excision is very great in these.

4. That in the second group, in which keloid growth begins in the middle of large scars, such as those of burns, it is seldom so well characterized. It often does not extend beyond the scar, and often, especially in young persons, soon begins to soften again, and to gradually disappear.

5. That in a third form the keloid growth is deeper, never produces the glossy, superficial, elevated, and spurred patches which occur in the others. These cases are very slow, and show but little tendency to spontaneous disappearance. They do not develop in connection with large scars, but rather with inflammatory damage to the skin. They are less prone than the others to recur after excision.

6. That although definite scars almost invariably precede the formation of keloid, yet that there are allied conditions which result rather from inflammation after injury, than from anything which is demonstrable as cicatrix.

7. That the cases of multiple keloid prove either that there is in some persons a remarkable tendency to the disease, or that primary patches have the power of infecting the blood and producing others.

8. That there is little or no clinical proof of tendency on the part of keloid to pass into cancer.

The etiology of keloid is unknown, and we can only say that some individuals possess a certain peculiarity or

idiosyncrasy that leads to the development of this curious affection.

Treatment.—Excision, cauterization, potential caustics, whether alkaline or acid, when of sufficient power to rapidly destroy the tumor, are almost invariably followed by relapse and often in an aggravated form. Relief sometimes follows scarifications followed by the application of acetic acid. The operation should be performed a number of times, according to the size, etc., of the tumor. In cases of excessive keloidal growth, excision may be employed as a means of temporary relief.

Several cases are recorded where electricity has been employed with excellent results.

Fluoric acid is the principal internal remedy, and the next is *Graphites*. *Nitric acid* and *Sabina* are occasionally indicated.

Dr. Neatly reports a number of cases as cured by the persistent use of *Silicea* for a few months.

Fibroma.

This name is applied to tumors of varied size and form, which take their origin from the dermal or sub-dermal tissues, which are single or multiple, and vary in size from a small nodule to a tumor of many pounds' weight. These tumors may be sessile or pedunculated.

The affection is chronic, taking years for its complete development, but the growths are usually painless, and give little or no inconvenience, except such as may arise from their size or particular location.

The causes of fibroma are unknown, but they are of perhaps more frequent occurrence in mulattoes than in either the pure white or black races.

Diagnosis.—Fibromata are to be distinguished from sarcomata and neuromata, and this may be readily done

when we remember that the former are of more rapid growth, and exhibit changes in the color and texture of the skin, which in fibroma are unaffected. Neuromata are usually painful. The diagnosis must be made in the early stage from sebaceous cysts; in the case of cysts, the origin from a flat gland, the central aperture or entrance to it, and the fatty contents which can be squeezed out, determine the nature of the disease. The hard contractile sessile outgrowths of keloid could not well be mistaken for the lax, flabby, pedunculated tumors of fibroma, which have the aspect of normal integument.

Treatment.—Piffard says: "Excision is the only practicable method of treatment, and this is to be recommended only when the tumors are few in number, or when their situation demands it."

Fox says the treatment is simple: "When small, fibromata may be removed. In elderly men they are sometimes small, flat, and numerous—especially about the back, over the shoulders, and on the chest. I have never had the least trouble in getting rid of them all by the use of acid nitrate of mercury caustic to the smaller, and the joint use of that remedy and the ligature to the larger ones. I generally, after applying the acid, give an oxide of zinc paste to be used, to prevent too much irritation."

The *Arsenite of calcarea* and *Lycopodium* are the principal internal remedies.

There is yet another form of fibrous hypertrophy, in which greater laxity of tissue is observed. It is called—

Dermatolysis.

In this affection the skin hangs in loose folds. Its fibro-cellular element is greatly increased. The affection really includes all pendulous conditions, from obesity,

parturition, the state of skin in lax and enlarged mammæ, and the like. In the uncomplicated form of disease, the hypertrophic growth arranges itself in layers like the folds of a tippet; there is little vascularity; the sensibility of the part is diminished.

Elephantiasis.

This affection is characterized by great hypertrophy of the integument of either the leg or scrotum in men, or leg or labia in women, or both locations may be involved at the same time. It occurs frequently in tropical countries, but rarely in northern climes.

In the development of this disease general symptoms precede the local ones, and the first indications are usually a sharp, febrile attack, in no way distinguishable at the beginning from an ordinary severe paludal fever. In a few days, however, pain in the groin, with swelling of the lymphatics, is noticed, and this in turn is followed by more or less œdema of the foot and leg. After the subsidence of the febrile attack the œdema of the limb abates, but does not as a rule wholly subside. After a varying and uncertain interval a second febrile attack occurs, with renewed swelling of the limb, which but partially subsides, leaving the part still a little larger than before. These attacks succeed each other irregularly several years, until finally the leg or other part affected may attain an enormous size.

Elephantiasis is unquestionably due to obstruction of the lymphatic circulation; and this in turn has been most conclusively proved in many cases to be due to the presence of a minute worm, the *filaria sanguinis*, which lodges and excites inflammation in the lymphatic glands and produces occlusion of the vessels. The febrile attacks, which occur with a certain periodicity, may be

due to the development of fresh broods of *filaria*. This parasite, however, is not met with in the higher latitudes, in which cases of the disease are sometimes encountered; and hence these latter need some other reasonable explanation, which we regret to say is not forthcoming. It is supposed by some that the mosquito plays an important part in the development and transportation of the undeveloped filariæ.

Elephantiasis is always a grave disease, and may last a life time.

Treatment.—A milk diet is the best for the elephantiasis patient, and if it is a possible thing a change of climate should be made.

I can not recommend Esmarch's bandage, neither amputation, as I have never seen any benefit from either expedient.

Relief, and occasionally beneficial results, come from the use of hamamelis or chaulmoogra oil dressings.

Myristica sebifera is the main internal remedy. *Hydrocotyle Asiatica*, has been recommended, as have also *Anacardium orientale* and *Elæis guineensis*.

Milium.

This name is given to an affection characterized by the appearance of minute white or pearly papules.

These little papules are usually clustered about the eyes, sometimes on the upper and the lower lids, and often on the cheeks just below the eyes. They correspond to sebaceous glands, of which the orifices have in some manner become occluded, thus allowing an accumulation of sebum. They are much more frequently met with in women than in men.

Treatment.—Milia are readily removed by dividing the thin skin that retains them with a sharp curved

needle ground flat on the curve. A little pressure is exerted, and the tiny white sebous concretion rolls out. The *Calcium iod.* is the principal remedy, and the next *Staphysagria*. *Tabacum* may be thought of.

Mammillitis Maligna.

Under this designation we embrace the peculiar and rare disease of the nipple and areola, commonly known as "Paget's disease of the nipple."

Dr. James Paget was the first to describe this disease, and he states that he had seen some fifteen cases, all occurring in women between the ages of forty and sixty. The affection *commences* as a red, almost raw inflammatory condition, confined to the mamilla and surrounding areola; the surface being somewhat granular, and looking not unlike an ordinary eczema rubrum from which the epithelium had exfoliated, and accompanied with a very similar exudation, with some tingling, burning, and itching. In other words, it presented the ordinary appearances of a common eczema, except that, when taken between the fingers, there was a firmness of the tissues, approaching the condition of induration, that is never met with in eczema proper.

The chief peculiarities of this disease, however, are the facts that, first, it is exceedingly rebellious to treatment, obstinately refusing to heal under the simple measures that would suffice in ordinary eczema; and, second, that the disease in question proves to be a forerunner of carcinoma.

It is on this fact that the real importance of the disease depends, as in the beginning it gives rise to very little local or other inconvenience.

Treatment.—If the diagnosis is firmly established, extirpation, either by the knife or caustic, is the only

means of treatment that promises any success, as soothing remedies do not check its progress, while those of a stimulating nature simply aggravate the lesion.

I am unable to recommend any homœopathic remedy as having had any influence upon the disease. *Kali mur.* and *Silicea* might be tried, given in alternation.

Ainhum.

This disease consists of spontaneous amputation of the little toes, with hypertrophy of the amputated part. The name means "to saw." The disease is said to exist amongst the Africans.

A small semi-circular furrow first appears in the digito-plantar fold, which gradually increases, without pain or inflammation, the toe enlarging, and getting loose and in the way. If the toe is cut off, the wound left heals very speedily. The cause is unknown. The general health does not suffer. The disease is symmetrical. The amputated toe shows fatty change of the tissues, enlargement of the areolar spaces of some of the bones of the phalanges, the bone tissue between the middle and proximal phalanges being replaced by fibrous tissue, the separation of the toe taking place at the proximal, inter-phalangeal joint, and not the metatarsal phalangeal joint; the cartilage and articular end of the middle phalanx being removed and replaced by fibrous tissue, which looks like an ordinary cicatrix.

Nævus.

These spots are congenital; and they are not only hardly ever amenable to surgical treatment, but have in many cases been rendered much worse by such injudicious treatment. Some remarkable nævi reproduce upon the skin of the child while yet unborn the vivid

impression made upon the mind of the mother. Another and more profound influence of the same kind, or one exerted in an earlier stage of pregnancy, results in actual deformities and monstrosities.

Nævi materni may be arranged in three distinct classes, in the order of their gravity.

1. *Moles*, the most common of all, whose character and harmlessness are well known, and which are generally attributed to some alteration in the structure of the rete mucosum.

2. *Venous Aneurisms—Anastomosis of Venous Capillaries*.—These form a dark-red circumscribed stain, which generally appears on one side of the face, and is sometimes of considerable extent. These "marks," which appear to be simple dilatations of the sub-cuticular capillary vessels, may increase in extent till puberty, and then remain stationary.

3. *Aneurisms and Dilatations of the Arterial Capillaries*—These form the most important of the *nævi*; they are apt to enlarge in after-life, especially when stimulated by external irritation, and they may give rise to dangerous hemorrhage if improperly meddled with. They form slightly elevated spots, with well-defined margin and a granular surface, which consists of an erectile vascular tissue. These granulated tumors, raised above the skin, may in fact be constituted of venous or of arterial vessels. In the former case they may be of a dark-blue or livid color; in the latter, of a brighter red.

Treatment.—Mr. Thomas reports three cases treated by collodion. The *nævi* were covered, together with the surrounding skin, with collodion, which was repeatedly applied. Improvement was so marked as to do away with the necessity for operative interference.

Dr. Mayor publishes an interesting case of a *nævus* of

the cutaneo-subcutaneous variety, on the back, in a girl aged ten months, where he successfully tried electrolysis. The number of sittings was two, and the duration of each about two minutes. On examination of the patient, nearly four years later, not a trace of the nævus was detected.

Dr. Marshall, from an experience of many years, recommends the electrolytic treatment of nævi as superior to every other. After criticising the methods in vogue, he claims for electrolysis: That it gives no after-pain; that it is free from danger; that there is no bleeding; that the resulting scar is white and shows no tendency to contract—a point not to be forgotten since nævi are so common about the head and face. This method is slow, the disappearance being gradual. One or more needles are used according to the size of the growth, and they are moved about to attack the various portions without withdrawing them. It is well, at first, to work well away from the surface to avoid destroying the same. The scars left by the negative needles are apt to be brown and disfiguring and hence the positive pole is to be preferred, being slower in its action, less apt to cause sloughing or to be followed by bleeding after withdrawal of the needle. A rheophore attached to the negative pole completes the circuit, a second puncture being thus avoided. As regards the number of cells, ten are usually sufficient, although in deep nævi as many as twenty have been used. A change in color to a dusky hue is the indication to stop the current. To withdraw the needle it should be first rotated and the orifice can be painted with collodion.

The following remedies should be carefully studied, in order to find the *simile* in each case: This being found, it should be given sufficiently high and at long intervals, in

order to remove as rapidly as possible from the system the morbid condition which sustains these irregularities of the circulation, and to enable nature to remedy the deficiency in structural organization from which perhaps they originally sprung.

If the arterial capillaries are involved:

Bellad. will be indicated by red radii extending from the centre.

Calc. carb.—In leucophlegmatic temperaments.

Lycopod.—In hypertrophied capillary tumors, both venous and arterial.

If the venous capillaries are involved:

Carbo veg.—Particularly when the slightest irritation causes free hemorrhage.

Phos.—Small wounds bleed much; this may be either venous or arterial.

Dr. Wilkinson reports a case of nævus on left labium majus, little girl aged six weeks, cured by application of thuja θ , thrice daily for six weeks.

CHAPTER XIV.

NEW FORMATIONS, OR NEOPLASMATA.

Neoplasmata are *essentially* characterized by the formation of new kinds of tissue in the skin. Neoplasms are observed in many different diseases of the skin, and under a variety of circumstances, but those diseases only are included in this chapter in which a neoplasm forms the entire disease. The new tissue in neoplasms has been regarded as originating in, and therefore an hypertrophy of, already existing elements; but it is certainly not a pure hypertrophy, and it is new in regard to its characters and behavior. On this account it is impossible to include the neoplasmata in any but a special group.

Lupus.

There are three principal forms of this disease—the superficial variety, commonly spoken of as *lupus erythematosus*; the deeper, or *lupus vulgaris*; and the deeply destructive form, or *lupus exedens*.

These three varieties present certain features in common, and their *color* is peculiar. It is neither the frank red of an active congestion nor the brownish ham-color of syphilis, but rather the vinous color that derives its hue from chronic venous congestion; mingled with a certain amount of red. The lesions are few in number; often but a single lesion may be present, but quite frequently we may find two or three—rarely more. Their course is chronic, years being devoted to their develop-

ment. They almost always leave scars, even in the absence of ulceration. The local symptoms are insignificant, as there is rarely either pain or itching, at most a slight burning sensation, to which the patient becomes habituated and ceases to notice. In the patient's family history, pulmonary phthisis is an almost constant feature.

Several years ago Bazin and Hardy gave the name of *scrofulides* to these affections, recognizing at that time their dependence on the general constitutional condition that predisposes to tuberculosis. Quite recently, the *bacillus tuberculosis* has been found to be a constant accompaniment of the lesions, thus demonstrating the soundness of the opinions advanced by the eminent dermatologists above mentioned.

Lupus Erythematosus.

In this variety the lesion commences as a reddish macule, barely elevated above the level of the surrounding skin. As it slowly but gradually increases in size, the elevation slightly increases, and small, closely adherent scales form upon the surface. The extension is peripheral, and after many months, or perhaps years, may attain the size of a coin. When it has reached a diameter of, say, one-half to three-quarters of an inch, the central and older portions begin to lose their infiltrated character, sink to the level of and even beneath the level of the skin, at the same time losing their color. This continues until we find a white depressed scar, surrounded by a still infiltrated raised reddened ring. During the progress of the lesion as described, other similar ones may have appeared on neighboring or on distant parts; but, as a rule, their number is limited. When two patches have appeared in close proximity, they may join by mutual peripheral extension. In this way the

greater portion of one side, or even both sides, of the face may become involved by the disease. Such extensive invasion, however, is the result of years, as cases are met with in which the lesions have been gradually extending in this manner for twenty years or more, the older portions of the lesion undergoing the retrogressive changes we have noticed.

The favorite seat of all varieties of lupus is the face, although other parts may be attacked as well, and even to the exclusion of the face.

Epithelioma may develop upon the site of a long-existing erythematous lupus, or in the neighborhood of lupous lesions.

Lupus Vulgaris.

L. vulgaris is characterized by the development of tubercles within or projecting to a greater or less degree above the surface of the skin. It rarely appears as an isolated tubercle, but more frequently in groups of six or a dozen tubercles, quite close to, but not touching one another, little bands of apparently healthy skin intervening, thus forming a patch. As the disease progresses, however, the tubercles may unite by mutual extension and the entire patch present a lupous character. There may be one or more of these patches. The tubercles themselves are soft, sometimes almost jelly-like, in appearance and consistence. The extension of the lesions is slow, years intervening before the patches attain any notable size.

Just as in the erythematous variety, the lesions of lupus vulgaris may undergo resolution, leaving a depressed cicatrix, or else they may ulcerate superficially. The ulcerative action is exceedingly slow, and appears to involve only the upper portion of the derm—more rarely

its entire thickness. The exudation from the surface of the ulcer is exceedingly scanty, and forms a crust adhering somewhat closely to the sore. The scars that result are of a reticulate character, not unlike those produced by a severe burn, and naturally cause more or less disfigurement. Lupus vulgaris, after ulceration takes place, may be succeeded by epithelioma at the margins of the ulcer.

Lupus Exedens.

This form of lupus was recognized by all the older writers; but those of recent times seem disposed to deny it a place in nosology, or declare that the cases described under this name were not lupus at all, but were epitheliomata. This is not in accord with Dr. Piffard's observations, and he describes in this place a variety of lupus characterized by the development of usually a single good-sized *soft* tubercle. This slowly increases in size, until after a lapse of years, perhaps, ulceration sets in, which extends both in width and depth, involving the tissues beneath the skin. The margins of the ulcer are uneven, ragged, and burrowed under. The edges, however, are soft, not presenting any hardness or induration. After an indefinite period, however, at one or more points on the periphery of the ulcer hard nodules may and usually do develop, and which can easily recognize as unmistakable epithelioma. This epitheliomatous process may extend until the greater part of the ulcer is involved. The only contention concerning the nature of this disease is whether it is a true epithelioma from the beginning, or whether it is an epithelioma ingrafted on a lupous basis. Whatever may be the true pathology of the disease, the practical outcome is the same, and this is

usually a fatal termination, unless the lesions be early vigorously dealt with.

Lupus may occur in the throat, and may make its appearance at any time of life. It occurs in men oftener than in women. It may occur in any constitution but seems to prefer the lymphatic temperament. Inheritance has nothing to do with it. Sometimes the mucous membrane assumes a purplish color, swells up and becomes granular and one or two of the granulations develop so much as to reach the size of a pea, or even that of a hazel-nut. Occasionally, the tubercles become prominent in the throat previous to alteration in the mucous membrane, and without differing from its normal color. They may be either superficial or deep. Their surface is smooth and brilliant, but if several of them become intimately united they appear as a single mass, rounded, cloven, and anfractuons. When the tubercles develop exuberantly in the larynx, breathing becomes embarrassed, and even stridulous. There is no alteration in the sensitiveness of the affected parts. Finally, the tubercles soften and become ulcerated. This melting down does not take place in a complete manner. In some cases, only the surface of the tumor becomes fissured or excavated as a margin to simple excoriations. In others, the destructive process attacks a greater or smaller portion of the tubercle in its entire depth, producing ulcers which dip out of sight in the midst of the tissues. The cure of these cases is difficult and is followed by indelible scars. In some cases, the ulcers are developed in a slow but fatal manner; in others, they spread with astonishing rapidity; while in some others, they stop in the beginning, but how far their ravages may extend it is impossible to predict.

Instead of appearing in its usual idiopathic form,

lupus, at times, develops subsequent to other skin lesions, for instance, a traumatism. In such cases it affects one or more localities, but always where formerly an injury, ulceration or scar has been.

If the disease attacks the fingers it can completely destroy them, but never the nails or the matrix. As the finger is shortened by the disease the nail maintains its position at the end of the stump, and may finally reach a position over the head of the metacarpal bone, where it remains in apparently as healthy a condition as in its normal condition.

The family history of the great majority of patients suffering from lupus reveals the important fact that phthisis pulmonaris is met among the near relations to a surprising extent, and we are forced to the conclusion that the same constitutional condition that predisposes one subject to the invasion of tuberculosis of the lungs predisposes another to tuberculosis of the skin; but the exact *role* played by the tubercle bacillus is no more known to us in the one case than in the other.

The diagnosis of lupus is in general easy. When we consider the location of the disease, the color of the lesions, their slow development, the absence of subjective symptoms, the presence of citatrices in cases of long standing, and the repeated relapses after even vigorous attempts at treatment, we ought not to be often led astray. A question may sometimes arise as to whether certain tubercles or ulcerations are lupous or syphilitic. The length of time they have existed will usually settle this, when we remember that syphilitic lesions may reach a degree of development in a few weeks that might hardly be accomplished by lupus in years. The single tubercle of lupus exedens is to be distinguished from sarcoma and epithelioma. In sarcoma the development

of the lesion is much more rapid, while in epithelioma, the tubercle is hard, but in lupus exedens it is soft.

In no disease of the skin is the prognosis more dependent on the character of the treatment. In early cases it is absolutely good if sufficiently vigorous treatment be instituted, while lack of appreciation or lack of vigor on the part of the physician is responsible for most of the extensive and long-standing cases that we meet with.

Treatment.—Lupus erythematosus may sometimes be cured by the induction of an artificial eruption produced by the action of irritants. This method, however, is not to be commended. It is much better to destroy it with an active caustic, provided the extent of the eruption does not contra-indicate this method. When the lesion is quite small, excision may be practiced; or thorough scraping with the dermal curette, followed by nitric acid, or the actual cautery. Lupus vulgaris demands the same treatment as the other form. In lupus exedens thorough removal with the knife of the diseased portions, including a portion of the surrounding apparently healthy tissue, is the better plan.

Dr. Mackay reports two cases of lupus healed after a few weeks of treatment by a twenty per cent. ointment of resorcin, applied after scarification. The application of resorcin was attended with but comparatively little pain.

Sulphurous acid, in the form of a lotion, or an oil, or in the gaseous state, has been employed as a remedial agent in lupus. The gaseous form may readily be obtained by burning in a jar, and allowing the fumes free contact with the surface to be treated. This can only be used upon parts removed from the respiratory organs. As a rule, two applications daily, each for about twenty

minutes, will be found best. The lotion is best obtained by the use of the pharmacopœical preparation of the acid, diluted in strengths of one in two, or one in three. This can be applied to any part of the face without producing disagreeable effects. The oil is preferred by some, and is prepared by dissolving the anhydrous acid in castor or olive oil. Satisfactory results frequently follow this method of treatment.

Alveloz has lately been recommended as a local application for lupus and cancer. Cases have been reported where brilliant cures were effected by the use of the drug. I have had no opportunity of testing its virtues.

The application of ice will frequently relieve the severe pain that is sometimes the accompaniment of lupus; some authors claim curative effects from the use of ice.

Arsenicum alb. and *Hydrocotyle*, are the main internal remedies.

Others may be indicated as follows:

Aurum mur.—When starting from the nasal mucous membrane; a discharge from the nares very offensive; absorption of the bones of the nose; melancholia.

Cistus.—Lupus on the face; worse from cold air.

Graphites.—Lupus on the nose; obstruction of the nares; dry, cracked skin; every injury tends to ulceration.

Guarana.—Lupus of an ochre-red color, yellow spots on the temples.

Hepar.—Lupus on the elbows; ulcers with burning or stinging edges; nodosities on the head sore to the touch; swelling of the upper lip.

Hydrastis.—Ulcers on the legs; exfoliation of the skin; purulent discharge from the nostrils; faint, sinking feeling at the stomach.

Kali bichrom.—Ulcers painful to the touch; worse in

cold weather; ulceration of the nasal septum; loss of appetite; all the secretions are tenacious and stringy.

Lycopod.—In recent cases; hunger with constant feeling of satiety; arms and fingers go to sleep easily; purulent discharge from the ears; weakness of memory; melancholia.

Nitric ac.—Lupus on the nodules of the ears; offensive purulent discharge from the ears; dry, scaly skin; affections of the bones and glands; in dark complexions.

Oleum jec. ass.—A valuable remedy.

Staphysagria.—Ulcers on the alæ of the nose; weary pains in the limbs as if bruised; teeth turn black and decay; in scrofulous subjects.

Epithelioma.

Epithelioma, or epithelial cancer of the skin, is characterized by the appearance of a hard tubercle or nodule, slowly increasing in size until ulceration sets in, which ulceration may extend both laterally and deeply and destroy all tissues with which it comes in contact. As its name implies, it is an outgrowth from the epithelial tissues, in which a more or less extensive and exuberant proliferation of epithelial cells occurs. The typical epithelioma may be said to take its origin in the Malpighian layer, the cells of which increase in number and seek accommodation in the deeper layers of the skin. As they increase, however, some of them, from the pressure of the neighboring connective tissue, are forced to occupy a smaller space than they would if permitted to multiply freely in all directions. As a result of this compression, small rounded bodies are formed, in which the cells assume a stratified arrangement, constituting the epithelial cell-nests well-known to every microscopical observer. Coincident with this extension of the disease

inward there is a greater or less projection outward, forming a distinct sessile tubercle, or a more flattened growth.

Primary cancer of the skin is a rare condition, while epithelioma, involving both cutaneous and mucous surfaces—as ordinary cancer of the lip—is sufficiently common. Cancer of the skin, however, which has developed secondarily to some pre-existing morbid growth, is the variety most frequently found in practice.

Epithelioma is distinctly the product of irritation—not an acute and transient irritation, even if frequently repeated, but rather one that is hardly, if at all, appreciable to the senses, and which is persistent and active through a lengthened period. Thus we may find that a purely innocent and benign growth, like a simple wart, may after a lapse of years become the seat of an epithelioma, which would not otherwise have appeared. A localized seborrhœic condition, which of itself implies an irritation of the epithelial lining of the glands, may, and not infrequently does, become the starting point of cancer. Lupus offers an inviting field for the development of the disease; and in general it may be said that an ulcerating lupus, if left to itself, will almost invariably in time become supplanted by epithelioma. Sarcoma more rarely is followed by epithelioma, and this rarity may be explained by the fact that sarcoma usually runs its course and has destroyed the patient before the cancerous affection has had time to develop—the irritation produced by the sarcoma being more active than that which ordinarily leads to the occurrence of the other disease.

Epithelioma is met with clinically in two distinct forms, in one of which the cutaneous involvement is more superficial than in the other. In the superficial variety, which is less frequently met with than the other, the

patient's attention is first attracted to a little crust—usually on some part of the face. This he picks off, and gives little further attention to the matter. A new crust forms, and this is in turn picked off, and reveals, perhaps, a slightly excoriated surface. He consults a physician, who, failing to recognize the gravity of the condition, prescribes some salve or other, or lightly touches the part with caustic. The lesion extends, and perhaps rarely reaches the hands of a surgeon until it has advanced to the stage of frank ulceration. We now find a sharp-cut ulcer, extending through the entire thickness of the skin, but not involving the subcutaneous tissues. This ulceration advances at its borders, or sometimes in one direction only, while reparative changes may sometimes occur in the other, much after the manner of some cases of lupus. The progress of the ulceration is exceedingly tardy, and years may elapse before the ulcer has attained any considerable size, and, when it does, we will sometimes find that cicatricial tissue now occupies a portion of the territory that had been the early seat of the cancerous lesion.

The other, or tuberos form of epithelioma, will be recognized at the beginning as a hard tubercle, occupying the seat of what may have been previously the situation of a wart, mole, etc. This tubercle increases in size, and the tissues beneath it are palpably involved in the morbid process. The skin surrounding the tubercle is also involved to a certain, or, rather, uncertain extent, as is evident to sight and touch. Later, ulceration appears, and the margins of the ulcer are everted and hard. As the ulcer spreads laterally, so also does it become deeper, and the process continuing unchecked leads in time to a fatal termination.

The diagnosis of epithelioma, when actually existing,

is surrounded with very few difficulties as the induration of the tissues is hardly to be met with in any other *chronic* cutaneous lesion; but the physician should be prepared as well to recognize conditions which will probably become epitheliomatous in time. It is this failure to diagnosticate an impending epithelioma that leads more frequently than it should to inefficient treatment and the sacrifice of lives that might otherwise have been saved. The face is the most frequent seat of purely cutaneous epitheliomata; and, if a physician can not make up his mind as to whether a certain hard tubercle or a chronic ulceration is cancerous or not, his plain duty is to take his patient to some one who can.

The prognosis of cutaneous epithelioma is *good*, provided the lesion is seen in its early stages, and its locality permits of suitable and efficient local treatment. On the other hand, it is *distinctly bad* if the disease has gained much headway or involves an extensive surface.

The treatment of epithelioma will depend, firstly, on whether the particular lesion in question is, or is not, in a curable condition. This is in reality the most serious question that the surgeon has to determine, and to its solution he should bring his best judgment, based on his knowledge and experience. If he decides that it is incurable, any operation would be a barbarity, and suggestive of charlantry; but if there is a good prospect for the thorough removal of the neoplasm, no time should be lost in carrying it into effect.

The removal of epitheliomata may be effected in two ways. One of these is with the knife, and, when this is practicable, it is the best way; and there is but one rule to follow—cut widely and cut deeply. If for any reason the knife is impracticable, the diseased tissues may be destroyed by a sufficiently active chemical agent; and

experience has shown that arsenic properly used is probably the most efficient means at our command. Now, there are two ways of using arsenic; one is to use it strong enough to destroy the cancer; and the other is to use a weaker preparation and destroy your patient by arsenical poisoning. The stronger the arsenial preparation the greater its local action; while the weaker it is, the less is its topical action, and the greater the probability of systemic absorption. Take anhydrous chloride of zinc and mix it with an equal weight of water—to this add sufficient arsenic to make a moderately stiff paste. This should be applied to the diseased parts in a reasonably thick layer with a little absorbent cotton as a top dressing. To this treatment there is one objection, namely, the severe pain that the arsenic will cause, which can only be mitigated by the free use of morphine. If the lesion be of moderate size, and the application thorough, the falling slough will, in a week or two, reveal a healthy ulcer, which only requires a little time for complete healing.

If the case has progressed beyond the period when a cure may reasonably be expected, the prudent surgeon will seek only to mitigate the patient's sufferings until death brings its release.

Resorin grammes 30.

Vaseline, “ 100, applied daily, has cured some cases that were diagnosed as epithelioma. The parts were first cleansed with borax water.

Aristol has been successfully used as a topical application.

Its advantages over arsenic are its painlessness, and rapidity of action.

Thuja is the principal internal remedy. Other remedies are: *Sepia*, *Ars. alb.* (malignant form), *Con-*

durango, Lapis alba, Nitric acid.: A roundish ulcer, bluish-red and nodulated; bleeds upon slightest touch; burning pain which becomes almost unbearable, when eating or drinking, when touched by cold or warm food.

Hoang nan.—Attacking especially the mucous surfaces.

Petroleum.—Nodules on hands, wrists, arms, feet and legs; worse about wrists or wherever the dress is tight (palms and soles being free), less on face, neck and parts to which oily matters find access. Pimples itching on angle between scrotum and thigh, scabs in fold of left wing of nose.

Sarcoma.

The word literally means a fleshy tumor, and embraces in its scope a variety of new growths, which present certain common features, but which differ, however, among themselves in many essential particulars, both as to form and constitution.

In general, it may be stated that a sarcoma is a tumor composed in the main, of cellular tissues, the cells themselves being either round or fusiform, and partaking of the characters of embryonic rather than fully organized adult tissue. The new growth is usually exceedingly vascular, being permeated with large vessels, some of which are doubtless extensions from pre-existing vessels of the neighboring parts, while others are doubtless first and independently formed in the new growth itself, and connect themselves later with the older vessels. In some instances there is a considerable deposit of pigmentary particles, probably derived from the blood coloring matter throughout the growth. These histological changes give rise to three types of tumor—namely, the round-cell sarcoma, in which the round cells greatly predominate over the fusiform; the spindle-cell sarcoma,

in which these cells make up the greater part of the growth; and, thirdly, the melano or pigment-sarcoma, which may resemble either of the addition of the foregoing with the addition of the pigmentary deposit. As a rule, neither of these types is met with in its purity, the majority of sarcomata being of a mixed type, with one or the other greatly predominating.

The earliest noticeable lesion of sarcoma may be a macule or a tubercle. The macule may develop into a tubercle, or, on the other hand, may spread laterally in the skin, forming a patch or blotch one, two, or more inches in diameter. These patches are heightened in color, the hue being a bluish-brown, are hardly at all elevated, and differ in consistence but little from the surrounding integument. In fact, they appear to be patches of chronic congestion rather than infiltration. The evolution of the macules is tardy, and a year or more may be occupied before they attain any considerable size. It is possible that these macules may exist singly, but they are usually multiple. These macules may undergo complete resolution, and leave little trace of their previous existence. Under these circumstances the propriety of classing them as a variety or lesion of sarcoma might be seriously questioned were it not for the fact that they not infrequently become the starting-point of typical sarcomatous growths. After the macule has attained a certain size, an elevation at one point occurs, developing into a tubercle and ultimately into a tumor.

The primary tubercle of sarcoma may develop at the site of some long-standing innocent growth, as a mole, etc., or may take its origin in apparently normal skin. The former is the more usual course in persons advanced in years, while the latter is commonly the case in children and young persons.

The progress of sarcoma is usually rapid, and a tubercle in a few weeks may deserve the title of tumor, and after the lapse of some months may attain the size of a child's head or even larger.

The sarcomatous tubercles and tumors present one character which is in striking contrast with carcinomatous growth. I allude to their consistency. Sarcomata are soft, sometimes of almost jelly-like consistence, while carcinomata are hard.

After sarcomata have attained a certain size, they usually soften in the more central and older portions, and break down, forming a fungoid ulcer, from the base and edges of which secondary sarcomata may spring. Occasionally the margin of the ulcer becomes epitheliomatous.

No age is exempt from the development of sarcoma, but it is decidedly more frequent before the age of fifteen and after forty-five than during the intermediate period. When we compare the three most important tumor types—namely, carcinoma, fibroma, and sarcoma—we are struck with their peculiarities and contrasts. Carcinoma is especially prone to occur late in life; it is a malignant growth, composed of tissue elements which are little viable, and do not form permanent tissue, but ultimately break down with ulceration. Fibroma, on the other hand, prefers the middle period of life, is benign, and is composed of viable and permanent tissue; while sarcoma, as we have seen, prefers the extremes of life, and is malignant, its elements not going to the formation of permanent tissue.

Sarcoma may be characterized by the development of either single or multiple tumors. When single and not interfered with they may attain a considerable size. When multiple the tumors vary in size from that of a pea to that of a hen's egg.

Hemorrhages accompany advanced cancerous disease, but they are insignificant compared with those which may occur in sarcoma. The extreme vascularity of the new growth and the unsubstantial character of the vessel's walls are sufficient to account for this pronounced hemorrhagic feature, which is met with not only in old and advanced tumors, but even in those that are small and have had but a few weeks' growth.

Sarcomata may appear on any portion of the integument, and exhibit little preference for any particular location, and after they have existed for some time are liable to develop on the mucous membranes, and also invade the viscera.

The general health and vigor may be apparently unimpaired during the early periods of the existence of sarcoma; but as the disease advances, these gradually fail, but without, however, the development of a *cachexia*, as marked as in the latter stages of cancer.

The *prognosis* of sarcoma varies. In single small tumors of recent appearance it is good, as they can be easily removed; and when the operation is properly performed they do not as a rule return. When sarcoma becomes generalized the prognosis is unfavorable, and this is specially the case when complicated with melanosis. Large sarcomatous tumors are usually fatal.

Treatment.—Beyond attention to the general health, there need be little expected from internal treatment, although there are undoubted cases of sarcoma on record in which the homœopathic remedy exerted a favorable influence and apparently effected a cure.

In small and young single sarcomata mechanical removal should be effected just as soon as a diagnosis is established, care being taken to remove a considerable portion of the apparently healthy skin, and the location

of the tumor will permit. Special provision should be made against hemorrhage, which, from the large number and size of vessels entering the tumor, may be excessive. In very large sarcomata, in which an ultimate fatal termination is to be anticipated, removal is hardly to be recommended, except as a palliative measure, looking only to temporary relief. In these cases removal by means of a loop of platinum wire heated by electricity is to be preferred to the knife, on the score of safety from hemorrhage.

Carcinoma.

The carcinomatous family of malignant tumors contain the tumors which the term cancer, as understood at the present day, is properly applied. A carcinoma is a tumor made up of a typical epithelial new formation-cells, of epithelial origin, but imperfect embryonic cells. Structurally it consists of cavernous, fibrous stroma, in the interspaces or alveoli of which are found the epithelial cells suspended in a serous fluid. The cells are not separated by any visible intercellular substance. Even the blood-vessels run in the fibrous stroma and not between the cells.

The development of cancer from epithelium has been clearly shown in certain localities where morbid processes are taking place. Some years ago, Paget called attention to the point that a certain eczema of the nipple is often the precursor of cancer. In cases of this kind, it has been shown that the proliferation of cells which is active over the denuded portions is continued down into the milk ducts until these ducts have become filled and expanded by the over-accumulation of imperfectly formed cells. At the same time, the connective tissue surrounding the duct takes on an increased vascularity from the

irritation, and is infiltrated with small cells resembling leucocytes. There is no direct connection between the cells of the duct and those found in the connective tissues outside. The latter are not migrating epithelial cells, but appear as the product of inflammation. As the ducts become filled and their walls distended, they give way, and the epithelial cells infiltrate into the surrounding tissues where they proliferate and become centres of disease.

It is believed by some pathologists that the entire growth is not due to the proliferation of epithelium, although originating in this way. Endothelial cells, connective tissue cells, and indifferent corpuscles in the presence of, or by contact with, a growing carcinoma, it is claimed, become infected and transformed into cells similar to those of the tumor itself. While this may be true, the progress of carcinoma in its extension to the lymphatic glands does not support this theory, for instead of infecting and transforming the gland as a whole, the mode of invasion is between and around the lymph corpuscles, they being affected only by the pressure of the rapidly growing masses. As the cells increase and distend the connective-tissue spaces the fibrous tissues are pressed back and welded together, and the stroma of the cancer makes its appearance. The stroma is not real cancerous tissue, but the natural tissue of the part is sometimes increased by unnatural activity of the surrounding tissue. The blood-vessels of the stroma, like the fibrous tissue, increase in size, so that the stroma becomes much more vascular than the original fibrous tissue.

Scheurlen claims to have obtained by cultivation from the juice of cancer of the breast in sterilized plural fluid, colonies of bacilli and spores, the bacilli being from 1 μ m. to 2.5 μ m. in length. By inoculating six dogs, in the

posterior mammary glands, with an emulsion of these cultures he has demonstrated the appearance of cancerous tumors. Finally, he has found the spores, if not the bacilli in question, in all the preparations of cancer stained by Gram's method. His conclusions are as follows: 1. There exist constantly in cancerous tumors bacilli which may be isolated. 2. The spores of these bacilli are found in all microscopic preparations of cancerous tissue. 3. Inoculation of animals with pure cultures of these bacilli determines the development of cancerous tumors. 4. There is a relation of cause and effect between these bacilli and cancer.

The female sex, on the whole, is much more exposed to cancer than the male, on account of the greater liability of the female organs of generation. The breast alone probably furnishes as many cases of carcinoma as all other portions of the body.

Carcinoma is essentially a disease of old age. It is so rare before thirty years that the age is often the most important consideration in the early diagnosis between benign and malignant growths. After thirty years of age it becomes more frequent, but it is not until the acme of life is reached and the organs begin their natural retrogression, that cancer becomes common. At, and after the climacteric in women, and at a somewhat later period in men, the cancer is most active. So well recognized is this fact that a tumor appearing at this time of life is always regarded with suspicion. Certain localities are attacked much earlier than others. In early adult life it is found most frequently in the testicle and labia; from thirty-five to fifty, in the breast, uterus, the tongue, and the penis; from fifty to sixty-five years, on the lip and œsophagus. It is a noticeable fact that the organs in

which natural degeneracy of function takes place are the organs most frequently attacked.

The carcinoma is a tumor of rapid growth. It never remains idle, and, with the exception to be noted, never decreases in size. In the manner of its extension, locally, it resembles sarcoma.

The carcinoma is liable to many changes, but one of the most common features is the tendency to ulceration shown by the growth.

The reproduction of cancer in an associated lymphatic gland is of such frequent occurrence that it is looked upon as one of the most certain signs of carcinoma. The glands affected are usually those having a direct anatomical connection with the affected part. Thus the axillary glands follow infection of the breast; the lymphatics in the groin, carcinoma of the testicle; and the submaxillary or sublingual glands, infection of the tongue or lip. There seems to be no limit to the number of glands involved. From one to fifty have been found enlarged, varying all the way from the size of a pea to that of a walnut.

The lungs, liver, etc., may become infected through metastatic deposits, carried thence by the blood.

The chief forms of carcinoma are the schirrus, encephaloma, colloma, and melanoma.

The *schirrus* is characterized by its firm, hard, dense feel, having a similarity, in this respect, to normal cartilage. It is most frequent of all the forms, and has been observed and recognized from the earliest times.

The *encephaloma* is a soft tumor, and is the most malignant of all tumors. It occurs at an earlier age than the other forms of cancer, being almost the only one which is found before the age of puberty. To the touch, the tumor presents a peculiar soft feel, giving way under

pressure, and returning to its shape again, as if filled with fluid. It varies in volume from the smallest kernel to a tumor of the size of an adult's head.

The *colloma* is so called because it consists, in large part, of a clear, viscid, gelatine-like substance.

The *melanotic* cancer, is apparently an encephaloid cancer which has been changed in appearance by the deposition of a black pigment in the elements composing the growth. A noted peculiarity of melanosis of the integument is its pronounced tendency to form in or under a pigmentary mole.

The diagnosis of the different forms of carcinoma, when located in some external part, is usually a matter of no great difficulty.

The *schirrus* is generally found in the breast. It is a solitary tumor, and rarely appears before the forty-fifth year of age. In feel it is firm, hard, dense, resembling cartilage. It grows slowly, and never attains large size. From its start it is accompanied by sharp, shooting, lancinating pains, which are distinctly localized. It early contracts adhesions to the integument and deeper tissues. If in the breast, the nipple is retracted. The superficial veins are but slightly enlarged. Ulceration occurs early, and the ulcer has an abrupt, steep edge, and a firm hard base. The lymphatics are invaded at, or soon after, the beginning of ulceration. The diagnostic symptoms of schirrus are clear-cut and cannot be mistaken.

The *encephaloma* may occur at any age and in almost any portion of the body. It is soft, lobulated, usually solitary. It grows rapidly, and often acquires a very large size. Pain is absent or slight until the advent of ulceration, when it becomes severe, but does not assume the lancinating character of the schirrus. The subcutaneous veins are always enlarged. Ulceration is early

and the ulcer is foul, with thin edges, and is often covered with a fungous, friable mass. The lymphatics are early involved.

The *colloid* cancer is rare, and its characteristics are not pronounced. It is tardy in its growth, of uniform consistency, free from pain, and often attains an immense bulk. It is usually found in the peritoneal cavity; when superficial, it may be confounded with a fibrous or cartilaginous tumor or sarcoma. It is distinguished from fibroma by its more rapid growth, its large size, and its constitutional tendency; from chondroma by its elasticity and less firm feel, as well as by its more rapid progress; from sarcoma by its more uniform growth and comparatively slow progress.

The *melanotic* cancer can only be distinguished by the peculiarity of its color and its frequent origin from pigimentary moles. From the facts given in the diagnosis this may be deduced; a tumor appearing late in life, which grows rapidly, is attended with pain, infiltration of the surrounding tissues, and adhesions to the integument and tissues beneath, shows a marked tendency to ulceration and to infection of the lymphatic glands, and decay of the vital forces, is a cancer or malignant tumor.

The *prognosis* in carcinoma is exceedingly unfavorable, the natural progress in every case being toward the destruction of life. The prognosis, as to course and duration of the disease, varies much in the different forms and in the different parts of the system affected. Scirrhus cancer is one of the most regular in its course, its average duration, when uninterrupted by operation, being about three years.

The *encephaloma* is more rapid in its course, the average duration of life being less than two years, even in parts whose formations are not essential to life. Carci-

noma of the tongue, the interior of the mouth, the œsophagus, and the penis are very rapid in progress, being usually fatal in from twelve to eighteen months. Carcinoma of the lip, the face, and the rectum are slower and more amenable to treatment.

Treatment.—The treatment of cancer has always been extremely unsatisfactory. Various remedies have from time to time been heralded as cures, but after thorough trial have in every instance been discarded. Among these are: Chian turpentine; Resorcin; Interparenchymatous injections of ozone-water; Chromic acid; Cundurango bark, etc. Galvanism has been highly recommended, as has also the inoculation of the cancer with erysipelas.

Occasionally, cures of cancer by the administration of homœopathic remedies have been recorded, but the cases are so few, and the possibilities of error in diagnosis so many, that the value of these remedies in the treatment of this disease cannot but be called into question. There are many tumors, the result of acute or chronic inflammatory action, which resemble very closely some of the forms of cancer. Many of these are amenable to the properly selected remedy, and it is cases of this character that have been cured by the remedy recorded. That no remedy has been discovered which is absolutely specific to the disease there can be no reason to doubt, but that remedies are of no value in the treatment of the disease cannot be so positively asserted. Whatever doubts may arise as to the value of remedies in overcoming the disease when once aroused, there can be none as to service rendered by remedies in retarding the development of the disease and in relieving many of the accompanying symptoms. At the close of this article will be found the remedies employed in the treatment of cancer.

While remedies are of value in relieving many of the attendant symptoms of cancer, and are often curative in ulcerations and indurations resembling cancer, at the present day surgery offers the only possibility of a radical cure. In certain forms of cancer in which involvement of the lymphatics does not occur until late in the progress of the disease, the possibility of cure following an operation is always greater than in those in which lymphatic involvement is early noticed.

Epitheliomas of the lower lip are quite amenable to treatment, the thorough removal of the tumor before the submaxillary gland becomes involved being, in many instances, followed by cure. Even in the more rapid and malignant scirrhous and encephaloid tumor, thorough removal gives a percentage of cures sufficiently large to encourage the belief that early and radical measures will succeed in materially reducing the mortality of the disease.

The removal of the disease, if it does not succeed in effecting a cure, is still a great benefit to the patient. A careful study of the statistics shows that the average duration of life is increased twelve months in cases operated upon over those in which the disease proceeds unmolested by surgical measures. The increase in life in some cases is several years. Even if this hope cannot be entertained, an operation is often justifiable on the ground that it will avert the suffering attendant upon the regular progress of the disease. The relief which follows an operation is sometimes remarkable. Freed of the local pain and offensive discharge, the patient will become cheerful, sleep, eat, and even gain in flesh.

In those cases in which an operation is not advisable, much relief from pain and offensive odor may be obtained by the use of certain applications. The best of

these is hydrochlorate of Cocaine. Painting the ulcerated surface with a two-to-four per cent. solution affords instant relief. When the discharge is profuse and offensive, the ulcer should be washed frequently with a strong solution of carbolic acid. Hyposulphite of soda may be used when other disinfectants fail. The surface of the ulcer is washed with a saturated solution added to an equal quantity of water, and lint steeped in the solution is laid upon it. The distressing night-sweats of the later stages of the disease may be controlled or improved by the use of aromatic sulphuric acid or aromatic vinegar. At this time also the use of morphine to allay pain and to secure sleep is permissible. It is best given by hypodermic injection.

Therapeutical indications:

Acetic acid.—Cancer of stomach, ulcerative gnawing pain at one spot in stomach with agony and depression, preventing sleep; severe burning pain in stomach and abdomen, vomiting of yellow, yeastlike matter, of blood; eyes sunken and surrounded by a dark circle; face pale and waxen; tongue pale and flabby.

Apis mel.—Is indicated in cancer of the breast, in which the induration has followed an old case of mastitis, and in which the pain is of a burning, stinging character. The characteristic urinary symptoms of the drug are the best indications for its use.

Arsen. alb.—Foul, destructive, easily bleeding, and cancerous ulcers, with burning and corrosive pains in the interior of the affected parts; terrible darting and lancinating pains through them; burning discharges, which may be thick or thin, brown or black, extremely offensive; worse after midnight.

Aurum.—The womb is prolapsed and indurated; pain like that of a bruise, with shooting and drawing, and the

mind constantly dwells on suicide. Cancer of the palate and nasal bones, or of the nose; pus greenish, ichorous, and putrid; cancer of stomach in last stage, when there are only few subjective symptoms.

Bellad.—Scirrhus indurations; cancerous ulcers, burning when touched; black crust of blood in the bottom of the ulcer; pus scanty. Pains come and go suddenly.

Carbo an.—Cachexia fully developed. Scirrhus cancer on the forehead; sudden and short aching from colloid cancer in the pit of the stomach, on taking a deep inspiration, clawing and griping in stomach, violent pressing in loins, small of back and thighs during menses, with chilliness and yawning; weak empty feeling in the pit of the stomach; it checks the putrid taste, the waterbrash, and contracting, spasmodic burning; scirrhus mammæ with dirty bluish loose, skin or red spots on skin, burning and drawing towards axilla; axillary glands indurated.

Causticum.—Patient cannot bear the pressure of the clothes on the stomach; the lightest food or even the smallest quantity causes a violent lancinating pain in the stomach; scirrhosis of the lips, with itching and soreness, which when ulcerated has a violent burning pain; pus bloody, or greenish, or corroding, or thin, watery, and yellow.

Chelidonium.—Old, spreading, putrid, carcinomatous ulcers; the pain in the stomach is of a gnawing or digging character; nausea, with sensation of heat in the stomach; burning in stomach.

Calcarea phos.—Cancer in scrofulous constitutions.

Calcarea fluor.—Knots, kernels, hardened glands in the female breast. Swelling on the jaw bone which is hard.

Chimaphila.—Tumors of the mammæ, enlargements of lymphatic glands.

Clematis.—For softened scirrhus uteri, with corrosive leucorrhœa and lancinating pains.

Conium.—Bleeding of the ulcers, with a secretion of fetid ichor; a portion becomes gangrenous; concealed cancer of bone; cancerous swelling and induration of glands; cancer of the lips; spreading cancerous ulcers in the face; contractive spasmodic pains in the stomach; cancer and cancerous ulcers after contusion; burning stitches; stinging in the affected parts.

Cundurango.—Is only efficacious in open cancer and cancerous ulcers, where it effectually moderates the severity of the pains. It does not act on scirrhus and indurated parts.

Ferrum phos.—An excellent alternate remedy for excessive pain in cancer.

Eucalyptus.—One of the best remedies for destroying the fetid odor of cancerous discharges, used internally and locally.

Galium.—Epithelioma, when the disease is slow in its progress, and where there are nodular deposits near the surface.

Graphites.—Hot and painful vagina; swelling of the lymphatic vessels and mucous follicles; the neck of the uterus is hard and swollen, with *tuberculous nodes and cauliflower excrescences*; great weight in the abdomen on rising, with fainting sort of weakness and aggravations of the pains, delaying menses, with aggravation of the pains shortly before and at the appearance of the menses; *discharge of black, lumpy, fetid blood*; stitches shooting through the abdomen as far as the thighs; *burning and stitching* pains; constipation; livid complexion; sad and anxious mood. Frequently useful in connection with ovarian diseases.

Hepar.—Corrosive pain in a cancerous ulcer, bleeding

at the slightest touch; yellow skin and complexion; eruptions around the mouth, lips and chin, which are converted into cancerous ulcers, rapidly spreading; pressure and dull aching pain in the stomach after moderate eating; cancerous ulcer of the mammæ, with stinging burning in the edges; pus, copious or scanty, smells like old cheese.

Hydrastis.—Recommended for all sorts of cancer, but it will only act as a regulator for the faulty nutrition, and thus exerts a favorable influence in soft or encephaloid cancer.

Iodide of Arsenic.—Swollen gland in the left axilla, size of a hen's egg, hard, and exuding a fluid which forms a hard, brown crust. The tumor is painful and sensitive to the touch; breast of the same side enlarged, indurated and very sore. Yellow, bloody, and irritating leucorrhœa, with swelling of the labia.

Iodium.—Uterine hemorrhage after every stool, with cutting in the abdomen, and pains in the loins and small of the back; great weakness during the menses, particularly in going upstairs; long-lasting uterine hemorrhage; dwindling and falling away of the mammæ; aggravated from external warmth; complete prostration of strength and general emaciation; violent vomiting, renewed by eating; pulsations in the pit of the stomach.

Kali phos.—Cancer, pain, offensive discharge and discoloration.

Kali sulph.—Epithelioma. Cancer on the skin near a mucous lining, with discharge of thin, yellow, serous, matterly secretions.

Kreosotum.—Shooting stitches in the vagina, burning and swelling of the external and internal labia; profuse discharge of dark coagulated blood, or of a pungent bloody ichor, preceded by pain in the back; aggravation of the pains at night; fainting on rising from the bed;

she always feels chilly at the menstrual period; complexion livid; disposition sad, irritable; cauliflower excrescences; wretched complexion, great debility, sleeplessness. Tightness of the pit of the stomach, cannot bear the weight of her clothing; painful hard place on the left side of her stomach.

Lachesis.—Melanosis, colloid, and encephaloid cancer; violent burning, gangrenous spots; cancer of the breast, with lancinating pains; the pit of the stomach very sensitive to touch; uterine cancer developing itself at the climacteric, or as a consequence of the change of life; the pains increase rapidly, until relieved by a profuse discharge of blood; violent pains, as if a knife were thrust through the abdomen, which has to be relieved from all pressure.

Lapis albus.—Cancer as long as it has not opened, based on scrofulosis.

Lycopod.—Swelling of the upper lip, with a large ulcer on the vermilion border of the lower one; vomiting of food, bile, coagulated blood, and pus; tension in the hypochondria as from a loop; great emaciation and internal debility.

Mercurius.—Cancerous ulcers, with a severe shooting and lancinating pain, not relieved by either hot or cold applications; spreading ulcers, spongy, readily bleeding, and extremely painful; unequal elevations and depressions in the floor of the ulcer; swelling of the whole or only the tip of the nose, accompanied by pain and inflammation, followed by cancer; pus thin, ichorous, and acrid.

Mezereum.—Scirrhus ventriculi with burning, corroding pains; internal surface of the gastric mucous membrane feels raw, with sensation as if food remained for a

long time undigested in the stomach, causing pressure and blood vomiting; hypochondriasis.

Murex.—Carcinoma uteri, with great depression of mind; pain in uterus as if wounded by a cutting instrument; lancinating, throbbing pains in uterus; acrid discharge, causing pudenda and thighs to swell and become raw, burning and itching; faintness and an "all-gone" feeling in epigastrium; deep hypochondriasis.

Natrum carb.—Induration of neck of womb, os uteri out of shape; pressing in hypogastrium towards genital organs, as if everything would come out; headache in sun and from mental labor; great nervousness and anxiety.

Nitric acid.—Pain and swelling of the submaxillary gland, with induration, ultimately becoming scirrhus; burning sensation in the stomach; mercurio-syphilitic taint; urine very offensive; aggravated after midnight; in uterine cancer sympathetic affection of the inguinal glands; violent cramp-like pains, as if the abdomen would burst, with constant eructations; violent pressing, as if everything would come out of the vulva, with pain from the back down the thighs.

Nux vom.—Ulcers with pale red, elevated edges; a painful, small, scirrhus tumor on the forehead; vomiting of sour-smelling mucus and dark clotted blood.

Nuphar.—Several cases of cancer have been reported as cured by the use of this drug. Its use is empirical, and comes to us from the Indians.

Phosphorus.—Cutting pains through the abdomen, sometimes with vomiting, painful to the touch, and when walking; belching up of large quantities of wind after dinner; frequent and profuse hemorrhages, pouring out freely, and then ceasing for some hours or days.

Phytolacca.—Scirrhus, especially mammæ; cancer of lips and cancerous, ill conditioned ulcers of the face.

Sepia.—Suspicious tubercle on lip of a cartilaginous appearance, sometimes bleeding and having a scirrhus appearance, with a broad base; epithelial cancer of lip, with burning pain and a pricking as from a splinter of wood; complexion yellow and earthy; cancer of rectum; indurations, ulcerations, and congestion of the os and cervix uteri; cutting pains in abdomen and a pressure on uterus downward, as if everything would fall out; sinking sensation at pit of stomach.

Silicea.—Painful dryness of the nose; scirrhus induration of the upper lip and face; continuous nausea and vomiting, especially when drinking; sensitiveness of the pit of the stomach; melancholy; in uterine cancer discharge of blood between the regular periods, with repeated paroxysms of icy coldness over the whole body; fetid, brownish, purulent, ichorous leucorrhœa.

Staph.—Scurfy and burning painful lips with pain in the submaxillary glands, with or without swelling. Syphilis and mercurialization.

Thuja.—Sycosis; cauliflower excrescences; medullary and fungoid cancers.

Zincum—Pewter-like hue of the face; scirrhus tumors in different parts of the body.

Rodent Ulcer.

Rodent ulcer has been called cancerous ulcer of the face, cancrioid ulcer, *ulcus exedens*, *noli me tangere*. A patient has a small tubercle upon the face, covered by a smooth skin; he may call it a wart, and it may remain on the face unaltered for years, and then, when the patient gets old, it may begin to ulcerate. The ulcer spreads

slowly, but constantly, and if it be left alone it may destroy the whole of the cheek, the bones of the face, and ultimately the patient's life; but it may take some years to run this course.

The disease is entirely local. It does not affect the lymphatic glands, nor do similar tumors appear on other parts of the body. The disease usually attacks some part near the eyelids; it is of slow progress; there is little pain. The disease has been described as commencing as a "pimple," "a blind boil," "a small hard pale tubercle," etc.; which tends to scab after a small central crack makes its appearance. There is, in fact, a small pimple followed by a minute ulcer. The disease extends gradually in all directions, but very slowly. When an ulcer forms, the edge is indurated and raised, but not undermined and everted; and there is no infiltration of the surrounding healthy structures. The surface of the ulcer is dry, clean, glossy, and does not give exit to any foul secretion; it is irregular in form, more or less oval, however.

The disease differs clinically from the ordinary progress of cancer by its greater slowness, the little pain and hemorrhage, the absence both of any attempt at the formation of a fungoid growth, and of fetor. The glands, moreover, are never affected. The advances of the deposit and ulceration are unequal, hence the eaten-out or rodent appearance. The ulceration advances in extent, and in depth. The growth is always in one mass, not in distinct centers.

Rodent ulcer then occurs on the face, has an indurated edge, a tendency to spread without respect to kind of tissue, is of slow progress, painless, is not related to any cachexia, never causes enlargement of glands, and microscopically presents characters that betoken it as the

least expressed form of the cancerous cachexia. It is most common between fifty and sixty, and it does not occur before thirty; generally it has its seat about the eyelids, and occurs in either sex equally, and it never attacks the lower lip.

The treatment is simple and satisfactory. Experience teaches that extirpation by the knife is the most successful mode of treatment.

One case is reported where the application of lactic acid resulted in the speedy cure of a rodent ulcer.

The following homœopathic remedies may be compared: *Arsenicum*, *Belladonna*, *Cicuta*, *Hepar*, *Hydrocotyle*, *Hydrastis*, *Mercurius*, *Nitric acid*, *Silicea*, *Staphisagria*, *Sulphur*, *Uranium*.

CHAPTER XV.

CUTANEOUS HEMORRHAGES.

General Remarks.

Blood may be effused into the skin under a variety of circumstances. The occurrence may take place as an idiopathic condition *spontaneously*; or *secondarily* in connection with other diseases of the skin. The blood-vessels may be ruptured, and so permit the escape of blood, or the blood globules may escape bodily through the actual vessel walls. The usual cause of rupture is traumatic injury. The hemorrhagic spots receive different names according to their size and shape. When they are small, in the form of red points, they are called *petechiæ*; when larger, and more or less linear, *vibices*; when large in the form of bruises, *ecchymosis*; and when the blood collects in the form of a distinct tumor, *hæmatomata*.

The *secondary* forms of cutaneous hemorrhage occur in connection with typhus, measles, scarlatina, and variola, the early eruptions of which may severally be more or less hemorrhagic, the hyperæmia being accompanied by actual hemorrhage into the skin. The eruption of several of the ordinary inflammatory diseases of the skin also are sometimes complicated by a certain amount of effusion of blood. Other conditions under which cutaneous hemorrhages arise are altered states of the blood current, such as impurifications by bile products, stasis of the capillaries produced in connection with kidney and heart disease, etc.

It is only to hemorrhage occurring as a primary and independent disease that the term *purpura* is applied, and this we will now describe.

Purpura.

Purpura is an affection of the skin characterized by the sudden appearance of reddish macules of varying size and on various parts of the body. In a short time they become purplish, the color not being removable by pressure. After they have existed a few days they undergo changes in color similar to those which follow a bruise.

The eruption may appear in either sex, at any age, and in almost any condition of general health; in those who are greatly enfeebled as well as in those in an apparently robust condition.

The eruption may cover the greater part of the surface, but more frequently is confined to the lower extremities.

A single purpuric outbreak may be the beginning and end of the trouble, or, as frequently happens, fresh crops may appear at regular or irregular intervals for a considerable period. The affection has been noticed in connection with suppressed menstruation, apparently taking the place of the natural flow. The foregoing features characterize *purpura simplex*, which, as a rule, is not a serious affection.

Sometimes, however, the hemorrhages are not confined to the cutaneous tissues, but may take place internally as well, and serious loss of blood may result from the rupture of superficial capillaries in the various mucous membranes, and especially those of the gastro-intestinal tract. This form is termed *purpura hemorrhagica*.

The etiology of purpura is absolutely unknown. It has no connection, however, with the congenital anomaly

known as hemophilia, nor with the acquired condition known as scorbutus, or scurvy.

Diagnosis.—The name should be confined to the simple affection we have described, and should not be used in connection with any other distinct disease that happens to be complicated with minute hemorrhagic effusions.

Scurvy should never be mistaken for purpura, or *vice versa*. In the former disease the limbs are swollen and tense, and the hemorrhages form diffuse patches rather than macules. The gums also are swollen, and ready to bleed at the slightest provocation. Purpuric blotches are likewise met with in *speliosis rheumatica*; but the pronounced arthritic symptoms serve as a mark of distinction.

Petrone found single, small, ovoid micrococci in the blood of a young man who was suffering from purpura hemorrhagica rheumatica febrilis. Some of his blood was subcutaneously injected into a rabbit. After two days numerous hemorrhagic spots appeared in the skin of one ear. By this experiment Petrone thinks he has demonstrated the infectious nature of the disease.

Treatment.—Piffard says that one drug stands pre-eminent and alone as an efficient agent in the treatment of purpura, and this is ergot. He advises the use hypodermically of ergotine, or drachm doses of the fluid extract given internally two or three times a day. He also advises against the use of iron, quinine, and similar drugs of the tonic class.

The diet should consist of the most nutritious articles. Malt preparations are useful foods. Outdoor exercise is very beneficial. Locally, hamamelis is one of the best remedies, and when there is much hemorrhage, ice treatment may be resorted to.

Simple purpura responds best to *Ars. alb.*, and the hemorrhagic form to *Sulph. acid.* Other remedies may be indicated as follows:

Arnica.—Yellow, blue and reddish-blue spots; in lying-in women.

Baptisia.—Livid spots all over the body and limbs, of the size of a three-cent piece; great languor; desire to lie down; tired, bruised, sick feeling all over the body.

Berberis.—Petechiæ on the right shoulder or left humerus, back of the head and wrist. Bruised pain with stiffness and lameness in small of back; renal or vesical complications.

Chloral.—Its continued use internally has caused *purpura hemorrhagica*, preceded by a bright red blush, erythematous in aspect, but permanent under pressure, followed in two days by deep red spots, mixed with mottled livid patches. The buccal mucous membrane becomes red, raw, ulcerated, and blistered, breath fetid, pulse 120 and feeble. A desquamation ensued, but with bed-sores in some places. In other cases it caused petechiæ, vibices, and ecchymoses.

Cocoa.—Dark spots like ecchymoses under the skin, about the size of a pin's head, on the fingers.

Erigeron.—When apparently well-indicated remedies fail.

Hamamelis.—Hemorrhagic purpura; profuse epistaxis; passive, venous hemorrhages; great lassitude and weariness; in old people.

Lachesis.—Simple purpura; blackish-blue spots; great physical and mental exhaustion; climacteric troubles.

Mercurius.—Bluish-red spots, darker on the margin and lighter in the centre. Other symptoms of *Merc.* present.

Phosphorus.—Petechial spots on the skin; bluish-red spots on the legs; purple-like exanthem over the whole body.

Rhus tox.—Simple purpura; dark brown spots on inside of ankles; rheumatism of joints worse during rest; swollen ankles after sitting too long.

Terebinth.—Hemorrhagic purpura; intestinal hemorrhages; hematuria.

Verat. vir.—Simple purpura; galvanic-like shocks in the limbs; rapid pulse; slow respiration; in plethoric individuals.

CHAPTER XVI.

Pruritus.

Pruritus is characterized by the occurrence of itching; in fact, pruritus is itching. It may co-exist with, or be entirely unaccompanied by, organic change in the skin; and a knowledge of the conditions under which it occurs is essential.

Pruritus occurs in the course of most inflammations of the skin; in connection with rheumatic manifestations; the circulation of morbid elements, as bile, urinary excreta; elevations of temperature, senile decay of the skin, gastro-intestinal disturbance, nervous diseases, Bright's disease, genito-urinary and uterine derangements, sedentary habits, and stimulating diet; it is also occasioned by *local causes*; about the rectum by ascarides and piles, and over the body in various parts by parasites (animal or vegetable). When pruritus is spoken of in the abstract, itching, as constituting the primary and sole disease present, is signified, and the nervous character of the itching is frequently shown by its sudden appearance, its almost as sudden disappearance, and often its marked tendency to periodicity.

Pruritus may be general or local, and it is very generally followed by secondary changes in the skin. When general it is due to the causes of more general operation, mentioned above.

When pruritus occurs, of course in most cases the patient scratches more or less violently for the relief of

the itching, and this induces certain special diseased conditions. In fact, the phenomena of a scratched skin are produced, or what is termed a "*pruriginous eruption.*"

In certain cases pruritus exists in the first place as apparently the sole disease, and in which scratching is practiced, and eruptions follow. These conditions we will now discuss.

Pruritus Senilis.—In old people whose skin begins to exhibit atrophous changes the sensibility of the skin is much disordered and more or less associated pruritus occurs. The practitioner is consulted for this pruritus, and at first there is nothing else to be observed in the skin but laxity and thinness of the integuments, with perhaps plugging up of a certain number of the follicles by the exuviæ shed from the sebaceous glands. The pruritus is the evil from which the patient desires to be rid. It is increased by heat, cold, the warmth of the bed, by digestion, and other things. These cases may be relieved by the use of alkaline baths, free oiling of the surface, or some local anodyne application. Besnier advises in these cases that the patient bathe in a solution containing to each litre a solution of carbolic acid 10.00 to 500 grammes of acet. aromat. This should be followed by dusting the affected parts with amylum, 90; bismuth salicyl., 20.0.

After awhile the scratching practiced to relieve the irritation induces the development of distinct eruptive phenomena. A certain amount of hyperæmia occurs, and this is followed by the formation of lymph papules, which, being scratched, become pruriginous—that is to say, the apices are torn, a little blood oozes out and dries on these apices as a dark speck. These changes are followed by more or less infiltration of certain parts, by the intermingling of excoriations made by the nails with the pru-

iginous rash, and in some instances by ecthymatous pustules or urticaria. The pruritus is often intense, and takes the form of a stinging, creeping, or burning sensation. The pruritus is the primary, as it is occasionally the sole condition. The disease may be, of course, more or less general, or more marked in one place than another.

The cure of pruritus senilis is, too, effected by emollient and vapour baths, and anodynes, locally applied. The following formulæ are often of benefit:

- ℞. Sodii Hyposulphit, dr. j.
 Acid Carbol., dr. ss.
 Glycerini, oz. j.
 Listerine, oz. iij.
 M. Sig.: Use as a lotion.

Or,

- ℞. Ammon. sulpho-ichthyolat, ℥j.
 Aquæ rosæ,
 Glycerini, āā ℥ss.
 M. Sig.: Use as a lotion.

Or,

- ℞. Opium, gr. viij.
 Creasote, gtt. x.
 Lard, ℥j.
 M. Sig.: Use locally.

Or,

- ℞. Tincture of myrrh, gtt. xxx.
 Oxide of zinc, gr. xx.
 Cold cream, ℥j.
 M. Sig.: Use locally.

Or,

- ℞. Carbonate of soda, ℥ss.
 Conium juice, ℥j.
 Elder flower water, ℥j.
 M. Sig.: Use locally.

The above formulæ, and many others, may be used in any of the forms of pruritus. Under the varieties mentioned below, some other means of affording relief will be noticed.

Pruritus Ani.—Itching about the anus arises from a variety of causes. It is a common consequence of piles, as carides, tinea circinata, the friction of the parts in stout people (intertrigo), gout, and uterine disorder. It occurs from the latter by reflex action. It is often very troublesome. The result of scratching is to give rise to the development of papulæ, and, it may be, considerable inflammatory thickening.

The practitioner must of course discover any local cause for the disease, and take care to negative its operation. The same local applications recommended for the preceding will be useful. In addition I would advise the following:

℞. Oil of bitter almonds, ℥ij.
Cyanide of potassium, gr. x.
Galen's cerate, ℥ij.

M. Sig.: Apply locally. This must be used with great caution.

Pruritus Præputii.—Is merely itching about the glans, connected with an abnormal secretion from the follicles of that part. The remedy is free washing with soap and water and the application of an oxide of zinc powder or lotion, as follows:

℞. Oxide of zinc, ℥ij.
Glycerine, ℥ij.
Lead-water, ℥iss.
Lime-water, ℥vj to viij.

M. Sig.: Apply locally.

Pruritus Pudendi, or itching about the genital parts, is common in women, and arises from a variety of causes

—eczema, intertrigo, the presence of vegetable fungi, ovarian and uterine irritation, hemorrhoids, and varicosity of veins of the genital parts. In those cases in which there appears no structural change relief is to be obtained by the locally applied anodynes, care being taken to treat any uterine or ovarian disease appropriately.

For the relief of the itching the following means may be used: The *cure* of the complaint in any of its above forms can only be accomplished by the administration of the properly indicated homœopathic remedy, hints of which will be found at the close of this article. In many cases, relief will be demanded for the excessive itching, and in such cases it is admissible to make use of one or more of the following:

- ℞. Hyposulphite of soda, ℥j.
 Glycerine, ℥j.
 Water, ℥iij.
- M. Sig.: Use locally.

Peppermint water is one of our best local applications in the above-mentioned forms of pruritus. Patients can easily make their own lotion, as required for use, by putting a teaspoonful of borax into a pint bottle of hot water, and adding to it five drops of oleum menthæ peperitæ, and shaking well; the parts affected to be freely bathed with a soft sponge.

If cracks, or sores, or eczema, or rawness be present this lotion will be too severe. Olive oil, with five grains of iodoform to the ounce, is better.

A sitz bath of cold water is often beneficial.

Galvanism, as a remedy, in pruritus vulvæ et ani, is a valuable adjuvant. A current from six elements with the anode applied to the vulva and the cathode to the affected portions of the integument. The sittings should last about ten minutes.

Therapeutic Hints:

- Itching as if from ants: Lach., Phos., Puls., Secale.
 Bitings: Berb., Bry., Chin., Colch., Lach., Led.,
 Magn. acet., Merc., Nux vom., Oleand., Puls.
 Burning: Agar., Arg. n., Ars., Bry., Calad., Caps.,
 Cic., Euphorb., Hep., Ign., Merc., Nux vom., Ran.,
 Rhus, Sabad., Spig., Staph., Sulph., Verat., Viol.
 od.
 As if from congelation: Agar.
 Corrosive itching: Rhus ven.
 Crawling: Arg. n., Ars., Dulc., Magn. c., Sil., Spig.,
 Staph.
 Creeping: Sil.
 Dull: Hepar.
 As if electric sparks: Phell.
 As if from fleas: Arg. n., Lyco., Magn. acet., Merc.,
 Mezer., Oleand., Puls., Sil., Spong., Staph.,
 Tabac., Teucr., Thuja, Zinc.
 Gnawing: Agn., Ars., Cocc., Dig., Euphorb., Magn.
 aust., Oleand., Plat., Puls., Rhod., Ruta.
 Intolerable: Merc., Sil.
 Itch-like: Amb., Merc., Verat.
 Jerking: Staph.
 Itching as of lice: Arg. n., Canth., Magn. m., Plat.,
 Zinc.
 As from mosquito-bites: Rhus ven.
 As of nettles: Colch., Lupul.
 Painful: Alum., Ammon., Baryt., Cham., Cocc.,
 Lupul., Nitr.
 Pinching: Mosch.
 Pleasant: Merc.
 Prickling: Cin., Plat., Zinc.
 Stinging: Agn., Arg., Arn., Asaf., Bry., Con., Cycl.,
 Dros., Graph., Ign., Led., Magn. acet., Merc.,

Oleand., Puls., Ran. sc., Rhus, Ruta, Sabina, Spig., Spong., Squill., Stan., Staph., Thuja, Ver., Viol. tr.

Tearing: Bell., Bry.

Tickling: Agar., Calc. c., Euphorb., Merc., Plat., Puls., Ruta.

Titillating: Bell., Chel., Chin., Plat., Puls., Rhod., Sabad., Squilla.

Violent: Agar., Dros., Ipec., Lach.

Voluptuous: Anac., Merc., Sulph.

Wandering: Cham., Graph., Kali c., Magn. m., Mez., Rhus v., Staph., Zinc.

Of wounds: Chin., Tart. emet.

Location.

Anus: Alum., Ambra, Amm. c., Anac., Calc. c., Carbo veg., Caust., Kali c., Lyco., Nux vom., Phos., Sabad., Sep., Sil., Spig., Sulph.

nates, between the: Alum., Con., Seneg.

perinæum: Agn., Alum., Ars., Carbo veg., Ign., Mur. ac., Nux vom., Plumb., Tarax.

Sexual parts: Ambra, Amm. c., Berb., Calc. c., Cann., Canth., Carbo veg., Caust., Cocc., Coff., Raph., Con., Hep., Ign., Kali c., Kreas., Lyco., Magn. acet., Magn. m., Merc., Natr. m., Nitr. ac., Nux vom., Petr., Puls., Rhus, Sep., Sil., Sulph., Thuja.

frænulum: Cann., Caust., Hep., Merc.

glans: Merc., Natr. c., Natr. m., Nitr. ac., Nux vom., Sep., Thuja.

testicles: Merc.

scrotum: Berb., Carbo veg., Caust., Cocc., Graph., Lyco., Nitr. ac., Nux vom., Petr.

clitoris: Sulph.

penis: Nitr. ac.

mons veneris: Kali c.

labia: Amm. c., Calc. c., Carbo veg., Con., Graph.,
Kali c., Merc., Natr. m., Nitr. ac., Sil., Staph.,
Sulph.

vagina: Canth., Con., Kreas., Sulph.

prepuce: Cann., Carbo veg., Lyco., Magn. acet.,
Nitr. ac., Nux vom., Puls.

CHAPTER XVII.

Chromatogenous Diseases, or Alteration In the Pigmentation of the Skin.

Pigmentary discolorations may be divided into three main groups—(1) primary and idiopathic, (2) secondary or symptomatic, and (3) congenital.

The primary or idiopathic pigmentations result from the application of irritants, which set up hyperæmia in some cases and in others not—as after the action of heat—or friction, or irritants, such as mustard plasters, or the pressure on a part, as by dresses, mechanical restraints, the friction of straps, and the following of certain handicrafts by which certain parts of the body are exposed to the sun or specially rubbed, as in masons. Scratching also will be followed in some cases by discoloration—this is seen in phtheiriasis particularly.

Secondary or symptomatic stainings are those which follow in the wake of other diseases, or are due to disturbance of organs at a distance from the seat of discoloration that do not, in other words, constitute the essential disease, but are secondary to, or form only a part of, the essential diseases present in any given case. There are three groups of secondary pigmentations: 1. Those which follow in the wake of and occur in the same seat as certain skin eruptions; 2. Pigmentations occurring in connection with certain cachexias, the latter being associated with definite organic diseases of important internal organs; 3. Physiological pigmentations connected with uterine functional changes.

As regards *congenital pigmentations*, I need only say these are seen in moles and pigmentary nævi.

Those cases in which the pigmentation of the skin is at fault as the sole existing disease may be divided into two classes—those in which the pigment is deficient in quantity (Leucoderma, or Vitiligo), and those in which it is in excess (Melanoderma). These may be congenital or acquired, general or local. The seat of change is the rete mucosum.

Vitiligo.

Vitiligo, or leucoderma, is an affection characterized by circumscribed patches of skin, from which the pigment has disappeared to a greater or less extent. At the beginning the patches will be quite limited in extent, and affect by preference the face, neck, hands, and genitals. As a rule, however, they increase for a certain length of time, and neighboring patches coalesce. The borders of the spots are usually somewhat hyperpigmented, as if the pigment which had been removed from the centre had been simply deposited at the edges. This feature, however, is not always met with.

The course of vitiligo varies. With some individuals it reaches a certain degree of development, and then remains stationary for years; in others, it progresses indefinitely, and this so particularly when it affects the negro.

In perhaps the majority of cases there is a return of the natural pigment after the lapse of a few years, while in others the affection appears, lasts a few months and disappears, only to be followed by one or several recurrences. It may be absent during the hot months, and return during the cold ones.

The causes of vitiligo are unknown. It occurs in both



VITILIGO.



sexes with apparently the same frequency, and usually without being preceded by any acute disease, or general failure of health. In fact, the majority of patients will complain of nothing except the unsightliness of the affection, which may pursue its course uncomplicated by trouble that can be attributed to it. There is no reason for believing that it ever shortens life. When we consider the permanency and progressive nature of some cases, we are utterly at a loss to account for this curious affection.

Treatment.—The old school acknowledge their incapacity to do anything in this affection. Our school is but little better off.

Locally, the pigmentation around the patch may be lessened by the use of strong acetic acid. Galvanism may prove serviceable. Internally the *Sulphide of Arsenicum* will be oftenest used with benefit. *Natrum c.*, *Nitr. ac.*, *Sumbul* and the *Phosphide of Zinc* may be studied.

Melanoderma.

This term of course means excess of pigment resulting in dark discolorations, but the altered tint of skin may be blue, yellowish, or black; hence the terms cyanoderma, xanthoderma, and melasma.

Melasma, or that condition in which the discoloration of skin is black in color, is general or partial. The latter is generally called melasma. It may be a physiological condition, as seen in the staining around the nipple and the linea alba in pregnancy; this condition may be excessive. The varieties of melasma are lentigo and ephelis.

Lentigo is known as freckles. The seat of the pigment deposit is the rete mucosum; it is often congenital, and of varying extent and distribution; generally, how-

ever, it consists of round yellowish spots, the size of split peas and less, not only on the parts exposed to the light, but also those covered by the dress. Lentigo occurs in those with fair skins, and particularly red-haired folk. There is no desquamation, no itching, and no heat of any kind in connection with freckles, which often disappear after puberty. Freckles do not depend upon seasonal change.

Lentigo may sometimes be made to disappear by an application of citric acid night and morning. One writer reports the application of emulsion of almonds, night and morning, to be the most satisfactory treatment, and advises its continuance until a slight amount of desquamation takes place. Another writer recommends the application of oleate of copper for the removal of freckles. Care should be exercised that a pure sample of the drug is obtained.

R. Cupric. Oleat., ℥j.
Petrolei, ℥xvj.

M. Sig.: Apply twice a day.

The internal remedies are:

Ferrum mag..—Spots resembling summer freckles on back of hands and fingers.

Kali carb..—Freckles on the face.

Lycopod..—Freckles on the left side of the face and across the nose.

Nitric acid..—Freckles on the chest; dark freckles.

Petroleum..—Freckles on the arms.

Phosphorus..—Freckles on the lower limbs.

Sepia..—Freckles on the cheeks.

Sulphur..—Freckles on the nose.

Ephelis, or Sunburn.

In this particular variety of discoloration the pigment deposit is excited by the sun's rays. Sunburn consists of little dots the size of pins' heads, which appear upon the parts of the body exposed to the influence of the sun, and are seen mostly in lymphatic subjects with delicate skins. Temporary benefit accrues from the use of local applications strong enough to cause exfoliation of the corneal cells. A one per cent. solution of mercuric bichloride and a ten per cent. solution of calcium chloride are the lotions most commonly used.

Ver. alb., *Robinia* and *Kali carb.* are useful internal remedies. *Bufo* is indicated when the face tans quickly.

Melasmic discoloration likewise occurs as the result of the action of local irritants—excessive scratching, strong lights, blisters

Pigmentary Nævi.—These consist of collections of pigment in the rete and corium, and a certain amount of hypertrophy of the papilla at times. They may be furnished with hairs. Moles are of this nature.

Xanthoderma.—In this disease the pigmentary discoloration is yellowish. It is characteristic of certain races, and is due to some special condition of the coloring matter of the skin, molecular or chemical.

Cyanoderma, or blue discoloration, is different from colored sweat. It is a curiosity, if not, at least in the greater number of instances, a hoax.

CHAPTER XVIII.

PARASITIC DISEASES.

The parasites are of two kinds, animal and vegetable.

The principal animal parasites are the *Acarus scabiei*, or itch mite; the *Pediculus*, or louse; the *Cimex lectularius*, or bedbug; the *Pulex irritans*, or flea; and the *Pulex penetrans*, or chigœ.

The bite of the *Cimex lectularius* causes a hyperæmic papule with a small red spot in the centre. That of the flea produces a little circular erythematous spot, which exhibits a dark speck in the centre, that marks the wound made by the insect. The chigœ attacks the feet and hands, entering the skin beneath the nails or betwixt the toes, or upon some portion of the extremities, either by a channel made for itself, or by the ducts of the skin; its tracks can sometimes be traced as an elongated brown spot.

The application of a lotion of glycerine and water, of each ʒjj, and tincture of calendula ʒj will be found very useful in allaying the irritation in the case of the first two. The treatment of chigœ disease consists in dilating the original channel of entrance, and carefully removing the chigœ bodily; after which apply an ointment composed of lard and salt.

Certain caterpillars, if they get upon the skin, may excite urticaria also.

Children of lymphatic temperament who are not kept clean, are poorly nourished, or insufficiently clothed, and

live in rooms badly ventilated, are particularly liable to vegetable parasitic diseases; and unless measures are adopted to remove the exciting causes and predisposing conditions treatment is unsatisfactory and relapses are frequent. The patients should be isolated whenever practicable.

The varieties are: *Tinea favosa*, or favus; *tinea tonsurans*; *tinea circinata*; *tinea versicolor*; and *onychias parasitica*.

Phtheiriasis.

Phtheiriasis is the name applied to the affections produced by the invasion of the there well known varieties of *pediculus*—namely, the head-louse, body-louse, and pubic or crab louse.

The nature and appearance of these insects are so well known that we need not describe them. The first of these infest the scalp; the second confines itself to the non-hairy portions of the surface; and the third prefer the pubic region, but may be met with wherever the hairs are short, but avoiding the scalp.

Phtheiriasis Capitis.

This affection occurs most frequently in children, more rarely in women, and almost never in men. The insect (*bediculus capitis*) finds its most congenial abiding-place in the hair of children, where it lays its eggs, and attaches them by a kind of cement to the shafts of the hair. The eggs take but a few days to hatch, and in a short time the parts may become pretty thickly settled. They derive their nourishment from the skin, and by their presence produce considerable itching and lead to a corresponding amount of scratching. In children predis-

posed to eczema they not infrequently lead to the development of this affection.

The **diagnosis** is, of course, readily made, as inspection of the scalp will quickly reveal the presence of the insects and their ova, if at all abundant. In doubtful cases the fine-tooth comb will soon settle the question.

The **treatment**, of course, involves the removal of the insects and their ova, usually called "nits." In children, clipping the hair as close as possible, or perhaps shaving it, is, of course, the quickest way of relieving the patient of these pests. When this is not practicable, the scalp should be thoroughly washed with tincture of staphisagria, or with ordinary kerosene oil. A few applications will kill the living insects, but do not appear to destroy the vitality of the ova. These should be removed as far as possible with the fine-tooth comb. Many, however, will still remain, and the best way to get rid of them will be to go over the scalp carefully and clip the shafts of all the hairs to which they are attached. The head should be washed for a week or ten days, for fear some of the eggs may have escaped detection. It is almost needless to say that soap and water, freely used, are essential adjuvants to the means just mentioned.

The following is a very excellent application:

- ℞ Ol. Staphisagriæ, ℥j.
 Ol. Limonis, dr. j.
 Ol. Amygdalæ, ℥iv.
 M. Sig.: Apply to the affected parts daily.

Phtheiriasis Corporis.

This affection is very rarely met with in young persons, and is found most frequently in middle and advanced life, and especially in the feeble and ill-fed, and among

the frequenters of prisons and cheap lodgings. Though sometimes met with in women, nine-tenths of the cases are among men.

The *pediculus corporis* does not lodge upon the body, but infests and breeds among the folds of the under-garments, from which hiding places it sallies forth to seek its nourishment from the skin. This it pierces with the sucker, and continues to feed until gorged with blood. These insects excite at times a lively, and most annoying itching, and lead to vigorous scratching. In cases that have lasted for any length of time, the skin gradually darkens, even to the color of a mulatto.

Diagnosis.—After a little experience a case of phtheiri-
asis will, in most cases, be recognized at a glance, and should always be proved by a careful search for the insects. Strip the patient, if possible, and then examine *not his skin*, but his shirt, and, as a rule, you will find the pediculi, if present, without difficulty.

Treatment.—Soap, water, and clean clothes are all that are necessary. The old clothes should be destroyed, or thoroughly disinfected by boiling or baking.

Phtheiri- asis Pubis.

The *pediculus pubis* affects a preference for the pubic region of both sexes, but is not confined to this locality; but in women may also be met with in the axillary region and in the eyebrows, and in men among the chest hairs and in the beard and whiskers. It rarely gives rise to as much irritation as the other varieties of pediculus, and its presence is often discovered accidentally. The insect attaches its eggs to the hairs like the pediculus capitis, and adheres to them itself or to the skin in the most tenacious manner by the aid of its crab-like claws.

The **diagnosis** is to be made by the discovery of the insect, but, having been found in its favorite seat, thorough examination of all other parts of the body liable to be infested should not be omitted.

The **treatment** of this affection involves the employment of some anti-parasitic application, and the one most in vogue is the common "blue ointment." When, however, the patient will consent to it, shaving of the affected parts is to be preferred. The affection is most frequently contracted during sexual intercourse, but may be derived from wearing infected clothing, or sleeping in an infected bed. The patient's under-clothes and bed-clothes should be boiled or baked, in order to destroy the insects and their eggs.

Psorospermosis.

Psorospermosis may be defined as a condition of the skin of varied lesion, but characterized by the presence of "psorosperms." The psorosperm is a living animal parasite, which infests the human skin as well as the bodies of some of the lower animals, and consists of a roundish or oval cell, containing one or more nuclei; the nucleus occupying but a small portion of the cell, the plasmic portion of which is extremely transparent and structureless.

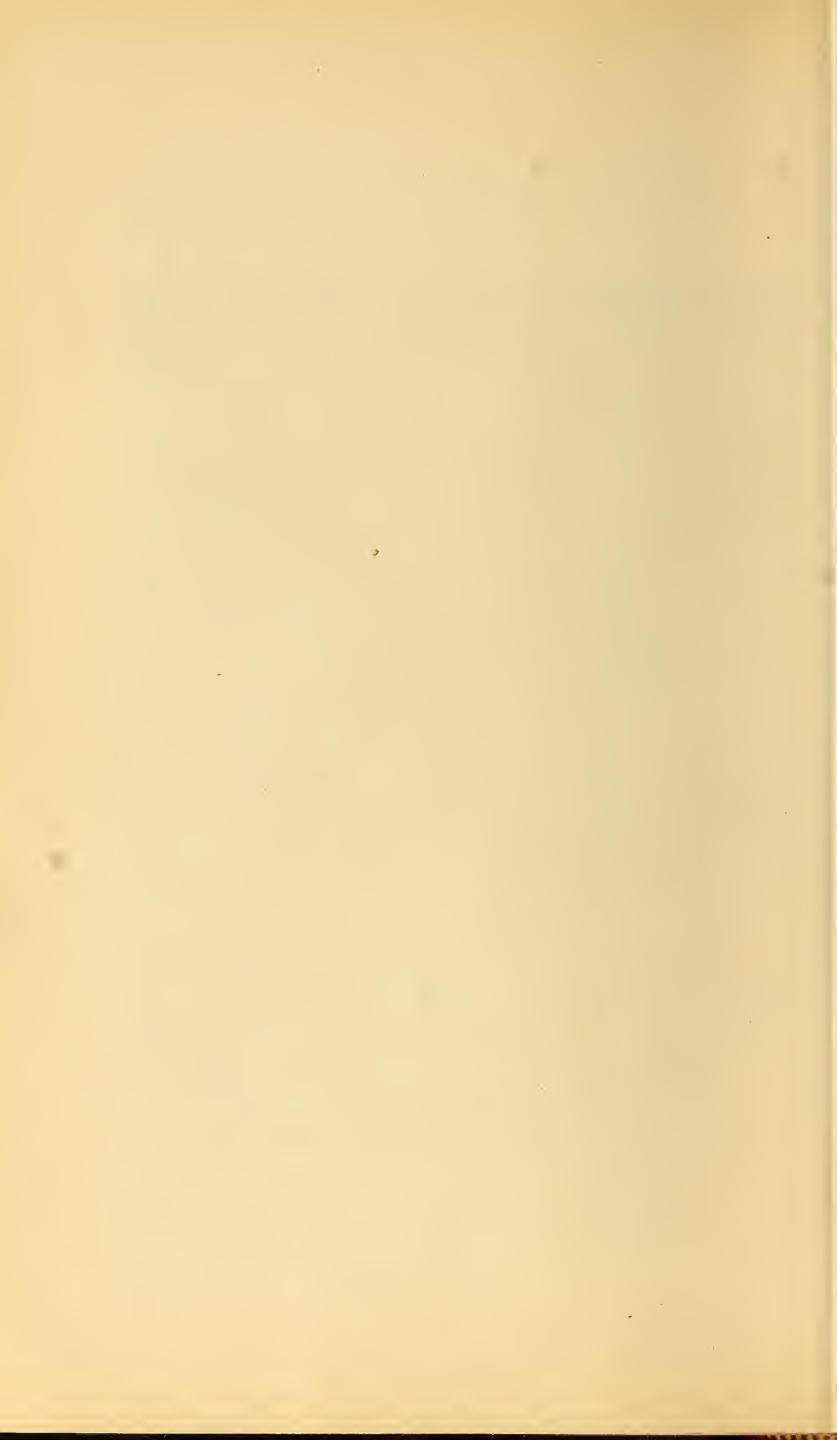
Much doubt exists among dermatologists as to the nature of this affection; and but little is known positively concerning it.

Scabies.

Scabies is a contagious affection of the skin characterized by the development of vesicles, pustules, and other lesions on the skin, and caused by the presence of an animal parasite, known as the *Acarus scabiei*.



SCABIES.



The affection usually commences by the appearance of small, non-umbilicated vesicles on the hands and between the fingers, accompanied with severe itching. The itching leads to scratching, and as a consequence transfer of the affection to other parts of the body with which the hands are brought in contact. Very early in the disease, then, we will find it appearing on the penis, on the breasts in women, and on the feet in children. From these parts it may spread over the greater part of the surface, more profoundly on the anterior than posterior parts and avoiding the face and scalp.

The vesicles above mentioned may be termed the primary lesions of the disease, but are usually followed in a few days by others secondary to the irritation produced by the insect, and to the effects of the finger nails. These new lesions may be papular or pustular in character, and may even assume distinctly eczematous characters, or develop into a true eczema in those predisposed to this affection. On the penis the lesions are usually papular. None of these features are absolutely pathognomonic. There is, however, a lesion which is met with in no other disease, and which when found renders the diagnosis absolute. This is a fine, grayish line frequently terminating in a vesicle, and found between the fingers more frequently than elsewhere. It is called the *acarian burrow*. When an impregnated female acarus finds lodgment on the skin, she immediately seeks a place in which to deposit her eggs. This she accomplishes by boring beneath the epidermis and laying an egg, and then advancing in a straight or slightly curved line for several days until ovulation is complete. She then dies, and her decomposing remains give rise to a vesicle or pustule. When the eggs hatch, the young find their way to the surface, and as soon as they assume the

adult form copulate, and the impregnated females commence to burrow as did their mother before them. A sharp needle-point, if guided by a sharper eye, will sometimes extract the acarus from her nest. The male acarus never burrows, and is very rarely detected.

Etiology.—Scabies is one of the few diseases of which we can say that we absolutely know the cause; and yet there is no chapter in medical history more interesting than that which concerns the etiology of this affection.

The acarus is exceedingly minute, and when first hatched has but six legs. It soon assumes its adult form, however, with eight legs; and the sexes are easily distinguished by the fact that in the female the four posterior legs are furnished with projecting hairs, while in the male two of these legs terminate in suckers instead of hairs.

Diagnosis.—The diagnosis of scabies should not in most cases be difficult. The early vesicles on the hands are either to be found, or the patient may tell you that the affection commenced with small "watery pimples." Next, examine the penis, and you will rarely miss finding papules on the glans or papules or vesicles on the cutaneous surface. Rather good-sized isolated pustules about the wrists are commonly present, and in women you usually find an eczematous eruption around the nipple. If on inquiry you find that one or the other of the patient's associates is suffering from a similar trouble, and that he has slept with him or worn his clothes, you may be fully confident of the diagnosis.

The mere presence or the intensity of the itching can not be relied on to establish the nature of the disease, as in several other affections intense pruritus is a marked feature; and this is notably the case in phtheiriasis, produced by the *pediculus corporis*, or body louse. The

papules or other lesions on the penis should not be mistaken for lesions of venereal origin.

To briefly sum up, then, the diagnostic points are:

1. A history of contagion.
2. The development of minute papulo-vesicles or vesicles, spreading on contiguous portions of the skin or on parts habitually handled by the patient (never in patches but in rather a scattered manner).
3. Itching, worse at night and becoming progressively worse as larger areas become invaded by the itch-mite.
4. Sites of predilection shown by the disease. They are the webs of the fingers, the front of the wrists, the anterior edges of the axillæ, the mamma, the penis, the abdomen and groins, the toes and feet. Flexor surfaces are more involved than extensor.
5. That the face remains free from the disease, except in the case of infants at the breast.
6. That it has taken about three weeks for the disease to involve the whole surface.
7. That old cases show all the lesions that can possibly be produced by disease of the skin, expressed by the term multiformity of lesions.
8. Incidentally—numerous scratch-marks.
9. The itch-mite and its canaliculi.

Treatment—However distressing the present symptoms, the patient may be confidently assured of speedy relief. This may be most promptly brought about by adopting the following somewhat vigorous treatment: Put the patient into a warm bath and let him soak for fifteen or twenty minutes. Then let him be rubbed thoroughly all over with soft soap, assisted with a flesh-brush. Every part of the body from the neck down should receive a thorough application of the soft-soap and water and brush, in order to break over the burrows

of the insects. The soap is then washed off and the surface rubbed dry. Then rub the entire surface with alkaline sulphur ointment to each ounce of which a drachm of iodide of potassium has been added. After a thorough inunction the patient should go to bed and stay there until the following morning. When morning comes a warm bath should be given to remove the ointment, and the patient should put on new under-clothes. The under-clothes and bedding that have been in use should be thoroughly disinfected by boiling or baking, in order to destroy any wandering acari. This treatment is effective but harsh, and for a day or two the patient's skin will be far from comfortable, and the eczematous and other secondary lesions will be greatly aggravated. Emollient treatment, therefore, will in almost every instance be needed for a few days longer, and the use of the oxide of zinc ointment is as good as any.

One of the following R's is, I think, far preferable, and less annoying to the patient:

R Beta naphtholi,
 Balsam Peru, $\bar{a}\bar{a}$ gm. x
 Sapon. kalini viridis,
 Cretæ albæ pulveris, $\bar{a}\bar{a}$ gm. xx
 Vasogen. Sulph (3 per cent.) spiss. gm. x L.
 M. f. unguentum.

Twenty-four hours' covering of the affected parts is sufficient in most cases

Or,

R Sapon. med., 100.
 Ol. petræ.,
 Alcohol, $\bar{a}\bar{a}$ 50.
 Ceræ alb., 40.

M. Sig.: Soap the whole body with this three or four times daily and the itch-mite will be destroyed.

Another, which has proved very efficacious in destroying the *acarus scabiei*, is:

- ℞ Naphthol, 15.
Lard, 100.
Green soap, 50.
Prepared chalk, 10.
M. ft. Unguent.

For obstinate cases the following is excellent:

- ℞ Petroleum, 50 parts.
White wax, 40 parts.
Alcohol, 50 parts.
Soap, 100 parts.
M. Sig.: Apply locally.

Remedies indicated:

Arsen. alb..—Inveterate cases; eruption in the bends of the knees; pustular eruption, burning and itching; better from external warmth.

Carbo veg..—Eruption dry and fine, almost over the whole body, worst on extremities; itching worse after undressing; dyspeptic symptoms, belching of wind and passing flatus; after abuse of mercurial salves.

Causticum..—After abuse of sulphur or mercury; yellowish color of face; warts on the face; involuntary urination when coughing, sneezing, or walking; sensitive to cold air.

Croton tig..—Itching and painful burning, with redness of skin; formation of vesicles and pustules; desiccation, desquamation, and falling off of the pustules.

Hepar..—Fat, pustular, and crusty itch; also after previous use of mercury.

Lobelia..—Pricking itching of the skin all over the body.

Lycopodium..—Humid suppurating eruption, full of deep fissures; itching violently, when becoming warm through the day.

Mercurius.—Fat itch, especially in the bends of the elbows, if some of the vesicles become pustular; itching all over, worse at night when warm in bed; sleepless at night from the itching; diarrhœa.

Psorinum.—Inveterate cases, with symptoms of tuberculosis; also, in recent cases, with eruptions in the bend of the elbows and around the wrists; repeated outbreak of single pustules after the main eruption seems all gone.

Sepia.—After previous abuse of sulphur; itching worse evenings, especially in females.

Sulphur.—*Main remedy*; voluptuous tingling, itching with burning and soreness after scratching; worse in warm bed; disposition to excoriation; glandular swellings.

Sulph. ac.—When itchiness of skin and single pustules appear every spring; after imperfectly cured itch.

VEGETABLE PARASITIC DISEASES.

Favus.

Favus is a parasitic disease of the skin caused by a minute vegetable fungus.

This disease may affect any portion of the body where there are hairs; but it prefers the scalp, especially the scalps of children. The fungus on which the disease depends is called *Achorion Schonleinii*, and falling on a congenial soil, gains access to the hair follicles, where it spreads and multiplies. In a short time it is perceived on the surface as a whitish speck, and later forms a very light-yellow umbilicated crust, the centre of which is perforated by a hair. A number of contiguous cups may coalesce, forming a crusty patch. The fungus, by its development and increase, presses on the follicular contents, and interferes with the nutrition of the hairs, and

in time insures their destruction and permanent disappearance. Favus of the scalp usually makes its first appearance in childhood. Spontaneous cure rarely, if ever, occurs; and the affection lasts indefinitely—that is, as long as there is a hair follicle left for the achorion to lodge in. In this way the affection may be prolonged for twenty years or more. The most striking features of a long-standing case are the sparseness of the hairs over the affected area, the appearance presented being entirely different from that of any of the commoner forms of alopecia. The peculiar crusts may be present to aid the diagnosis, but not infrequently they are entirely absent from the surface, as various ointments, or even plenty of soap and water, are sufficient to prevent their development on the surface to an extent to prevent them to be visible to the naked eye.

The progress of the affection is extremely slow, and, when not checked by efficient treatment, may last for twenty years or more.

Favus on the body—that is, on the trunk or extremities—first exhibits its presence by a small erythematous patch like a commencing ringworm; this spreads until it has a diameter of an inch or more, when the characteristic crusts appear.

Etiology.—The disease is due to a vegetable parasite, and is communicable from one to another. This disease is not infrequent in the common domestic mouse, from which animal it is sometimes conveyed to the household cat, who in turn transmits it to the children of the family.

Diagnosis.—In most cases the diagnosis is easy. If the affection is in full efflorescence, it can hardly be mistaken for anything else, as there is no other disease that presents the characteristic umbilicated, light yellow, and

dry crusts. In an advanced case the peculiar alopecia, marked by the presence of a few, scattered, lusterless hairs, distinguishes it from every other form of baldness. In doubtful cases the microscope will reveal the parasite, which consists of minute spores and mycelium.

Treatment.—The treatment of favus of the general surface is exceedingly simple. All that is necessary is to pick off the crusts and make a few applications of tincture of iodine, or other efficient parasiticide, to the affected patches.

When, however, the affection is located on the scalp, it is very difficult to cure. The primary indication is to destroy the parasite. As this fungus flourishes in the lowest depths of the hair follicles, ordinary applications made to the surface are not sufficient. It is necessary to attack the parasite in its stronghold, and this can only be done by first extracting the hairs. These should be removed by properly constructed epilation forceps. After epilation a solution of corrosive sublimate, two grains to the ounce, should be rubbed in. This should be repeated daily until a considerable degree of irritation is produced. The artificial irritation should be sufficient to produce exfoliation of the epithelial lining of the follicle. If the affected surface is at all extensive, it is hardly practicable to epilate and mercurialize the whole of it at a single sitting; it should be done in sections. This treatment should be continued with as much regularity and thoroughness as circumstances will permit. In a few weeks the disease will appear to be cured; but in general this appearance is delusive, and treatment should not be relaxed simply because the disease is no longer visible on the surface. In all cases the patients should be kept under observation for several months after active treatment has been suspended.

Of internal remedies the following may be mentioned:

Agaricus.—Favus with biting itching in the scalp; crusts sometimes spread to other parts of the body; sensation as if ice-cold needles were piercing the skin.

Arsenicum alb.—The scalp is found perfectly dry and rough, covered with dry scales and scabs, extending sometimes even over the forehead, face, and ears.

Arsenicum iod.—Scalp dry and rough, and covered with dry scales and scabs; extend to forehead, face and ears; intense itching and burning.

Bromine.—Malignant scald head, oozing profusely; discharge dirty looking, offensive smelling; when the skin is dry, extreme tenderness of the scalp; crawling beneath the skin of the occiput.

Calcareo carb.—Scabs are thick, and cover a quantity of thick pus; the scabs are large, even one-half of the entire scalp being covered with a single scab; eruption spreading to the face; burning and itching; glandular swellings on the neck.

Clematis.—Eruption on occiput, extending down the neck, moist, sore, with crawling and stinging itching; often drying up in scales; itching worse when getting warm in bed, and but temporary relief by scratching.

Cornus circinata.—Dry or moist eruption; scrofulosis, with dry spasmodic cough, or tedious chronic cough, with mucous expectoration.

Dulcamara.—In scrofulous children when the crusts are thick and the hair falls out; bleeding after scratching; glandular swellings in the neighborhood of the eruption.

Graphites.—Exudation of clear, glutinous fluid forming moist scabs; secretion from scratching; falling out of hair; skin dry and inclined to crack; tendency to ulceration.

Jacea.—Thick incrustations, pouring out a large quantity of thick yellow fluid, which agglutinates the hair.

Kali carb.—Exudation of moisture after scratching; sensitiveness to cold; frequent urination, especially at night; dryness and falling out of the hair, in old over-treated cases.

Lappa major.—Scalp covered with a grayish-white crust, and most of the hair disappeared; eruption spreading over head, face, and neck; moist foul-smelling eruption on the head of children; swelling and suppuration of the axillary glands; boils all over the body.

Lycopodium.—Eruption beginning on the back of the head; when there are several spots, and when the crusts are fetid, thick and bleed easily. Hunger, but a small quantity of food fills him up.

Mezereum.—Head covered with a thick leathery crust, under which pus collects and mats the hair; dry eruption on the head, with intolerable itching, as if the head were in an ant's nest. White, scaly, peeling off eruption on the scalp, extending over forehead and temples.

Oleander.—Biting itching on the scalp, as if from vermin; worse back part of head and behind ears; better when first scratching it, followed by burning and soreness; worse evenings when undressing; humid, scaly, biting, itching eruption, especially on the back part of head.

Phosphorus.—May be used when the follicles appear to have been destroyed, and the scalp left smooth and shining.

Psorinum.—Moist, suppurating, fetid eruption, or dry eruption; hair dry, lusterless, tangles easily; averse to having head uncovered; wears a fur cap even in hottest weather.

Staphisagria.—Yellow, moist, offensive scales; falling out of the hair; humid, itching, fetid eruption on occiput,

sides of the head, and behind ears; scratching changes the place of itching, but increases the oozing.

Sulphur.—May be necessary to help along the action of the indicated drug.

Ustilago.—When there is great moisture, with matting and falling of the hair.

Vinca minor.—Offensive, moist eruption, with brownish crust; abundance of lice on the head; hair matted together; the hair falls out in single spots and white hairs grow there.

Viola tricolor.—Thick crusts; hair becomes matted; urine smells like cat's urine. Swelling of the cervical glands; intolerable itching at night.

Tricophytosis.

Tricophytosis is an affection of the skin, due to the development of a minute fungus known by the name of the *Tricophyton tonsurans*. The disease itself bears the common name of "ringworm." There are four principal varieties of the affection, which present appearances differing somewhat from each other, due to differences of location. These are *tricophytosis capitis*, *barbæ*, *corporis*, and *genisto-femoralis*.

Tricophytosis Capitis.

This variety is almost wholly confined to childhood and youth—very rarely, if ever, appearing in adult life. The symptom that usually first attracts attention is a small, scaly patch on the scalp, perhaps half an inch in diameter, from which the hair appears to have fallen. On closer examination, however, it is found that, instead of the hairs having fallen, they are broken off a line or two from the surface. If an attempt be made to extract a few of these short stumps with forceps, it will be found

that many of them do not come out by the roots, but break off in the follicle, leaving the lower extremity of the root *in situ*. This fragility of the hairs is a marked feature of the disease, and brings it into contrast with favus, in which affection the hair-shafts are not notably weakened.

If one of the extracted hair-stumps be examined under the microscope, it will be found infiltrated throughout its entire extent with the minute spores of the *trichophyton*. This fungus, when it takes lodgment on the scalp, gains access to the hair-follicles, into which it descends until it reaches the bottom. Here it increases and invades the root, and travels up the shaft toward the surface. It produces dissociation of the fibres, and thereby weakens the hair. After the surface is reached, there is no outside pressure to counteract the pressure from within the shaft, and the latter gives way and breaks off. The original patch extends centrifugally, and new ones form, so that after a few weeks or months there may be a pretty complete involvement of a considerable portion of the scalp.

In scrofulous subjects, or those prone to suppurative action, the irritation of the fungus may cause the formation of little collections of pus on the substance of the scalp, which, opening on the surface, give a honey-combed appearance to the lesion, to which the older writers assigned the name of *kerion*.

When left to nature, the affection persists indefinitely, apparently as long as the hairs and hair-follicles afford sufficient pabulum for the fungus. The ultimate termination is baldness. The circular patches on the scalp may spread beyond the line of the hair and down upon the adjacent uncovered skin; and in the form of trichophytosis corporis may appear on other parts of the body.

Tricophytosis Barbæ.

This variety is confined to adult males, and appears on the bearded portions of the face and neck. At its first appearance we usually find a small, red, and very slightly raised spot. In a few days this develops into a distinct ring, with elevated margin, gradually increasing in size, and new spots and rings appearing. Accompanying these lesions we may have pustules, tubercles, and sometimes considerable infiltration of the integument—in fact, something not unlike the kerion of children. If shaving be practiced, the irritation is increased. The hairs sometimes break and sometimes fall out, and, if examined microscopically, will be found infiltrated with the fungus.

Tricophytosis Corporis.

This is the ordinary ringworm of the body, and is too familiar to need any special description. Appearing at first as a small red spot, it soon assumes the annular form, bounded by a slightly reddened and raised periphery. The center of the patch is apparently healthy, or, at most, slightly reddened. When two neighboring rings extend until they meet, the elevated margins which are in contact melt away, and we may have a figure eight, or some similar form.

This form of tricophytosis rarely gives rise to much inconvenience by itself, except in tropical countries, when this fungus is found to flourish with a vigor not met with in cooler regions.

Tricophytosis Genito-Femoralis.

This is not a very uncommon variety of ringworm, and is almost wholly confined to adult males. The usual loca-

tion is at the upper and inner aspect of the thigh and contiguous parts. It generally involves a portion of the scrotum as well as the thigh.

The diagnosis of *t. capitis* is usually easy, as the broken-off hair-stumps are characteristic. *T. barbæ*, when seen early, and before marked inflammatory action has changed the aspect of the part, ought to be recognized without difficulty, but later in the course of the disease it might be mistaken for eczema barbæ, or so-called non-parasitic sycosis. Ringworm of the body is recognizable under almost any condition that can be imagined, and trichophytosis genito-femoralis equally so, unless obscured by a co-existing eczema. Under all circumstances, however, the microscope may be relied on to settle the diagnosis.

Etiology.—Trichophytosis is due to a vegetable parasite, and is propagated from one to another by contact. Ringworm of the head is usually contracted by the careless habit among children of wearing each other's head-gear, and in public institutions by the common use of brushes and combs, towels, etc. In nursing infants the trouble is sometimes conveyed to the breasts of their mothers.

Ringworm of the beard is perhaps more frequently contracted at barber shops than elsewhere, from the use of contaminated utensils, and may be passed in turn to the lips or cheeks of young women.

Trichophytosis is met with in the rat, cat, dog, cow, horse, and perhaps in other animals, and may be conveyed by them to man. Cavalrymen, who are accustomed to practice their exercises on bare-back horses, sometimes contract the genito-femoral variety.

Treatment.—The cure of *t. capitis* is by no means easy. Methods of treatment innumerable have been and

are being proposed; but none are simpler or more effective than the treatment originally proposed by Bazin forty years ago. This consists in thorough epilation, combined with applications of a solution of bichloride. If the parasite is destroyed, the affection ceases; hence the first object is to secure destruction of the *trichophyton*. The spores, however, are deeply buried in the hair-follicle, and are not easily reached by lethal applications while the hairs are still *in situ*. The first thing to be done, then, is to remove them as thoroughly as possible with the aid of a properly constructed epilation forceps.

Attack the affected spot or spots with forceps, extracting every hair-stump possible. Many will break off; but do not leave a single one visible above the surface. Then thoroughly wash with a bichloride lotion, of the strength of one to three grains to the ounce. Apply this daily, unless it produces too much reaction, in which case dilute it, or omit for a few days. At the end of a week, again, with forceps in hand, repeat the epilation, as many of the broken hairs will have appeared above the surface. Extract as many of them as possible, and continue this treatment as long as necessary, which may perhaps be six weeks or six months, according to the extent of the disease, or the intelligence and care with which the treatment is carried out, remembering that patience and bichloride will succeed in the end.

The following makes a good application:

℞. Carbolic acid,
Chloral,
Tincture Iodine, āā ʒjjj.

M. Sig.: Apply once a day with a brush. Three or four times for ringworm.

Ringworm of the beard demands and will respond to the same treatment.

Ringworm of the non-hairy parts is a very readily curable affection. Sulphur ointment, any form of mercurial ointment, tincture of iodine, or chrysarobin dissolved in traumaticin. A few applications of either of these will promptly remove the trouble.

Ringworm of the crotch may be treated in a similar manner, without epilation—an excellent application being a solution of six or seven grains of chrysarobin in an ounce of traumaticin.

Internal remedies:

Sepia and *Tellurium* are adapted to the ringworm variety, as occurring on either body or scalp.

See remedies under "Favus."

Chromophytosis.

Chromophytosis is a parasitic affection characterized by the appearance of yellowish-brown spots on the skin.

The discolored spots are in the beginning small and irregularly scattered over the invaded surface. They are very slightly, if at all, elevated, and are covered with minute, barely perceptible scales. The affection is usually confined to the trunk and upper extremities, almost never appearing on the lower limbs. Its favorite seat is the chest and back; but it may spread to the neck and down upon the abdomen, and upon the arm between the shoulder and elbow. The macules may be very numerous, and many of them not larger than a pea; or they may coalesce by mutual extension, and form patches of considerable size.

The progress of the affection is slow; and it is not uncommon to meet with cases in which the lesions have existed for several years. It is sometimes met with in the strong and hearty, but most commonly in those who are enfeebled by chronic disease, and is especially frequent in

those who are suffering from phthisis or syphilis. It was, in fact, at one time classed as a symptom of phthisis. This was, of course, before the true nature of the disease had been ascertained. It is usually more noticeable in winter than in summer, a fact explainable by the lighter clothing and more frequent ablutions in warm than in cold weather. Itching is sometimes present, but is rarely severe enough to seriously incommode the patient.

Etiology.—Chromophytosis is caused by the development of a minute fungus, called the *microsporon andonini* among the superficial epidermic cells. Being of a parasitic nature, it is presumably contagious.

Treatment.—This affection is easily cured, provided proper treatment is instituted and persisted in. The one prominent indication is to destroy the superficial epithelial cells, and bring about their exfoliation, bringing with them the parasite. The list of agents that will accomplish this is a long one; but those found most generally useful are lotions of bichloride, tincture of iodine, sulphur ointment, and chrysarobin. If seven or eight grains of the latter be added to an ounce of traumaticin, and painted upon the spots for several days in succession, the epidermis will soon desquamate. For the treatment to be effectual, it is necessary that every spot, no matter how minute, should receive the selected application. This is rarely done the first time, and the case should be inspected weekly by the physician, and the applications made by him so far as practicable. It must not be forgotten that the under clothes need disinfection or destruction; otherwise the affection is very liable to recur.

Onychomycosis.

This term is used to designate disease of the nails due to the attack upon them of vegetable parasites. The name of the fungus is the *achorion*.

Speaking generally, the effect of the attack of the fungus upon the nail is to thicken it, to render it brittle, to break it up into layers, and to make it opaque, or it may be yellowish. The seat of the fungus growth is shown in some cases in the early stage by yellowish specks imbedded in the nail, and the fungus oftentimes attacks in the first place the side or the part near the root of the nail, giving rise to a certain amount, it may be, of inflammation and discomfort.

This condition of nail has been produced in those who have attended to children's heads affected with ringworm, in one or more nails, and as an independent state of disease or preceded by tinea circinata of the fingers or back of the hand, which has spread to the nail, and in that way infected it.

The diagnosis is made by paying attention to the co-existence of parasitic disease, and by the microscopical examination. It must not be forgotten that the nails are rendered opaque, thick, and brittle in connection with psoriasis, pityriasis rubra, lichen ruber, and the like; but in parasitic cases the evidence of the connection between the nail and the general disease and the origination of the former from the latter is usually clear.

The treatment is, in the majority of cases, very satisfactory, but in order that a successful result may be attained speedily it is necessary that the parasiticide should be made to reach the deeper parts of the nail, and that the nail structure should be kept soaked in the parasiticide lotion. Scrape off some of the loose laminæ of the nails, then apply every second or third day some strong acetic acid to the seat of the change, the whole nail area if necessary, taking care not to make the matrix too tender; and then keep the nail or nails soaked in a solution of hyposulphite of soda (℥ss to ℥vj of water).

Perseverance with the lotion will certainly cure the disease.

There are a few diseases of the nails that can hardly be classified, yet are of sufficient importance to demand a passing notice; and we know of no more suitable place than the present one to take them up. The first of which we will make mention is that very uncomfortable condition known as:

Ingrowing Toe-Nails.

This affection is too well known to need any description, and we will simply give two methods of treatment that have been very successfully used in our practice. The first is known as the liquor ferri sesquichlor. treatment, and the method of using, as follows:

After disinfecting the wound with corrosive mercury apply a few drops of the liquor ferri sesquichlor., after lifting the nail somewhat. Allow this to dry. On the second and third days, the same process is repeated. Then with delicate forceps try to remove the hard crust that has formed. The slight bleeding that ensues is immediately stopped by a fresh application of the liquor. In a few days more the same process of ablation is again practiced. After a few applications, thus carried out, the nail rots so that it can be removed with the aid of the scissors or a dull knife without causing any pain. To prevent relapses, it is well to insert fine layers of cork under the edges of the new nail as it grows forward.

The second plan of treatment is preferable in some cases. After cleaning the diseased nail in a soap-bath and having dried it thoroughly, the whole nail is smoothly enveloped with tin-foil. A thin strip of tin-foil is pressed in on the side where the nail has grown in, or tries to grow in. These strips are kept in their place by

a thin layer of yellow wax, so that in all places where the nail touches the flesh some tin-foil lies between them. Tin-foil acts not only mechanically, but the constant contact of these moist and granulating spots with the metallic foil dries up the affected places in a few weeks and causes a more healthy state in the morbid nail. It is a great gain for laboring people that they are thus able to follow their usual avocations, and it is only necessary to renew the dressing three times during the first two weeks. The feet must not be bathed during that time, but may be cleansed with dry wheat bran.

Paronychia.

Paronychia is an inflammation, situated around and beneath the nail, terminating in suppuration.

It attacks mostly the thumb and fingers, and makes its appearance as a dusky-red, extremely painful border, either completely or partially surrounding the nail. In a few days the pain becomes throbbing in character and pus forms, attended at times by more or less constitutional disturbance.

Treatment.—Locally, the pith of the common bullrush has been used with good results. *Natrum sulph.* is the principal internal remedy.

Paronychia may sometimes be aborted by the following simple treatment: Take a handful of fresh wood-ashes; pour upon it a quarter of a litre of boiling water, so as to get a strong lye. As soon as the patient feels the characteristic pains of the paronychia, with hammering and throbbing, the hand should be put in the hot lye, after which it is covered with compresses soaked in the solution. It may be necessary to repeat the procedure once or twice.

A very annoying condition, especially when occurring in young women, is "red hands." An excellent ointment for this condition is the following:

- R. Lanolin, 100 grms.
Paraffin, liquid, 25 grms.
Vanillin, 0.01 grms.
Ol. rosæ, gtt. j.
- M. Sig.: Apply a thin coating of this ointment to the hands at bed time.

CHAPTER XIX.

DISORDERS OF THE GLANDS.

There are two sets of organs to deal with here—the sweat glands and the sebaceous glands.

1. Diseases of the Sweat Glands.

The deviations from health may be functional or structural; the former include all those cases in which the sweat varies in amount and kind, but in which there is no change in the actual tissue of the glands or follicles themselves; the latter, those in which the sweat follicles are likewise congested, obliterated, inflamed, enlarged, or otherwise structurally altered.

The disorders may be arranged thus:

A. Disorders of Function and B. Structural Disorders.

A. Functional Diseases of the Sweat Glands.

HYPERIDROSIS is the term applied to *excessive sweating*. It is, however, not very often an independent form of disease. It occurs in connection with general febrile disturbances, as in pneumonia, phthisis, rheumatism—appearing to be “critical” in some cases. It may, however, occur as a purely local disease, and then the excessive secretion of sweat takes place from the face, the hands, the feet, or the armpits, and it is very annoying. A similar state of things is natural to some persons. The sweat may be very offensive. Hyperidrosis may give rise to eczema and intertrigo, as about the feet frequently. In some cases hyperidrosis, that is, a freer secretion of

sweat than usual, may be conjoined with or followed by more or less congestion of the follicles, and then the morbid states known as *miliaria* and *lichen tropicus* result. If the sweat fails to escape it may collect under the cuticle, forming sweat vesicles. This is sudamina.

Probably the most annoying form of this affection is that where the feet are the parts attacked. Various means have been used with varying success. Dr. Armingaud recommends a hypodermic injection of Pilocarpine in cases of fetid foot-sweat.

Chromic acid has been used with excellent results. Frequently, one application of a five per cent. solution of chromic acid suffices. The solution should be applied with cotton-wool to the soles of the feet and between the toes. If there are wounds on the feet, they had better be healed before applying the chromic acid.

Therapeutical indications:

Bar. carb.—*Fetid foot-sweat*, with callosities on the soles which are painful on walking; soles feel bruised at night, keeping one awake, after rising and walking.

Calc. carb.—*Foot-sweat* which makes the feet sore; feet feel cold and damp, as if she had wet stockings; burning in the soles.

Canthar.—Temporary cold sweat on feet; smells like urine.

Carbo veg.—*Foot-sweat* excoriating toes; toes red, swollen; stinging, as if frosted; tip of toes ulcerated.

Graphites.—Profuse foot-sweat, not fetid as in *Sepia* or *Silic.*, but the most moderate walking causes soreness between the toes, so that the parts become raw; spreading blisters on the toes, thick and crippled toe-nails.

Helleborus.—Humid, painless vesicles between the toes.

Iodum.—Acrid, corrosive *foot-sweat*; edematous swelling of the feet.

Kali carb.—*Profuse fetid foot-sweat*; swelling and redness of the soles; chilblains; stitches in the painful and sensitive corns.

Lac. ac.—*Profuse foot-sweat*, but not fetid.

Lycopod.—*Profuse and fetid foot-sweat*, with burning in the soles; one foot hot, the other cold, or both cold and sweaty; swelling of the soles; they pain when walking; fissures on the heel.

Mur. ac.—Cold sweat on the feet, evening in bed; swelling, redness and burning of tips of toes; chilblains.

Nitr. ac.—*Foul-smelling foot-sweat*; chilblains on the toes.

Petrol.—Feet tender and bathed in a *foul moisture*; feet swollen and cold; hot swelling of the soles, with burning; heel painfully swollen and red; chilblain; tendency of skin to fester and ulcerate.

Plumbum.—*Fetid foot-sweat*; swelling of the feet.

Podoph.—*Foot-sweat evenings*.

Sepia.—*Profuse foot-sweat* or very *fetid*, causing soreness of toes; burning, or heat of the feet at night; crippled nails.

Silicea.—*Offensive foot-sweat* with rawness between the toes; itching of soles, driving to despair.

Squilla.—*Cold foot-sweat*; sweat only on toes; soles red; and sore when walking.

Sulphur.—Sweating and coldness of the soles; burning soles, wants them uncovered.

Thuja.—*Fetid sweat* on toes, with redness and swelling of the tips; nets of veins, as if marbled, on the soles of the feet; suppressed foot-sweats, nails crippled, brittle or soft.

Zincum.—The feet are sweaty and sore about toes; also fetid; chilblains from scratching and friction; the suppression of sweat causes paralysis of the feet.

Anidrosis.

A disorder of the function of the sweat-glands, characterized by deficiency or absence of perspiration.

It is either idiopathic or symptomatic, general or confined to a location, and derived from ancestors or acquired in life from such predisposition, and may or may not be permanent.

This functional disorder of the skin is found apparently alone, unaccompanied by any other disturbance of health, in which case it is known as idiopathic. A typical case is the instance of a person who perspires but little, or apparently not at all, under conditions which would naturally provoke or accelerate the secretion of sweat, were the glands in their normal condition, as when no effect results from moist or dry heat, or diaphoretics. The skin is dry and harsh to the touch, such as seen in cases of ichthyosis or xeroderma.

The **symptomatic** is the more common form, and is often found associated with other cutaneous or general diseases or nervous disorders, and accompanied by general debility and impaired nutrition. There is the same dry, rough skin as in the idiopathic form, and the patient feels a tightness of the skin, with an itching sensation. This condition is general, as in diabetes; or local, as in nervous disorders like certain forms of neuralgia and paralysis; and it may be temporary, as in fevers, eczema, and psoriasis; or permanent, as in diabetes and tuberculosis.

Etiology.—Idiopathic anidrosis may be ascribed to a faulty development of, or defect in, the sweat-glands from hereditary, congenital, or other causes, as shown in the ichthyotic, xerodermic, and paralytic conditions, the otherwise general good health remaining unaffected.

Symptomatic anidrosis, on the other hand, may be ascribed to functional torpor resulting in deficient secretion without structural defects in the sweat-glands, as found in cases of eczema, psoriasis, diabetes, and phthisis.

Prognosis.—In the idiopathic form, this is uncertain and unfavorable; but in the symptomatic form it is to be determined by the nature and duration of the primary disorder.

Treatment.—In the old school, the concensus of opinion seems to be that when treatment is admissible in the idiopathic form, benefit is only to be derived by stimulating the functions of the sudoriparous glands, and by the application of suitable emollients to relieve the existing dryness of the skin. In the symptomatic form the exciting cause should be removed, and the treatment directed to the relief of the subjective symptoms present. They claim that the activity of the sweat-glands may be restored mainly by diaphoretics. Resort should also be made to friction and to the use of alkaline, Turkish, or other hot baths.

Internal remedies may assist in some cases, and those heretofore found of benefit are:

Æthusa.—The skin has a dry, white, leathery appearance.

Natrum carb.—The skin of the whole body becomes dry and cracked.

Phosphorus.—The skin is dry and wrinkled.

Plumbum.—Dry skin, with absolute lack of perspiration.

Potass. iod.—The skin is dried up, and rough, like hog skin.

Dysidrosis.

This name is applied to an acute affection of the sweat-glands and ducts, characterized by vesicular eruptions, usually located and confined upon the palms of the hands, but sometimes upon the soles of the feet; and in either case the sides of the fingers and toes may be involved. The vesicles at first are small, discrete, and deep; afterward they become confluent and superficial; and, finally, disappear by absorption.

The earliest symptoms of this affection, previous to the appearance of the eruption, are a tingling sensation, accompanied by heat and tension of the parts involved. When the eruption first appears, the vesicles are minute, transparent, and discrete, imbedded deeply in the skin, and there they slowly increase and become opaque or whitish in color. The end may come here, and the eruption disappear by absorption, accompanied by slight scaling of the parts affected; but, when the affection continues, the vesicles grow larger and coalesce, forming bullæ; and when its course is run, usually in a few days or weeks, absorption, or rupture and evaporation of the fluid contents take place, and the bullæ disappear, leaving a dry, reddened skin. The reaction of the fluid contained is acid. More or less pruritus is always present.

The eruption is usually symmetrically distributed, and, when both the hands and feet are involved, it first appears on the hands. The duration and severity of the attack are increased in persons of impaired health. Such persons, particularly young women, are predisposed to this affection, being in a relaxed and depressed nervous state, manifested in part by a mild, continuous hyperidrosis of the palmar surfaces of the hands.

Diagnosis.—This affection, when mild, somewhat resembles sudamina, but, if severe, might be mistaken for eczema vesiculosum, or scabies.

Itching and burning sensations will distinguish it from sudamina.

In eczema vesiculosum there is increased and severe pruritus, attended with a hot and reddened surface surrounding the vesicles, which are of a pin-head or less in size; these vesicles rupture early and expose a moist surface, and the drying exudation forms crusts. In dysidrosis this exposed surface is dry, and in the vesicular stage unsurrounded with inflamed skin.

In scabies there is the characteristic burrow, or cuniculus, leading up to the vesicle, and, in a later stage, multiform lesions appear, such as papules, pustules, scratch marks, etc., which, together with its favorite regions and the reddened surface surrounding the vesicles, make this affection distinct.

Prognosis.—There is always a favorable termination to this affection. Its tendency is self-limiting, but relapses are likely.

Etiology.—This affection is caused by a disturbance of the functions of the sudoral apparatus, both of secretion and excretion, usually ascribed to disordered innervation; and occurs in persons suffering from nervous depression, weakness, innutrition, and other symptoms of neurasthenia.

Treatment.—This will consist in carefully considering every abnormal condition of the patient, and prescribing that remedy whose symptoms cover most closely those complained of by the patient. As almost any remedy in the materia medica may be needed, it would not be possible to give the indications here.

Osmidrosis.

This is that disease in which the odor of the perspiration becomes so offensive as to constitute "the thing to be remedied."

Osmidrosis may co-exist with other functional derangements of the sweat apparatus. In general diseases the sweat exhibits very peculiar odors—in rheumatism it is "rank," in scurvy, "putrid," in chronic peritonitis, "musky," in scrofula like "stale beer," in intermittent fevers like "fresh-baked brown bread," in fevers, "ammoniacal," and so on. When the feet are affected, the sweat is sometimes most offensive, especially in the summer time.

Chromidrosis.

This term signifies colored perspiration, a condition by no means common. The perspiration may be changed to a black, a blue, a red, or a green color in certain cases. The black (*melanidrosis*) and the blue (*cyanidrosis*) varieties of perspiration are probably the same in nature, the substance giving the color being identical, but varying in hue in the two cases.

It generally occurs in hypochondriacs, or in women with uterine disorders of different kinds. It is seen as a symmetrical affection attacking mostly the eyelids, and the lower one chiefly, but in other instances and more rarely the upper eyelid, the cheeks, the forehead, the sides of the nose, the breast, the stomach, and the hands. It consists of an oozing of black matter which can be wiped away, but only as a rule to quickly reappear. The discolored secretion is excited by grief, by emotions, by fright, and the like, it is said.

The disease may be, and often is, simulated. But there appears to be no doubt that there is a real chromi-

drosis. The coloring matter is probably *indican*, which is, as it normally exists, colorless, and occurs pathologically in human urine. The indican is believed to be secreted by the sweat glands in a colorless state, and to be acted upon by the air so as to be oxidized blue, or brown, or blackish, as the case may be.

Hæmatidrosis.

Hæmatidrosis, or Bloody Sweating, occurs under similar circumstances, and is supposed to be due to the escape into the sweat glands of blood from the capillaries, in its turn the result of great excitement.

B. Structural Diseases of the Sweat Glands.

Miliaria and Sudamina.

These two affections really have no right to be considered as separate diseases. *Sudamina* is the lesser degree of miliaria, the contents of the vesicles being acid; miliaria is the more developed condition, in which inflammation has occurred and the contents are alkaline—in fact, inflamed sudamina. Sudamina have been described as little round vesicles, produced by distension of the cutis by sweat, and therefore seated at the orifices of the sweat follicles. These vesicles may be attended with more or less inflammation. Then the disease is termed *miliaria*. Sometimes the vesicles are reddish (*miliaria rubra*), sometimes white (*miliaria alba*). These vesicles are developed about the neck, axillæ, clavicles, and trunk, in diseases in which profuse sweating occurs, their contents quickly dry; each crop is usually succeeded in from three to six days by furfuraceous desquamation. The disease is seen in phthisis during summer-time, in acute febrile diseases, the parturient state, fevers, and

rheumatism. Since the adoption of a cooler regimen in sick-rooms, the disease has been altogether less frequent than formerly.

Bryonia, *Ammon. mur.*, *Arsen. alb.*, *Ledum*, and *Urtica urens* are the most important internal remedies. *Sulphur* and *Apis* may be studied.

A weak carbolated bran bath, followed by dusting with either the nitrate of bismuth and starch, or lycopodium powder, is the best local treatment.

Lichen Propicus, or Prickly Heat.

This has nothing to do with lichen. It is a congestive or inflammatory disorder of the sweat follicles of the skin. It occurs as the result of the stimulant action of heat upon the surface. It is therefore common in hot countries, but not rare in this climate. "Prickly heat" is generally described as an eruption of numerous papillæ of vivid red color, about the size of a pin's head, without redness of the skin generally, often interspersed with vesicles and accompanied by a peculiar tingling and pricking sensation, which may be almost intolerable, and is excited and intensified by heat, warm drinks, flannel, etc. The disease attacks chiefly the parts covered by the clothes, the arms, legs, breast, thighs, flanks, and the upper part of the forehead.

The treatment is the same as that for miliaria.

Hydro-Adenitis.

This is an inflammatory state of the perspiratory follicles, ending in suppuration. The disease may occur in every region of the body where there are glands, except in the sole of the foot; but it is most frequent in the axilla, at the margin of the anus, and near the nipple. It also is seen on the face. The disease commences by

a crop of, or perhaps only one or two small inflammatory, tumors, always distinct, about the size of peas, of bright red hue, and at first somewhat like boils; but they are unlike boils in the fact that the little inflamed indurations begin not on the surface of the skin, in a sebaceous or hair follicle, but beneath the skin, which is reached and involved secondarily. The suppurating follicles offer no prominent "point" or "head," and there is no discharge till the swelling bursts, when the disease is brought to a sudden termination. The causes are said to be uncleanliness, friction, the contact of irritants, pus, parasites, profuse perspiration, and, according to Bazin, the arthritic dyscrasia, syphilis, and scrofula, but nothing is known about this. The disease is often mistaken for scrofuloderma.

Cystic Formations (Obstructed Sweat Glands).

In some cases one sees developed in the skin a cyst, which takes its origin in a dilated follicle or sac of the perspiratory gland. The follicle of the sweat gland becomes obstructed, and instead of the gland inflaming and suppurating the fluid collects and distends the follicle. The line of demarcation between hydro-adenitis and cyst formation in the early stage is not well defined.

The continuous application of collodion is the best treatment; the cysts, however, may be punctured, and the contents allowed to escape; the incisions must, however, be deep enough.

Sudolorrhœa.

This is characterized by the appearance of one or more slightly reddened, barely elevated, and sharply limited patches, more or less thickly covered with a few greasy scales. These appear occasionally on the scalp; more

frequently, however, on the contiguous skin along the hairy border; and still more frequently on the chest in men—rarely in this region in women.

The affection is essentially sub-acute in its behavior, and chronic in its duration. Vigorous friction will remove the scales and leave a surface not wholly unlike that of a dry eczema which has been submitted to the same treatment, and occasionally will excite a slight oozing of oleaginous matter, quite different, however, from the clear but plastic exudation of eczema. If a little *liquor potassæ* be rubbed on the spot, we will have under the finger a thin, non-adhesive emulsion, and not the sticky layer which follows a like application to a patch of eczema.

Besides the regions mentioned, the affection may appear on the back, and, according to Unna, on the lower extremities. The patches may vary in number and in shape, being round, oval, semilunar, or irregular, as if made up of several circular patches which had united; in fact, it may assume the varieties of form that are familiar to us in connection with psoriasis, for which disease it is not infrequently taken.

Sudorrhœa, when left unchecked by treatment, often persists, with varied activity, for an indefinite period, even for years.

Nothing definite is known as to the cause of the affection. It is possibly due to a micro-organism, but this has not as yet been positively shown to be the case.

Treatment.—There is little difficulty in causing a temporary amelioration, and even disappearance, of the lesions. Frictions, with precipitated sulphur, sulphur-ointment, white precipitate, and applications of chrysa-robin, will usually be sufficient to restore the skin to a comparatively healthy condition, but within a few weeks

after treatment is discontinued we not infrequently see evidences of relapse. These must be immediately taken in hand, and we can usually count on a complete cure if treatment be followed up with needful persistence.

I know of no homœopathic remedy that is especially useful in this complaint, as I have never had an opportunity of treating a case of sudolorrhœa.

II. Diseases of the Sebaceous Glands.

The diseases of the sebaceous glands are divided into two groups—namely:

FUNCTIONAL.—Including *seborrhœa* (increased secretion), *asteatodes* (deficient secretion) and *allostetodes*, or alteration in the character of the secretion. Retention of secretion is usually accompanied by alteration of structure.

STRUCTURAL.—Including diseases of the lining membrane of the sebaceous glands; retention of the secretion and its consequence, and, lastly, congestive diseases and inflammatory diseases.

Seborrhœa.

Seborrhœa is a functional affection of the sebaceous glands, and its chief varieties are *Seborrhœa oleasa*, *sicca*, and *kerativa*.

Seborrhœa Oleasa.

This variety is characterized by the excessive formation of a thin, oily, sebaceous secretion, which flows in abnormal quantity from the orifices of the glands and covers the affected parts with a shiny and greasy coating, plainly visible to the eye, and on this account annoying to the patient. The usual seat of the trouble is the forehead, cheeks, and nose, and especially the latter. If this organ be taken between the fingers and squeezed, the

fluid may sometimes be seen to exude like little droplets of sweat. The affection is perhaps more frequent in youth, and often lasts for several years, and appears to be connected with puboric changes. If the secretion be not wiped off, it may lose its watery parts by evaporation and leave thin scales, consisting of epidermic cells mingled with oil-globules, and more or less dirt and dust from the atmosphere.

Seborrhœa Sicca.

In this variety there is excessive formation of sebum, possessing more nearly the character of the normal secretion—that is, less fluid than in the last named affection. There is also a larger proportion of epidermic cells, and these, mingled with the oil, dry upon the skin as thin, slightly adhering, and usually circumscribed crusts. The affection is usually of an extremely mild inflammatory type, with slight redness of the skin underlying the scales. It may be found on the situations favored by the last mentioned variety, or upon the chest in man and other parts where the sebaceous glands are well developed, but the hairs not so abundant or long as upon the head, except in infancy, during the early periods of which it is quite common.

Seborrhœa Kerativa.

This affection is rare and peculiar, and the few cases that have been observed during recent years have been described under a variety of names. It appears to consist in a hyperplasia of the lining cells of the sebaceous glands, associated with keratization in place of the usual fatty degeneration of these cells. The result of this pathological process when generalized is a condition of the skin that may be likened to the surface of a magni-

fied nutmeg grater. The orifices of the sebaceous follicles are widened, and from them project horny plugs in almost infinite number. The affection is chronic in its development, spreading gradually until almost the entire surface is involved. We have little definite knowledge of the subsequent course of the affection.

Diagnosis.—The diagnosis of seborrhœa *oleosa* is self-evident. *S. sicca* is to be distinguished, on the one hand, from eczema *oleosa*, and, on the other, from pityriasis capitis. This latter is distinctively an affection of the adult scalp, characterized by excessive hyperplasia and exfoliation of the horny cells of the epidermis, and mingled with but a scant amount of sebaceous secretion.

Treatment.—Lotions containing hydrochloric and chromic acids—either of which may be employed in the strength of from two to four per cent., are highly recommended by the old school.

The indications for the homœopathic remedies are:

Arsen. alb.—Smutty brown, mottled skin; yellow color of face.

Ammon. mur.—Large accumulation of bran-like scales, with falling off of the hair.

Bufo.—Skin greenish, and always looking dirty and oily.

Bryonia.—In long lasting cases.

Calcarea carb.—Nose shines as from oil. Seborrhœa with hyperæmia of the scalp and headache.

Graphites.—Seborrhœa behind the ears.

Iodine.—Firmly adhering scales, which leave the skin red and painful, on removal.

Kali carb.—Dry hair rapidly falling off, with much dandruff.

Lycopodium.—Seborrhœa on the chin.

Merc. sol..—Seborrhœa of the genitals, accompanied with hyperæmia.

Mezereum..—Excessive formation of smegma.

Natrum mur..—Severe itching of the scalp; the hair falls out in masses; seborrhœa of the face.

Plumbum..—The skin of the face shines as if oily, and feels oily.

Phosphorus..—Copious dandruff; falls off in clouds.

Potass. brom..—Seborrhœa on hairy parts of the face, forehead and neck.

Raphanus..—Skin is greasy and makes the hands greasy to touch it.

Sepia..—Seborrhœa of the genitals in women.

Sulphur..—Dandruff.

Thuja..—White scaly dandruff. Hair dry and falling off.

Vinca minor..—Seborrhœa on upper lip and base of the nose.

Asteatodes.

This is *deficiency of the sebaceous secretion*. The skin appears to be dry and harsh, and this arises from deficient action of the sebaceous glands. Asteatodes is seen in hereditary syphilis, and in badly-nourished or uncleanly folk. The treatment consists especially in the use of the bath, oily infrictions, generous diet, and cod-liver oil.

Allosteadodes.

Alteration in the quality of secretion is the characteristic of this form of disease. The secretion may be of various colors—yellow (seborrhœa flavescens), or black (so-called seborrhœa nigricans).

Structural Diseases.

Xanthelasma.

Hypertrophy of the epithelial lining and adjacent structures of the follicle, with fatty degeneration, is called *Xanthelasma*, because of the yellow laminæ which characterize it. The disease may occur in two forms—“either as tubercles, varying from the size of a pin’s head to that of a large pea, isolated or confluent; or secondly, as yellowish patches of irregular outline, slightly elevated, and with but little hardness.” These are mere modifications of one disease, but may occur together in the same person. The disease is seen about the face, the ear, and the limbs and palms of the hands. The most common form and seat is a yellowish patching about the inner part of the eye; the disease is symmetrical; the cuticle over the diseased part is unaffected. It never occurs in children; but it is fairly common in middle and senile periods of life. In a small proportion of cases, that are very severe, jaundice with enlargement of the liver is met with. When jaundice occurs, it almost always precedes the xanthelasmic patches. The form of jaundice is peculiar, the skin becoming of an olive brown, or almost black tint, rather than yellow, and the color being remarkable for its long persistence.

Xanthelasma occurs more frequently in females than in males, the proportion being two to one. The patches occur to those who have been liable to have dark areola round the eyes, whether from “sick-headaches,” ovarian disturbance, nervous fatigue, pregnancy, or from any other causes. Hence their frequency in bilious subjects, and in the female sex.

Retention of Secretion.

Comedones, or Comedo.

This name is applied to an affection of the skin characterized by little black points corresponding to the openings of the sebaceous follicles. If the skin in the neighborhood of these specks be squeezed between the fingernails, the sebaceous plug which fills the follicles will be pressed out.

This affection is more frequent in youth and adolescence than at any other ages. The glands of the face are the ones that are chiefly affected.

The causes of comedo are probably similar to those which lead to the development of ordinary acne simplex, in company with which affection they are usually found, though they sometimes exist without any inflammatory complication.

One author holds that comedones in children differ from those of adults in being mainly dependent on local causes, on their greater tendency to group and to be more closely set, in their involving the hairy scalp, and finally to their being generally readily amenable to treatment, all that is usually required being friction with a weak soft soap and spirit liniment, or a weak sulphur application may be employed in mild cases, preceded by fomentation with very hot water.

A peculiar variety is described by Dr. Dumesnil, as occurring in two patients. In both cases, the unusual eruption occurred on the back, which was also well covered with acne. The comedones, in both cases, were well marked, the skin not being elevated at the sites where they existed. The distribution of these comedones was all over the back, though inclined to be discrete. One

peculiarity of the distribution was, that many of them were in pairs, the distance between each varying from one-eighth or less to about three-sixteenths of an inch, with a channel connecting them. By bringing firm lateral pressure upon one of the condones in the direction of the other; both follicles were emptied from one point, and a fine probe introduced at one opening would appear at the other. There was but one plug, and that was black at both extremities.

Treatment.—The comedones may in most instances be readily removed by pressure with the fingers or aided by some one of the many comedone extractors. Sexual hygiene is to be enforced if the trouble is to be radically cured.

The principal internal remedies are *Baryta carb.* and *Selenium*.

Others may be indicated as follows:

Bellad.—Comedos in young full-blooded people.

Cicuta.—Black spots on the skin.

Digitalis.—Black comedos on the skin of the face, which suppurate.

Mezereum.—Small comedos on the nose and cheeks.

Nitr. ac.—Black sweat pores in the skin of the face.

Sabina.—Comedos that can be easily pressed out, in the cheeks and about the nose.

Sulphur.—Blackish pores in the face.

Sumbul.—Numerous black pores on the face; skin pale.

Molluscum.

This affection is characterized by the development of small, umbilicated papules, or tubercles, from the size of a small bird-shot to that of a pea, and sometimes even larger.

The natural color of the skin is usually preserved, and the tubercles are not accompanied with inflammatory action. If they are squeezed between the fingers, a cheesy or sebaceous-looking matter issues from the hilum.

These molluscous growths are met with on the face, neck, chest, limbs, and genitals, and may be few or numerous, coming out one after the other for several weeks or months.

After they have attained a certain size they may persist for an indefinite period, often at the end shriveling up and leaving a little tab of loose skin.

This affection is most frequently developed in young females, but is occasionally met with in males and in persons more advanced in years.

The **etiology** of molluscum is obscure, but the weight of evidence appears to be in favor of contagion. In what the contagious element, however, consists is unknown.

The **diagnosis** of molluscum is easy, as we have simply to recognize a non-inflammatory, umbilicated tubercle, with cheesy contents.

Treatment.—The quickest way to get rid of them is to snip them off with scissors; and, after pressing out the remaining contents, to introduce the point of a pencil of nitrate of silver.

Silicea as an internal remedy ranks first, and *Teucrium* next. *Bryonia*, *Bromine*, *Calc. ars.*, *Lycopodium*, *Natr. mur.* and *Potass. iod.* complete the list.

INFLAMMATORY AFFECTIONS.

Acne.

Acne is an inflammatory affection of the sebaceous glands.

Acne, in its mildest form of development, consists of a

small papule, usually seated on the face, chest, or back. The papule is red, pointed, and may be slightly sore to the touch, presenting the usual features of a localized inflammation. The papules may vary in number from one or two to several hundred, scattered over the nose, cheeks, forehead, temples, chest, and back. The little pimple may, on pressure with the finger, present slight firmness, indicative of the inflammatory effusion. After a few days it may undergo spontaneous resolution and disappear, others appearing from time to time to take the places of those which have disappeared. This constant succession may be kept up for an indefinite period. Instead of undergoing resolution, pus may make its appearance, either at the summit of the papule or more deeply in its structure, thus converting the papule into a pustule. If the pustule be squeezed between the fingers, the pus is discharged, and with it the somewhat altered contents of the sebaceous glands. This form of acne, in which there is little or no implication of the tissues surrounding the follicle, is usually termed acne *simplex*, or on account of the age at which it is most prevalent, acne *juvenilis*.

The variety of acne just considered is the special appendage of youth, and occurs in both sexes between the ages of fifteen and twenty-five. Associated with it we frequently and perhaps usually find comedones in greater or less number scattered over the surface affected by the acne.

In more advanced life—from twenty-five or thirty up to fifty years—we may encounter a form of acne characterized by much larger lesions than those of acne *simplex*. In fact, they are large enough to be classed as tubercles, and the affection has received the name of acne *tuberculata*, and, when seated on a hardened base, acne *indurata*. In this form there is more or less involvement

of the tissues surrounding the follicles. These larger lesions are usually more sluggish in their development and coarser than those of acne simplex, but go through essentially the same phases as the smaller ones. That is, there is the same tendency to pus formation, and the larger ones may form veritable abscesses, followed by permanent cicatrices.

The causes of the affection are well-known to be local irritants, cosmetics, want of cleanliness, exposure to heat, cold winds, some varieties of soap, all debilitating causes, too rich or insufficient food, onanism or sexual excesses, liver, stomach or uterine derangements, and any cause that may lead to congestion of the face. Scrofulous subjects are very prone to this form of skin disease.

Acne tuberculata is not a very common affection in women; but when not associated with intemperance will usually be found accompanied by disease or derangement of the uterine or ovarian functions.

Gastric and hepatic disturbances, associated with constipation, are unquestionably important factors in the causation of acne, and too free indulgence in alcoholic stimulation is well recognized as the promoter of acne tuberculata in men who are advancing from youth to middle age.

Treatment.—Time alone, without special medical treatment, is sufficient in many cases of acne simplex in young persons to bring about a cure. Acne simplex is in a certain sense a self-limited affection, but this limitation is not a matter of weeks or months but of years, and the patient who leaves the affection entirely alone may usually count on six or eight years of annoyance. The majority prefer a quicker cure, and to that end consult the physician. Now, the "cure" of an acne involves two quite different questions. The first relates to the speedy removal of the

existing eruption, and the second to the prevention of the ever-recurring tendency to relapse.

Baehr says that acne patients are very hard to treat, as they generally feel so well that a restriction in their diet is hardly ever taken with good grace, or strictly followed out.

Hebra says: "I must confess that, in spite of many efforts, I have not yet succeeded in finding a remedy by which acne can be prevented from developing itself, or quickly got rid of when established.

In acne simplex the measures best calculated to promote disappearance of the eruption are: Puncture of the papules and pustules; hot fomentations, in cases characterized by marked inflammatory action; stimulant and discutient applications in those of a more sluggish nature. It is good practice in every case to puncture the papules with a lancet-point, and at the earliest possible moment. If pus has already formed, this should be squeezed out. Hot fomentations for several minutes should then follow, and the fomentations with water, as hot as it can be borne, repeated night and morning.

In subacute cases an artificial irritation should be set up by nightly rubbing with green soap. Usually in a week, or in less time, the skin will be inflamed to as great an extent as the patient's endurance will permit. Soothing applications should now be employed, and in a few days the irritation will subside, accompanied with desquamation of the outer layers of the cuticle. This will be followed by a greater or less disappearance of the eruption. If necessary, the applications may be repeated. In like manner, sulphur, either pure or diluted with some violet powder, may be applied with a ladies' puff. Chrysarobin, in the strength of four or ten grains to the ounce of traumaticin, effects similar results. In the use of

chrysarobin, however, it will be wise to commence with rather mild applications confined to the papules themselves, and not permitted to spread to the adjacent healthy skin, as this drug when too freely applied to the face may set up a considerable degree of inflammation, almost simulating erysipelas.

Dr. Hutchinson advises the passage of the cold urethral sound every third day in cases that are attended with or caused by hyperæmia or irritability of the genital organs. In females, he orders hot water vaginal injections every other night, and claims in both instances successful results.

The following ointment is highly recommended:

℞ Resorcin, 2 to 5 parts.
 Zinci oxid.
 Pulv. amyli., āā 5 parts.
 Vaseline, 10 parts.

Fiat unguentum. Sig.: Apply to parts as often as occupation of patient will permit.

Dr. Piffard says: "The effect of internal medication in acne simplex sometimes appears to be very striking, and at other times absolutely *nil*. The drugs which we have found most useful are, in ordinary cases, calc. sulphurate, arsenic, and ergot. The first of these is decidedly the most useful, and may be given in doses of one-tenth to one-half a grain two, three, or four times daily, bearing in mind that the more acute the process the smaller the dose should be, while in sluggish and indolent lesions it should be pushed to the maximum.

The dosage of arsenic should be governed by the same principles. Ergot was introduced into the treatment of acne by Dr. Denslow. It has appeared to me to be specially useful in the treatment of pustular acne in females.

Whether it directly affects the local circulation, as believed by Dr. D., or whether its primary effect on those cases is on the pelvic organs, I do not know. It has also been followed by good results in males.

In patients who are suffering from anæmia, struma, etc., iron and cod-liver oil should form an important part of the treatment.

In *acne tuberculata* and *indurata* the same general principles of treatment are to be followed; except that in these forms arsenic has appeared to me to be of very little use. On the other hand, iodide of potassium, in doses of five to ten grains, has in some instances been followed by favorable results.

The foregoing applies to the removal of the existing eruption. The prevention of relapses, or frequent outbreaks of eruption, is quite another matter; and success in this regard will be due to the accuracy with which the practitioner unravels the etiological factors, and is successful in bringing about their removal or amelioration.'

Our first object should be to get at the cause of the disease, if possible, and remove that. The dyspeptic should avoid pastry, highly-seasoned food, beer and spirits of all kinds. The poorly nourished patient should be fed on good food, and should have plenty of it. Buckwheat cakes, hot bread, nuts, cheese, fried substances, exhilarating drinks, and all sweet and rich articles of food should be avoided. In dyspeptic patients, a cup of hot water taken a half hour before meals, will often prove beneficial.

The soaps that have been found most useful are, notably, sulphur and iodide of sulphur soaps, and the Juniper tar soap. I have seen excellent results from the use of a soap made from the waters of the "Shookum Chuck Lake," and prepared by Boericke and Tafel.

As for remedies, we should choose that one that meets all the symptoms of the case, and not some one that has been suggested for acne, for cases differ widely in their causes and symptoms.

One of the following will likely be indicated :

Antim. crud..—Small, red pimples about the face, and on the right shoulder, stinging when touched ; acne in drunkards, with gastric derangements, severe thirst, and white-coated tongue.

Antimon. tart..—In obstinate cases, with longing for acids, and when there is a decided tendency to pustulation ; the pustules are thickest on the neck and shoulders, and after discharging leave bluish-red cicatrices. May be used internally and locally.

Arctium lappa..—Aggravated cases, with numerous small boils all over the body.

Arsenicum..—In chronic cases where the skin is dry, rough, and dirty-looking, and when the eruption is most marked on the face and extremities ; cachectic acne.

Asimina..—Itching red pimples, appearing first on the left, then on the right side ; pustular acne, with itching in the evening when undressing.

Aurum..—Red pimples on the face ; disposition to melancholy ; disgust for life, with suicidal tendency ; in onanists and syphilitics ; after over-dosing with the iodide of potash.

Baryta carb..—In obstinate cases, especially when the papules or pustules are interspersed with comedones ; persons who take cold easily ; wine drinkers ; hysterical or scrofulous persons.

Berberis vulg..—Red, burning, gnawing pimples, sensitive to pressure, surrounded by red areolæ, and leaving brown stains ; adapted to indurated acne, associated with urinary or hemorrhoidal troubles ; in women with scanty

or suppressed menstruation; the patient complains of a good deal of chilliness.

Belladonna.—Large, bright, red pimples on the *face*, back, and scapulæ, especially in young, full-blooded people; fine stinging in the tips of the pimples; frequent congestion of the face and epistaxis; aggravation during profuse menses, pregnancy and confinement.

Bovista.—Large, scattered pimples on the forehead; hard, red pimples, large as peas, on the chest, worse from scratching; in delicate women, with thick acrid or corrosive, greenish-yellow leucorrhœa, after the menses; ill-humor.

Bromine.—Indurated acne in scrofulous individuals; aggravated by smoking; swelling and induration of the glands of the neck; prone to erysipelatous inflammation.

Bryonia.—In dyspeptic cases, aggravated by eating cabbage, or warm food; or occasioned by suppressed perspiration; constipation as a rule.

Calcarea carb.—Acne on the face and neck; when due to sexual excesses; redness of the nose in consequence of dysmenorrhœa or amenorrhœa; people who work much in water; scrofulous persons; always worse before the menses.

Calcarea phos.—Has been used successfully for similar indications after the failure of the carbonate; chronic enlargement of the tonsils; red pimples full of yellow pus. In young people during puberty.

Cannabis.—Meets acne rosacea better than simplex when there is morning aggravation with burning like fire; syphilitic patients with much headache on top of the head.

Carbo veg.—Pimples on the nape of the neck; red pimples on the face and chin; young people, with aggravation from eating butter or pork; lymphatic swellings with

suppuration and burning pains; dyspeptics, when the most innocent food disagrees.

Causticum.—Eruption on the face, more felt than seen; yellow color of the face; papulous eruption between the eyebrows above the nose; dark-haired persons; in cases which have not been improved by *Ars.*, *Hepar*, or *Sulphur*; aggravation from cold, with sensitiveness to cold air.

Chelidonium.—Pimples and pustules in groups of three or four on the face, except the chin; chiefly on the left side; acne dependent upon liver derangement.

Actea rac.—Acne in women, dependent upon gastric, ovarian, or uterine derangement; melancholy persons.

Conium.—In obstinate, indurated acne occurring on the face; aggravation from suppressed menses; swelling of the parotid or submaxillary glands; fetid, smarting perspiration; adapted to scrofulous persons and old maids.

Eugenia.—Pimples on the face which are painful for some distance around; at times useful in the indurated form.

Granatum.—Pimples on the forehead and left temple with sore pain; they suppurate, and on drying leave nodules; itching in different parts of the body as if pimples would break out.

Graphites.—Pimples in persons inclined to obesity; particularly females with disposition to delayed menstruation; aggravation during, after, and from suppressed menstruation; the skin is very dry, inclined to crack, and easily tends to ulceration.

Hepar.—Painless pimples on the nape of the neck, forehead, and chin; crusty pimples on the face in young people; swelling and suppuration of glands; skin yellow and unhealthy, every small injury suppurates; cough with rattling in the chest but no expectoration.

Iodine.—Indurated acne in scrofulous subjects with ulcers in the throat; adapted to young persons with dark hair and eyes; and rough, dry skin; skin insensible and of a dirty yellow color.

Kali bich.—Face covered with a profuse eruption resembling acne; when pustules form they resemble small-pox pustules; in persons with loud rattling cough and stringy expectoration; especially suitable for fat, light-haired persons.

Kali carb.—Small pimples on the face, chest, and back, with redness and swelling; deficient perspiration; cases aggravated by suppressed menses; rough, chapped skin of the hands; dry, parched skin of the face; persons inclined to pulmonary difficulties.

Kali mur.—Pimples on the face with thick white contents, caused by a disturbed action of the follicular glands.

Kreasote.—Acne worse after menstruation, or from getting heated; dry pimples on the forehead; greasy pimples on the right cheek and chin; sad and irritable individuals, always worse after the menses, or from getting heated.

Ledum.—Red pimply eruption on the face; small pimples on the root of the nose; in rheumatic persons or drunkards, also when greatly aggravated by heat.

Lycopodium.—Red pimples in *clusters*, between the scapulæ and on the nape of the neck; after the failure of *Sulph.*, *Rhus*, or *Hepar*; dyspeptic ailments; red sand in the urine; cold feet; constipation.

Mercurius sol.—Indolent bluish-red papules, especially on the lower extremities; dirty yellow color of the skin, with glandular swellings; in syphilitic and scrofulous persons.

Mezereum.—Single pimples on the thighs; red pustules

with inflamed areolæ on the outer side of the extremities; in scrofulous individuals, and in persons who have already taken mercury; in those who have attacks of intercostal neuralgia.

Nabalus.—Pimples on the face, about the nose, upper lip and chin.

Natrum mur.—When the skin between the acne points looks as if besmeared with oil; aggravated after violent exercise, and periodically.

Nitric ac.—Many small pimples on the forehead, just below the hair; painful pimples on the chin with hard, red areolæ; skin dry, scaly; brown-red spots on the skin; after the abuse of mercury; dryness of the tongue and throat; itching mostly at night.

Nux juglans.—Variously sized reddish pimples and pustules on the face, chiefly around the mouth; large, painful blood-boils on the shoulders, and in the hepatic region; adapted to all stages of acne.

Nux vom.—Dyspepsia with constipation; small fetid ulcers in the mouth and fauces; persons who use coffee, wine or liquors, tobacco, or who have been allopathically drugged; sedentary habits.

Phos. ac.—Smooth, red pimples with red areolæ on the forearm, knees and leg; large, red pimples on the face and scapulæ, only sensitive to the touch; acne in weakly persons, onanists, and victims of spermatorrhœa; also when due to suppressed perspiration, or loss of animal fluids.

Phosphorus.—Acne in persons predisposed to bronchial and lung trouble; of hemorrhagic diathesis; lean and slender individuals with painless diarrhœa; aggravated from salt and camphor.

Picric acid—Severe and chronic cases; eruption on face, especially on chin and along edges of the sides of

the nose on either side, of indurated and elevated papules, dark red, painless, but sore to touch, upon the surface of which small pustules develop.

Potass. bromide.—Acne on the face, neck and shoulders, with peculiar yellow points which neither coalesce nor burst; frontal headache at night; adapted to both the simple and indurated forms.

Potass. iodide.—Papulous eruption all over, but especially on the face and the shoulders; painful sensitiveness, worse at night; in mercurial and syphilitic affections.

Pulsat.—Acne in mild, gentle persons, or pale, slender individuals; delayed or scanty menses; predisposition to catarrh or diarrhoea; gastric difficulties; aggravated by rich or fat food, pork, pastry, etc.

Rhus tox.—Acne in hard drinkers or persons addicted to sexual excesses; rheumatic individuals, always worse during rest; aggravated after getting wet and cold; debility and tired feeling nearly all the time.

Robinia.—Hard pimples, which take a great while to suppurate; great tendency of tumors to become indurated; in dyspeptics with sour stomach, worse at night; nocturnal emissions; increased sexual desire.

Rumex.—Dense rash of small red pimples; eruptions aggravated by wearing flannel; itching on various parts, worse while undressing.

Ruta.—Itching over the whole body relieved by scratching; all parts of the body upon which he lies feel sore.

Sabina.—Acne during pregnancy; desponding and hypochondriac; desire for acid things.

Sarsaparilla.—Acne on the nose and face, worse during the menstrual period; acne after the abuse of mercury, after gonorrhoea suppressed by mercury; burning itching of the eruption.

Sepia.—Acne on the *chin*, aggravated during menstruation and pregnancy; pimples on the mons veneris, legs and flexures of the joints; skin dirty-yellow and scurfy; ailments following vaccination and self-abuse.

Silicea.—Obstinate cases in scrofulous persons; fetid sweat of the feet; constipation; aggravated from drinking wine, from getting cold or wet.

Sulphur.—In acne vulgaris with black pores in the face; red, itching pimples on the nose, lip, around the chin, and on the forearm; furunculosis; chronic cases.

Sumbul.—Smooth, small, reddish spots on the forehead; black pores on the face; the least draught of air is felt down the spine; debility.

Thuja.—Acne, especially on the wings of the nose; dirty, brownish color of the skin; sweet, honey-like perspiration; aggravated during menses; after over-heating; after eating fat meat, onions, acids and sweets; after drinking beer or wine; after using tobacco, sulphur and mercury.

Verat. alb.—Pimples on the right labium just before menstruation.

CHAPTER XX.

DISEASES OF THE HAIR AND HAIR FOLLICLE.

Diseases of the Hair.

Diseases of the hair may be divided into those of Augmented and Diminished Formation, Abnormal Direction, and Alteration in Physical Aspect.

Augmented growth may be congenital, of varying extent, from small localized growths, such as little hairy moles, to the extensive tracts covering more or less of the body, as in the "hairy man" described by Mr. Crawford. Stimulation has a tendency to augment the growth of hair, if the formative power is normal. During convalescence a freakish, reactionary growth, in odd and unusual places, sometimes takes place.

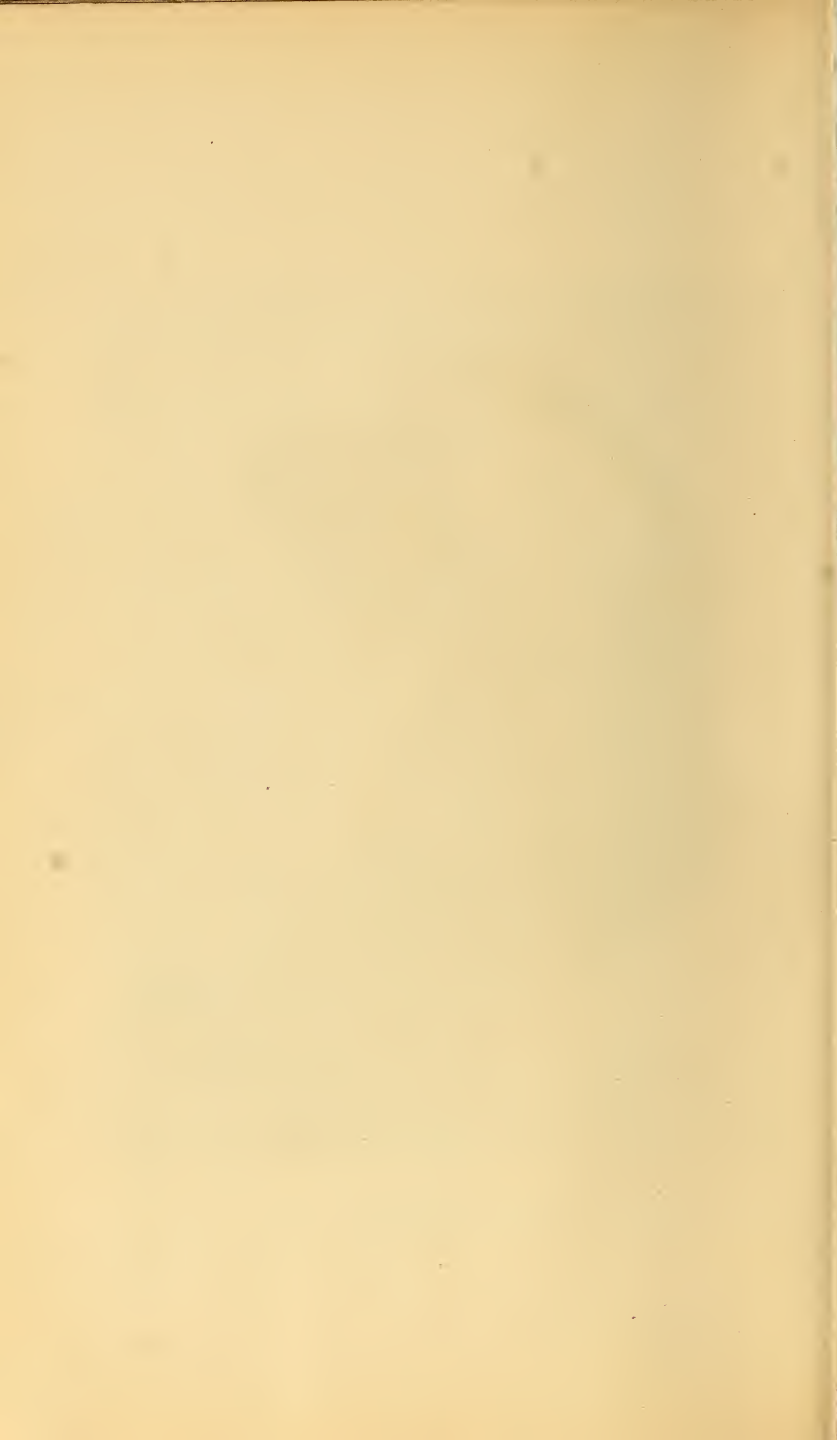
Diminished formation of hair is partial or general, comparative (thinning) or absolute (alopecia). It may be congenital, accidental, or normal (senile).

Alopecia.

When the hair is lost entirely from a part, this is called alopecia, or baldness. Parasitic disease and atrophy of the bulbs are the most usual causes of *localized* baldness; syphilis, violent emotion, atrophy of the scalp, and senility are most efficient in producing an absolute or a *great amount* of baldness. The total loss of hair is sometimes seen in early life.



ALOPECIA AREATA.



Alopecia Areata.

Alopecia areata is an affection characterized by circumscribed patches of baldness on the scalp or other hairy parts of the body.

It usually commences with a single spot, rarely noticed until it has attained a diameter of perhaps the third of an inch. This spot gradually increases in size, and others make their appearance to the number, in some instances, of a dozen or more. As the several spots increase in size, they encroach on each other until they finally coalesce and form patches of considerable size, and if unchecked may denude the entire scalp.

The spots themselves are absolutely deprived of hair, the short stubble met with in trichophytosis being absent. As a rule, the normal hue of the skin is preserved, but occasionally we meet with cases in which a slight congestion is apparent. Sometimes the reverse is the case, and the affected portions appear to have a lessened blood-supply.

Although most frequently met with on the scalp, and usually confined to this region, the disease may invade the beard and eyebrows, axillary and pubic hairs, and, in fact, cases have been observed in which apparently every hair of the body has fallen.

The cause and progress of the affection vary. In some cases they proceed by gradual steps to entire denudation of the scalp, while in others spontaneous recovery and regrowth of the hair may be observed. The new hair that comes in, either spontaneously or as the result of treatment, is usually fine and silky, and very much lighter in color than the surrounding healthy hair, and may even be entirely colorless. This early growth is not very viable, and the hairs are gradually supplanted by others

stronger and more normal in appearance, until finally the formerly bald patch is to be in no way distinguishable from the surrounding hair.

Diagnosis.—There is, or should be, no difficulty in diagnosis, as there is no other affection that presents the features of circumscribed and progressive patches of baldness.

Prognosis.—When cases are met with in the earlier stages, and are subjected to judicious treatment, the prognosis is almost invariably good. In cases in which it has progressed further, the prognosis is less favorable, although the increase of the area of baldness can generally be stopped, even if the hair can not be brought back to the already affected portions. Cases, however, in which total baldness has already occurred may usually be regarded as hopeless.

Etiology.—The nature and causes of alopecia areata are unknown. On the one side, there are those who maintain that it is a purely trophoneural affection; and on the other, those who are equally satisfied that it is of microbial origin. The specific microbe, however, has not been determined with any certainty, and the chief support of the parasitic theory lies in the fact that the disease frequently appears in certain series of cases as if it were spread by contagion. Perhaps both theories are right, and that two entirely different diseases exist, included under the same name—one of them nervous in origin, and the other parasitic.

Fragility of the hair, seen oftentimes about the beard, is explained by the attack of fungi, or by such causes as lead to insufficient nourishment of the hair, whereby its fibres are ill-formed, and tend to undergo degeneration.

Senile baldness is due to an atrophy of the structures generally; it commences on the crown of the head, the

hair first turning gray; the scalp is dry, thinned, loses its subcutaneous fat, and the follicles become indistinct. In some people this change takes place at an early age; it is either an hereditary or physiological peculiarity.

General thinning of the hair is most likely to occur under conditions which lower the vital energy of the patient. The scalp generally is scurfy and dry. This is in all probability due to the sluggish action which goes on. The usual sebaceous matter is not secreted; the follicles become choked by retained fatty and epithelial matter, and the formation of the hair is interfered with. This is also the case in eruptive disease and in syphilis.

The loss of hair in all these cases is an evidence of the working of some debilitating cause; it is not remediable to the most perfect extent without the use of constitutional remedies.

The hair in cases of thinning and baldness is often dry, brittle, and twisted or split up. This results from the peculiar absence of moisture; in its turn from the diminished activity of the circulation of the scalp; in its turn again, from the general debility of the system.

The various other alterations in physical aspect come under the head of Parasitic Disease.

Treatment.—The removal of superfluous hair may be accomplished by shaving, epilation, depilation, bleaching and electrolysis; of these agents electrolysis is far the preferable. This is easily done by introducing a fine, needle-shaped electrode into the papilla and connecting it with a galvanic battery. Any acid battery of from four to eighteen cells will be sufficient. The positive electrode is taken in the hand. From 25 to 50 hairs may be removed at one sitting, being careful not to remove hairs near together.

In the case of total loss, much good may oftentimes

be done. In the first place, all syphilitic taints require treatment. Then debility of all kinds must be removed. In the cases which occur from a failure of the reproductive function of hair-forming apparatus, local stimulation is necessary whenever any downy hairs are visible; if these be absent, the scalp atrophied from disease, and white and shining, little good will be done. If there be œdema, or any tension, though the follicles are distinct, tincture of iodine applied over diseased parts every two or three days is of service. Shaving the downy-haired scalp is also beneficial.

I have used the following application with excellent results:

- ℞. Quiniæ Sulph., dr. jj.
 Bay Rum, ℥ v.
 Ol. Rosemary, dr. iv.
 Tinct. Canth., ℥ j.
 Glycerine, ℥ jss.
- M. Sig.: Rub into the scalp every morning with a small sponge.

Some may prefer the following:

- ℞. Carbolic acid,
 Chloral,
 Tinct. Iodine, āā ℥ iij.
- M. Sig.: Apply once a week with a brush.

The principal internal remedy is *Phosphorus*, and the next *Natrum mur.* Others may be indicated for alopecia in general, as follows:

Aloes.—When the hair comes out in lumps, leaving bald patches.

Arsen.—When it falls out in circular patches.

Calc. carb.—When the bald spots are on the *temples.*

Carbo veg.—Falling off of hair after severe illness, or after parturition.

Fluor. ac.—When there is a syphilitic taint.

Graph.—Bald spots on sides of the head.

Helleb.—Falling off of hair from eyebrows and pudendum.

Hepar.—Bald spots on the head, after headaches.

Kali carb.—Dry hair rapidly falling off with much dandruff.

Mancinilla.—Falling off of the hair after severe acute diseases.

Phos.—Falling out in tufts.

Phos. ac.—Alopecia as a result of debility.

Vinca minor.—The hair falls out in single spots, and white hair grows there.

CHAPTER XXI.

VARIOUS LESIONS NOT CLASSIFIED.

Pernio.

Pernio, or chilblains, is an inflammation of the skin, occurring as a secondary effect of cold, and appearing for the most part upon the hands and feet. Occasionally pernio attacks the nose and ears, and may appear on any part of the body. It commences after exposure to cold by slight vesication attended with tingling, itching, burning sensations. In mild cases it may terminate in a few days with desquamation. In severer cases, remissions and exacerbations are prone to occur, and thus prolong the disease for months. The parts are usually left in an irritable state, and are liable to renewed attacks from the slightest causes. Any sudden change of temperature, and especially a combination of cold and moisture, may renew the trouble. In chronic cases the parts become livid or purplish in color, and are more or less swollen and itchy. Ulcers frequently form. One author claims that the ulcerations of erythema pernio were very frequent in scrofulous patients. Chilblains present special gravity in certain cases, as they might become the starting point of cutaneous tuberculosis, and are specially tenacious when they occur on the fingers of patients affected with spina ventosa.

Prognosis.—Pernio when it becomes chronic may last for years, disappearing usually in the summer time, but returning again as winter approaches.

Treatment.—When there is much inflammation a decoction of marshmallows, locally, acts well.

Tamus communis tincture is recommended as a topical remedy for unbroken chilblains.

Broken chilblains may be dressed with either Oxide of zinc ointment or the Glycerole of calendula.

Resin ointment is adapted to the ulcers that sometimes follow.

The *Galvanic* current acts favorably in most cases.

Paint the affected parts every evening with a mixture of

℞. Resorcin, 1 part.
 Ichthyol, 1 part.
 Tannin, 1 part.
 Water, 5 parts.

This will soon turn to a dry varnish on the skin, causing the latter to shrivel and the chilblains to disappear.

A very successful application consists of compresses of cotton moistened with a solution of permanganate of potassium. The strength of the solution to be from one to three grains to the ounce of water.

Another excellent application is:

℞. Iodini pur., 1 part.
 Collodion, 40 parts.

Dissolve the iodine in the collodion, and apply to congested areas once daily.

Chilblains may be relieved by local baths of sulphuric acid and water, a liquor-glass of the former to a quart of the latter. Ulceration does not contra-indicate. The baths, lasting about ten minutes, are employed twice daily.

The tincture of benzoin acts as a preventive. It is applied by simply painting it on the skin. The stockings

may be prevented from sticking to the feet by rubbing some oil over the benzoin.

The remedies likely to prove useful are:

Agaricus.—Violent itching, worse at night; burning in the fingers, lower limbs and toes; itching, burning and redness of the toes.

Arsen. alb.—Ulcerated chilblains; red spots on the feet; violent tearing pains in edges of ulcers when exposed to cold; relieved by warm applications.

Badiaga.—Flesh and integuments sore to the touch; sensitive to cold air.

Bellad.—Bright red shining swelling, with pulsative pains; burning in skin when touched; tingling itching, worse at night.

Calc. sulph.—Discharging pus.

Cantharis.—Itching and swelling of the fingers; blisters burning on touch; burning in the soles of the feet at night in hysteric patients; tearing and ulcerative pains.

Citrus vulg.—Itching of the swollen hands and arms; general itching, which prevents sleep.

Kali phos.—Chilblains on toes, hands and ears, tingling and itching pain.

Nitric acid.—Itching of the feet; spreading blisters on the toes; ulcers with stinging and pricking pains as of splinters; offensive profuse perspiration on the feet, causing soreness.

Petroleum.—Broken chilblains, with tendency to fester; heel painfully swollen and red with stitches; tips of fingers rough, cracked and fissured, with sticking cutting pain; unhealthy skin.

Prunus.—Itching on tips of fingers as if frozen.

Pulsat.—Blue red chilblains with pricking burning pain, worse toward evening; redness and swelling of joints

with stinging pains; feet feel hot and swollen with tensive burning pains; wandering pains.

Rhus tox..—Inflamed chilblains with excessive itching; aching pains in the legs; worse before storms and from getting wet.

Sulphur..—Thick red chilblains on the fingers which itch severely when warm; predisposition to chilblains.

Urtica dioica..—Has been used both internally and externally with good results.

Verat. vir..—Intense painful itching; chilblains on the nose; prickling in the fingers and toes; used internally and locally.

Actinomycosis.

This is a very rare disease, and may best be described by the following case as reported by Drs. J. Darier and G. Gautier:

The patient was aged 24. The disease, the etiology of which could not be definitely traced, had appeared nine months previously. The lesion occupied almost the entire right cheek, extending from the inferior border of the orbit above, limited on the inner side by the nasal furrow, and arrested below at a line corresponding to the upper border of the inferior maxilla, and extending over the entire cheek-bone. The surface was of a reddish-violet, of the color of certain forms of lupus, and covered in part by scales. The lesion was somewhat elevated and studded with half a dozen hemispherical elevations or nipples of about one centimetre in diameter, some of them ulcerated at the summit and covered with crusts.

The diagnosis was established by the abundant presence in the pus of minute grains of actinomycosis, each drop of pus containing from ten to fifteen of these minute bodies.

The case was cured by the electro-chemical treatment.

This treatment is based upon the decomposition of a solution of iodide of potassium (one to ten), in living tissues, into iodide and potassium by the galvanic current. To obtain this result, Dr. Gautier introduced two platinum needles into the nodules of the tissue, and by means of a syringe injected, every minute during the operation, a few drops of the solution. The two needles were connected with the two poles of a battery. The treatment, which was under chloroform, consisted of three seances, twenty minutes each, at intervals of eight days, with an intensity of fifty milliamperes.

The patient being enciente, the treatment was interrupted for fear of compromising the natural evolution of the pregnancy. Six weeks after her accouchment a final treatment was given, with the result of accomplishing what is apparently a complete cure.

Wash-leather Skin.

Dr. Ferrier, in 1879, first recorded a peculiar condition of the skin in which certain metals marked it with black lines; this condition he terms "Wash-leather Skin."

From an analysis of fifty cases, Mr. Emerson concludes that:

1. As a rule, wash-leather skin does not occur in the healthy.
2. It does not occur in many diseases.
3. It occurs in patients suffering, as a rule, from diseases which directly or indirectly affect either the trophic or the secretory nerves of the skin, such as renal disease, phthisis, erysipelas, and hemiplegia.
4. Silver is the best metal to use for bringing out the marks.

5. It may precede, and in the cases cited did precede, bed-sores.

6. It is of diagnostic value in testing vitality of the skin, and the site for the experiment is the lumbo-sacro-gluteal region.

7. So far as one may judge at present, it may be of value in foretelling bed-sores; and should this be established it would be of great use, for the proper precautions might be taken as soon as the black line is diagnosed; this, at present, seems to be its only probable use. The pathology of this phenomenon is as yet only conjectural.

Effects of Rhus tox. on the Skin.

The toxic action of this species is one difficult to explain. The first noticeable peculiarity is its choice of victims, many persons being entirely devoid of response to its influences, many others peculiarly susceptible.

Another peculiarity is that in many cases it is not necessary to even touch the plant to be severely poisoned.

A third peculiarity is that the plant is more poisonous during the night, or at any time in June and July when the sun is not shining upon it. Absence of sunlight, together with dampness, seems to favor the exhalation of the volatile principle (*Toxicodendric acid*) contained in the leaves. An acrimonious vapor, combined with carburetted hydrogen, exhales from a growing plant of the poison ivy during the night. It can be collected in a jar, and is capable of inflaming and blistering the skin of persons of excitable constitution who plunge their arms into it.

The symptoms caused by this plant are: First, redness and swelling of the affected part, with intolerable itching and burning, followed by vertigo, weariness, and a sort of intoxication. Infiltration of the face and eyes, and agglutination of the lids after sleep; great restlessness, pain,

thirst, and fever. The surface of the skin, after a time, becomes studded with confluent bullæ where the cellular tissue is loose, then a dermatitis follows resembling erysipelas; this may spread rapidly and finally communicate to the mucous membranes. This is followed by swelling of the mouth and throat, cough, nausea, and vomiting. Rheumatoid pains develop about the joints, and a painful stiffness asserts itself in the lumbar region, while the legs and arms become numb. Confusion of mind and delirium may then set in, during which the patient may become ill-humored, restless, and anxious, that he will jump out of bed.

The concomitant symptoms are inflammation of the eyes, dilation of the pupil, weakness of vision, and sometimes diplopia; frequent epistaxis; brown coated tongue, with a triangular red tip; swelling of the parotid glands, with difficult deglutition; griping in the abdomen; diarrhœa; profuse urination; oppression; rapid pulse; great weakness, weariness, and prostration; soreness of the muscles, worse while at rest, and passing off when exercising; sleepiness; and chilliness, followed by fever and copious sweat.

There are almost as many antidotes recommended for *Rhus tox.* poisoning as for the bite of the rattlesnake. Prominent, however, among the applications are: Alkaline lotions, especially carbolate of soda, alum-curd, and hyposulphite of soda, keeping the skin constantly moist with the agent in solution. A strong infusion of *red* *Sassafras* root is strongly recommended. It is applied freely to the parts, and gives almost immediate relief, and this, too, when other remedies fail.

The fluid extract of *serpentaria* has been used in quite a large number of cases of *rhus* poisoning with great suc-

cess. It is best applied by placing cloths moistened with the extract upon the affected parts without any friction.

The internal remedies most likely to prove beneficial are: *Agaricus*, *Apis*, *Arnica*, *Belladonna*, *Bryonia*, *Croton tiglium*, *Graphites*, *Grindelia robusta*, *Ledum*, *Nymphæa*, *Sanguinaria*, *Sepia*, or *Verbena urticæfolia*.



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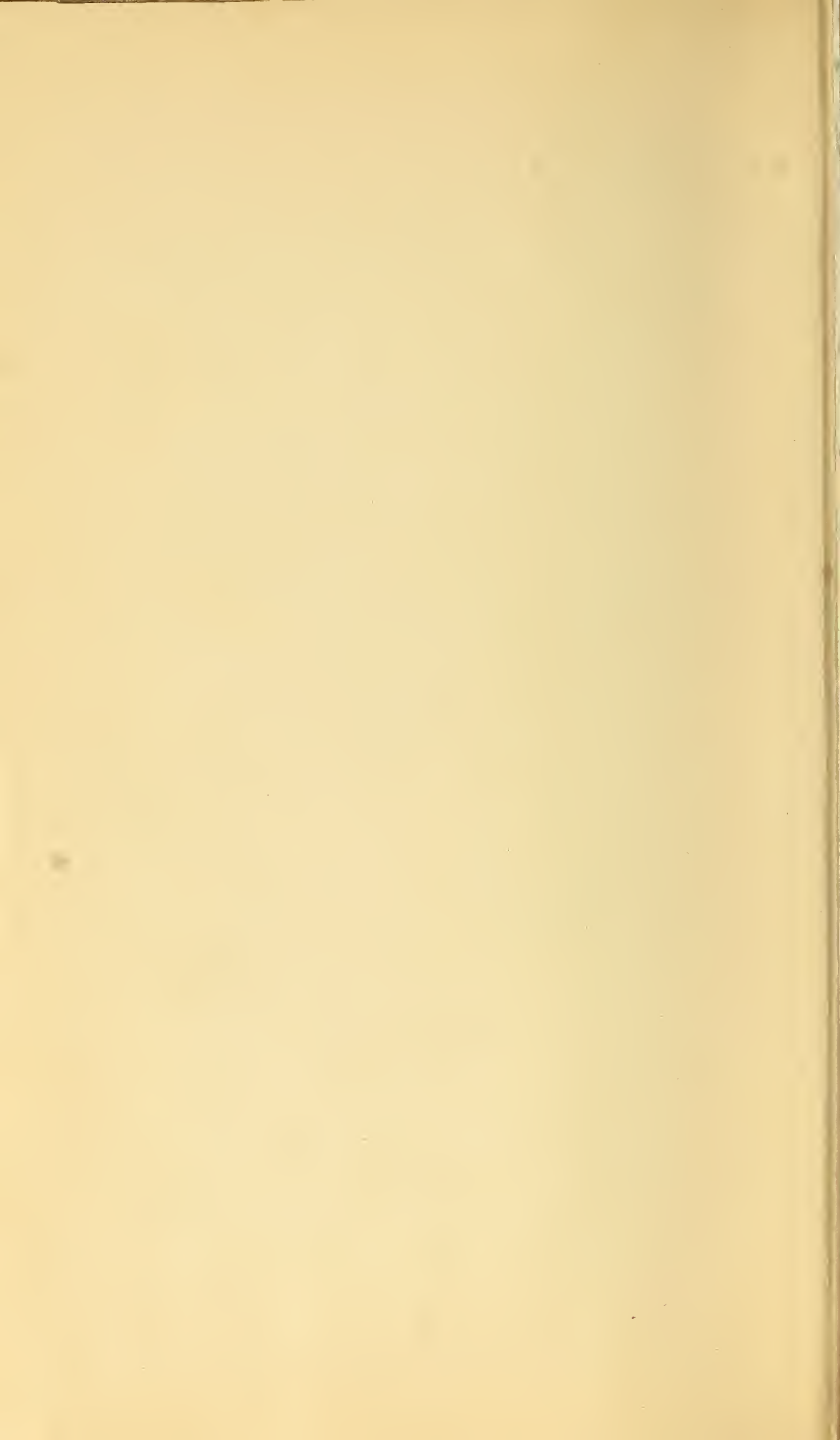
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