tion; the whole body scarlet, and the skin hot to the touch. The penis and scrotum were greatly swollen, the latter exuding freely; vesicles were plainly visible in the bends of the joints, while a moist eruption occupied the axillary region. The patient was sleepless, and in a state of extreme agitation. The use of stimulants and all irritating applications were forbidden; the skin was simply covered with starch-powder; and in a few weeks the whole disorder had disappeared. As might be expected, this variety of eczema assumes many different aspects.

(*e*) *Eczema Intertrigo.*

This occurs were two cutaneous surfaces are in contact, and proceeds from the erythema intertrigo of such localities. Children and corpulent adults are most liable to its attacks. The eruption is usually situated in the folds of the genitals, in the anal fossa, beneath pendulous mammæ, and at the bends of the joints. In rare instances, the inflammation runs so high, in consequence of neglect, that even diphtheritis and gangrene, with their sequelæ, may be developed (Caposi).

CHRONIC ECZEMA.

Chronic eczema presents the same changes as the acute form; but, in addition, exhibits others, resulting from repeated attacks of inflammation. In chronic eczema the skin is swollen, thickened, reddened, and darkly discolored. In protracted cases, the corium often contains small thickenings of the connective tissue resembling furuncles which are hard to the touch, and merge gradually into the surrounding structure. The apices of these formations are generally scratched off, and they are most frequently met with on the extremities. The subcutaneous tissue may take part in the inflammatory process. Certain cases of chronic eczema are characterized by profuse exudation, while others, and these the most frequent, merely present a few scabs on the affected surface. Chronic eczema often gives rise to ulcers, particularly on the legs. The itching is usually extremely distressing, and compels the most resolute patient to scratch. Even if he is able to keep from doing so in the day-time, the inclination becomes irresistible at night, and especially on getting warm in bed. The lesions caused by scratching, and the intense cutaneous irritation, give rise to an increased exudation of plasma, which stiffens the linen. This exudation is accompanied by an abatement of the itching, and by a painful burning sensation, which, however, is hardly noticed by the patient in comparison with the previous symptom. The itching is much aggravated by everything which irritates the skin. Numerous boils frequently make their appearance during the course of chronic eczema; the cause of this phenomenon is not very clear. It is certainly observed more frequently when the disease is treated with ointments than when aqueous and alcoholic solutions are relied upon.

There are other varieties of eczema, dependent on its locality. These we will now proceed to consider.

(*a*) *Eczema Chronicum Capillitii.*

This is most frequently met with in children, but is not a rare affection among adults, generally in the forms of eczema squamosum and impetiginosum. Its peculiar features are due to the hair and the numerous sebaceous glands of the scalp. It attacks either circumscribed portions only, or the entire surface. In the latter case, adjacent regions, as the forehead, neck, and ears, are also involved. In eczema squamosum the scalp is reddened and covered with a plentiful crop of white, greasy scales. In eczema madidans

the hairs are agglutinated into tufts by the abundant secretion, which is mingled with the contents of the sebaceous glands. This being decomposed by the action of the atmosphere, the fatty acids are set free, producing that abominable odor of rotten straw which belongs to neglected cases of eczema. If the crusts are allowed to remain, and the hairs are not cleansed, the latter mat together almost inextricably, and in this condition become a breeding-place for lice and insects (plica polonica); on the other hand, lice may constitute its exciting cause. When this occurs, the affected places are generally of small dimensions, surrounded by healthy integument, moist, and covered with a thick brown crust, on which papillary growths a few millimetres in height are sometimes visible. The cervical glands are always swollen, but rarely suppurate. Abcesses of the scalp, however, are often met with, especially in weakly children. Ordinarily, the hair comes out in large quantities, but is reproduced. In not a few cases, the hair-follicles are destroyed by suppuration (sycosis capillitii) and permanent baldness is the result.

(*b*) *Eczema Chronicum Faciei.*

The face is very often the seat of chronic eczema, especially in children, in whom it assumes a moist and pustular character, and is associated with eczema of the scalp. In adults, the squamous form is more frequently observed. Sometimes the disease extends over the entire face, sometimes only isolated portions are affected. On hirsute parts of the face, the inflammation often attacks the hair-follicles and assumes the aspect of a sycosis, each pustule appearing to be pierced by a hair. The process involves the beard, eybrows, hairs of the nostrils, and especially the eyelashes; around the latter, cup-like ulcers are frequently produced. While, however, in sycosis the disease is confined to the hair-follicles, removal of the eczematous crusts leaves a moist surface, which often spreads over the vicinity of the hairy parts. The eruption is usually symmetrical. In situations where the epidermis merges into mucous membrane, the latter is generally attacked. Eczema in these localities is exceedingly intractable, especially at the nasal aperture. In scrofulous subjects, the nostrils are often completely obstructed by crusts. The patients breathe with their mouths open; the secretion collects beneath the scabs and gives rise to lymphangitis and erysipelas, which produce a snout-like prolongation and thickening of the upper lip. In adult males, chronic coryza will often cause such an eczema of the upper lip to degenerate into sycosis. Very frequently, eczema of the nose, mouth, or canthi results in very painful fissures. The disease often affects the vermilion borders of the lips in the shape of E. rhagadiforme. The lips are dry and hard, and beset with numerous fissures; they desquamate or are covered with bloody crusts. This form is especially frequent among females, and is associated with intense itching. Usually, the skin around the red portion of the lips is also attacked, so that the mouth is inclosed as by a broad ring.

Chronic eczema of the ears is distinguished by an extraordinary tendency to acute relapses, generally accompanied by profuse exudation. The sulci of the concha are obliterated, or nearly so, and the skin is greatly swollen; a very deep fissure, extending even to the aural cartilage, is frequently formed in the fold behind the ear. The disease often attacks the auditory canal, which is then greatly swollen, and its orifice filled up with crusts or scales; the hearing is also impaired. In such cases, exceedingly painful boils often break out in the external auditory canal.

Eczema of the eyelids often causes considerable swelling of these parts, with immobility; they are agglutinated, and unpleasant-looking yellow crusts collect around

the lashes. When this condition is of long duration, it leads to very obstinate ectropium. At the same time, a catarrhal conjunctivitis is almost always manifested, which sometimes develops into blennorrhœa or even diphtheritis.

(*c*) *Eczema Chronicum Mammæ.*

This is particularly apt to affect one, or, more frequently, both of the nipples, in the case of nursing women, especially primiparæ; but it also occurs, though rarely, in virgins and males. It begins with a superficial excoriation of the nipple, and a slight discharge, which rapidly dries into a small scab. When left undisturbed, the sore soon heals spontaneously, but the constant irritation of suckling causes it to spread over the whole nipple and the areola. The nipple becomes raw, fissured, and swollen, and so spread out that it appears as a broad, red, and moist protuberance, only slightly elevated above the level of its firmly-incrusted areola. The eruption is always circularly disposed around the nipple. It is not unfrequently followed by mastitis.

According to Paget (St. Bartholomew's Hospital Reports, 1874), an eczematous affection of the nipples (Paget's Disease) often precedes mammary cancer. Later observations, however, have shown that this is a correct statement only so far as regards a very superficial epithelioma of one of the orifices of the lactiferous glands.

(*d*) *Eczema Chronicum Umbilici.*

The umbilicus is frequently attacked by eczema, especially in corpulent individuals, and here also the eruption usually assumes a circular form. The umbilical fossa is often filled with an easily decomposed, fœtid secretion.

(*e*) *Eczema Chronicum Genitalium et Perinæi et Ani.*

Eczema of the anus is very often the starting-point for the same disease of the sexual organs, and is frequently associated with hemorrhoidal troubles. Eczema of the anus often continues for several years before it attacks the genitals, which is does under the form of an acute eruption. It is frequently accompanied by very painful rhagades, which seriously interfere with defecation, by a profuse secretion of mucus, and by troublesome itching, especially at night. The straining at stool often results in swelling and prolapsus of the rectum. Subsequently, the eruption extends mostly along the anal fossa. The manifestations of perineal eczema are of a particularly obstinate character along the line of the raphe. Next to the anus, the most frequent starting-point for eczema of the genitals is the folds of the thigh, especially where the skin is in contact with the scrotum. It is very seldom that the complaint attacks the entire surface of the penis; usually, the dorsum exhibits only a few transverse furrows of eczema, while that portion of the under surface which touches the scrotum is covered by the eruption and exudes freely. On the scrotum, moist eczema very often occurs, while the squamous form is more rarely met with. The scrotum is enlarged, has a glazed appearance, and secretes a fluid which decomposes almost immediately and smells abominably. In cases of long standing, the scrotum swells so enormously that the patient believes himself to have elephantiasis. The itching is often very intense, and comes on in paroxysms. (The so-called eczema marginatum, which so frequently appears on the thighs, especially where they touch the scrotum, is one of the mycoses.) In females, the labia majora are very often the seat of vesicular eczema, but this is quickly transformed, by scratching, into eczema madidans; it is accompanied by great swelling of the parts. The labia

minora and vaginal orifice are frequently affected in the same way. The complaint in these localities is generally associated with vaginal leucorrhœa. From the genitals the eruption often extends over the mons veneris and the surface of the thighs and abdomen.

(*f*) *Eczema Chronicum of the Folds of the Joints.*

Unlike psoriasis, eczema prefers the inner surface of the joints. After crusts have formed or cutaneous infiltration has taken place, very painful fissures are produced as the result of movement. The patient, therefore, maintains the affected limb in a semi-flexed position, so that one might almost believe it to be ankylosed. The disease in this situation generally occurs symmetrically.

(*g*) *Eczema Chronicum Cruris.*

Salt-rheum, as the moist form is popularly called, is that in which it most frequently appears on the leg, and is one of the most practically important varieties of the complaint. It is often associated with varices, and may lead to hemorrhages, ulcers of the leg, thickening of the skin, œdema, and enlargement of the limb resembling elephantiasis. Dark, discolored spots usually remain upon the skin after healing has taken place. The small, scattered pustules, each in general punctured by a hair, and the small and often very painful abscesses which belong to E. impetiginosum of the leg, constitute peculiar features in this complaint.

(*h*) *Eczema Chronicum Manus et Pedis.*

Eczema of the hands and fingers is very often the result of injuries of those parts. All forms of eczema are liable to occur on the hands, but more especially on the fingers. Usually, the disease makes its appearance on the inner surface of the fingers, in the form of sago-like vesicles, with elevated borders, which, when opened, discharge a gummy, tenacious fluid. Owing to the thickness of the epidermis on the palm of the hand, the vesicles in this locality often remain for a long time, and then dry up and desquamate, leaving the skin perforated with numerous small holes, as if by a punch. Old eczemas on the inner or outer surfaces of the articulations commonly result in the production of painful rhagades; and there is often very considerable infiltration of the cutis, especially on the back of the hand.

A peculiar form of eczema occurs on the palm of the hand, especially in anæmic females, as a dirty, dry, indurated, smooth thickening of the epidermis. The furrows of the hand are reddened and filled with a whitish powder resembling flour. Only the itching and the co-existence of similar eruptions on other parts enable this affection to be recognized as eczema. It may render the fingers incapable of complete extension; in my two cases, even the nails were affected, becoming dry, brittle and fissured, traversed by vertical or horizontal furrows, sensitive, and even painful. The walls of the nails were reddened and greatly swollen. Eczema of the feet gives rise to similar phenomena.

PATHOLOGICAL ANATOMY.

Acute eczema, anatomically regarded, differs in no respect from other inflammations of the epidermis, with predominant serous exudation. The papillæ in circumscribed portions of the skin are enlarged and lengthened through their infiltration with cell elements and a clear serous fluid. The connective-tissue corpuscles of the papillæ become more numerous and undergo a marked increase in size and succulence. In the stratum mucosum, as V. Biesiadecki has shown, fusiform cells abound, extending half-

way into the papillary layer, half-way into the deepest portion of the former structure. These, in their advance, force asunder the cells of the stratum mucosum, and reach even as far as the epidermis. They form around the swollen epithelial cells a network, which serves as an outlet for the escape of the exudation to the surface. The development of a vesicle hastens the new cellular formation within the papillæ, and the superficial cells of the stratum mucosum swell up, perhaps even to bursting, and lose their epidermal investment. The more intense the inflammation the more deeply it extends into the corium and even into the adipose layers. The exudation consists of serum and white blood-corpuscles. The multiplication of the latter causes the vesicle to change into a pustule. The usual reaction of the fluid is slightly alkaline.

In chronic eczema the microscope reveals considerable thickening of the epidermis and the corium, with dark discoloration. The papillæ are often so greatly enlarged, especially in moist chronic eczema of the leg, that they are visible to the naked eye as red points upon the oozing surface (Bulkley).

There is also enlargement of the lymphatics and blood-vessels; thick deposit of cells and coloring-matter; increase of connective tissue at the expense, partly, of the obliterated sebaceous glands and hair-follicles and of the degenerated sudoriparous glands; atrophy of the fat cells, and degeneration of the nerve-fibres.

ETIOLOGY.

Is eczema a local or a constitutional disorder, and ought the inflammatory symptoms resembling those of eczema which are caused by external irritants to be set apart from the latter? In my opinion, we are not justified, so long as the primary causes of the constitutional disease still remain undiscovered, in separating into distinct classes, affections anatomically homogeneous, and displaying the same succession of phenomena. The predisposition to eczema differs to a remarkable extent in different individuals. As with some persons every trifling irritation of the stomach gives rise to gastric catarrh, so in others a mere chafing of the skin will cause an outbreak of eczema.

It is certain that debilitating influences will increase the predisposition to the complaint, as they increase it in the case of catarrhs in general. Among these predisposing conditions are: chlorosis, rhachitis, scrofulosis, gout, albuminuria, diabetes, dyspepsia, gastric and intestinal catarrhs, dysmenorrhœa, uterine affections, lactation, and pregnancy. Like Bulkley, and unlike Hebra, I had never seen an instance of the last-named state predisposing to eczema until, while actually engaged in writing these lines, a woman came under my treatment in her eighth pregnancy, who, since her third, had been attacked with eczema regularly each time in the third month, and disappearing spontaneously at the end of her confinement. Eczema is often observed to be aggravated during the menstrual period. Psychical influences may also be the immediate cause of the complaint, where a predisposition exists. Persons having a very delicate skin are more liable to the complaint. Susceptibility in this direction is also increased by repeated attacks. Varicose veins and hemorrhoids tend directly to the production of eczema in congested localities, as the anus or the legs.

On the subjest of heredity in this disease, I, like my father, am at variance with the majority of authors, both of us having met with frequent instances of its occurrence by descent. This may probably be accounted for by supposing that in private practice only the most inveterate cases come under notice, in which category hereditary eczema must undoubtedly be placed. But one instance of this kind need here be cited. A girl of sixteen was placed under our care for eczema by her father, a medical man. He himself

and his mother, as also his second daughter, were sufferers from the complaint. Similar examples might be multiplied. Eczema is observed with special frequency in scrofulous and phthisical families.

Foremost among the external causes is the action of water. Eczema is often brought out by the wet-sheet packing and baths of water and vapor administered at hydropathic institutions. Sulphur and saline baths still more frequently produce the same effects. The eczemas due to these causes are most nearly related to those arising from injuries to the skin, as eczema intertrigo, eczema from india-rubber clothing or bandages. The "chafing" of children may result not only from perspiration, but also from the alkaline character of their discharges. Another predisposing affection is the sudamina (miliaria alba et rubra, hydroa) which so frequently occur, under the form of papules and watery blisters, in patients who sweat profusely.

Numerous drugs may give rise to eczema: croton oil, tartar emetic, cantharides, mezereum, mustard, hellebore, potash-alkalies, mercurial sublimate, sulphur, blue ointment, belladonna ointment, arnica tincture, and turpentine (especially as a component of adhesive plaster, diachylon plaster, etc.). Since the introduction of the antiseptic method in surgery, carbolic acid eczema has been frequently observed; it is generally characterized by numerous vesicles and copious exudation. With these may be classed those chemical substances which affect the skin through their action on the spinal system of nerves: the mineral acids, arsenic, vegetable juices, anilin dyes, resins, turpentine (in house painters and printers), soap and water (butlers and barbers), alkalies (washerwomen); pulverized materials, as flour, cement, plaster, powerdered spices (millers, bakers, masons, agricultural laborers, grocers).

Among the dynamic influences tending to the production of eczema may be mentioned heat and cold (E. solare, E. caloricum). In winter, the disorder very commonly takes the form of chapped hands.

The disease may also result mechanically from pressure and friction, especially of the clothing, but principally from scratching, which is operative in all complaints accompanied by itching.

The cause of eczema when following vaccination must be sought in cutaneous irritation, and not in any specific action of the virus employed.

Eczema and psoriasis are often observed to occur simultaneously. This is also true of asthma and eczema—a fact not to be wondered at if eczema is recognized in its true character as a catarrh of the skin.

DIAGNOSIS.

If the symptomatology be kept in view, all the affected localities being at the same time carefully compared with each other, its diagnosis in most cases will present no difficulty. Still, it may possibly be confounded with the following complaints:

1. Erysipelas is frequently mistaken for acute eczema. The latter, however, exhibits little redness or swelling, and its fever is of a lower grade. The diminutive papules or vesicles of eczema are perceptible under oblique illumination, or by palpation. Eczema of the face usually breaks out in several places at once, whereas erysipelas in the same situation spreads from a single point. In erysipelas there is usually a discharge of fluid, but this proceeds from the rupture of large bullæ.

2. Epithelioma in the first stage. The small extent of the epithelioma, its sharply-defined borders, and the absence of itching, are sufficient to prevent mistake.

3. Lichen. While the papules of eczema change into vesicles or pustules, or dis-

appear altogether, those of lichen remain firm, solid, unaltered, and tipped with scales, for a considerable period.

4. Pruritus of the genitals is particularly apt to be mistaken for eczema. But the papules, vesicles, and moist surfaces are wanting in pruritus. Its only visible signs are the results of scratching.

5. Herpes is attended with a burning sensation; eczema with itching. The vesicles of herpes are in isolated groups; those of eczema are densely aggregated, without regular arrangement.

6. Miliaria crystallina. The vesicles of eczema are crowded together in confined spaces; those of miliaria are isolated, especially on the breast and abdomen. Eczema is accompanied by pruritus; miliaria by stinging pain and uniformly by fever.

7. Pemphigus vulgaris. The large bullæ characteristic of pemphigus are not seen in eczema. Pemphigus foliaceus is distinguished from eczema by the extensive exfoliation and superficial soreness, with scanty exudation, to which it gives rise, and by the absence of itching and cutaneous infiltration.

8. Scabies. This is localized chiefly on the hands and fingers, in the axillæ, and on the breast, abdomen, and penis. It does not attack the hairy scalp. The itch-vesicles are less closely aggregated than those of eczema. The principal mark of distinction, however, is the acarus-burrows.

9. Favus can be confounded only with the pustular varity of eczema. Favus exhibits sulphur-colored crusts which are dry and friable. The crusts of eczema have a yellow or dark appearance, and a gummy consistence. Underneath them is a moist surface. Favus always results in baldness, and the hairs of the affected parts are bleached, lustreless, and brittle.

10. Sycosis. The crusts of eczema are larger than those of this disease. The skin beneath them is smooth in eczema; in sycosis it is rough and glandulous. The hairs can be drawn from the pustules of sycosis without giving much pain; in eczema this is not the case. By the latter disease, moreover, the beard is generally left untouched.

11. Syphilis. Syphilitic pustules on the head may be mistaken for E. impetiginosum. The pustules are scattered over the scalp, and removal of the crusts discloses an ulceration with perpendicular borders. The pustules are succeeded by scars, and there is no itching.

When eczema is seated on the palm of the hand, it is often impossible to distinguish it from syphilis, on a first inspection. In syphilis the infiltration is more solid and extends deeper into the tissues; the discoloration does not disappear under pressure. Close examination shows the blotches to be composed of numerous points, papules, and tubercles, mostly arranged in circles. They have a strong tendency to become enlarged peripherally. Their outline is usually irregular and undulating, in most cases there is no itching. When syphilis affects the labial commissures, it produces fissures exactly resembling those of eczema, but the other features of the latter disease are wanting. Besides the fissures, syphilis generally gives rise to flat papules.

12. Seborrhœa.—Eczema is often found in the neighborhood of the hairs. It is also attended with itching and glandular enlargement. A red and inflamed, and frequently a moist surface is left after the removal of the scales, while in seborrhœa the cuticle remains intact and of its natural color. Seborrhœa spreads uniformily over the entire scalp; eczema often attacks only isolated spots.

13. Lupus Erythematosus. The scales adhere very firmly, and extend into the enlarged sebaceous glands. The scales of eczema are easily detached. Lupus erythematosus leaves contracting cicatrices, and is unaccompanied by itching.

14. Pityriasis Rubra. In eczema, the eruption is usually moist, with well-marked infiltration and thickening of the skin. Pityriasis rubra exhibits a uniform redness, with an abundance of thin scales, like shreds of paper, and is generally attended with severe burning pain. Pityriasis is never moist. It is characterized by a profusion of thick, silvery-shining scales, which, when detached, leave a red surface dotted with blood-points. The patches of psoriasis are sharply defined, and are chiefly met with on the anterior surface of the limbs. The two diseases are almost certain to be confounded, except after lengthened observation, especially E. squamosum and psoriasis universalis, in which, besides the history of the case, only the appearance of a moist eruption renders differentiation possible. When eczema occurs on the hand, its diagnosis is very difficult; in this situation, Hebra and Caposi recommend frictions with caustic potash, in order to bring out the vesicles more clearly. In eczema, there are usually small vesicles between and on the end of the fingers. Eczema itches violently; psoriasis not at all, or only moderately. Psoriasis heals from the centre of the eruption; eczema from its circumference.

16. Herpes tonsurans can be confounded only with eczema squamosum. The acute character of herpes tonsurans, its blotches, sharply-defined and healing from the centre, its contagious nature, the slight itching which accompanies it, and, above all, its microscopic fungi, leave no doubt as to its diagnosis. The scalp in herpes tonsurans is lead-colored, dirty, and grayish-looking; the hairs are dry and broken. Herpes marginatum, the parasitic origin of which has been demonstrated by Köbner, Pick, and Caposi, is identified by the sharp borders of its eruption, which heals from the centre, and its fungi.

PROGNOSIS.

This is always very favorable, so far as life is concerned. The prognosis varies according to the cause of the complaint. If this is external and avoidable, or if it is some curable constitutional disorder, like anæmia, etc., the outlook is more favorable than when such conditions as uterine diseases, varicose veins, etc., are to blame. Hereditary eczema is always difficult of cure.

The prognosis is also influenced by the locality of the complaint. Eczema relapses more frequently on the hand than in any other situation, and it is very hard to cure in those places where the epidermis merges into mucous membrane. It is also more tedious when seated on hairy parts. It is always well to be careful about predicting its period of duration, but, in the great majority of cases, it can be permanently cured

TREATMENT.

Every case of eczema can be cured without injury to the general health, nor have we ever observed the slightest ill result from removing the malady.

1. INTERNAL REMEDIES.

As in treating any case of catarrh of the mucous membrane, all co-existing constitutional disorders and organic affections must be taken into consideration, so also must eczema be managed. When, however, no such complications exist, local measures alone will be sufficient.

In acute eczema, internal treatment, apart from cooling draughts and an occasional mild purgative, is inapplicable.

In chronic eczema, demulcent drinks and decoctions, mercury, and iodine are useless, and even injurious. The same may be said of ergotine. A specific for eczema has yet to be discovered. Arsenic may be worth trying in many chronic cases with extensive infiltration. Little, however, is to be expected from its use without accompanying external treatment. When there is chlorosis, iron must be administered. We prefer pilul. ferri carb. 6.–9. daily. In long-standing cases, the following compound of steel and arsenic has done good service:

℞ Liq. kal. arsenic..... 5.0
Tinct. ferri pom.,
Tinct. rhei. vin .....ana 20.0
Aq. menth.....140.0
S. One-half tablespoonful every day.

The natural and artificial chalybeate waters and the ferruginous pyrophosphate springs may also be employed. For scrofulous subjects, cod-liver oil is indicated; where bronchitis exists, phosphate of lime; gout requires alkaline waters (Vichy), etc. When dyspepsia, constipation, or hemorrhoidal troubles are encountered, the usual remedies may be resorted to. As to dyspepsia, I believe that it is very frequently not the cause, but the result of an extensive eczema. A well-regulated and invigorating diet, from which injurious fats and acids are excluded, fresh air and moderate exercise, are the main requisites for a cure. As symptom-remedies, chloral hydrate and bromide of potassium may be employed against the itching, which is often only aggravated by morphine and opium. My experience in the use of tincture of gelsemium, as recommended by Bulkley, has been insufficient to enable me to pronounce upon it; carbolic acid internally has produced no results in our practice.

2. LOCAL REMEDIES.

In the local treatment of eczema, which is by far the more effective, the physician must first of all satisfy himself as to the following questions:

1. Is the disease acute or chronic ?
2. What stage is it in ?

When they have been answered, it will usually be perceived that quite different modes of treatment are called for in the respective situations, since we must now be contented with merely combating the symptoms.

(*a*) *Acute Eczema.*

In the management of this form, the principal rule to be observed is, that all irritating applications must be carefully avoided until the disease has entered the chronic stage, and even then their effects should first be carefully tested upon a small portion of the affected surface. The same means which have previously proved beneficial will sometimes entirely fail us in precisely similar cases. Rayer says that the best way of treating acute eczema is to let it alone—a dictum which is just as unassailable at the present day as when it was first uttered. During the progress of a typical case, our duty is to alleviate the distressing symptoms, and to remove all causes of injury to the skin, that is, to protect it against the pressure and friction of the clothing and the effects of heat. With this view, the patient laboring under universal eczema must lie in bed naked or wearing only a light garment. Water is often injurious, hence baths and

ablutions must be forbidden. When, however, as in the case of children, they are indispensable, distilled or boiled water, or a decoction of bran or some other demulcent substance may be used. The temperature of the liquid should be regulated according to the feelings of the patient. Soap must never be employed.

Among the numerous applications which have been recommended for the relief of the burning and itching, I will mention only the most useful.

In eczema intertrigo, decomposition of the sweat must be prevented by placing cotton batting between the apposed cutaneous surfaces, and renewing it when saturated. It is well to prepare this material by dipping it in a powder containing one per cent of boracic acid, finely pulverized, and one per cent of salicylic acid, five per cent of oxide of zinc, or five per cent of subnitrate of bismuth. Lister's borax-ointment spread upon muslin and laid between the cutaneous folds is also of service.

Powdering the diseased surface is likewise beneficial at the commencement of E. papulosum and vesiculosum. I usually make use for this purpose of pure starch flour. The powder sold by hair-dressers is not to be recommended, as it frequently contains deleterious ingredients. For amylum, we may substitute talcum venetum, semen lycopodii, or amylum oryzæ, and to impart a fragrance to the powder pulvis iridis may be added. Caposi gives the following formula: ℞ Amyl. oryzæ, 100.0; Talc. venet., Flor. zinc., Pulv. irid. florent., ana 5.0. S. Make into a powder. Camphor usually forms another ingredient when the itching is violent. If no relief follows, and if, in cases of E. papulosum, the itching is unbearable, we may try bathing the parts with alcohol (cologne-water). Weak solutions of acetic acid (2 : 100 aqua), or of acetate of alumina (0.5–2 : 100 aqua) are often very effectual. Caposi recommends: ℞ Acid. carbol., 1.0; Spir. vin. gall., 150; Spir. lavand., Spir. colon., ana 25; Glycerin, 2.50. Even this trifling amount of glycerin frequently proves highly irritating.

The above powders are also recommended to be applied on moist surfaces. When crusts form, and the secreted fluid accumulates beneath them, they are made to burst by the pressure of the powdered cotton. In cases of violent inflammation, with severe pain, when powdering is ineffectual, cold fomentations with water or saturnine solutions may be tried, to which tincture of opium may sometimes be added. The compresses should cover no more than the diseased surfaces, and should be frequently changed, or else be kept cold by an ice-bag. Fatty applications occasionally give better results, but it must always be borne in mind that they will produce eczema in individuals whose skins are naturally intolerant of such substances. Hebra's diachylon ointment is preferable, especially when the exudation is profuse. To prevent rancidity, it is best prepared with vaseline. ℞ Empl. diachyl. simp., 20; Vaselin, 80; liquid. misce. This ointment is thickly spread on pieces of lint from four to five cm. wide, which are bound down with gauze; the face is covered by a complete mask of the former material, having openings for the mouth, eyes, and nose, and eyes, with simple slits to admit the ears, and it is pinned together behind. When the exudation has somewhat diminished, dusting the surface with lead ointment (Unna, *Berl. Klin. Wochenschrift*, 1881, p. 389) is much recommended on account of its ease of application. The mull is drawn through the melted ointment, and is then dried.

℞ Empl. plumb. simpl., 10.0; Sebi benzoinati, 10.0; Adip. benzoinat., 2.0. (To make sebum benzoinatum: ℞ Seb. taurin., 10.0; Benzoes subtil. pulv., 1.0. Digere in balneo vapor. per horas duas et cola. Adeps benzoin.: ℞ Adip. suill., 10.0; Benzoes subt. pulv., 1.0; digere in balneo vapor. et cola.)