of the fever centres should, in proper subjects, cause an irritation of the convulsive centre would also presuppose the possibility of a reversal of this process. In other words, we should expect the activity of the convulsive centre to produce a secondary activity of the fever centre. This is certainly fully demonstrated by practical experience at the bedside. All authorities are agreed as to the enormous rise of temperature which occurs in the course of a so-called "status epilepticus." The epileptic falls into convulsions, repeated at very short intervals, so that the patient does not recover consciousness for hours, or even days. Shortly after this condition has set in the temperature begins to rise, and sometimes reaches an enormous height. Bourneville has seen it as high as 107¼° F.; Reynolds reports equally high temperatures.[19]

Prognosis.—The prognosis of an attack of eclampsia resolves itself into two elements: first, as to the fatal or non-fatal termination of any attack, and secondly, as to the recurrence of the convulsion. Although many infants die in an attack of eclampsia, yet, when we consider the great frequency of such attacks, those that die are comparatively few in number. The prognosis in this respect does not depend upon the severity of the seizure; very severe convulsions will often last but a short time and terminate in complete recovery. The duration of an attack of eclampsia is a more important factor in the prognosis. A series of convulsions of long duration, with short intervals between the individual attacks, renders the prognosis grave; and yet children sometimes recover after lying in "status convulsivus" for one or two days. Convulsions in which one side appears to be far more affected than the other are much more apt to be fatal than those in which the difference between the two sides is not so marked. A fatal termination, as well as a repetition of attacks of eclampsia, will often depend upon our inability to remove the cause which lies at the root of the derangement of the nervous centres. An attack of eclampsia may be repeated either within a short time after the original attack, and is then probably due to the same cause as the original convulsion; or after the lapse of weeks and months, and must then be studied with reference to its etiology as an entirely new seizure. If after an eclamptic seizure a child recovers completely and returns to its normal condition, and especially if the cause of the convulsion has been surmised and removed, the prognosis is good, the convulsion will probably not recur; it is best, however, even in these cases, to be guarded and prepare the patient and friends for a recurrence, rather than the contrary. In the large majority of cases, however, and above all in those cases in which the cause of the convulsion cannot be removed or is unknown, the convulsion is apt to be repeated; the more frequently the convulsion is repeated during a limited period of time, the more unfavorable the prognosis as to recovery. The convulsions are more apt to be multiple in the peripheral and toxic variety of eclampsia than in the febrile. The reason of this is obvious, inasmuch as fever is a condition which, temporarily at least, may be removed, while the former two do not so readily admit of treatment. A child that has already had attacks of eclampsia is far more liable to repeated returns of convulsions, under the influence of proper exciting causes, than one that has never had a convulsion. In the former case the nervous system has already shown its instability, and hence our distrust. In conclusion I would repeat, the prognosis depends to a great extent upon our ability to recognize and treat the cause. In rachitic eclampsia, while the rachitic disease is on the increase, the liability to eclampsia is on the increase. When the rachitis is cured, the eclamptic attacks as a rule no longer recur.

Treatment.—In discussing the treatment of eclampsia infantum, we would repeat what has been urged concerning the necessity of a careful differential diagnosis as to the etiology of the convulsion. We should distinguish whether the convulsion belongs to the febrile, the toxic, or the peripheral group of convulsions. If it belongs to the former, the abnormally elevated temperature should be reduced as speedily as possible. For this purpose rapid and certain means should be employed. Cold sheets, sponging with equal parts of cold water and alcohol dilutus, cold baths, Ziemssen's baths—all of these are excellent methods of reducing the temperature by external means, and our choice should be governed by general principles. Among antipyretic drugs, the best, most trustworthy, and most rapid antipyretic is antipyrin, in proper doses and at proper intervals. I am accustomed to give to children, a year old, gr. v. every hour until two doses have been taken, and to repeat the dose in six hours if the temperature shows a tendency to rise again. The object being to reduce temperature, the drug must be used in sufficient quantity to effect our purpose. If the convulsion be of the toxic variety, the indication is as far as possible to get rid of, or diminish, the toxæmia of the blood; the kidneys, the bowels, and the skin, all the excretory channels, should be brought into play. An enema, together with a cathartic, should be administered; a mustard bath should be given to produce sweating and to make the skin act vicariously for the kidneys; should these organs be at fault diuretics should be administered if not contraindicated by the general disease. Should the convulsion depend upon a peripheral irritant, it must, if possible, be removed. If the stomach be overloaded, an emetic should be administered; if constipation appears to be the cause, the bowels must be emptied. If dentition is the cause, and the gums are swollen, lancing is indicated; the swelling will thus be diminished, the teeth will be more easily cut through, and the irritation removed; if helminthiasis is at the root of the evil it must be treated. Whatever the peripheral irritant may be, it should be removed. There will be many cases that cannot be classified, which must be treated on general principles. In addition to treating the etiological element in any attack of eclampsia, it has been the custom of physicians to administer a class of drugs known as antispasmodics. The most important of these are the bromides and chloral hydrate, and during the convulsions amyl nitrite and chloroform. The bromides should be given in comparatively large doses to produce a beneficial effect. Thus, I am accustomed to give gr. vi. to gr. viij. every three hours to children one or two years old; even larger doses should be given if necessary until the convulsions cease and sleep is produced. Chloral hydrate may be used in small doses, either alone or in combination with the bromides. I have used the amyl nitrite, a few drops inhaled from a handkerchief during the convulsions, with but little success; I have been unable to convince myself of its utility when thus presented to infants. Should the convulsions be very severe and continue for a long time, chloroforming the little patient may be tried, although in cases severe enough to require this measure the convulsions are apt to return as soon as the effect of the chloroform passes away. In cases in which the bromides must be administered during a convulsion, it is best either to inject the drug per rectum or subcutaneously in solution. When given by the rectum the dose should be at least twice as large. I have always considered the application of cold cloths or ice-bags to the scalp as superfluous in ordinary eclampsia; if they accomplish any good at all it is only in cases in which reduction of temperature is an element in the treatment, and in these cases we have more effective means for accomplishing this result.

For the attack Trousseau advised compression of the carotids, either one or both, until the convulsions subsided. The carotids are compressed opposite the thyroid cartilages, by pressing the artery against the spinal column. The corresponding side of the face thereupon becomes pale and then cyanotic. In most cases the convulsive movements gradually cease and the patient falls asleep. Should the convulsion not cease the compression must be stopped as soon as the cyanosis is extreme. The compression may be repeated at quarter- to half-hour intervals; should it then not succeed in checking the convulsions we should not advise its repetition. In conclusion, it must not be forgotten that, whatever may be the disease of which the convulsion is a symptom, our attention must be mainly directed to the treatment of it, and not to the treatment of the convulsion alone.

Henry W. Berg.

[1] Handb. v. Ziemssen, Bd. xii., ii. Theil, Heft 2, pp. 285–295.
[2] Recherches Cliniques sur l'Eclampsie des Enfants. Arch. Gén. de Méd., 1850, March, May, June.
[3] On the Minute Structure and Functions of the Medulla Oblongata, and on the Causes and Rational Treatment of Epilepsy. New Sydenham Soc. Translation, London, 1859.
[4] Die Ursachen der cerebralen Symptome bei der sogenannten Gehirn-Pneumonie. Jahrb. für Kinderheilkunde, 1869.
[5] Soltmann, in Gerhard's Handb. für Kinderkrankheiten.
[6] Beiträge zur Kinderkrank., 1868.
[7] Hunter: Lancet, 1875, vol. i., No. 2.
[8] Dubrisay: L'Univers Médical, 1876 (98–100).
[9] Zur Lehre von den Zahnfraisen. Wien. med. Presse, v., 1876, Nos. 13–16.
[10] Ueber die der Dentition zugeschriebenen Krankheiten, etc. Wien. med. Wochenschrift, 1874 (47–51).
[11] Jacobi: Masturbation and Hysteria in Children. New York, 1876.
[12] Steiner: Die Ursachen der cerebralen Symptome bei Gehirn-Pneumonie. Jahrb. für Kinderheilkunde.
[13] Henoch: Cerebral Symptoms of Whooping-cough. Charité Annal., 1874, i.
[14] Bouchut: Encéphalopathie albuminurique avec l'Eclampsie. Gaz. des Hôp., 1871, Nos. 53–54; also 1875, No. 78.
[15] R. Demme: Zur Kenntniss und Behandlung der chronischen Eclampsie und Epilepsie. Jahrb. für Kinderh., viii., 113, 1875.
[16] E. C. Seguin: The Early Diagnosis of Epilepsy.
[17] H. W. Berg: Etiology of Congenital Talipes Equino-varus. Archives of Medicine, December, 1882.
[18] Reynolds: System of Medicine, American edition, p. 777.
[19] H. W. Berg: Pathology of Eclampsia Infantum. American Medico-Surgical Bulletin, July 15th, 1894.

ECPHYMA GLOBULUS.—A name given to a contagious skin disease that manifested itself in Ireland during the famine years of 1847–48 and called by the Irish peasantry "Button Scurvy." Frazer, who described the disease, thought that it resembled frambœsia or yaws of the West Indies. It seems practically to have died out. The eruption, according to Frazer, occurred on any part of the body except the hands and feet, the lesions starting as slight elevations or tubercles. In this stage the skin over the lesions is perfectly normal. Increasing slowly in size the tubercles become discolored, gradually soften, finally forming prominent deep-red tumors looking like raspberries though considerably larger. These persist for an indefinite length of time unless treated, but the free use of nitrate of silver causes them soon to heal.

Charles Townshend Dade.

ECTHYMA.—This form of pustulosis of the skin is not, strictly speaking, a disease separate and distinct. It is rather a secondary or consecutive lesion occurring in many and varied disorders, in which the clinical type remains fairly constant. A predilection is displayed in most cases for the extremities, the lower in particular, but the trunk and neck are often attacked.

In the beginning there is a small pustule which generally takes a rounded outline, although the character of the local injury may give it an unusual appearance; for example, linear in infected scratch marks. When fully developed, the pustule, tense or flaccid, is seated on an indurated base whose redness fades gradually into the surrounding skin. The purulent contents soon dry into a thick, dark crust, adherent, and showing on removal a superficial ulceration of the corium. The base of the ulcer is uneven, due to indolent granulation tissue and of a red or grayish color from the presence of pus. In syphilis, the crust of ecthyma becomes stratified (rupial) like the shells of crustacea, due to spreading of the lesion under its dried cover. The ulcer heals slowly and with the formation of a small scar, which is always evident when the patient is afterward stripped for examination. Development is rather slow, but the individual pustule usually runs its course in a fortnight. It may be single or be accompanied by others, developed either coincidentally or appearing in successive crops. Subjective symptoms are those of burning and pain; itching, if present, is due to previous disease.

Ecthyma gangrænosum may be separated from the mass of ecthyma and given a definite place on account of its etiology and its occurrence in young, cachectic children. The lesions are apt to appear on the buttocks, thighs, and perineum and are extremely indolent. The ulcers are of a deep red color and covered by a dirty, tenacious slough, varying in size up to that of a silver quarter of a dollar. The earliest lesion observed is a brown or dark-red discoloration, which soon becomes necrotic. In Kreibich's case there were twenty-five or thirty ulcers at one time.

Etiology.—As in other conditions, especially those of a purulent character, three factors determine an outbreak of ecthyma: first, a depraved state of health, second, a point of entrance of diminished resistance for (third) the invading organism. The disease attacks all ages and both sexes, but is more common in adult males. Lowered vitality may simply, as in vagabonds, result from insufficient nourishment, but it may be a part of infections like syphilis and tuberculosis (scrofuloderms of Duhring), or of diabetes, Bright's disease, and anæmia. The injury to the tissues is most often due to scratching commonly of louse, bedbug, and flea bites, but also in the course of the pruritus of eczema, diabetes, dermatitis herpetiformis, and senile pruritus. Localization of specific morbid products furnishes a portal of entry doubtless in the granulomata, syphilis, and tuberculosis. The invading organism is in most cases the streptococcus, inoculated by dirty finger nails, clothes, and bedclothes. The other pus cocci of course may be present. The Bacillus pyocyaneus seems to be responsible for ecthyma gangrænosum—I say seems, because it is quite possible that it is inoculated in ulcers perhaps due to another organism, from alvine discharges. At any rate, it has been regularly found by such men as Ehlers, Baginsky, and Kreibich. The infants are invariably cachectic.

Histopathology.—The pathological process begins in the corium in the form of a circumscribed area of purulent inflammation. The cellular infiltration is chiefly of polynuclear leucocytes, the vessels are dilated and congested, and the tissue elements at the periphery are separated by a serous exudate. Later, a central necrosis occurs with complete solution of fibres, vessels, and skin appendages in its area. The epithelium covering the pus collection is much swollen, owing to an intracellular as well as an intercellular œdema. Many of the cells show hydropic degeneration. By specific staining, a network of fibrin can be demonstrated at the centre. The crust is composed of fibrin filaments in whose meshes are entangled epithelial cells and leucocytes; when it separates there is left an ulceration which extends into the cutis and which heals by the usual process of granulation and scar formation. Slight pigmentation may persist for a little time.

Diagnosis.—Differentiation of ecthyma from other pyodermias is a matter of small importance as compared with recognition of the underlying condition. Impetigo contagiosa is superficial with a "stuck-on" crust which leaves on removal no ulceration; pustular eczema is a diffuse process with no epidermal destruction; furuncles show unmistakable necrotic plugs. The ecthyma of syphilis has an indurated base, its crust commonly takes on a rupial character, and the ulceration is apt to be characteristically reniform. In the absence of external factors, careful search for a causative systemic condition—such as anæmia, cachexia, and, too often, starvation—must be made. When the skin shows excoriations and no pediculi or other parasites are to be found, it becomes necessary to decide which of the itching dermatoses is at fault,—an eczema, an urticaria, a pruritus, or a dermatitis herpetiformis.

Prognosis.—The outlook is invariably good so far as ecthyma itself is concerned, but on recovery from the pyodermic condition the prognosis becomes that of the causative, underlying disease. Ecthyma gangrænosum is always a grave condition, merely, however, as a sign of deep systemic depression.

Treatment.—Soap and water, good food and tonics constitute all that is really necessary. Even the pustular syphiloderm and scrofuloderm will get well with them

alone, but the cure may, it is hardly necessary to remark, be hastened by appropriate local measures. In vagabonds' disease, the clothes and bedclothes should be boiled to kill lice and, if possible, the patient should be changed to a clean bed. After a preliminary bath, the crusts may be softened by sweet oil, boric-acid poultices or ointment, and removed. The bases of the ulcers are cleaned with hydrogen peroxide and covered by antiseptic surgical dressings. Gauze soaked in fifty-per-cent. ichthyol in watery solution is admirable for the purpose since it never starts a dermatitis of its own. The solid stick of silver nitrate is used to restrain exuberant granulations. In dispensary practice where elaborate dressings are usually out of the question, ecthyma heals readily under inunction with ten-per-cent. sulphur ointment, but its use must be stopped before it excites a reaction in the skin. Treatment of underlying cachexias must be left for consideration in their proper places.

James C. Johnston.

ECTODERM.—The ectoderm is the outermost layer of cells in the embryo, or outer germ layer. It is called ectoblast by some German, and epiblast by some English writers. The cells early arrange themselves so as to form a distinct epithelium; in the median line of the embryo the cells become thickened and give rise to the so-called medullary groove, out of which the nervous system is developed, these median cells becoming entirely separated from the rest of the ectoderm, which thus becomes the embryonic epidermis. The epidermal ectoderm develops all the epidermal structures of the adult, and also gives rise to the epithelium of the auditory labyrinth and to the lens of the eye, as described in the special embryological articles.

Charles S. Minot.

ECZEMA.—(Synonyms: Ger., *Eczem;* Fr., *Eczéma;* Tetter; Salt rheum.)

Definition.—Eczema is an acute or chronic inflammatory disease, presenting a most varied assortment of cutaneous lesions, and accompanied by more or less intense itching, burning, or pain. The lesions consist, at first, of erythema, papules, vesicles, or pustules, which may subsequently form into crusts or weeping surfaces, or infiltrated and scaly patches.

General Symptomatology.—All eczemas possess certain characteristics and are associated with definite general symptoms which may be briefly referred to before taking up the study of the disease in its various phases. Eczema is distinctly an inflammatory affection, and as such manifests, in some degree or modification, the cardinal symptoms of that process. These are: (1) congestion, with swelling and increase of local temperature; (2) fluid exudation into the tissues, with the formation of vesicles and pustules, or with a discharge upon the surface, resulting in crusts and scales; (3) plastic exudation, producing papules, patches of infiltration, and thickening; and (4) subjective sensations of itching, smarting, or burning pain.

The character and intensity of these various symptoms will depend upon the acuteness or chronicity of the inflammation, upon the locality affected or the extent of territory involved, upon the inherent temperament or peculiarities of the individual, and upon his habits of diet, the nature of his occupation, etc.

(1) *Erythema.*—The erythema may vary from the bright red blush which is seen in the acute forms of the disease to the dull redness commonly observed in the more chronic erythematous varieties. The amount of swelling accompanying it is a varying quantity, dependent generally upon the acuteness of the inflammation. An increase of local temperature is always appreciable, more marked in the acute than in the chronic forms, but is never a very decided symptom, such as that accompanying some other inflammatory affections, *e.g.*, erysipelas.

(2) *Serous Exudation.*—Exudation is a part of every eczematous process, the form of lesion produced thereby being determined by the various influences already enumerated. Fluid exudate will produce swelling, vesicles, and pustules, and when rupture occurs there will be a weeping, moist surface which dries into crusts and scales. The crusts are often thrown off rapidly, leaving a more or less continuously weeping or moist patch, or areas of greater or less extent. This discharge has the peculiarity of stiffening linen with which it comes in contact.

(3) *Plastic Exudation.*—When the exudation is plastic, papules and dry scaly patches result, the scales being either fine and branny or they become agglutinated into larger flakes, which are sometimes quite thick. The former are usually seen in the erythematous type of the disease, commonly found upon the face, or in the dry scaly eczema of the scalp; while the latter are observed chiefly in connection with chronic squamous eczema. Infiltration is present in every form of the disease, but it is only in the more chronic forms, where the exudation takes place deep in the corium, that the thickening and infiltration so characteristic of the disease are found. When not too great it can be fully appreciated by pinching alternately the healthy and the diseased skin; but in some inveterate cases the skin is so densely infiltrated that it cannot be pinched up. If it is so situated that the natural movements of the part subject the infiltrated skin to stretching, very painful fissures and excoriations are produced, which are often very difficult to heal.

(4) *Itching, etc.*—The subjective symptoms of eczema are perhaps the most important of any, both on account of the great distress they cause and the influence they exert in keeping up the disease. These symptoms vary greatly in the different cases and in the different forms of the disease, and even at different times in the same individual. In some cases there is merely a slight tingling or pricking sensation, or feeling of formication, while in the other extreme there may be most intense itching, which can be relieved only by deep and continuous scratching with the nails until a bleeding or oozing surface is produced. Between these two extremes various degrees of irritation are experienced. Sometimes, as in the acute and erythematous forms, smarting or burning is alone complained of. In other cases this amounts to a burning pain, without any itching or desire to scratch. The itching of eczema is, as a rule, paroxysmal or intermittent in character, aggravated generally by exposure to the air, and is invariably worse at night. Its character and intensity are likewise affected by the influences already mentioned, as having a bearing upon the general symptoms of eczema. Besides the itching or some of its modifications just enumerated, certain patients exhibit a most marked hyperæsthesia of the skin, particularly upon exposure to the air or the slightest contact of the clothing, and when certain remedies are applied to the skin.

In addition to the symptoms just described, certain characteristics in the course and evolution of the disease are common to all cases of eczema. The clinical picture varies from day to day, and in some cases, especially in children and infants, from hour to hour. Not only rapid changes in the severity of the process are to be expected, but the type of the eruption itself may change in a very short period of time. The reason for this will be apparent when we come to consider the various causes of the disease. Eczema either runs an acute course, remaining for a few weeks or a month when recovery takes place; or, as more commonly happens, it becomes chronic and may last for years or for a lifetime. It may be limited to only one region of the body or of an extremity, but more frequently it occurs in several localities, and generally in a symmetrical manner. Often the disease is more or less general in its distribution, and in rare instances it becomes universal. Its general tendency in every case is to progress, and spontaneous recovery is not to be looked for. No matter how severe or protracted the disease may be, there are usually no constitutional symptoms, although in the worst cases some impairment of the general health is manifested as a result of the persistent loss of sleep and prolonged suffering.

Eczema is so varied in its manifestations and so protean in character that to give a comprehensive clinical picture of the disease would obviously be impossible. It is necessary, therefore, in the further study of its symptomatology, to consider separately the various types of eruption which make up the symptom-complex of the affection. While this is essential for a clear understanding of the disease as a whole, it must not be forgotten that the several types about to be discussed rarely occur clinically in a distinct or pure form, but are often mingled one with another, or follow one another in rapid succession. This frequent and often very rapid change in the severity of the process and in the type of lesion has already been referred to as one of the chief characteristics of the disease.

For convenience of description the subject is divided in the following manner:

(A) Types of the eruption dependent upon the predominant, primary, anatomical lesion, namely, *eczema erythematosum, eczema papulosum, eczema vesiculosum,* and *eczema pustulosum.*

(B) Types dependent upon secondary changes in the preceding, namely, *eczema rubrum* or *madidans, eczema squamosum, eczema sclerosum, eczema verrucosum,* and *eczema fissum,* and

(C) Types dependent upon the stage or character of the inflammatory process, namely, *eczema acutum* and *eczema chronicum.*

The symptomatology, diagnosis, and treatment of the other special varieties of the disease, namely, *eczema infantilis, eczema parasiticum, eczema seborrhoicum,* and the regional forms of eczema will be considered separately.

A. Eczema Erythematosum.—This type of the disease occurs in its most characteristic form upon the face in middle-aged or elderly people, though it may affect any part of the body. It generally begins in small, irregularly shaped patches, of a more or less bright red color, which coalesce into larger areas. The face, however, may be acutely suffused, in which case there is considerable œdema, with closing of the lids and marked temporary disfigurement. When the affection is acute, after a few hours tiny vesicles develop upon the erythematous surface and some moisture or oozing is produced by the rubbing, which is resorted to in consequence of the itching. In the subacute form the color is a dull red, and slight scaling is to be observed, while in the chronic forms considerable thickening of the skin is produced, the natural lines being greatly exaggerated; the color in the more chronic forms varies from a dull red to a purple or brown and the scaling is more abundant. Itching and burning are the chief symptoms complained of, the former being so severe, especially when the disease is chronic, that the eyebrows are sometimes rubbed off in the efforts of the patient to obtain relief. The disease may be of very short duration, or may last for years, with intervals of slight improvement; this form is often spoken of as "*chronic erysipelas.*" Erythematous eczema of the extremities presents characters similar to those upon the face, though the scaling is apt to be more abundant, and here the type readily changes into the squamous form.

When it occurs upon the palms and soles the skin is thickened, red, and swollen, and is accompanied by most intense itching and burning. In the axillæ, beneath and between the breasts, or in the fold of the neck and groins in infants, the disease is of a brighter red color, and a moist oozing surface is produced. This form of eruption constitutes "*eczema intertrigo.*"

Eczema Papulosum.—The papular type of eczema is of very frequent occurrence, and is often one of the most obstinate forms met with. It is characterized by the appearance of firm, dull red, acuminate or rounded, raised papules, varying in size from a mere speck to that of a pin's head. These may develop in a discrete manner, scattered irregularly over the part affected without tendency to grouping, or form here and there into small groups or even coalesce into patches. When located about the hair follicles a lichen-like appearance is presented, and on this account the disease was formerly called "*lichen simplex.*" The number of lesions present at any given time varies considerably. Often they are sparsely distributed, but after a time the itching becomes so intense that new papules develop rapidly in consequence of the severe scratching induced. These are soon capped by a small blood crust or are severely torn, so that serum oozes from their summits. There is perhaps no other variety of eczema in which the itching is such a marked feature.

The disease may remain papular throughout or the papules develop into small vesicles and then into pustules, or become associated with other vesicular or pustular lesions. When they are grouped, or become more or less confluent, weeping patches with infiltration and crusting may form as a result of vigorous scratching. Sometimes the lesions present the flat character of those seen in lichen planus, and the color being dull red or purplish, mistakes in diagnosis are not uncommon. This form of papule generally occurs about the neck and flexor surfaces of the wrists, both common sites for lichen planus.

The life history of any individual lesion or group of lesions is extremely variable. The same papule may remain almost unchanged for weeks or may disappear quickly, only to be replaced by others in rapid succession. Sometimes a single small patch or several patches, without any other manifestation, will affect some particular location and resist the most careful treatment for long periods of time.

The distribution of the eruption is of considerable importance, particularly as regards diagnosis. The trunk, especially the back and buttocks, and the flexor surfaces of the arms, forearms, thighs, and legs are the regions generally affected. It rarely occurs upon the face, hands, or feet. The disease is more common in adults than in children or infants, the liability being about the same for both sexes.

Eczema Vesiculosum.—Vesicular eczema pure and simple is perhaps less commonly observed than any other type of the disease. It is essentially an acute process and speedily changes into some other form, or is associated with some more chronic variety. The attack is always preceded by tingling, pricking, or itching sensations, which are soon followed by a punctate or diffuse erythema, with more or less swelling of the tissues. After a few hours a number of tiny vesicles appear upon the reddened surface, which vary in size from a pin's point to a pin's head. These are pearly and transparent and have a very thin covering of epidermis. In some localities, as between the fingers and toes, and on their flexor surfaces, or on the palms and soles, which are the most common sites of the eruption, the erythematous stage is often wanting, the lesions appearing as minute transparent globules embedded in the skin. There is generally no tendency to grouping of the vesicles in this type of the disease, though they are closely packed together and sometimes even coalesce. In a very short time, even after the lapse of only a few hours, they either rupture spontaneously or are broken by the patient in scratching. Much relief from the itching is now experienced, but this symptom is quickly replaced by smarting or burning. The contents of the vesicles soon moisten the affected part, which is kept more or less wet by the oozing of serum from the vessels beneath, or is converted into a moist crusted patch. The serous crusts which form are of a characteristic yellowish color, and are never very thick. In some cases the crusts are continually washed away or are removed by contact with the clothing, leaving a red, angry, oozing surface, being thus converted into an "*eczema rubrum*" or "*eczema madidans.*" At other times the weeping diminishes and a scaly, red, infiltrated patch results, "*eczema squamosum.*" Under appropriate treatment, however, neither of these secondary forms develops, but resolution takes place by a gradual subsidence of all the symptoms. New vesicles cease to appear, the oozing becomes less and less, the surface heals beneath the crusts, and there is left a sensitive,