



J. CLARK, M.D.

A

PRACTICAL SYNOPSIS,

OF

CUTANEOUS DISEASES,

FROM THE

MOST CELEBRATED AUTHORS,

AND PARTICULARLY

FROM DOCUMENTS AFFORDED

BY THE

CLINICAL LECTURES

OF

DR. BIETT

PHYSICIAN TO THE HOSPITAL OF ST. LOUIS, PARIS.

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TRANSLATED FROM THE FRENCH, WITH NOTES.

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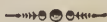
“A Practical Synopsis of Cutaneous Diseases, from the most celebrated authors, and particularly from documents afforded by the Clinical Lectures of Dr. Biett, Physician to the Hospital of St. Louis, Paris. By A. Cazenave, M. D. &c. and H. E. Schedel, M. D. &c. Translated from the French, with Notes.”

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D. CALDWELL,
Clerk of the Eastern District of Pennsylvania.



INTRODUCTION.



THERE are no diseases that have been, and still continue to be involved in so much obscurity, as those which constitute cutaneous pathology. This appears the more extraordinary, as there is no part of the system whose phenomena are more readily observable, for they manifest themselves in characters constantly appreciable to the sight, and moreover, are so frequent that they are every moment presented to the observation: but is it not this very frequency and the facility with which their existence is verified, one great cause of the confusion which has reigned among this class of diseases? Here, as in many other parts of medicine, the multiplicity of facts has only tended to encumber the science—can it be otherwise, when the same diseases observed at different stages are described as dissimilar affections, according to the classification to which they were subjected, classifications in themselves defective and vicious; or are thrown together without order or any attempt to group them.

To give some idea of the obscurity that has necessarily resulted from the application of the same term to different diseases, the word *lepra* given to a multitude of cutaneous affections, has been used for centuries without carrying with it any precise meaning. At one time it is a tubercular disease, (*elephantiasis of the Greeks;*) at another, it is an affection in which, rigorously speaking, the skin does not participate, at least at the commencement, and which is constituted by a considerable swelling of the subcutaneous cellular tissue, (*elephantiasis of the Arabs;*) now, it is a squamous inflammation, (*dartre furfuracée arrondie,*) or even a union of different diseases, (*eczema, psoriasis, lichen,*) which were all received in the Leper Hospital in Paris, in the twelfth century, a hospital which, in 1600, or even later, was still devoted

to the same purpose. Or, to choose a more recent example; at the present time what vague ideas are conveyed by the word *dartre*, and yet we find it constantly employed by medical writers; they even attempt to define it as if the word *dartre* was not itself devoid of meaning, or signified any thing more than disease of the skin, or eruption, of which it is a synonyme.

The want of classification, and latterly their faultiness, have also powerfully contributed to throw much obscurity on the important study of diseases of the skin. Nevertheless, in the seventeenth, towards the end of the eighteenth, and commencement of the nineteenth century, several authors have attempted to collect and arrange the various forms under which these diseases appear; they have formed groups of them, and somewhat enlightened this important branch of pathology. All these classifications may be reduced to three divisions.

Mercuriali, 1623, *Turner*, 1736, *Alibert*, 1806.—One to which Alibert has attached his name of late years, was introduced by Mercuriali, and afterwards adopted by Turner. Its fundamental principle is to divide the diseases of the skin into two great groups, as they manifest themselves on the head or body. But this learned professor, in adopting these distinctions, and giving the name of *teignes* to eruptions on the head, and *dartres* to those of other parts, is not content with these primary divisions, he has created species and varieties; hence, there was a necessity for distinctive characters. These he found either in the products of the inflammation, in its different states, in differences of form, &c. Thus, if he met an eruption, accompanied by a scaly exfoliation, he arranged it as *dartre squammeuse*, adding the term humid, orbicular, &c. according as it was habitually attended by an exudation of a fluid, or that it assumed the form of a circle or ring. Whenever he met with scabs, (*croutcs*,) he grouped this disease around a common species, to which he gave the name of *dartre crustacee*, &c. Finally, he made a multitude of different sections for those diseases which he could not arrange

in the other orders. Thus, independently of the *teignes*, of which he described six; of *dartre*, of which he admits seven species, he also gives the history of the *pliques*, *ephelides*, *cancrioides*, *lepres*, *pians*, *ichthyoses*, *syphylides*, *scrophules*, and *psorides*. This plan, vast as it is, has been skilfully followed up by this learned pathologist, but is far from being exempt from censure, and is not perhaps a certain guide in studying the cutaneous diseases. In fact, the reproach that has been cast on Mercuriali and Turner for having separated identical diseases, because they had a different seat, is equally applicable to Alibert, as he has adopted their distinctions as the basis of his plan; and this attack is the better founded, as there is not perhaps a single eruption that has so special a seat, that it is never to be met with in other parts, and with similar characters. But besides, in grouping diseases according to the products of the inflammation, this illustrious professor has incurred the risk of uniting dissimilar affections, and separating those which are analogous; this, in fact, has happened; we find under the generic term of *dartre squammeuse*, inflammations wholly distinct in their elements, in their course, and symptoms, and the mode of treatment they require. Certainly no exact idea can be formed of *dartre squammeuse lichenoides* and *dartre squammeuse humide*, when they are grouped in a common order, and the same characters assigned to them in *dartre squammeuse humide* itself, taken separately, but one certain period of inflammation can be seen, which may, however, assume different elementary forms, and constitute a disease which it is very important to distinguish. On the other hand, we find in this classification, eruptions which are precisely similar, ranged as different species. Thus the *dartre furfuracee arrondie* is so analogous in every respect to the *dartre squammeuse lichenoides*, that it has the same symptoms, follows the same course, requires the same treatment, and only differs from the latter in the form of its spots, which should at the most constitute a variety. Notwithstanding these defects of classification, defects inherent in the subject, the work of Alibert is a precious and lasting monument.

from the light it has contributed to shed on this class of diseases, from the energy of his style, and the truth of his descriptions; and if we were to attempt to answer the censures bestowed on him by a foreign author, we should only point out the history he has given us of the *dartre rongeante*, of the *syphilides*, &c. which attest in the highest degree the merit of this learned pathologist.

Plenck, 1796, Willan, 1798. Another classification predicated on a different basis, was established by Plenck, and perfected by Willan. The first rejecting all topographical division, classed diseases of the skin by their external characters; but with the true anatomical lesions he arranged the products of inflammation, and among the fourteen classes he adopted, are seen distinct sections based on scabs and ulcers, ranged with those constituted of vesicles and pustules, as if these ulcers and scabs are not consecutive symptoms, and succeed pustules, &c.; the consequences were inevitable, that of making two or three different affections from the same disease, according as it existed in a pustular, crustaceous, or ulcerous state.

Willan adopted this ground-work, and established a classification, which, if it is not exempt from errors, is at least, in the actual condition of our knowledge, that which presents the most clearness, precision, and exactness in the study of diseases of the skin. He rejected all products of inflammation, and only adopted as the characters of his orders, elementary lesions strictly speaking, of these he gives eight. 1. Papulæ. 2. Squammæ. 3. Exanthemata. 4. Bullæ. 5. Vesiculæ. 6. Pustulæ. 7. Tubercula. 8. Maculæ. One of these, it is true, (Squammæ,) is founded on a product of inflammation, rather than an elementary lesion; but the characters which constitute it are so well defined, and belong so exclusively to the diseases he has placed in it, that they form as distinct a group as the other orders. Hence this classification taken generally presents the greatest exactness. But, if we descend to details, we perceive that it leaves something to be desired, even without adverting

to the errors which are only vicious applications, and do not detract from the utility of the plan, we mean placing *purpura* in the exanthemata, *erysipelas* in the bullæ, *scabies* in the pustular, *acne sicosis menti*, (mentagre,) in the tubercula. It is singular to find diseases so widely different in their nature and course thus associated, because their elementary lesions were similar to a certain point; *variola* for instance with *impetigo*; but nature will not thus lend herself to artificial divisions. Thus there is often but a slight shade of difference between a vesicle and a pustule; the bulla in *Rupia* approaches in one of its varieties to the phlysaceous pustule of *Ecthyma*. But there are many diseases which cannot be arranged in the eight orders of Willan. *Purpura*, for instance, is equally dissimilar to the exanthemata as to the squammæ or vesiculæ; *lupus* is not always a tubercular disease, &c. But notwithstanding these imperfections, the classification of Willan certainly offers much facility and precision, and this arises from its being based on the principles of the diseases themselves; principles which are invariable, and may be always recognised at every stage of the eruption.

Retz, 1790, *Derien*, 1894. *I. Franck*, 1821. A third classification, which would present many advantages if it were only applicable, is that of *I. Franck*, who, following those of *Retz* and *Darien*, has divided diseases of the skin into acute and chronic. This distinction appears at the first view to be natural, and it seems proper to separate *Rubeola* from *Psoriasis*, *Scabies* from *Prurigo*, but on a closer inspection it will be perceived that the plan is impracticable. How can we in fact divide a work into two parts, in one of which is given the description of a disease in an acute form, whilst the account of it in a chronic condition is contained in the other, or even admit with *Franck* that such an eruption is always acute, and another always chronic; this may be true as regards a few, but is not applicable to the majority, and particularly those which this author considers as always being in the latter state. Hence these distinctions which are of the highest importance in particular description, cannot form the basis of a general classification.

Such are the three principal methods by which diseases of the skin have been arranged. As may be perceived, neither of them presents sufficient precision or clearness to preclude our wishing for a better; but it is in the very subject matter of these classifications that we must look for the cause of their imperfections. In fact, this class of diseases is presented to us, in characters appreciable by the sight, but the tissues in which they have their seat are not yet sufficiently well known to enable us to establish precise and durable divisions on them. It may be said indeed, that the only classification of diseases of the skin, which will be exempt from faults, will be that, which has for its base the special seat of each alimentary lesion, and so long as the anatomy of the dermoid system shall remain in its present state, shall we be deficient in a perfect classification of the cutaneous affections.

S. Plumbe, 1824. In the actual state of our knowledge, it is vain and illusory to attempt to arrange these numerous diseases by the causes which produce them. Mr. Plumbe, who has adopted this classification in a recent work, has rather added new obstacles to those already existing in this branch of pathology, if a work undertaken on such a plan can exercise any influence on the science.

We have adopted among these different methods that which appeared to us as most favourable to the study of cutaneous diseases, and have selected that of Willan, with the modifications introduced by M. Biett. Wherever the classification of Alibert agrees with that of the English pathologist, we have endeavoured to present both, and have always at the head of each chapter succinctly indicated the principal analogous divisions admitted by the learned French author.

We have classed the diseases of the skin, as may be seen by the following table, by their external characters, and their elementary lesions, referring to as many different chapters, those which it appeared to us could not be arranged in any of the eight principal orders.

Order in which the Diseases of the Skin are classed and described.

Order I.	EXANTHEMATA.	Porrico.
	Erythema.	Order V. PAPULÆ.
	Erysipelas.	Lichen.
	Roseola.	Prurigo.
	Rubeola.	Order VI. SQUAMMÆ.
	Scarlatina.	Lepra.
	Urticaria.	Psoriasis.
Order II.	VESICULÆ.	Pytirisias.
	Miliaria.	Icthyosis.
	Varicella.	Order VII. TUBERCULA.
	Eczema.	Elephantiasis.
	Herpes.	Græcorum.
	Scabies.	Molluscum.
Order III.	BULLÆ.	Frambœsia.
	Pemphigus.	Order VIII. MACULÆ.
	Rupia.	<i>Discolorations.</i>
Order IV.	PUSTULÆ.	Bronze colour.
	Variola.	Ephelis.
	Vaccinia.	Nœvus.
	Ecthyma.	<i>Decolorations.</i>
	Impetigo.	Albinism.
	Acne.	Vitiligo.
	Mentagra.	

Diseases which cannot from their nature be arranged with the above.

Order IX.	LUPUS.
Order X.	PELLAGRA.
Order XI.	SYPHILITICA.
Order XII.	PURPURA.
Order XIII.	ELEPHANTIASIS OF THE ARABS.
Order XIV.	DISEASES OF THE SEBACEOUS FOLLICLES.
Order XV.	KELOIDE.

The diseases of the skin, as may be seen in the above plan, may be generally referred to a certain number of elementary lesions. These lesions are constant in all the eruptions of each order. In whatever form, at whatever stage, cutaneous inflammation is observed, these may be always seen either combined or unaltered, but always recognisable with a little attention, either on the diseased surface itself or in its immediate vicinity. All appear with particular characters, all have an individuality very important to study, and it is because they have been misunderstood that we see the word pimple constantly employed, a term devoid of precision or meaning, or else the word pustule has been applied to a multitude of different eruptions.

Exanthematous diseases, (*exanthemata*.) By this term is meant spots of different degrees of redness, of various forms and extent, disappearing under the pressure of the finger, and terminating by retrocession, resolution, or desquamation.

Vesicular diseases, (*vesiculæ*.) By vesicles are to be understood small elevations* of the epidermis, formed by the collection of a serous and transparent fluid, which, under certain circumstances, may become opaque, or even sero-purulent. The absorption of the secreted fluid, a slight exfoliation, or what is more frequent, excoriations, or small and very thin crusts, may succeed to vesicles.

Bullar diseases, (*Bullæ*.) These diseases only differ from the preceding in their size, which is much greater; they are small superficial tumours, formed by a serous fluid effused under the epidermis.

Pustular diseases. (*Pustulæ*.) This denomination may be exclusively applied to purulent collections, formed on the surface of an inflamed mucous tissue. The fluid they contain gives rise to incrustations of different thicknesses. They leave either chronic indurations, ulcerations, or only red inflamed surfaces, sometimes slightly excoriated.

Papular diseases. (*Papulæ*.) Papulæ are well-defined, solid, firm elevations, not containing a fluid, only susceptible

of ulcerating at their apex, but generally terminating by resolution or a branny exfoliation.

Scaly diseases. (*Squamæ.*) By this term is meant scales or lamellæ of altered cuticle, generally thickened, dry, white and friable, originating from small papular elevations, which are more or less red and inflamed. These become detached, and are reproduced for an indefinite time by successive exfoliations.

Tubercular diseases. (*Tubercula.*) By tubercles are to be understood, small, hard tumours, more or less elevated, circumscribed and permanent, which may ulcerate at their summit and partially suppurate. Tubercles are here considered as primary diseases, and not having been preceded by any purulent collection.

Spots. (*Maculæ.*) Maculæ are permanent discolorations or decolorations of either a part or of the whole of the skin, and which are uncombined with any general derangement of the system.

In these orders we have been able to arrange a majority of the cutaneous diseases, which thus grouped present strong analogies with each other, especially in form. We have thought it proper to make some changes in the arrangement of species. Thus *pemphigus* and *pompholix* appear to us to constitute one and the same disease. *Acne* is evidently not a tubercular disease, hence we have arranged it with the pustules, this being its true nature. *Erysipelas* certainly belongs to the exanthematous, and *scabies* to the vesicular diseases, and we have accordingly so placed them. As to the diseases that form the seven last orders, they cannot, for the most part, be enrolled in any of the sections, as their elementary lesions are different, and because they are developed under a particular influence, and with symptoms *sui generis*: hence we have preferred to make separate orders of them.

It should not excite surprise that no mention is here made of a multitude of diseases, which are described in a recent work, such as anthrax, burns, cyanosis, &c. all foreign to the subject. In the first place, the plan of this work would not

admit of it, and besides we were apprehensive of being thought to have unnecessarily increased its size in thus accumulating a crowd of diseases, which, in fact, are as much misplaced in a complete treatise as in a practical abridgment. There is no reason why fistulas and wounds, which are as much in the province of cutaneous pathology as anthrax, which belongs exclusively to the subcutaneous cellular tissue, should not be also given.

The particular symptoms of the various diseases of the skin may be complicated with each other, and several different primary affections are often to be met with on the same individual, particularly in acute eruptions. They are also frequently accompanied with general symptoms, and particularly with those which indicate some degree of irritation in the mucous membranes of the respiratory organs, and still oftener of the digestive apparatus. A great number of eruptions follow a chronic course, and last months and years without being complicated with any general disorder or internal derangement.

The cutaneous affections are susceptible of a multitude of modifications, not only in their progress and their colour, but also their termination, according to the constitution and age of the patients, the state of health they may be in, and the combination with internal inflammation. Thus it is very common under the influence of an accidental gastro-intestinal irritation, to see an eruption, even of a chronic nature, and which has lasted for several months, fade, and sometimes gradually diminish and wholly disappear, and again appear and slowly increase as the patient becomes convalescent. It is a common observation in such cases, that "the eruption has struck in, and has fallen on some important organ," thus taking the effect for the cause. Although the internal inflammation evidently preceded the disappearance of the eruption, the return of this latter takes place but slowly, even when the organs which had been the seat of the inflammation no longer present morbid phenomena. Without here wishing to decide on the question of retrocessions, at least in diseases of the skin, it must be allowed that these often occur, and if they are not always

explainable, or if the disposition of the eruption appears sometimes to coincide with the development of internal inflammation, these cases are rare, and prove nothing; for it is well known that an organ may be diseased and inflamed for some days before it produces any appreciable morbid symptom. Why then search for forced explanations, when physiology offers those which are natural. Diseases of the skin may develop themselves under a multitude of different causes, and their etiology is not one of the least obscure points of their history.

Some evidently manifest themselves from direct causes, which in a majority of cases are appreciable. For instance, the influence of stimulating applications, of certain professions and conditions of the body, cannot be denied. Thus it is not uncommon to see a vesicular or vesiculo-pustular eruption after blisters, frictions, or irritating lotions; they are also frequently seen in those who constantly work among pulverulent substances, or who are exposed to a great heat. Several of the exanthematous eruptions may arise from irritating substances applied to the skin: *prurigo* may take place from uncleanness, &c. &c.

But although a certain number of eruptions may occur from direct causes, care must be observed not to localise them in a general manner; for, on the other hand, it often happens that the cutaneous affections are united in a certain degree with some derangement of the system, or alteration of some internal organ. Thus chronic *pemphigus* occurs most frequently in old age, in the midst of misery and privations; *erythema*, *acne*, and *purpura simplex*, often coincide with a plethoric state, or derangement of menstruation in women; *roseola*, some cases of *urticaria*, &c. accompany febrile attacks; others, as *pellagra*, appear intimately associated with a gastro-intestinal irritation. But it is right to observe that if it is true that inflammation of the digestive canal is sometimes met with in diseases of the skin, the cases where these are only symptomatic phenomena of the former, are extremely rare, and that most

generally these two classes of disease are rather combined than dependant on each other. This is so far true, that, on the one part, the digestive organs are generally in a healthy state in persons affected with diseases of the skin, and it is to that point, in the majority of cases, that our remedies are directed; and, on the other, an inflammation of mucous membrane of the intestines often causes the disappearance of a disease of the skin, and that this will again occur on the cure of the internal inflammation.

But if, as we have observed, the cutaneous inflammations, in the greater number of cases, are caused by direct, or at least appreciable influences, it is also evident that they appear without our being able to assign any cause for their development, that they are sometimes evidently hereditary, that there are individuals in whom they frequently return, either at fixed periods, as the change of seasons, or on the least deviation of regimen, from excess, or some mental emotion. In these cases, which are especially remarkable for a multitude of chronic inflammations, *lepra*, (*dartre furfuracee arrondie*,) and the scaly eruptions generally, *lichen*, and some pustular affections, &c. it is impossible not to recognise a hidden cause, a particular principle, which is transmissible to a certain degree, and whose hereditary succession is undeniable.

Finally, there are eruptions essentially contagious, as some species of *porrigo*, *scabies*, &c. There are some which, not only may be transmitted by contagion, but carry with them a peculiar stamp, and are developed under a special influence which is always identical, as *variola* and *syphilis*. Others depend on climate, as *elephantiasis Græcorum*, *framboesia*, *molluscum*, &c. As to the special cause, that which influences the different forms, by virtue of which, when any excitant is given, a cutaneous inflammation is developed in the shape of a vesicle and not a papula, and presents itself in round spots depressed at the centre, which, under the appearance of small scaly disks, somewhat resemble drops of water sprinkled on the skin; it is needless to add, is entirely unknown; without

doubt, some day the intimate structure and functions of the dermoid system will be better known, and then, and only then, these phenomena will be explained.

The particular diagnosis of diseases of the skin, is that part of their study which demands the most care: it is connected with all other parts of their history, and without it no opinion can be formed, as to the treatment. It is because it is generally wanting in almost all writers who have treated of these affections; it is because a multitude of eruptions are usually mingled in a confused mass, by designating them all under the vulgar name of tetter, without attaching any importance to their individuality; that we see a physician causing inquietude and trouble in a family, by declaring that such an eruption is itch when it is *lichen*, or *prurigo* or *eczema*; another in declaring that a disease is venereal, and exasperating it by giving mercurial preparations, when there is no trace of syphilis: this one permitting a venereal complaint which he had mistaken, to continue its ravages; that one, again, using incisions and cauterizations for some simple affection he had taken for a formidable disease, and which would have yielded to mild applications.

It is therefore of the highest importance to pay strict attention to the diagnosis. Moreover, in this resides the whole study of cutaneous affections. Let us see in what way this can be accomplished, and lay down some general rules, at least for the majority of cases.

The most important point is to ascertain the primary elementary lesion, if it has not been destroyed or hidden to a certain degree by secondary alterations. This once attained, it only remains to compare the disease thus discovered with the small number of those which like it have the same constituents.

If we suppose the elementary disease to be in a normal state, and not to have undergone any alteration, it only is requisite to decide if it is constituted of vesicles, pustules, or scales, &c. and for this purpose a slight inspection is all that may be necessary. When this is accomplished, it must still be de-

cided to what species it belongs; and to do this, recourse must be had to some important secondary characters, which form such or such genus or variety from their seat, course, &c.

Thus, for example, if a patient presents himself with the internal part of the arms, the interval between the fingers, and the abdomen, exhibiting small distinct serous spots, pointed and transparent at top, accompanied with itching, &c. in examining with attention, proof will be had that these do not contain pus, that the elevations are not solid and resisting, or have a circumscribed induration, still less a papular elevation covered with a dry and hard scale; nor an injection disappearing under pressure; that is to say, it is neither a pustule a papula, a tubercle, a squamous disk, nor an exanthematous patch, but in fact a vesicle. Now it only remains to decide to which of the vesicular affections this appearance belongs, and in proceeding in this way of rejection, a positive diagnosis will soon be arrived at. It is neither *miliaria* or *varicella*, for these two diseases are accompanied with general symptoms; and, besides, in one the vesicles are numerous and globular; in the other they are larger and more inflamed. It is not *herpes*, for that is characterized by a collection of vesicles in groups, and here they are scattered. There only remains *eczema* and *scabies*, the vesicles of *eczema* are flat, here they are acuminated; they are generally collected together in a greater or less number in *eczema*, here they are distinct, hence it is *scabies*.

We have chosen a very simple example, but sometimes the diagnosis is more difficult, without the primary disease being changed by consecutive alterations; and scabies itself, which is usually recognised with ease, may, under certain circumstances, present much obscurity, especially when it has been changed by scratching; but even then a variety of characters will serve to point out the true nature of the disease. These principally consist in the situation of the eruption, in the appearance of its accidental forms, in its precursory symptoms, in those which accompany it, &c.

It is not sufficient to merely acquire a knowledge of the

primary character, for this often disappears, and the eruption presents itself with the consecutive symptoms; a familiar acquaintance with the secondary modifications of the eruption must therefore be possessed. Thus the fluid contained in a vesicle may thicken and form a small crust; a pustule does not remain always in a pustular state, for the fluid concretes, and forms a crust of various thickness, this may be succeeded by an ulceration; it is therefore important to be aware of the peculiar characters of these secondary affections, and above all, to what primary disease they belong. Scales, (and here we mean those which are soft and yellowish, and the result of an effused and thickened fluid, and not the laminæ of altered epidermis,) may succeed vesicles, pustular vesicles, and papulæ; crusts are met with after most of the pustular diseases, particularly *ecthyma*, *impetigo*, *porrigo*; they also succeed *pemphigus*, *rupia*, &c. Ulcerations may be occasioned by *rupia*, *ecthyma*, &c.

Hence, to arrive at a diagnosis, we must first decide on the nature of the secondary affection, then ascertain to what primary disease it belongs, and afterwards follow the same plan as was pointed out above. Thus, a patient presents himself with an eruption characterized by yellowish, rough, thick crusts, occupying large surfaces on the limbs, and especially the legs, which, on their disengagement, leave slight excoriations, whence flows a purulent fluid, which in concreting forms new crusts: the first object of attention are these crusts, the least inspection will serve to distinguish them, not only from a primary disease, but also from secondary alterations; but it is less easy to recognise to what eruption they belong: to arrive at this, we must recollect what diseases are susceptible of presenting these secondary forms. We have seen that crusts belonged to some bullar affections, but particularly to the pustular; here there is no question of either *pemphigus* or *rupia*, which are seldom, like this eruption, irregularly dispersed, and which manifest themselves in most cases by incrustations of a round form, are distinct, and of a black colour, &c. We must look exclusively among the pustules, it is neither *vari-*

ola nor *vaccinia*, they are characterized by marks too striking to be mistaken; it is not *ecthyma*, for it generally presents some large isolated pustules, which become covered with black adherent incrustations, leaving ulcerated surfaces on their falling off; it is neither *acne* nor *mentagra*, for the pustules in these two diseases rarely change into real crusts, but usually give rise to chronic indurations. There now remains but *porrigo* and *impetigo*, and on comparing it with them, we find that the first presents distinct characters, which it is needless to enumerate in this place: it is sufficient to have indicated in what matter the disease could be recognised as *impetigo*, (*dartre crustacee flavescence*—Alibert,) and by a little more observation, it will be seen that the crusts are scattered without order over large surfaces, thus indicating the variety, *impetigo sparsa*.

Sometimes the characters are not so well marked, and the diagnostic offers great difficulties; but we have supposed that no distinct primary marks of disease remained, whilst, on the contrary, in the generality of cases, some are always to be met with in a perfect state in the vicinity of the eruption.

Under some circumstances there exists a union of different affections, but the predominant form of the inflammation may always be recognised, of which the others are merely accidental complications.

But there are other cases in which it is impossible at first to ascertain the true nature of the eruption, such as certain chronic inflammations, which, according to the time of their duration, lose their primary appearance, and seem to be confounded with diseases of a wholly different order; in such a state of things it is only a fresh attack with a reproduction of the original symptoms that will enable us to ascertain the true nature of the inflammation: sometimes also as they approach to a cure they lose these accidental forms, and again resume their original characters.

These general views are only applicable to the first eight orders of our table. The others present themselves with particular symptoms that cannot be confounded, or rather they

may assume the primitive forms of other eruptions, but then they also have a special stamp, which, in most cases, leaves no doubt as to their nature.

Finally, it must not be forgotten, that in the diagnosis of diseases of the skin, nothing must be overlooked: independently of the positive disease, there are a crowd of phenomena, such as the seat of the eruption, its form, colour, progress, and general state of the patient, which form a certain whole, that strikes a practised observer even before he has had time to recur to details.

We have devoted some space to these generalities, because we think that these rules may be of great utility, especially as they comprise in a great measure those which should be followed in the study of diseases of the skin.

Well convinced of the importance of diagnosis, we have endeavoured, in the particular descriptions, to give as many details as possible.

The treatment of diseases of the skin experienced the effects of the confusion which reigned among them; a single curative treatment was applied to them all, and they were for a long time, and even are still, attacked, under all circumstances, and in all forms, by the same vulgar means which have been considered as specifics, the bitter and sulphurous remedies.

But, in the last few years, the science has been enriched by a mass of precious materials, though they remained for a long time useless, for the want of exact knowledge and positive experience of their effects, and the circumstances in which they were applicable. M. Biett has rendered a most important service in filling this hiatus, by his numerous researches and precise results. He is perhaps the only one in France who has made experiments on all the means that can be used in the cure of these diseases, and from which he has derived useful results. It is therefore a little extraordinary that some of these should have been published, without the author giving himself the trouble to indicate the source from whence he derived his information.

In taking a view of the treatment of cutaneous diseases in a general manner, we shall pass over that of the acute inflammations, (rubeola, variola, &c.) which in most cases only require an antiphlogistic treatment, and means suited to the internal alterations which may complicate them, to occupy ourselves with those, which being generally of a chronic character, (although they do sometimes assume a certain acuteness,) are very obstinate.

It is idle to suppose that these diseases generally require the same plan of treatment. It is as certain that some forms yield more readily to peculiar modes, as that certain remedies are appropriate to particular diseases. This has hitherto been overlooked, and we have endeavoured to give it much attention at the end of each particular description.

The treatment of diseases of the skin is general or local, or rather it is composed of internal remedies and direct applications. It is erroneous in most cases, to rely on one of these alone, particularly the latter; for it is evident that a multitude of eruptions disappear under the influence of medicines given internally, whilst, if a few diseases, purely local, be excepted, such as scabies, they will resist external remedies alone. And the theory that has lately been reproduced, which consists in advising local remedies only, in diseases of the skin, is founded on conjectures which betray great want of experience, rather than on facts.

Among the general means, some, as blood-letting, may be considered as accessories, although they are very useful in plethoric and stout individuals, where it is advantageous to make one or many detractions of blood, before commencing a treatment either to relieve an exacerbation by venesection or leeches applied near the eruption, or to oppose the development of an accidental inflammation.

Others, (purgatives for instance,) are very useful in persons whose digestive organs are in a normal state, by inducing a slow and long-continued revulsion; hence it is necessary in a plurality of cases to employ small doses and to intermit their use from time to time.

Some preparations appear to act powerfully on particular symptoms; such are the acids and alkalis which are of so great assistance in allaying itching. Some others seem to possess special properties, as that crowd of remedies, including some bitters, certain sudorifics, and some of the antimonial and sulphurous preparations, &c.

There is also another order of remedies, very energetic it is true, which evidently exert a direct action on the dermoid system; these are the tincture of cantharides and the arsenical preparations. Although they are valuable means in the treatment of cutaneous affections, although they have effected the cure of severe and obstinate diseases which had resisted all other remedies for years, and caused both patient and physician to despair, they have been the object of violent attacks; they have been accused of secretly altering the constitution, and inducing deep-seated disease which manifested itself after a certain time with fatal symptoms. These reproaches, although they have been recently repeated in a work where they would not be found if it was based on practical researches, are wholly destitute of foundation. These preparations, like all heroic remedies, are capable of producing accidents if they are imprudently administered in immoderate and repeated doses; but the same may be said of a multitude of remedies introduced for a long time into the materia medica; mercury, sulphate of quinine and tartar emetic, for example. We who have seen them employed a great number of times, and who might have collected more than one hundred analogous facts, can affirm that the results are as follows. 1st. In the greater number of cases a complete cure of the most obstinate and inveterate diseases. 2d. Sometimes slight symptoms, arising from a gastro-intestinal irritation, which disappear at the end of a few days, and permit a recurrence to their use. 3d. Never those fatal symptoms that have been proclaimed, by a cowardice that is the more culpable, as it tends to deprive medicine of precious remedies, without their rejection being the result of any positive fact. We will also add that we have several times seen the same patients re-admitted into the Hospital St.

Louis, months, or even a year after their cure, without presenting any symptom of derangement of their constitution from these remedies.

The local treatment sometimes consists in determining a greater degree of excitement in the diseased part, to hasten resolution, and among the numerous ointments that have been employed for this purpose, those which succeed the best are a union of iodine with mercury or sulphur.

At other times it is useful to modify or change the condition of the skin, and in such cases, blisters applied according to the plan of Ambrose Paré, on the diseased surfaces themselves, are a powerful remedy; excitories, on the contrary, employed as revulsants, are at best useless and often hurtful.

It sometimes becomes necessary either to entirely change the state of the diseased surface, or to limit the ravages of a disease which is rapidly extending, and recourse must be had to caustics, among which we would cite in the first rank, the arsenical paste of Frere Come, which, if only applied on small spots, never occasions accidents; it is an excellent remedy, as is the acid nitrate of mercury, whose effects are often prompt and happy.

Among the local means there are few that are so constantly useful, and followed by results as advantageous as the use of baths, and we cannot finish these observations, without calling attention to the Hospital of St. Louis, which is one of the finest establishments, one of the most complete of its kind, and where they are administered, with an order and precision that is remarkable, to the amount of one hundred and fifty thousand yearly.

It is to the labours of M. Biett that it owes all the improvements it presents, and without speaking of the medicated liquid baths of all kinds, or of the dry or other varieties of fumigations administered by the ingenious apparatus of Darcet, of those local fumigations exercised on the diseased parts alone by a plan invented by M. Biett, how much benefit has not been rendered by the *douches* and baths of vapour to crowds of patients.

DISEASES OF THE SKIN.



ORDER I.

EXANTHEMATOUS DISEASES.

EXANTHEMATATA.

By the term Exanthemata is meant those acute inflammations of the skin, which are characterized by a greater or less degree of redness, disappearing momentarily under the pressure of the finger, and accompanied in most cases with general symptoms. Such are the characteristics of *erythema*, *erysipelas*, *roseola*, *rubeola*, *scarlatina*, and *urticaria*.

Symptoms.—All parts of the surface of the skin may be affected; some of the exanthematous diseases attack the whole superficies of the body at the same moment, whilst others are confined to a spot of greater or less extent. Their special seat appears to be in the most superficial layers of the dermoid tissue, although in some cases the whole thickness of this membrane participates in the inflammation.

The progress of exanthematous diseases is always acute and continued, with the exception, however, of some cases of intermitting *urticaria* and *erythema*. *Urticaria* alone sometimes continues for months or even years.

The usual premonitory symptoms are, irregular chills, lassitude, a greater or less degree of fever, thirst, and loss of appetite. But each of these affections possess symptoms peculiar to themselves. Thus the redness is sometimes diffuse, sometimes circumscribed, and the spots, although in general irregular, assume in certain cases distinct forms. Heat, redness, tumefaction, and swelling, accompany *erysipelas*. *Urticaria*

is distinguished by its violent itching. Finally, exanthematous disorders are in general accompanied with symptoms of inflammation of the internal organs, and particularly of the brain and pulmonary and gastro-intestinal mucous membranes.

The usual termination of these affections is by resolution and desquamation, although they sometimes end in retrocession or even death; suppuration and gangrene may also be induced by *erysipelas*.

Appearances on dissection.—The examination of the bodies of those who have fallen victims to exanthematous inflammations seldom presents satisfactory results; the usual appearances met with, are different degrees of sanguineous congestion in the various organs, but in some cases evident marks of inflammation may be perceived.

Causes.—*Rubeola* and *scarlatina* are induced by a contagious principle, of which the true nature is entirely unknown, and which, with the exception of some rare cases, exercises its influence but once on the same individual. The cause of the other exanthematous affections may be direct, but they depend in general on a particular predisposition of the system extremely difficult to understand. Without attempting to prejudge their reciprocal influence, it is evident that they often coincide with inflammations of the internal organs.

Diagnostic.—The distinctive character assigned to the exanthemata will distinguish these inflammations from every other cutaneous affection; this character alone will always distinguish them from *purpura* and *ecchymosis*, in which the pressure of the finger never causes the disappearance of the morbid colour of the skin. This red tint which characterizes exanthematous disorders does not take place in the negro, in whom, under such circumstances, the black hue is always deepened.

The exanthematous affections may be complicated with different papular, vesicular, &c. eruptions, and it was the frequency of one of these complications in *erysipelas* that induced Willan to class this eruption among the bullæ.

Prognosis.—The prognosis of these phlegmasiæ varies according to their seat or extent, to the age and constitution of

the patient, and, above all, according to the violence of the concomitant inflammations.

Treatment.—The treatment of exanthematous diseases should be antiphlogistic; regimen, diluents, and a moderate temperature suffice in most cases. If the symptoms are very violent and important organs are menaced with inflammation, there should be no hesitation in resorting to blood-letting either general or local, always graduating it to the state of the patient or the particular nature of the exanthematous affection.

The convalescence in some of these diseases is oftentimes very long and may be retarded by many disorders, among which may be particularly cited, whooping cough, anasarca, chronic diarrhœa, &c.; hence prophylactic treatment should be continued for some time after the disappearance of the eruption.

ERYTHEMA.

The different species of erythema admitted by Willan are all designated by Alibert under the denomination of *dartre erythemoïde*.

Erythema is characterized by a slight, superficial, irregularly circumscribed redness, of various forms and extent.

It may occur in all parts of the body, but its general seat is the face, breast, or limbs, usually confined to one of these regions, it may extend to several, or even in some cases affect nearly the whole superficies of the body.

Erythema assumes in most cases an acute form, and its duration varies from one to two weeks. In some rare instances it is intermitting, as when it accompanies a fever of that type, or when it appears in the paroxysms of a violent fever; in such cases its duration is generally dependent on the diseases with which it is complicated.

Symptoms.—Without being usually preceded by any general symptoms, erythema manifests itself by spots of different sizes, of which the redness being vivid and superficial, is

wholly distinct from the dark and deeper seated colour of *erysipelas*. This redness disappears by pressure with the finger, but immediately returns. The form of the spots is generally irregular, but they sometimes assume a definite shape. The heat and pain in most cases slight, are in many instances scarcely perceptible. Finally, these spots, almost always unaccompanied by tumefaction, are sometimes attended with a swelling of either an indolent or painful character, which gives the eruption a peculiar aspect, and constitutes two marked varieties.

One of these, (*E. epapulatem*, Willan,) most commonly attacks females and young persons: it is usually observed on the neck, breast, arms, posterior part of the forearm, and especially on the back of the hand. The patches are small and irregularly rounded, rarely exceeding the size of a *centime*: they are slightly elevated, apparently papular. Red at first, they soon assume a violet tint, particularly in the centre. In about thirty-six to forty-eight hours the swelling subsides, leaving only the red colour which is now on a level with the surrounding skin, and disappears in one or two weeks. In other cases, on the contrary, the swelling remains and the spots appear more elevated, (*E. tuberculatum*, Will.)

Another variety, (*E. nodosum*, Will.) is often met with, occurring in infants, women, and young persons of a weak constitution and lymphatic temperament. It may appear in various parts of the body, but usually it attacks the chin, arms, and anterior parts of the legs. In the plurality of cases, a state of general uneasiness, depression, and slight fever either precedes some days or accompanies the appearance of the eruption. This takes place in the form of red, oval spots, a little elevated towards the centre, and from a few lines to near one inch in diameter. In passing the hand over these spots they are felt to be elevated a little above the surface of the skin, and forming nodosities; the swelling augments slowly, and some days after their first appearance, small, red, painful tumours are perceptible, which appear to have a disposition

to suppurate, but they soon diminish in size, and a bluish colour replaces the original red hue; they soften and disappear slowly in about ten or twelve days.

Causes.—Erythema may be either idiopathic or symptomatic; the first results from the direct or mediate action of various agents on the skin. Thus it is produced by the repeated chafing of two contiguous parts of the body, particularly in infants or in fat persons. It occurs below the breasts, in the arm-pits, groin, and upper parts of the thighs, (*Intertrigo*, *Sauvages*.) It also takes place on the buttocks and internal parts of the thighs, from a forced march on foot or horseback.

Erythema may also be produced by the action of the sun or cold, the contact of leucorrhœal, gonorrhœal or dysenteric discharges, urine and fœcal matters. It sometimes occurs on the upper lip, induced by the acrid fluid which flows from the nose in coryza.

Erythema is oftentimes symptomatic of a gastro-intestinal affection, whether acute or chronic, and is most observable during the paroxysms. It is often developed in children during dentition. It manifests itself in plethoric persons, and in women at their critical period. It often supervenes on the ingestion of irritating substances, and is sometimes observable after the administration of the balsam copaiba.

Idiopathic erythema usually terminates by resolution in a few hours, or at most days. Sometimes there is a slight desquamation, and in some cases, (*intertrigo*,) there is a secretion of sero-purulent fluid of a nauseous and disagreeable smell.

Erythema, symptomatic of acute diseases, generally disappears without any sensible desquamation on the cessation of the paroxysms, (*E. fugax*,) this is also the case when it accompanies intermittent fever, though in some cases it does not terminate for seven or eight days, and then with a slight desquamation.

Erythema may exist with anasarca of the lower limbs; in this instance the surface is smooth and shining, with here and there confluent patches. (*E. læve*.)

It precedes and accompanies a variety of eruptions, and in such cases, belongs to their peculiar characteristics.

Diagnosis.—Not only the other exanthemata, but also eruptions of a different class may be confounded with erythema. Of all these affections, those which present the greatest difficulty in their diagnosis, are—

Erysipelas.—Erythema, which many authors have considered as a species or stage of this disease, differs from it however in many respects. It can never be mistaken for it, except in those cases where it occupies large surfaces, for the circumscribed spots in the other varieties of erythema do not permit the least doubt of its nature. In the first case the redness is always superficial, the absence of tumefaction, and of pain which is constant, burning, and severe, in erysipelas, the mild nature of the complaint, and the rapid and always favourable termination of it, are characters which distinguish it perfectly.*

Roseola.—In roseola, the redness is superficial as in erythema, but it differs from it by being of a characteristic rose colour of different tints. The *erythema nodosum*, which may be confounded with the irregular circular spots of roseola, differs from it by the redness never being as circumscribed, and by the swelling which accompanies it.

Rubeola and Scarlatina.—These eruptions differ from erythema, the one by the irregular semi-lunar form of its spots, and the other by the raspberry colour of the large patches which characterize it: added to which, these two diseases are contagious, and are accompanied by a train of peculiar symptoms.

Urticaria.—Erythema *papulatum* is the only variety that can be mistaken for urticaria; but this latter disease differs

* Mr. Lawrence, in an able paper on Erysipelas, in the fourteenth volume of the Medico-Chirurgical Transactions, classes erythema as the first and most simple form of that disease. Cullen places it among the phlegmasiæ. J. P. Franck includes under this head gutta rosea, chilblain, and ranks it among the impetigenes. Joseph Franck has added *nævi materni* to the list.

from it by the greater elevation of its spots, by the absence of the violet colour observable in erythema, by the itching which accompanies it, and by its irregular and oftentimes rapid course.

Lichen urticatus.—The above variety of erythema may be confounded with *lichen urticatus*, but in the latter, the papulæ are smaller, rounder, and more solid; their colour is not so deep, and, as in urticaria, there is always great itching.

Syphilitic spots.—These spots might, at the first glance, offer some resemblance to erythema; but their duration, and their coppery or grayish hue will always suffice to distinguish them, besides they are usually accompanied by other venereal symptoms.

Prognosis.—Erythema is never fatal.

Treatment.—Idiopathic erythema rapidly disappears with the cessation of the causes which developed it:—soothing lotions, warm baths, and attention to cleanliness, are all that are necessary. When it arises from the attrition of surfaces, either in infants, or in corpulent persons, it must be sprinkled with an absorbent powder, as that of the lycopodium, and the chafing prevented as much as possible.*

The treatment of symptomatic erythema depends on the disease which it accompanies; in curing a gastro-enteritis, of which it may be one of the symptoms, it also disappears.

Those erythemata, or morbid rednesses which often occur in women at their critical period, or which coincide with a delay or suppression of the menstrual discharge, demand blood-letting, diluents, regimen, and other means of reduction.

The *erythema nodosum* does not require any particular treatment, although it is the worst form of the disease; topical applications are useless: baths and light laxatives, and in some rare cases, small blood-lettings, constitute all the treatment.

* This variety of erythema is very troublesome during the summer in corpulent persons, and requires frequent ablutions with tepid water to remove the viscous secretion. Hair powder forms an excellent application after the eruption has been washed.—TRANS.

ERYSIPELAS.

Erysipelas is an exanthematous affection which is not contagious, characterized by a deep red colour of the skin, accompanied with heat and swelling, which often extend to the subcutaneous cellular tissue, occupying a greater or less extent of surface, and capable in some rare cases of becoming general.

Although it attacks all parts of the body, the face and limbs are the most usual seats of the disease.

Symptoms.—In erysipelas the inflammation of the skin may be confined to this membrane, sometimes accompanied by an irritation of the subcutaneous cellular tissue, or this tissue may be inflamed in various degrees, giving rise to severe symptoms. From these circumstances we shall divide erysipelas into two varieties: erysipelas and phlegmonous erysipelas. Both these varieties may occur simultaneously in a great number of cases; but as there exists a marked difference between them, both in their progress and the treatment they require, a succinct description of each appears necessary.*

The precursory symptoms, as lassitude, general depression, transient but at times very severe chills, hardness and frequency of the pulse, nausea, pain in the epigastrium, thirst, anorexia, and constipation, are common to both varieties. About the second or third day of the febrile attack the eruption makes its appearance, although in some instances it is developed much sooner.

1st. *True erysipelas*, or that in which the inflammation does not extend beyond the skin, presents itself with the following characters: a deep red colour occupying a greater or less extent of the skin, which shows by the elevation of its edges that this inflamed part is tumefied; this redness disappears momentarily from pressure with the finger, which pressure is in general very painful, there exists a greater or less degree of pain accompanied with a tingling and burning sensation, the

* Mr. Lawrence divides erysipelas into three varieties: E. simplex, E. œdematodes, and E. phlegmonosum.—TRANS.

pulse is accelerated, there is nausea and thirst, the mouth is bitter, and the tongue covered with a white coat. The cuticle which covers the inflamed part is sometimes raised to a greater or less extent by a yellowish serum, and these vesications may acquire a considerable size. They usually appear about the third or fourth day, and sometimes break on the day succeeding their appearance, at other times later, and discharge a viscid fluid, which in many cases forms small scabs.

The general symptoms ordinarily follow the progress of the eruption, augmenting or declining with it; in some instances, however, they are very slight, notwithstanding the extent of the erysipelas, and *vice versa*.

Towards the fifth or sixth day, the redness diminishes and assumes a yellowish tinge, the swelling is less, and the cuticle is covered with a multitude of small wrinkles; by degrees the morbid discoloration disappears, and desquamation takes place in the affected parts. This is the most frequent and favourable termination of the disease, but where vesications have existed, the skin is covered with small brown scabs, which remain for some length of time.

Instead of passing through its various stages where it was first developed, erysipelas may successively attack different parts of the body, and disappear from that which was first affected.* At other times it gradually extends over a greater surface without disappearing from its original point of attack, so as in some rare instances, to cover the whole body at the same moment. In certain cases it suddenly disappears and attacks another spot, leaving no other traces than a slight desquamation. (*E. erraticum*.)

In individuals of a lax and lymphatic constitution, erysipelas may be accompanied with œdema, particularly where it attacks the lower extremities. In this case the redness is lighter and in some instances scarcely perceptible, the skin is smooth and polished, and retains for some time the impression of the

* A metastasis of erysipelas may sometimes take place to the heart or head. Mr. Adams gives some interesting instances of these in the Dublin Hospital Reports, Vol. IV.—TRANS.

finger. The termination of erysipelas, when thus accompanied with œdema, is favourable, and should not cause disquietude; but this is not the case when the eruption follows œdema, as is sometimes observed in anasarca patients, and above all when it arises from scarifications which have been made to draw off the water, for in these cases gangrene is apt to ensue; this is announced by the inflamed skin assuming a livid hue, the blistered epidermis forms large irregular phlyctenæ filled with a brownish fluid, and in persons already exhausted by disease, death rapidly ensues. The genital organs and lower extremities are particularly obnoxious to this consecutive erysipelas. (*E. œdematodes*, Willan.)

2d. *Phlegmonous erysipelas* is accompanied with an inflammation of the cellular tissue, and may attack all parts of the body; but is generally observed on the extremities, being sometimes confined to one spot, and at others extending over the whole limb.

In this variety, the symptoms are always more violent than in true erysipelas; but they differ according to the extent and depth of the inflammation, and the anatomical structure of the affected parts.

When the cellular tissue is not very deeply inflamed, the eruption is accompanied with a violent burning pain, considerable swelling, and high fever. Pressure on the part is very painful, and the skin regains its morbid colour but slowly.

Termination by resolution may take place towards the fifth or sixth day; but in general the pain becomes throbbing, the redness diminishes, and abscesses are formed which discharge laudable pus, sometimes mixed with small shreds of dead cellular membrane. When the cellular tissue is more deeply affected, or when the phlegmonous erysipelas attacks the whole of a limb, the disease is oftentimes rapid in its progress, and the cellular tissue appears inflamed at the same time as the skin, and in some instances even before. When this is the case, the pain is extreme, the least movement of the limb causing the patient to cry out, the skin is red, much distended and exceedingly painful on the least pressure; the pulse is frequent,

hard, and corded; there is often delirium, violent thirst, dryness of the tongue, and profuse sweats. The termination, except from an energetic treatment, is seldom by resolution; the suppuration, which takes place from the fifth to the seventh day, though sometimes sooner, is accompanied with uncertain chills, the redness of the skin and pain diminish, but the swelling increases: there is much doughiness, and the limb remains in that state for some time; in some cases the pus remains for a long time before an opening is formed in the skin to give it vent, but in general it escapes either by a natural or an artificial orifice, mingled with shreds of gangrenous cellular tissue. In these cases the course of the disease is ordinarily tedious, sinuses are formed, sometimes sloughing of the skin takes place to a considerable extent, and colliquative diarrhoea often carries off the patient, exhausted by the slow fever and great suppuration.

The symptoms of phlegmonous erysipelas may be still more severe, particularly when the aponeuroses, in opposing the swelling, produce strangulations, as is observable in the hands and feet. In these cases the general symptoms are very violent, violet spots appear on the inflamed surface about the second or third day, the skin loses its sensibility, these spots increase rapidly and are covered with vesications, eschars are formed, which, however, are small when a proper treatment is pursued; these gradually fall off, and convalescence takes place after a greater or less degree of suppuration. But when the disease occupies a great extent, and this order of things occurs, the system soon becomes implicated, symptoms of severe gastrointestinal irritation supervene, characterized by prostration of strength, dryness of the tongue, much diarrhoea, great frequency of the pulse, &c. to these are sometimes superadded taciturn delirium, flightiness, coma, a great alteration of the features, and death rapidly ensues.

Erysipelas offers some modifications, according to the spot it occupies, which deserve to be noticed.

Erysipelas of the face is the most frequent form of the disease; it generally commences at the nose, one of the cheeks,

or eyelids, and gradually extends till the whole face is involved, the features rapidly become unrecognisable; the swelling of the eyelids is often extreme. There are at the same time general symptoms of greater or less intensity, such as frequency of the pulse, heat of skin, violent head-ache, wakefulness, excitement of mind, and slight delirium during the night. These general symptoms are in some cases strong, whilst in others they are scarcely perceptible. The eruption generally attains its height about the fourth or fifth day, and resolution takes place on the eighth.

Erysipelas of the scalp often succeeds that of the face. At other times, it arises from punctures, contusions, operations, &c. It is marked by œdematous swelling, and great sensibility of the inflamed skin; the redness is slight, being in many instances of a light rose tint. Termination by suppuration is extremely common in this variety, and the subcutaneous cellular tissue often becomes gangrenous; but mortification of the scalp itself rarely occurs; this arises from the anatomical arrangement of its vessels, which, as is remarked by Dupuytren, are distributed in large numbers over its internal surface. Cerebral symptoms are most to be feared, and are more frequent in this variety than in the others.

Erysipelas of the breasts in women is generally of the phlegmonous character. It often occurs in females recently delivered, and in whom the mammæ are much developed, with peculiar symptoms; there is at first violent pain, but unaccompanied with swelling; the skin only presents a rose colour around the nipple, the redness extends itself in an irregular form from this spot, and is bounded by small phlyctenæ, somewhat resembling those in herpes, but as it gradually spreads, the skin which was primarily affected, becomes of a yellowish-white colour, and loses its sensibility; and at the end of two or three days, when the eruption declines, this membrane is found to be gangrenous over the whole space from the nipple to the point at which the erysipelas had terminated. This diseased skin does not at first emit any smell, but is gradually detached by suppuration, during which pro-

cess the odour is very fetid. A large ulcerated surface is formed, the cicatrization of which is extremely tedious. Both breasts may be affected with the disease; but whatever may be the extent of the gangrene, the nipples and the areola surrounding them remain uninjured.

Erysipelas of the umbilical region is often observed in newly born children in hospitals, and in institutions for foundlings. It is attributed to injury done the chord, and above all, to the influence of the vitiated atmosphere inhaled by the children in these establishments; it sometimes extends to the hypogastrium and genitals, which are apt to become gangrenous, and in such case death is almost inevitable.

Erysipelas of the limbs is sometimes of little extent, whilst at others, the whole member becomes implicated, and in these cases it often terminates by suppuration at one spot, whilst resolution takes place elsewhere.

The most dangerous complications of erysipelas are, without doubt, those with cerebral and gastro-intestinal inflammation, which may occur of very high grades, and speedily destroy the patient. In these cases, the eruption generally disappears as soon as the disease of the other parts develops itself, though they sometimes exist simultaneously. Swelling of the parotid glands is a very common attendant on erysipelas of the face.

The terminations of erysipelas are by resolution, retrocession, suppuration, gangrene, and death: the first is fortunately the most common; it is often preceded, particularly in erysipelas of the face, by a profuse bleeding from the nose.

Dissection.—In cases of severe erysipelas, not only are traces of inflammation of the skin discoverable, but the subcutaneous cellular tissue is found very friable and infiltrated with pus, which is in many cases collected in particular spots.

When death has suddenly taken place from a violent cerebral affection, no appreciable pathological lesions are perceptible. At other times, diseases either of the lungs or alimentary canal are met with, whose existence had never been suspected.

Causes.—Erysipelas may attack all ages, both sexes, and at all seasons, but is more generally met with in females, and

those individuals in whom the skin is fine and delicate; and is most common in spring and autumn.

Certain external causes acting directly or mediately on the skin, may cause its development; as heat, cold, irritating applications, punctured and contused wounds, slight surgical operations, &c. But even in these cases, it appears to be dependent on some unknown predisposition of body.

There are other causes which also exercise a marked influence on the appearance of this disease, as the habitual use of gross food, putrified meat, high seasonings, fermented liquors, excess in food, &c. &c.

It often appears at the time of the establishment of menstruation, at the critical period, and on the suppression of some habitual evacuation. Its attack is often induced by strong mental excitement, profound grief, or violent fits of anger, and sometimes accompanies a gastric disorder, particularly in old persons. But it is most generally observable in individuals affected with a chronic irritation of the digestive organs, in those who have been confined for a length of time in prisons, hospitals, or places where the air becomes vitiated. Finally, it frequently occurs in the course of acute gastro-intestinal affections, or in inflammations of other organs; and if it generally augments the danger, still there are cases where its appearance is critical and salutary.

Diagnosis.—The character of the symptoms in erysipelas, are too well marked for any difficulty to arise as to its nature. A close examination, however, is sometimes necessary to recognise it when seated in the scalp, particularly when it occurs with a disease, whose symptoms are the most prominent.

Prognosis.—Simple erysipelas of little extent is a disease unaccompanied with danger, but far different is the case when it involves a large surface, or is complicated with inflammations of the brain or digestive organs. Erratic erysipelas, when it has lasted for some time, indicates a state of the system, from which serious consequences may be apprehended.

The prognosis of this disease in persons affected with anasarca, is generally fatal; the same remark is applicable when it

attacks individuals who have lived for a long time in prisons, hospitals, &c. When erysipelas occurs during a pleurisy, pneumonia, gastritis, &c. its danger is dependent in a great measure on the general symptoms.

The sudden and spontaneous disappearance of this eruption, preceded or followed by violent symptoms, indicates an inflammation of some of the vital organs, and is always a bad omen.

The prognosis of phlegmonous erysipelas is generally bad, and becomes worse if this is of any great extent.

Finally, much is to be apprehended, when the skin, which is the seat of the inflammation, becomes gangrenous, and adynamic symptoms are at the same time developed.

Treatment.—When erysipelas, whatever may be its cause, is simple, of little extent, and does not cause any general disturbance of the system, it is sufficient that the patient should be kept on a low diet, and diluent drinks administered; the disease pursues a regular course, and seldom requires any other curative means.

Lotions of Goulard's extract, used cold, produce beneficial effects in that variety of the disease known under the name of *engelure*.

When the eruption is extensive, and there are general symptoms, as takes place in most cases of symptomatic erysipelas, recourse must be had to more active treatment, as blood-letting, emetics, purgatives, and certain local applications.

Blood-letting is generally indispensable in these cases, and must be promptly resorted to, where the patients are young and plethoric, or where the general reaction is well marked: the inflammatory fever which precedes the eruption most imperiously demands this remedy, when it is high. Bleeding from the arm is preferable to that from the foot, even in cases of erysipelas of the face, as the quantity of blood to be drawn is more readily obtained; venesection must be repeated several times, if the symptoms require it. If, after the reduction of the pulse, the eruption is still great, local bleedings are to be resorted to, particularly where the inflammation is situated

on the face or scalp. It is, however, often advantageous to use local bleedings simultaneously with general venesection; taking care always to practise them at a little distance from the seat of the eruption, and never on the inflamed surface itself.

Blood-letting is to be repeated according to the pertinacity or increase of the symptoms: there are cases, however, where, notwithstanding the apparent violence of the disease, great precaution must be used in its employment; as when the eruption appears in patients already enfeebled, either by previous disease, or by the energetic treatment requisite for its cure, and in persons who have been confined for a length of time in prisons, &c.*

Emetics, which were formerly used in an indiscriminate manner in the treatment of erysipelas, particularly where there was bitterness of the mouth, and a yellowish coat on the tongue, should never be used without precaution. In fact, these very symptoms occur in diseases where the use of emetics is dangerous. They should also never be employed where there exists dryness of the skin, violent thirst, heat at the epigastrium, and high fever.

Purgatives are preferable to emetics in relieving the saburral state which often exists with erysipelas of the face; the revulsive effect they produce on the intestinal canal is advantageous. But their use should be guided by the same rules as those for emetics. In the majority of cases, laxatives and mild purgatives are sufficient.

Local applications are generally useless in the cure of erysipelas; above all, refrigerant applications must be avoided, as they have often caused fatal effects. Ointments and cataplasms will only augment the inflammation. Vesicatories

* Local bleeding by means of leeches has been much deprecated by some authors, as Willan and Thomson, but the generality of recent authors agree in its utility; for, although leech bites often produce an appearance similar to erysipelas, on the sound skin of some individuals, yet they do not occasion this effect on this membrane when in an inflamed state. See an interesting paper on this subject, by Henry Neill, M. D. in the North American Medical and Surgical Journal, Vol. I. p. 295.—TRANS.

should only be employed to fix the erratic form of the disease, or to bring back the eruption to the part first attacked, when it has suddenly disappeared, and this disappearance is followed by violent symptoms.*

Phlegmonous erysipelas demands a very energetic treatment, which must be modified by the extent and violence of the disease. General and local bleedings must be used with vigour, and at the commencement of the attack; afterwards recourse must be had to emollient local baths, continued for a long time, as well to favour the flow of blood, as to relieve the erethism of the diseased part.

When these means are unsuccessful, or have not been employed, and the symptoms rapidly increase, we must resort to incisions, not when gangrene has taken place, as has been advised, but before, to endeavour to prevent it.

The extent of the incisions must vary according to the state of the disease, and its seat. The object in making them is to relieve the tension of the aponeuroses, and consequently the inflammatory strangulation. Incisions are also necessary when

* Local applications have been much praised by some practitioners; Mr. Lawrence observes, that they however certainly relieve the patient's feelings, and that if their use is preceded and accompanied by a proper plan of general treatment, there is no fear of their producing bad effects.

Blisters are also highly serviceable in some cases of erysipelas, and have been employed both in France and this country, under the high authorities of Physick and Dupuytren, and although used in the time of Ambrose Paré, their use was laid aside till revived some years since by Dr. Physick; they are most beneficial in cases where the tongue is moist and slightly red, the skin moderately tense and hot, and when there is local inflammation with little general reaction. Dr. Dewees speaks of the use of this remedy in the highest terms, and observes that the blister should be large enough to extend some distance on the sound skin.

Notwithstanding the denunciation in the text against the use of ointments, many authors, and those of no little standing in the profession, have spoken of them in the highest terms. Dr. Dewees has found the most beneficial results from the use of mercurial ointment, but makes the objection to its use that was urged by Mr. Brodie, that of producing salivation. Dr. Chapman says that a wash of the watery solution of corrosive sublimate, or calomel dusted on the parts, is very effectual in this disease. Dr. Meigs has found Kentish's ointment highly useful in these cases.—TRANS.

phlegmonous erysipelas terminates by suppuration, or to prevent gangrene.*

Compression has been proposed as very advantageous in phlegmonous erysipelas, but in reflecting on the violent symptoms which so often take place in fractures, where, from the application of a simple bandage, the limb swells; the use of this means appears to us too hazardous to be adopted; besides, as it can only be employed at the commencement of the disease, and that at this time the advantages of an antiphlogistic treatment is incontestable, we must have stronger proofs of its efficacy, before we would sacrifice so much precious time.†

ROSEOLA.—*Roseola*, Willan.

Roseola is an exanthematous eruption which is not contagious, characterized by rose-red spots of various forms, which are not prominent; its appearance is in general preceded and accompanied with febrile symptoms.

The whole surface of the skin may be the seat of the disease, although at times it is only developed on parts, as the body or limbs.

Its course is always acute, but varies according to the individual, the cause, or the diseases which it accompanies.

Its duration varies from twenty-four hours to a week.

Symptoms.—In very young children, an eruption of numerous, nearly circular spots, contiguous to each other, and of a deep rose-red colour, is oftentimes observable; these spots

* The propriety of using incisions in erysipelas, has caused many acrimonious disputes in England. Mr. Lawrence, Mr. Brodie, and others, recommend them to be extensively used, whilst Mr. Hutchinson prefers small ones; but there can be no doubt of the utility of incisions in cases where the tension is great: they relieve the pain, and arrest the progress of the disease.

Mr. Lawrence is of opinion that they are of the greatest advantage at the commencement of the attack.—TRANS.

† Compression in erysipelas was first recommended by Velpeau, and was extensively used by himself and Mr. Bretonneau with astonishing success, but has not proved equally efficacious in other hands; and, as is observed in the text, been followed by serious consequences.—TRANS.

are from four to six lines in diameter, and disappear in the space of twenty-four to thirty-six hours. Their appearance is generally connected with some gastro-intestinal disorder.

A similar eruption often occurs during dentition; in such case after vomitings, fever, diarrhœa, and sometimes slight convulsions; rose-red, irregular, distinct, although nearly confluent spots, appear on the surface of the body. These disappear in the space of twenty-four hours, but in some cases they recede and return for several days.

The most severe form of roseola occurs in summer, (*R. æstiva*, Willan.) It is generally preceded in children by alternations of chills and fever, by lassitude, head-ache, sometimes by excitement, slight delirium, or even convulsions; there is at the same time, heat of skin, thirst, loss of appetite, constipation, or diarrhœa; the eruption appears from the third to the seventh day, dating from the commencement of these symptoms; it first shows itself on the face or neck, from whence it spreads, in the space of twenty-four to forty-eight hours, over the whole body; the redness of these spots is deeper, and their form more irregular than those of rubeola, and this red colour changes into a deep rose tint. The patient at the same time experiences violent itching, the fever continues, and deglutition is often painful. The progress of this eruption is very irregular. There may even be a total absence of all febrile symptoms. Its duration is from three to four days; it disappears without any appreciable desquamation; in some instances it returns again, in which case its attack is prolonged.

An analogous eruption occurs in the autumn, (*R. autumnalis*, Willan,) and only differs from the preceding by the spots being somewhat larger, and their being seated in the upper extremities, and in the absence of fever.

There is a singular variety of this disease, in which all parts of the body are covered with rosy spots in the form of rings, (*R. annulata*, Willan,) the centres of which preserve the natural colour of the skin. These rings, whose diameter is at first from one to two lines, gradually enlarge, leaving in their centre an uncoloured spot, which is at one time large and at others

small; sometimes two, or even three rings surround each other, the skin maintaining its natural colour in the intervals between them. The duration of this eruption is short when it is accompanied with fever. At other times it may continue for an indefinite time, in which case it is generally attended with chronic affections of the digestive organs.

Causes.—Roseola may occur at all ages and in both sexes, but is most common in women and children, and takes place rather in summer and autumn, than at other seasons. It may repeatedly attack the same person. It has been known to reign epidemically, and M. Biett has several times observed it in this form, in the dispensary of the Hospital of St. Louis, during very warm summers. Roseola may precede the eruption of either natural or inoculated small-pox; in some children it appears on the ninth or tenth day after vaccination; the first dentition, ingestion of cold drinks whilst the body is in a state of perspiration, and laborious exercise, are frequent causes of this disease, which also is a frequent concomitant of gastro-intestinal irritation in children.

Diagnosis.—Roseola has often been mistaken for *rubeola* or *scarlatina*, but the spots in this disease are almost invariably of a circular form, are circumscribed, of a deep red colour, and larger than those of *rubeola*, and smaller than those of *scarlatina*. It is never contagious. In *rubeola* the spots are small, irregularly semilunar, and of a bright red colour; those of *scarlatina* are large and of a raspberry hue. Both these diseases are contagious, and their general symptoms are well marked; nevertheless the most experienced practitioner may mistake them, especially at their commencement.

The greater extent of the rings and the absence of vesicles, distinguishes *roseola annulata* from *herpes iris*.

Prognosis.—The prognosis of roseola is always favourable; the occurrence of some disease of the internal organs at the same time, alone can render it fatal.

Treatment.—In all cases a proper regimen, diluent drinks, moderate temperature, and rest, are all that are required.

That form of the disease which occurs in vaccinated persons

does not demand any particular treatment. In cases where it is complicated with inflammation of some vital organ, the treatment must be directed to that.

RUBEOLA.

Rubeola is a contagious affection, accompanied at its commencement with coryza, serous discharge from the eyes, cough, and fever, and appearing in the form of small red spots, which are slightly elevated, and at first distinct, but afterwards become united, and assume an irregularly semi-lunar shape, leaving small intervals of unaltered skin between them.* The progress of the disease is always acute; its duration is from eight to ten days, but some of the symptoms often remain a much longer time. The continuance of the eruption itself is from three to four days.

Symptoms.—The attack of rubeola is marked in the majority of cases by a state of general uneasiness, lassitude of the limbs, alternations of chills and heat, bleeding from the nose, and vomiting. These are soon succeeded by greater or less acceleration of the pulse, heat of skin, sneezing, serous discharge from the nostrils and eyes, coryza, frequent and dry cough, slight angina, thirst, anorexia, nausea, white and moist tongue, constipation, scanty and red urine, head-ache, coma, and sometimes convulsions in children.

These symptoms are developed in the first forty-eight hours; their violence, as well as that of the fever augments the third and fourth day: there is then great heat of skin, general uneasiness, sweats, great sensibility of the conjunctiva and eyelids, coryza, hoarseness, fatiguing cough, greater or less de-

* Dr. Chapman is of opinion that this disease is not contagious, as from experiments performed in the Philadelphia Dispensary in 1801, in which the blood, the tears, the mucus of the nostrils and bronchia, the eruptive matter in the cuticle, were all tried without effect.

It has been said that the measles appear epidemically every seven years, but on this point there is as yet no certainty, although there is no doubt of its recurring very nearly at this period.—TRANS.

gree of dyspnœa, redness of the tongue, sometimes vomiting, cephalalgia, and in some cases transient delirium. At this time the palate and uvula are covered with small red spots, which rapidly become confluent.

Towards the fourth or fifth day, small red spots, which are distinct, circular, slightly elevated, and apparently papular, appear on the forehead, chin, nose and cheeks, and in a short time the neck, breast, body and limbs, are successively covered with the same eruption. The red spots enlarge and become somewhat prominent, resembling flea-bites in their form. A small vesicle is often observable towards their centre; their number soon augments, and in becoming confluent they form larger patches, of an irregular, semi-lunar shape, having small spaces interposed between them in which the skin preserves its natural colour. In some cases, particularly on the face and hands, a sensation of an unequal surface is experienced, in passing the finger over the eruption.

The redness of the spots usually attains its height in about twenty-four hours after their appearance, and the eruption terminates in about thirty-six hours. The face is often swelled at this time, and in some cases the tumefaction of the eyelids prevents vision. On the sixth day of the disease, the redness diminishes on the body, but augments on other parts. On the seventh, the eruption begins to fade, and on the ninth slight yellowish spots indicate the spots it occupied. The eruption pursues much the same course in its disappearance as in its attack, and is followed by desquamation, usually attended with violent itching.

Instead of diminishing as the eruption increases, the heat, thirst, coryza, and cough rather augments, but the pulse becomes less frequent; these symptoms generally cease as the eruption fades. The cough remains longer than the other symptoms; sometimes bleeding from the nose takes place towards the close of the disease, and there is often a slight diarrhœa, which appears to hasten the convalescence.

Such is the most usual course of rubeola, but in some cases there is scarcely any eruption, whilst in others it is very ex-

tensive. In some patients the redness of the spots is very great, and in others, on the contrary, they are scarcely perceptible.

Measles may be complicated with other diseases. It is rarely accompanied with petechiæ, but, as has been observed in many instances, by M. Biett, the spots may assume the form and colour of *purpura simplex*, in which case they do not disappear by pressure. Those combinations which merit attention are with—

The *cerebral affections*; these are often followed by serous effusions into the ventricles: with pulmonary inflammation and that of the gastro-intestinal mucous membrane. In these cases ataxic and adynamic symptoms supervene.

The complication with *croup* is very fatal, but fortunately it is of rare occurrence. Finally, measles may be accompanied with various other eruptions, either vesicular, bullar, or pustular.

The convalescence, independent of these combinations which retard it, also may give rise to a great number of different diseases; thus chronic ophthalmia, inflammations of the respiratory passages, otitis with deafness, and chronic phlegmasiæ of the vessels and lymphatic glands, may all take place. In persons predisposed to phthisis, the development of tubercles appears to be hastened by the continuance of the catarrh subsequent to the eruption; and also the convalescence from this affection may be retarded, as in scarlatina, by acute dropsy, a circumstance, which, however, is observed more frequently in the latter disease.

In the generality of cases, measles follows a regular course and terminates happily. But in some instances death takes place, in which case it should be attributed to one of the complications of the disease, for on dissection traces of inflammation and congestion are met with; the brain, lungs, and stomach, are the organs which most frequently present these appearances.

Causes.—Measles is induced by an unknown morbid principle which is transmitted by contact and infection, and in

general exercises its power but once on an individual. The experiments tending to prove that inoculation with blood of persons affected with rubeola can cause the disease, are any thing but conclusive.

Measles may occur in all climates, and ordinarily appears as an epidemic. In some of these, the morbid cause may only induce coryza, and symptoms of mucous irritation of the pulmonary organs in certain individuals, but in some rare cases the eruption is unaccompanied by any of these symptoms. Such individuals are not protected against a second attack. No age is exempt, but it usually affects young persons. It prevails more generally during the winter and commencement of the spring, than at other seasons. The appearance of this disease is from the tenth to the fourteenth day from the infection.

Diagnosis.—The course of the disease, the nature of the symptoms, and the character of the eruption, will always suffice to distinguish rubeola from scarlatina. In measles, the precursory symptoms precede the eruption from three to four days, the spots are smaller, of a vivid red colour, and irregularly semi-lunar, having between them intervals of unaltered skin. In scarlatina, the eruption is more rapid in its appearance, the spots are larger, more irregular and of a raspberry colour.

As the eruption of scarlatina does not disappear in a uniform manner, but by intervals, towards the end of the fifth day small irregular spots may be perceived, that are readily to be mistaken for measles. There are also cases in which the diagnosis is really difficult, as where large spots of a uniform red, cover different parts of the body, and there are symptoms of irritation of the mucous membranes, resembling those in scarlatina. In these cases attention must be paid to the reigning epidemic, and to the predominant symptoms of the disease; the fact of a previous infection should not prevent the physician from making an attentive examination, for it is proved that the same person may be twice attacked with measles.

As to roseola, the deep rose-red colour of its eruption, and circular form of the spots, their size, and its almost uncontactious nature, mark it at a certain period of the disease; but at

the commencement, when the usual symptoms of measles are wanting, they may easily be mistaken for each other.

Finally, the various inflammations which may be complicated with measles, may be recognised by their own peculiar characters; but it is to be observed that their march is often insidious, and demands strict attention.

Prognosis.—Rubeola is not usually a fatal disorder, but may become so in many cases; it is to be particularly dreaded in pregnant or recently delivered women, and persons worn down by previous disease. In drawing a prognosis, the general character of the prevailing epidemic should be taken into the account, and great attention paid to the degree of violence of the concomitant affections, and the nature of the organs implicated. The appearance of petechiæ, the eruption being premature, its sudden disappearance with much fever and oppression, are bad signs.

Treatment.—Diet, rest, a mild temperature, warm diluent and mucilaginous drinks, inhalation of emollient vapours, and guarding the eyes from too vivid a light, constitute the treatment in ordinary cases of measles.

The use of emetised drinks, administered either to favour the appearance of the eruption, or to relieve gastric disorder, is at least useless and often dangerous; the nausea and vomiting experienced by patients disappear in a majority of instances with the other symptoms, and even if they do not, palliatives and blood-letting are much preferable. The constipation which exists during the first days of the attack is of little consequence; if it remains for any time, it may be relieved by simple injections.

If the eruption does not appear freely, or suddenly fades, diaphoretics should be employed, the patient should be put in a warm bath, in which a small quantity of flour of mustard had been mixed, or, what is preferable, a vapour bath, if it can be procured, administered.

But when the eruption is tardy in its appearance, and at the same time the febrile symptoms increase, there is reason to apprehend the development of some organic inflammation, which should be immediately combated.

We will briefly pass in review the best therapeutic means for this purpose.

Blood-letting, both general and local, holds the first place. In making use of this remedy, the symptoms which belong to the disease itself and decline with it, must be distinguished from those of the concomitant malady, which always compromise the life of the patient in a greater or less degree. Thus during the eruption there is always great excitement, thoracic pains, the cough becomes very troublesome, the oppression augments, and auscultation discovers a subcrepitating rattle of various degrees of strength; nevertheless, all these alarming symptoms disappear spontaneously with the striking out of the eruption. But if they should continue, recourse must be had to general or local blood-letting; the quantity of blood to be drawn must depend on the strength of the patient and the nature of the symptoms.

Before the appearance of the eruption, if there are evident signs of pneumonia, or symptoms of gastro-intestinal inflammation, or if coma, stertorous respiration, and high fever exist, the patient must not be abandoned to the efforts of nature, but resort must be had to bleeding.

In young children, the application of a few leeches to the temples, behind the ears, to the epigastrium or anus, will advantageously supersede the necessity of phlebotomy. In adults and young persons, it is often useful to employ both general and local bleedings at the same time. It often happens, that, in consequence of bleeding in such cases, the eruption will make its appearance, and the dangerous symptoms diminish in violence. The precise time at which blood-letting is to be had recourse to, is of importance, as this means will be more efficacious as it is practised towards the commencement of a concomitant inflammation, if employed at a later period, when the system is sinking under the violence of the disease, and the different organs have been labouring for some time under great congestion, it is far from being useful, and may even hasten death. In fact, the use of blood-letting is to subdue those inflammations which so often aggravate the original disease, and not to combat the eruption.

Purgatives have been too highly praised by some authors in the cure of measles; gastro-intestinal inflammation so often occurs in it, that caution should be used in their employment. Nevertheless these remedies may produce very advantageous effects in cases of meningo-encephalitis, pneumonia, violent angina, and croup; they should be employed conjointly with blood-letting. The purgatives generally used are senna, jalap, calomel, castor oil, &c.

Towards the ninth or tenth day, if the ordinary diarrhœa does not occur, it is advisable to administer a mild purgative.

The use of emetics should be restricted to those cases of measles, where they are complicated with croup. It must, however, be remarked, that in some instances the administration of a few grains of ipecacuanha has caused the appearance of the eruption much more rapidly and strongly.

Sinapisms and vesicatories should be employed with caution, they may be useful in some cases to reinduce the appearance of the eruption.

Lotions of cold water, where the skin is hot and dry, have been much commended by some celebrated English practitioners. We will speak of their use, when treating of scarlatina.

As to tonics, such as generous wine, cinchona, camphor, &c. they are only applicable to some exceedingly rare cases, and their employment requires great skill. They may be resorted to when the pulse is small and feeble, the skin cold, and the eruption pale or livid. They should never be used in cases where the skin is dry and burning, notwithstanding there may be adynamic symptoms.

During the convalescence, the patient should take warm baths, guarding against taking cold; if the cough continues, laxatives, opiates, or blisters on the chest or the internal part of each arm, should be prescribed. Sometimes a slow fever remains, calling for constant care and attention. Finally, in cases of obstinate diarrhœa, opiates, demulcents, strict regimen, and a blister on the upper part of each thigh, or on the ileo-cœcal region, may all prove advantageous.

SCARLATINA.

Scarlatina is a contagious disease, presenting itself in the form of small red points, which are soon replaced by large irregular patches of a raspberry colour, which, in becoming confluent, cover a great part of the body. A greater or less degree of fever, and of irritation of the mucous membrane of the mouth and larynx, precede and accompany the eruption.

It is usually from the third to the sixth day after exposure to the contagion before the disease develops itself.

Symptoms.—As regards the violence of the symptoms, this disease offers many varieties; they may be very light, whilst at other times they are extremely severe, and in numerous instances are complicated with others of so dangerous a character as to threaten the life of the patient, whom the best regulated treatment will not always save.

Scarlatina generally commences in the evening, and in a sudden manner, with an access of fever, accompanied with depression, transient chills, nausea, and pains in the loins and lower extremities. The pulse is much accelerated, beating from a hundred and twenty to a hundred and forty strokes in a minute; the respiration is frequent and irregular. The skin of the body is hot, whilst the feet are cold; in some cases, though rarely, there are convulsions.

The next day, or even during the night, the eruption appears occupying at first the neck and face, but spreading over the whole body in the succeeding twenty-four hours. It consists of a multitude of small red points, so contiguous to each other, that the skin presents a universal red hue, and feels rough to the touch. This membrane is at the same time the seat of a violent heat, accompanied with great itching. Large patches of a raspberry scarlet colour cover all those parts of the body on which it rests; the colour is also deeper in the folds at the articulations. Not only the skin, but the tongue, pharynx, palate, interior surface of the eyelids, nostrils, and cheeks, are also of a scarlet red at this time, and deglutition is very painful.

In many cases, the edges and extremity of the tongue are alone affected with this colour, whilst its surface is covered by a whitish mucous coat, through which the papillæ appear more or less prominently and of a vivid red.

The eruption is generally accompanied with a greater or less degree of excitement; sometimes there is delirium and coma, and often swelling of the face and extremities. In some cases, the febrile action diminishes on the appearance of the eruption, but it ordinarily continues, as well as the other symptoms; as, an ardent thirst, great heat, nausea, constipation, and more or less difficulty in deglutition.

The raspberry colour of the eruption is always higher in the evening, and particularly about the third or fourth day; it begins to diminish on the fifth, and disappears towards the seventh, when desquamation takes place.

The various symptoms that accompany the eruption, disappear with it; deglutition becomes easy, but the redness of the tongue remains; at this time, a copious perspiration or diarrhœa often occurs, and the urine deposits a sediment, which, in some cases, is very abundant. The desquamation, at times furfuraceous, often lamellar, is accompanied with a very troublesome itching, and takes place several times. (*S. simplex*, Willan.)

Such is the course of the mildest variety of scarlatina, the duration of which is from eight to ten days. But in other cases, the fever is more violent, and the angina much more dangerous; it is the predominance of this latter symptom that has given the name of anginose scarlatina to this variety. (*S. anginosa*, Willan.)

In this form of the disease, the angina often precedes the fever, and the premonitory symptoms of the eruption are far more violent than in simple scarlatina. The patient experiences at first, a sudden sensation of stiffness of the muscles of the neck and lower jaw, and the mucous membrane of the pharynx presents a vivid red colour. General symptoms rapidly develop themselves on the second day, the tonsils are much more swelled, the voice becomes hoarse, deglutition is

painful and difficult, sometimes impossible; in which case, drinks are rejected through the nose, respiration is more or less impeded, and excites a painful feeling of constriction in the throat.

The other symptoms are a great frequency of the pulse, violent heat of the skin, excitement, cephalalgia, coma, slight delirium, nausea, and sometimes vomiting.

The eruption in this variety presents much the same appearances as in simple scarlatina, but does not always appear on the second day, being sometimes retarded till the third. It is also less generally diffused, and is composed of large, irregular scarlet patches on different parts of the body, but particularly on those on which it reposes. In many cases, the soft palate, the tonsils and pharynx, are covered with a thick mucous secretion, or with flakes of a grayish-white pultaceous matter, which, in some instances, adheres for days, and in others is renewed from day to day. Ulceration of the tonsils does not generally occur, but sometimes these glands are slightly affected, as are also the soft palate and the posterior portion of the pharynx. The pultaceous secretion may be of a black colour, from admixture with extravasated blood: the tongue and lips are often parched and chapped, and the blood in drying on them, forms black crusts.

In this form of the disease, the eruption often disappears in the course of twenty-four hours, and returns in an irregular manner, both as to situation and time of attack. The general symptoms are, however, rarely aggravated, but the duration of the disease is prolonged, and the desquamation less regular.

In mild cases, this sometimes is wholly wanting, whilst in others, it continues for three or four weeks. Although there may exist a variety of degrees in this form, we have contented ourselves with detailing the most prominent symptoms. The angina is the most obstinate.

Scarlatina also puts on a much more dangerous form, and in such cases has received the name of malignant, (*S. maligna*, Will.) but it must be observed that all these varieties are only

different degrees of severity in the attack; and that although it may be very light during the first few days, it may afterwards assume a malignant type.

Scarlatina maligna at first presents the same symptoms as the preceding, but on the second or third day, dangerous appearances occur. The eruption usually takes place in twenty-four hours, but is sometimes later. There is much depression, an ardent thirst, dryness and burning heat of the skin, much restlessness, oppression and vomiting; the pulse is full and frequent. After some hours, the symptoms augment in violence, excitement and delirium supervene, the tongue becomes dry, the pulse loses its force, but not its frequency; the skin remains hot, the eyes are injected, the cheeks of a crimson red colour, the breath fetid, and the tonsils and surrounding parts covered with a blackish secretion.

In children there may be coma, stertorous respiration, swelling of the neck, throwing of the head backwards, and an extremely rapid but scarcely perceptible pulse. Sometimes hæmorrhage, either from the nose or intestines takes place, or a petechial eruption, the extremities become cold, and the patient expires. This fatal termination often occurs without the eruption having disappeared or faded, and in some cases the burning heat of the skin continues to the last.

This form of the disease may terminate, as we have just observed, by death, which may take place in a few hours, or days, or even later. Even if the patient survives, the succeeding symptoms may be dangerous. These are gastro-intestinal inflammations, and abundant suppuration following the eschars which have formed in different parts of the body.

Other cutaneous eruptions may be complicated with scarlatina. There is often a miliary eruption which covers the thorax, temples, neck, scalp, and shoulders; this soon disappears, either from the absorption or effusion of the fluid contained in the vesicles. Combinations of scarlatina with measles, erysipelas, and small-pox, are more uncommon.

Violent attacks of scarlatina are generally accompanied either with inflammation of the brain, of the thoracic viscera,

or of the gastro-intestinal mucous membranes. Oftentimes all the large viscera appear to be simultaneously affected, and nature, overwhelmed by the violence of the disease, soon succumbs. The partial gangrenes which occur in certain cases, announce great disorder of the circulation.

Abscesses of the tonsils, bronchitis, ophthalmia, otitis with deafness, swelling of the parotids, inflammation of the testicles in adults, and engorgements of the sub-maxillary and inguinal glands in children, are often the sequelæ of this disease. It is sometimes followed by a state of great weakness: but the symptom most to be dreaded during the convalescence, is acute anasarca, and serous effusions in the different splanchnic viscera. The anasarca may be either partial or general; it occurs eight or ten days after the disappearance of the eruption, particularly where this has been very extensive. It has been remarked that this occurred more frequently and violently in children than in adults, in winter than in summer, and that cold and humid weather exercised a great influence in its development. Its precursory symptoms are lowness of spirits, general languor and depression, loss of sleep and appetite; the pulse becomes frequent and chorded, the skin hot, and the urine scanty and turbid. The œdema commences in the eyelids, then attacks the face and inferior extremities: it may be universal; its duration is from six to twelve days, and it is unaccompanied with danger when it is confined to the subcutaneous cellular tissue. It may be complicated with diarrhœa and symptoms of gastro-intestinal irritation. In some rare cases, sudden effusions take place in the serous cavities, and occasion death in a short time.

Dissection.—In persons who have died of scarlatina, the skin presents large patches of a livid, red colour, occupying the superficies of the dermis, and, as in all inflamed tissues, putrefaction of this membrane rapidly ensues. The mouth, nasal fossæ, pharynx, and even the trachea, are usually red, and covered with a greater or less quantity of grayish, pul-taceous matter. In a majority of cases there exists a marked injection of the brain, and of the vessels which ramify over its

surface. Sometimes the lungs are sound; at others, they are gorged with blood, and easily torn; in some cases, however, their tissue is dense and solid, of a vivid red, and very firm and tough. The mucous membrane of the stomach generally appears injected. That of the intestines is often reddened, even in those cases where diarrhœa has been one of the predominant symptoms.

Causes.—Scarlatina is occasioned by an unknown contagious principle; children and young persons are more usually attacked than adults; it seldom affects an individual more than once, and in two thousand cases, Willan never met with an instance of a recurrence of the disease. When this affection is epidemic, it appears that the specific cause sometimes develops certain anomalous characters, such as the general symptoms without eruption, or *vice versa*. In the first case is it really scarlatina?

This disease is not confined to any season; it may reign epidemically during all; but it generally appears in the autumn, after heavy rains, followed by warm weather. The situation of certain spots in valleys, and the middle of woods, or in general, whatever tends to diminish the free circulation of air, appears to aid the development of this disease. It must also be noticed, that persons who have been affected with scarlatina, may propagate the disease during the whole period of desquamation; in fact, it appears that the contagion is most active at this epoch.

Diagnosis.—Scarlatina can never be mistaken for measles, if it be recollected that in the former the eruption usually manifests itself in twenty hours after the appearance of the first symptoms. The extent and raspberry hue of the eruption, and the nature of the symptoms of irritation of the mucous membranes, which, in scarlatina, principally affects the pharynx, will prevent all misapprehension.

In roseola there is often sore throat, but the eruption never presents large patches as in scarlatina; the shade of colour is not the same; the duration is short, and the course often irregular.

Prognostic.—Scarlatina, when it is simple, is in general unaccompanied with danger, not more so than measles. The two latter varieties, however, are often fatal. It is always to be dreaded when it attacks either pregnant women, or those recently delivered, and when it is accompanied with other dangerous diseases.

Treatment.—When scarlatina is slight, attention, and the simplest antiphlogistic remedies are all that are required; a moderate temperature, diet, refreshing mucilaginous drinks, acidulated with either lemon-juice, the hydrochloric, or any other acid, (for this latter does not appear to possess the specific qualities that have been assigned to it,) emollient and slightly tonic gargles form all the necessary treatment. The constipation which exists the first few days, should be relieved by simple injections.

It is not necessary to administer emetics at the commencement, the nausea and vomiting rather indicate gastric irritation, than a saburral condition of the alimentary canal.

To these means, although sufficient for simple scarlatina, other and more energetic treatment must be added in the anginous and malignant forms of the disease, especially if there also exist symptoms of inflammation of one or more of the internal organs.

Blood-letting, above all, is indicated in these cases. One or more applications of leeches to the anterior part of the neck, when the angina is violent, produces great relief, as also does topical detraction of blood from the epigastrium, when there is nausea and obstinate vomiting, accompanied with pain in this region. General bleedings, ordinarily useless in the simple form of the disease, may be used with great advantage when scarlatina appears in young persons, strong and muscular adults, and females near the time of their delivery. In these cases, one or more large bleedings, practised at the commencement, will prevent or diminish danger. In malignant scarlatina, where the course of the disease is very rapid, the symptoms becoming alarming in a few hours, this remedy must be had recourse to very early; for, if congestion takes place in

the different organs, it becomes very difficult, or almost impossible to relieve them. At a more advanced stage of the disease, much less reliance should be placed on blood-letting, which, when employed at such a time to combat the symptoms, even where it seems well indicated, is often useless, and sometimes hurtful. Finally, blood-letting is most efficacious where there is inflammation of one or more of the important organs; thus leeches should be applied to the neck and the mastoid apophyses, if symptoms of cerebral congestion exist, and they should be resorted to early.

Laxatives and purgatives are at best useless, in simple scarlatina, where it pursues a regular course; but when there are symptoms of either cerebral or pulmonary congestion, they should be freely used, conjointly with bleeding. Their use is also beneficial when the angina is violent. In their administration, no guide can be drawn from the redness of the tongue, as this colour, which is often scarlet, analogous to that of the skin, is a symptom of the disease. In cases where the signs of gastric irritation are strongly developed, it would be better to make use of injections.

Emetics are only indicated in those cases where it becomes necessary to free the pharynx from the viscid secretions which clog it; this occurs principally in children.

Effusions with cold water, although not employed in France, have been used in England by the most celebrated practitioners. This remedy, which has erroneously been supposed very dangerous, has been adopted in several epidemics of scarlatina, particularly when the eruption had arrived at its greatest height. When this has moderated, simple sponging with vinegar and water is to be used. The results are in general beneficial; there is a marked diminution of the heat, of the quickness of the pulse, and other symptoms. The fear of danger from this remedy is not founded on any fact, and it is desirable that recourse should be had to it in cases where the disease presents itself with the violent symptoms it sometimes offers. In simple cases, it may be sufficient to lightly sponge the different parts of the body, and particularly the

forehead, face and arms, with cold water or vinegar. Some pathologists have objected to the employment of this remedy, that it might favour the development of anasarca, as during the convalescence from scarlatina, this symptom is generally induced by the action of cold. This reasoning does not appear to us as just, for the influence of cold during the inflammatory stage of scarlatina need not produce the same effect as during the convalescence. Besides, in what manner can the two impressions be compared?

The use of sinapisms, of blisters, and other irritating applications ought to be restricted to those cases where it becomes necessary to establish a powerful revulsant. The application of blisters to the front part of the neck in those cases where there is violent angina, only adds to the irritation of the skin, without being of advantage to the interior inflammation; in some instances it has induced gangrene.

The convalescence demands curative means, as warm baths, &c. In cases of obstinate constipation, if there should be no counter-indication, mild laxatives may be given. The patient should avoid exposure to cold air or any deviation from his regimen. If anasarca takes place, it must be combated with rest, diet, and warm diaphoretic drinks; if there is much fever, diarrhœa, or gastric symptoms, leeches should be applied either to the anus or epigastrium; vapour baths are also very efficacious in anasarca.

Belladonna has been proposed as a prophylactic against scarlatina, and has been employed with success of late years, in several epidemics, both in Germany and Switzerland. Dr. Biett has observed this disease in an epidemic form in one of the elevated valleys of the latter country, in which all the children to whom belladonna had been administered, were, without exception, exempt from the disease. No hesitation should therefore take place in its administration, when the scarlatina makes its appearance in schools, &c. or wherever it occurs epidemically.

The most commodious preparation, and the form in which it appears to act with the greatest efficacy, is the tincture.

The usual dose is six drops a day to children of eight or ten years of age: it need scarcely be added, that it must be augmented or diminished, according to the age of the patient. Its use must be persisted in for ten or twelve days. It is well ascertained that in the small number whom it did not protect from the disease, this was always mild, and of a short duration.*

URTICARIA. *Nettle-rash. Fievre Ortiee. Porcelaine.*

Urticaria is a non-contagious cutaneous inflammation, characterized by prominent patches of various forms and extent, but generally irregular, of either a redder or whiter colour than the surrounded skin, usually very transient, and sometimes accompanied by an intolerable itching.

The nettle-rash, though sometimes acute, is ordinarily chronic, and its duration varies from two or three days, to months or even years. That of acute urticaria is from eight to ten days, but no limits can be assigned to the chronic form. As to the individual duration of the patches, it varies from a few minutes to twelve or twenty-four hours, but in some rare cases, they last for one or two weeks. (*U. perstans.*)

Causes.—Attacking all ages, both sexes, manifesting itself at all seasons, the nettle-rash, however, particularly affects children, young persons, females, and individuals of a sanguine and nervous temperament. It is observed most fre-

* No remedy has been more highly praised in scarlatina than belladonna, particularly by the German physicians. The following prescription was used by Dr. Maisier with almost universal success as a preventive in epidemic scarlatina:—

Extract of fresh prepared belladonna, gr.	xv.
Dissolve in fennel water,	$\overline{\text{z}}$ v.
Add rectified alcohol,	$\overline{\text{z}}$ i.

The dose is to be a drop for every year of the age of the child, never, however, exceeding fifteen drops. It is to Hahnemann we owe this discovery, and it is highly praised by the celebrated Hufeland. But at the same time it must be mentioned that several physicians have given it a fair trial without success.—TRANS.

quently in the spring and summer. Some persons, in whom the skin is fine and delicate, are so predisposed to it, that the least pressure or chafing will induce large patches of urticaria resembling the redness from flagellation.

Urticaria may be induced by direct and appreciable causes, thus it is produced by the leaves of the nettle, (*Urtica dioica*,) by the contact of certain caterpillars, &c.* In these cases the eruption is always local, and often ephemeral. At other times, without being able to trace it to its probable causes, it appears to be developed during dentition, by states of mental excitement, abuse of the pleasures of the table, and above all by the ingestion of certain articles of food, as mushrooms, almonds, honey, cucumbers, &c. But the substances which appear to possess this property in the highest degree are muscles, crabs and some kinds of dried, salted, or smoked fish. It is generally attributed in these latter instances to a certain degree of putrefaction of these animal matters, but this is far from being proved, for among several persons who may partake of them, only one may be affected, pointing out a particular predisposition, which is sometimes so evident, that there are many persons who cannot under any circumstances make use of these articles without inducing an attack of urticaria.

This eruption sometimes accompanies intermittent fever, or irritation of some internal organ. It may also coexist with diseases of the skin wholly different from it, particularly with *Lichen simplex*. In some instances it is connected with a peculiar and unknown state of the system.

Symptoms.—The course of this eruption is extremely irregular, being sometimes accompanied with general symptoms, but in most cases presenting only those that are peculiar to it; it may disappear and return several times for days or even weeks, leaving but short intervals between its attacks, till it

* Dr. Hewson mentions several cases of eruption, induced by the ingestion of Bals. Copaiba, (North American Medical and Surgical Journal, Vol. V. p. 72,) some of which resembled urticaria, whilst others assumed the appearance of erythema or roseola. Urticaria is sometimes produced from eating strawberries.—TRANS.

finally ceases: at other times it lasts for a certain time, but in the plurality of instances it ceases and reappears at irregular periods, and thus continues for months and years. We have seen several cases of chronic urticaria in the hospital, which had lasted for more than a year.

Urticaria has been divided into many varieties, according to its form, its symptoms, &c. of which the following are the most important.

1. *Urticaria febrilis*. (The true *fièvre ortiée*.) The eruption is preceded several days by head-ache, nausea, pains in the epigastrium and anxiety; it is accompanied with slight horripilations; it commences by a general itching, with a sensation of heat over the whole body, the least touch will occasion red or whitish elevations, surrounded by a vivid red or crimson areola, particularly on the shoulders, loins, internal part of the forearm, thighs, and around the knees. These are prominent and sometimes circular, but generally irregular; their edges are hard and their size variable, being confluent in some places; the limbs then appear swelled, and the skin presents an almost universal red hue. (*U. conferta*, Will.) An intolerable itching and tingling accompany the eruption, and give the patient but little rest. The itching is much augmented by the heat of the bed. The eruption does not continue during the whole of the disease, which is of seven or eight days' duration from the period of attack; but appears and recedes irregularly on every part of the body; and its return, which is generally towards evening, is accompanied with a slight acceleration of the pulse. The patient can often produce it at will on any spot by scratching. The predominant symptoms during the continuance of the disease are languor, anorexia, fever and a greater or less degree of gastric irritation. These symptoms gradually disappear, and the eruption insensibly diminishes until at last there is a mere itching left, finally it ceases entirely, and in some cases, where it has been very strong and general, it is succeeded by a slight desquamation.

Urticaria, produced by the ingestion of the substances formerly alluded to, belongs to this variety. In these cases it

may manifest itself in a few hours, but it usually appears on the succeeding day. The patient generally experiences, one or two hours after the ingestion of these articles, an uncomfortable feeling, weight at the epigastrium, vertigo, nausea, and general prostration, the skin soon becomes hot, and the eruption appears. The symptoms are much the same as those above described, except that they are often accompanied with vomiting and alvine dejections, the eruption is more general; it is in these cases that the patches become confluent, that there is swelling and stiffness, the face especially is oftentimes much tumefied, and the itching is insupportable. In some instances the urticaria is complicated with erythematous patches of a large size. Finally, this variety, which generally diminishes in violence at the end of thirty-six or forty-eight hours, and shortly afterwards disappears, leaving slight traces on the skin, may also in some rare cases, terminate in death. But it may readily be supposed that this event should rather be attributed to the deleterious action of the ingested article, than to the violence of the eruption.

2d. *Urticaria evanida*.—This variety is completely chronic. The eruption appears at irregular periods, sometimes in one place, sometimes in another, but may be confined to one region. It is not attended by fever, and usually disappears in a few hours. The patches, rarely rounded, are generally irregular and resemble those produced by flagellation. They are not accompanied with an erythematous areola, and present no other symptom than that of a violent itching. The *urticaria evanida* ordinarily lasts for several months, and may even be prolonged for whole years. This is the form generally observable in females and in persons endowed with great susceptibility of skin. It often resists the most skilful treatment, and in a multitude of cases appears to be connected with some alteration of the digestive organs, and particularly of the stomach. At the same time we frequently see this disease in persons enjoying the most perfect health.

In some instances, the itching is replaced by a sense of pricking under the skin, which is very acute and resembles

that produced by a needle thrust into the skin. (*U. subcutanea*, Willan.) This pain, the only appreciable symptom, never is accompanied with an eruption, and it is only at extremely distant intervals that spots appear. This variety appears to be specially induced by strong mental emotions, or by a sudden change of temperature.

3d. *Urticaria tuberosa*, (Franck, Will.)—In this form, which is the rarest, the disease is of a violent character. There are not only somewhat prominent patches, but real tuberosities of greater or less extent, which are hard, deep-seated, and accompanied with difficulty in the movements, and violent pain and tension. It usually appears in the evening or night, and disappears the next day, leaving the patient prostrated, weak, restless, and complaining of general lassitude. It sometimes appears with still more severe symptoms. Thus, at the Hospital of St. Louis, in a patient in Mr. Biett's wards, we have seen it accompanying a quotidian intermitting fever, and after having lasted for four years, finally induce swellings and great distention, ecchymoses, ruptures, and ulcerations. In many paroxysms it was accompanied with a general tumefaction, sometimes to such a degree that the patient was nearly suffocated, his respiration was hurried, the movement of the thorax very slight, the neck swelled, the face puffed up and of a violet colour, the pulsations of the heart intermitting and at times scarcely perceptible, and death, which appeared imminent, only prevented by large bleedings. This patient, who had passed through several hospitals, and in which every means of cure had failed, was at last restored to health by the use of Fowler's solution.*

The *urticaria tuberoso* appears to be produced by excess in food, or by the excessive use of spirituous liquors. Its duration, which, as we have stated, may be for several years, is ordinarily of several months.

Diagnosis.—The form and elevation of the patches, the

* For a detailed account of the case, see Nouv. Bib. Médicale, Oct. 1827. Bulletins de l'Athénée, page 62.

great itching, the ephemeral character of the eruption, are symptoms sufficiently characteristic to prevent this disease from being mistaken for any other exanthemata.

In the *lichen urticans*, which may be confounded with some cases of urticaria, the papulæ are round, much smaller, and less elevated; their colour is also darker, they are more resisting to the touch, never disappear spontaneously, and always present in their vicinity the real signs of lichen; true papulæ, which need only be seen once, to distinguish them from the eruption of nettle-rash.

The *urticaria tuberosa* may, under some circumstances, be confounded with *erythema nodosum*. The acute, continued, and permanent character of the latter, will always suffice to distinguish it from this severe variety of urticaria, which presents very different symptoms.

Nettle-rash sometimes exists conjoined with other eruptions, as *erythema*, often with *roseola*, and in some cases, with *impetigo* and *lichen*.

Prognosis.—Urticaria is seldom dangerous of itself. The *urticaria tuberosa* is the only form in which it is serious; but it constitutes a painful and annoying disease, from its intolerable itching and obstinate character.

Treatment.—Urticaria, which is the result of direct causes, requires no medical treatment in a majority of cases. Acidulated local applications, one or two tepid baths, and weak lemonade, are the only means to be employed if the eruption does not speedily subside. Lotions with a solution of acet. plumbi, or subcarbonate of potash, or baths rendered alkaline by the addition of this salt, are sometimes necessary to allay the violent itching, particularly where the eruption has been produced by contact with certain caterpillars. The simple febrile nettle-rash yields readily to a strict diet, cooling drinks, and tepid baths. Mild laxatives are sometimes useful, particularly where the disease accompanies dentition. But where it is the result of the ingestion of certain articles of food, vomiting must be induced, if it should not have taken place. Afterwards strongly acidulated drinks should be given, (barley water,

with a drachm of sulphuric or nitric acid to the pint,) or sweetened water, and every half hour thirty to forty drops of ether on a piece of sugar.

Chronic nettle-rash is much more difficult to eradicate; a strict regimen must be insisted on, taking care to avoid any thing that appears to exercise an influence on the development of the disease. In some cases it is beneficial to make an entire change in the habits of the patient. Blood-letting, either general or by the application of leeches to the anus, is useful in young and plethoric persons, or in women who are irregular in their menstruation. Simple tepid baths produce less effect, where the disease has lasted for some time, than alkaline or vapour baths, or even partial applications of vapour, when they affect a particular part. In all cases, acidulated drinks, and some mild laxatives, are the best adjuvants to the preceding.

When nettle-rash accompanies intermitting fever, this latter disease must be particularly attended to. Here much success is obtained with the sulphate of quinine; it cures the febrile attacks, and in most cases the eruption disappears with them. If the cinchona fails, and the intermitting urticaria presents the alarming symptoms we have spoken of, recourse must be had to Fowler's solution.*

* To relieve the excessive itching, where recourse cannot be had to the medicated baths, the patient should be liberally dusted with well-toasted rye or wheat flour, and scratching avoided as much as possible. Dr. Dewees has found the Fowler's solution to succeed in a majority of chronic cases. The dose for a child of from seven to fourteen years of age, is four drops, three times a day, in sweetened water; if this sickens, decrease the dose to two or three drops.—TRANS.

ORDER II.

VESICULAR DISEASES.

VESICULÆ.

THE diseases arranged in this class are characterized by small elevations of the cuticle, formed by a collection of a transparent serous fluid.

These elevations have received the name of vesicles; sometimes they terminate by a loss of transparency, and assume a yellowish colour. The serosity may be re-absorbed, but it is generally effused over the surface of the skin, where it forms either whitish scales, or thin, yellowish, lamellar crusts.

These diseases are different in their course; some are essentially acute, as *varicella* and *miliaria*; others, though sometimes appearing in this form, are in general chronic, as *eczema*, *herpes*, and *scabies*.

Their duration varies from a few days, to weeks, months, or even years.

Symptoms.—Sometimes preceded in their appearance by general symptoms, as in the acute varieties, the vesicles succeed an eruption of red spots, oftentimes of a very light colour, in the centre of which the cuticle soon becomes elevated. At other times, on the contrary, they take place without being preceded or accompanied by any other symptom than an itching. The vesicles sometimes arise from a red and inflamed surface, and at others do not present the slightest trace of an inflammatory areola.

They may be small, acuminate, or globular; large, prominent and irregular, or even flattened. In some cases they are distinct, in others they are conglomerated, and form large surfaces, which appear studded with an innumerable quantity of small, silver-white points.

They generally cover irregularly circumscribed surfaces of different sizes, and sometimes form semicircular bands, or even rings.

Seat.—The vesicular diseases may attack all parts of the body, and often cover the whole surface: this occurs in the acute forms, as *varicella*, *miliaria*, and sometimes *eczema*; even *scabies* may in certain cases simultaneously affect every portion of the body. But *eczema*, *herpes*, and *scabies* are usually confined to one or more regions, and at times to a very circumscribed spot.

Causes.—*Scabies* is the only vesicular disease that is contagious, the others result from some inappreciable derangement of the system, but may be excited in some instances by the influence of external causes.

Diagnosis.—The presence of vesicles, independently of the well characterized symptoms peculiar to each species, will always prevent any mistake in the diagnosis; and although in certain cases some of the vesicular affections appear at the first glance to resemble the pustular diseases, there exists, nevertheless, a very striking line of demarcation; the one always commences with vesicles, which if they should lose their transparency, never contain a sero-purulent fluid, and are constantly accompanied with transparent vesicles, and finally, in concreting, the sero-purulent liquid only forms scales, whilst the other always begins by a real purulent eruption, accompanied with deeper inflammation, and terminates not in scales, but in thick crusts or scabs.

Prognosis.—The vesicular affections are seldom serious: some among them, (the *eczema acuta*, Biett,) may however become so from their extent.

They may terminate by resolution; the liquid which elevates the cuticle is re-absorbed, and a slight desquamation takes place; in this manner does *miliaria*, and in some cases, *eczema*, disappear. 2d. At other times the fluid concretes, and forms yellowish lamellar crusts: this is observed in *eczema* and *herpes*. 3d. The contained fluid is effused over an inflamed surface, which excoriates and secretes a serous

fluid, (*eczema chronica.*) 4th. In certain cases it forms true ulceration, (*zona.*)

Treatment.—The vesicular affections require very simple treatment. The antiphlogistics are the most proper remedies in the acute forms. Those that are chronic, require a very active treatment, which however, they sometimes resist for a long time.

MILIARIA.—*Sudamina. Febris miliaris.*

Miliaria is a disease characterized by an eruption of vesicles about the size of a grain of millet, scattered in various numbers over a greater or less extent of surface, and which is in most cases the concomitant of some more serious disorder.

Every part of the body may be the seat of these vesicles, but they are generally observable on the anterior or posterior part of the trunk. But they may occur on the limbs and face, although this is seldom the case. The eruption is usually confined to particular spots; it seldom attacks the whole body.

Causes.—The appearance of miliaria is always connected with some violent excitement of the integuments, and with profuse sweats. It has been observed as a concomitant symptom of a variety of gastro-intestinal affections, and its development usually coincides with the paroxysms. It is frequently seen in puerperal fevers, and above all when the serous membranes are affected. It also accompanies the sweating sickness, certain cases of rheumatism, and scarlatina. In some epidemics of gastro-enteritis, this eruption has always appeared as one of the symptoms.

A stimulating treatment, or the use of tonics and excitants in these different diseases, seems to be the cause of miliaria, or at least to increase it; but these vesicles are also observed, where an active antiphlogistic treatment has been pursued, though in such cases the disease is less violent.

Miliaria may ordinarily be regarded as symptomatic of some more serious disease, but there are instances where it is idio-

pathic, as when it occurs in persons in good health, after violent exercise, during the heat of summer.

Miliaria is attended in such cases with a feeling of heat and great itching, but the eruption is ephemeral, and a complete restoration to health takes place in twenty-four hours.

Symptomatic miliaria may occur at all periods of the disease which it accompanies, and return more than once.

Symptoms.—It is not preceded by any symptom in particular, except an exacerbation of those of the principal disease. Generally, the appearance of the vesicles is attended by sweats, and a feeling of heat and itching in the parts in which it occurs. The vesicles are rarely confluent, but they often form patches of various sizes, or are grouped together irregularly. Their number is variable, sometimes a great part of the body is covered, and at others they are widely scattered.

The vesicles, at first very small and transparent, are often developed on a vivid red surface, and this colour is then visible through them, (*Miliaria rubra.*) In the space of twenty-four to forty-eight hours, the vesicles augment in size, and contain a milky fluid, which gives them a pearly appearance. (*Mil. alba.*) This is particularly striking in scarlatina, where a great number of these vesicles appear on a large surface, of a raspberry colour; they are soft to the touch, and soon disappear, either by the absorption of their contents, or by its effusion. Sometimes the cutaneous affection ceases by the desiccation of the vesicles, and at others, successive eruptions prolong the attack for one or two weeks.

In certain cases of violent entero-colitis, accompanied with general debility, the miliary eruptions, which often occur at night during the paroxysms, present the next day a complete vesicular appearance, and the portion of skin which they cover is destitute of redness; it is as if a multitude of minute drops of limpid water had been sprinkled over its surface. These vesicles disappear in about twenty-four hours, and a slight desquamation of the cuticle succeeds.

As to the *diagnosis* of miliaria, *eczema* is the only disease with which it can be confounded; it differs from it, however,

by the circumstances under which it appears, by its rapid progress, and short duration. Besides, in eczema the vesicles are confluent, and an immense number are visible in a very circumscribed space; whilst, in miliaria, the vesicles are almost always isolated, and are larger than those in eczema.

The *prognosis* of this disease is favourable; but is dependant on the violence of the malady it may accompany, and the appearance of it usually announces a state of general excitement, without in itself being dangerous.

Miliaria demands no treatment, it is the general disease that must be attended to, and it may be safely asserted, that anti-phlogistic means are the best adapted to these cases.*

VARICELLA.—*Chicken-Pox. Swine-Pox.*

By this name is meant a non-contagious disease, characterized by an eruption of vesicles in various numbers; the appearance of which is preceded or accompanied with general symptoms, and whose desiccation happens from the fifth to the eighth day.

Questions of the highest importance have latterly arisen, as regards chicken-pox, and it appears necessary, before giving a description of this disease, to enter into some details on the subject.

The name of varicella, or *petite verole volante*, had been given to slight and purely vesicular diseases, to distinguish them from small-pox, with which they were thought to possess a strong resemblance, and to be mere varieties. More recently these diseases were wholly separated from each other, as differing in symptoms and causes. Never, it is said, are the symptoms of varicella similar to those of small pox, and never is the cause of variola that of chicken-pox. These striking differences were sufficient to establish a marked line

* Miliaria is now a disease of rare occurrence, but appears to have been a very common attendant on febrile attacks, during the time they were treated on a heating and stimulating plan; hence, its frequency in puerperal fevers, as mentioned by White, Cullen, and others.—TRANS.

of demarcation between the two diseases, and, according to those who established these distinctions, nothing was more easy than to distinguish the two affections. But experience has not demonstrated the validity of these assertions, for we observe, in the long discussions on inoculated small-pox, that very able practitioners give the name of varicella to affections, which, according to others, are true variola. Far from being decided by the discovery of vaccination, these disputes on the nature of varicella have become more extensive; and, at this time, the opinion of practitioners is far from being fixed, on this important question.

Among the authors who have been prominently engaged in this discussion, some, as Thomson, Berard, Delavie, &c. maintain, that the chicken-pox should not be separated from variola, of which it is but a variety, for, according to them, the cause is the same. Others, as Luders, Abercromby, Bryce, &c. in admitting that certain variolous affections have been wrongfully admitted as varicella, assert, that this latter disease should be distinguished from variola, and that it constitutes a distinct affection, not only in the nature of its symptoms, but in its cause.

We shall rapidly review the facts and arguments advanced by these writers in support of their opinions, and shall afterwards point out the reasons that induced us to describe the chicken, as distinct from the small-pox.

Thomson having observed during variolous epidemics, that vesicular eruptions, similar to those of varicella, were simultaneously developed, and under the influence of the same causes as those of small-pox, both in vaccinated persons, or in those that had formerly had the small-pox, was naturally led to suppose that these eruptions had the same cause, and should be considered as varieties of the same disease.

In these epidemics, as in those we have latterly observed in Paris, the eruptions may be divided into three classes: 1st, small-pox; 2d, the disease termed varioloid, or modified small-pox; 3d, an eruption purely vesicular, and presenting all the appearances of varicella.

A single cause, the variolous contagion, seems to develop these various eruptions; they are to be observed in the same quarters of the city, in the same streets, and even in the same houses. If the disease occurs in a large family, some may be affected with small-pox, some with varioloid, and others with varicella. One fact was very striking, which was the mildness of the disease in vaccinated persons, and in the majority of those who had been affected with small-pox, the eruption in these individuals offered all the characters of varioloid, a name given to it from its great resemblance to variola, and Mr. Thomson had little difficulty in proving that it was only the small-pox, modified by the influence that vaccination or previous variolation had exerted on the constitution.

But this gentleman goes farther, and states that the varicella itself, is only modified small-pox, on the following grounds:—

1st. Because, on the one hand, persons placed in contact with others actually affected with varicella, had contracted the small-pox; and on the other, that the contagion of this latter, had occasioned small-pox.

2d. That an epidemic of small-pox never exists without varicella, and *vice versa*.

3d. And finally, that varicella never develops itself, except in persons whose constitution had been modified by the former existence of vaccination or of small-pox.

These opinions of Mr. Thomson are far from being generally adopted. They have even been disputed by physicians, who otherwise fully agree with him as to the variolous nature the pustular eruptions observed during epidemic small-pox, and designated under the name of varioloid.

In reply to the arguments advanced by Mr. Thomson, in support of his opinion, they observe:—

1st. That during an epidemic small-pox, it is extremely difficult to ascertain if the development of this disease in persons placed in contact with others labouring under varicella, is the result of this communication, or of the variolous contagion which is causing the disease on every side.

2d. That the true vesicular varicella is not communicable by inoculation, and never causes small-pox.

3d. That those persons who have regarded the varicella as contagious, have confounded this disease with the varioloid or modified small-pox.

4th. That varicella appears in unvaccinated persons, who have never had the small-pox, and consequently could not be regarded as that disease modified by previous variolation or vaccination.

5th. That vaccination, practised a short time after the disappearance of the varicella, pursues a regular course, which never takes place after small-pox.

6th. That the progress of varicella is always the same, whether it appears before or after vaccination or variolation.

7th. That the small-pox often reigns epidemically without being accompanied by varicella, and that on the other hand, this latter affection may rage epidemically without being accompanied by the former.

Finally, that the characters of the eruption and symptoms of varicella differ essentially from those of small-pox.

These objections have been met by Mr. Thomson, but the question still remains undecided; hence it appears indispensable for us to pursue the route already traced out, and to describe varicella among the vesicular diseases, and as a distinct affection.

Varicella, as we have already said, is a disease characterized by an eruption of an indefinite number of vesicles, of a certain size, and which dry away, in from five to ten days. At first transparent, these vesicles afterwards become opaque. Their appearance is preceded or accompanied by general symptoms; they are distinct, and often invade the whole body, but by successive eruptions.

Two varieties of varicella may be distinguished: in one, the vesicles are small, but little elevated, and contain a limpid and colourless fluid; in the other, they are large, globular, and soft, being of a greater size at top than at base. At first, transparent, the contained fluid soon becomes turbid and assumes a milky appearance.

To these varieties, the English writers have given the name of chicken-pox and swine-pox. Both may exist in the same individual at different times, and present the same symptoms, whether they occur before or after small-pox or vaccination. Varicella often reigns conjointly with epidemic small-pox. According to some authors, epidemics of varicella alone, have been observed. It generally appears in the beginning of the year, or in the spring. In most cases an individual is but once affected, although it may attack several times. It usually takes place in young persons, but adults are liable to it.

Varicella is preceded for twenty-four, thirty-six, or forty-eight hours, by depression, general uneasiness, thirst, loss of appetite, and constipation. There is often nausea, sometimes vomiting, and pain at the epigastrium; the skin is hot, the face injected, the pulse accelerated, and there is a tendency to sweat. These symptoms may exist in various degrees. In general they do not cease with the appearance of the eruption; but continue for two or three days. The eruption usually commences on the body, but sometimes on the face, and continues to make its appearance for several days in succession.

In the varicella with small vesicles, (chicken-pox,) small red elevations, which are irregularly circular, and having in their centre a small, transparent vesicle, make their appearance on the first day. These vesicles augment in size for two or three days: some are acuminate, whilst others are flat. On the second or third day, the fluid they contain, from being transparent becomes milky, the patient experiences great itching, and the vesicles become soft and appear diminished. The fourth day a red areola surrounds some of them. Towards the fifth, desiccation commences, and on the sixth they are replaced by small brownish scales. These small, thin crusts, dry from the circumference to the centre, and fall off on the ninth or tenth day. As successive eruptions take place for two or three days, the different stages of the eruption may be observed at the same time, and the duration of the disease is prolonged to the eleventh or twelfth day.

Varicella with globular vesicles, (swine-pox,) is preceded

by the same symptoms, and is developed in the same manner. The red points are speedily replaced by large vesicles, containing a transparent fluid, which becomes turbid on the second day of the eruption. The vesicles having now acquired their full size, are soft and flaccid to the touch, of a pearly white colour, and their circumference is larger than their base, which is surrounded by an inflammatory areola.

On the third day the vesicles diminish and become wrinkled, whilst the fluid thickens, and assumes a yellowish tint.

As there exists at the same time great itching, it often happens that children open the vesicles in scratching, thus causing an increase of inflammation of the part, and the formation of a yellowish pus. This happens more particularly on the face. The scabs that replace these pustules continue for a long time, and leave small cicatrices. The same peculiarity may take place in the first variety.

The vesicles, after having shrivelled, open about the fourth day, and are replaced by small, lamellar, brown crusts. These scabs dry from their circumference towards their centre, and fall off in from four to five days, leaving small red spots, which gradually disappear. As the vesicles appear in a successive manner during two or three days, various stages of the eruption may be observed at the same moment.

Diagnosis.—It is very easy to distinguish varicella from well-defined, distinct small-pox, by the regular progress, and gradual development of the variolous pustules, which contain a thick, white, curdy matter, preceding the appearance of the suppuration, as has been pointed out long since by Ashburner, an English physician. But it is not easy to distinguish between varicella and modified small-pox.

In this latter affection the precursory symptoms are generally violent, which is never the case in varicella. In modified small-pox the eruption is pustular. The pustules are small and circular, and generally depressed at their centre. After the falling off of the small, scaly scabs, minute tubercles, which slowly disappear, are frequently seen. In varicella, the vesicles, although at first transparent, now contain a sero-purulent fluid,

and are never succeeded by small tubercles, as is the modified small-pox. We would also add, that the varicella is not contagious, whilst the modified small-pox may be transmitted by inoculation, and in some instances occasion severe cases of small-pox.

The *treatment* of varicella is very simple, a moderated temperature, tepid drinks, diet, and confinement to bed, are the only remedies this disease requires, even in severe cases.

ECZEMA.

The word eczema is derived from the Greek, $\epsilon\chi\zeta\epsilon\omega$ *effervesco*; Willan adopted it to designate one of the genera of vesicular eruptions.

La dartre squammeuse humide of Alibert, corresponds to one of the stages of eczema; he has also united under this denomination the *lichen agrius*.

This disease is characterized by vesicles, which are usually very small, but conglomerated together in great numbers, and often occupying large irregular surfaces.

Eczema may present wholly different appearances, according to the state in which it exists; this no doubt was the cause that Willan divided it into *solare*, *impetiginodes*, and *rubrum*. Biett, in his clinical lectures, has, for a long time, distinguished it as acute and chronic. This method we have adopted.

In acute eczema, we arrange, 1st. *Eczema simplex*, which constitutes a very distinct variety from its slow progress, but is different from chronic eczema. 2d. *Eczema rubrum*; and 3d, *Eczema impetiginodes*.

1st. *Eczema simplex*.—This variety presents itself in the form of extremely small vesicles, closely distributed, and appearing without the slightest inflammatory areola, on a surface not differing in colour from the surrounding skin.

It appears without any premonitory symptoms, the patient experiences a slight itching, and is astonished to discover an eruption on the place. The vesicles that constitute it are in great numbers, closely conglomerated, small,

transparent, indolent, and presenting a shining aspect; the small drop of fluid they contain becomes turbid, and assumes a milky appearance; in a short time the fluid is reabsorbed, the vesicle shrivels, and falls off by an insensible desquamation, or opens and forms a small squamous disk, which is extremely thin, and soon detaches itself. In no case does the eruption give rise to inflamed surfaces, the secretion of fluid, or renewal of desquamation observable in other varieties; it does not leave the slightest mark.

These different stages take place slowly, and the disease is prolonged by successive eruptions; hence its duration, which usually varies from one to three weeks, may be much lengthened.

Eczema simplex may be general, but it is ordinarily confined to certain spots. It occurs on the arms, between the fingers, and sometimes may be mistaken for the itch. It is accompanied by no other symptom than itching, which is sometimes very great, particularly if the eruption should be general.

This variety of eczema most frequently occurs in young persons, and especially in females. It often arises from frictions or irritating lotions. This is the eruption usually occasioned by the quack remedies to bring out the itch. We have several times observed it in persons obliged to remain for a length of time near a furnace or large fire. It also arises from causes which are scarcely appreciable; thus, it often appears between the fingers of women in childbed.

Eczema simplex is a slight disease, and never accompanied by general symptoms; it is often complicated with itch, being usually produced by remedies employed to cure that disease; it also exists with *lichen*.

2d. But eczema presents itself in a majority of cases with greater severity, and may be divided into two distinct degrees.

1st. *Eczema rubrum*.—Here the eruption is usually preceded, and always accompanied by well marked symptoms of heat and stiffness; the skin is inflamed, and presents a vivid

red colour; if it be closely examined, it will be seen that it is studded with small elevated points of a silvery hue. At a later period, true vesicles may be distinguished, which soon acquiring their full size, appear about the size and shape of the head of a small pin; they are transparent and surrounded by a distinct inflammatory areola.

From the sixth to the eighth day, sometimes before, the redness diminishes; the fluid is reabsorbed, the vesicles are shrivelled, and the disease terminates by a slight exfoliation produced by the remains of the vesicles. In examining the eruption at this time, it still presents marked characters; there is a reddish coloured surface, (which remains for some days after the cure,) sprinkled with small rounded points, surrounded by a whitish border, irregularly scalloped, which indicates the line of demarcation between the elevation of the cuticle, that formed the vesicle and the areola surrounding its base.

Sometimes *eczema rubrum* does not terminate in so simple a manner; the inflammation, instead of diminishing, continues, or even augments; the vesicles become confluent, break and exude the fluid they contained, which, from being transparent, has acquired a milky colour. This fluid, flowing over an inflamed surface, irritates it still more, and occasions superficial excoriations, and a greater or less weeping of serum. When this exudation diminishes, it thickens, concretes, and forms soft, thin scales, often of a large size, which are frequently renewed, and leave inflamed surfaces on their falling off. The serous exhalation gradually ceases, the scales become drier and more adherent, and are not detached. The skin slowly recovers its natural state around the diseased surface, and the complaint gradually disappearing from the circumference towards the centre, ceases in from one to three weeks. But often instead of improving, these symptoms continue for a length of time, occasionally becoming more severe, and the eruption assumes a chronic state, which is very remarkable; this we shall hereafter describe.*

*The most remarkable variety of *eczema rubrum* is that which arises from the effects of mercury. Although most authors describe it as being

2d. Whether the vesicles were observable from the commencement, as is most generally the case, or that the progress of inflammation has been so rapid that its products were only discoverable at a more advanced stage; it often happens that eczema presents an appearance which allies it both to the vesicular and pustular affections. (*Eczema impetiginodes*.)

In *eczema impetiginodes*, the inflammation is violent, the skin at the inflamed spots is tumefied, the fluid contained in the vesicles has lost its transparency, and become sero-purulent. These pustular, congregated, confluent vesicles, soon break; the fluid rapidly thickens and concretes, giving rise not to laminae, as in *eczema rubrum*, but to yellowish, soft scales, formed of different layers, and sometimes of a very large size. These fall off and lay bare surfaces of a crimson red colour, which soon exude a reddish serosity, which follows the same course till the inflammation subsides; the pustular vesicles are less frequently and generally formed; the scales becomes thinner, and leave spots of a lighter colour on their disengagement, till finally, the skin regains its natural condition. This eruption may last two or three weeks, and be confined to a single spot; but sometimes it is general, and in such case is dangerous, as it is accompanied with general symptoms; the pulse is frequent, there is thirst, loss of appetite, &c.

In most cases, different degrees of inflammation are perceptible, particularly if the eruption be general or extensive. The vesicles may be observed at first transparent, then passing into a pustular state, and we have seen some, in which one-half was of a milky colour, and not yet become pustular; whilst the other, by its yellowish hue and thickened state, indicated that condition. In those cases of *eczema impetiginodes*, which are confined to a single spot, vesicles of *eczema rubrum* are visible, not only around, but even arising among the vesicular pustules of the former. This disease, instead of

confined to a small space, this is not always the case; we have seen a person almost covered with the eruption—in this instance the greatest benefit was derived from scalded bran.—TRANS.

terminating in twenty or thirty days, may also become chronic; but in such case, it does not differ from the chronic state, succeeding *eczema rubrum*: at this epoch, nothing but true vesicles occur, the pustules having disappeared.

Eczema impetiginodes, therefore, is not *eczema rubrum*, complicated with pustules of *impetigo*, but an eruption, whose vesicles, at first transparent, become not true pustules, but pustular vesicles. Otherwise the disease would be a true *impetigo*, for we perceive that at a certain period, almost all the vesicles become pustular, yet nevertheless we shall see in speaking of the diagnosis, that marked differences exist between the two eruptions.

The inflammation is sometimes so active that eczema, (and this often happens,) may be combined with true pustules of *impetigo*, or even with the larger ones of *ecthyma*. But these elevations of the cuticle contain pus almost from the moment of their formation; their base is generally larger, and the fluid yellower, and above all, thicker.

Acute eczema is seldom accompanied with general symptoms of a serious character, from oftentimes occupying a large part of the body; it would appear to be a dangerous disease, and yet it follows a regular march, and soon terminates without having occasioned any other symptom than a little elevation of the pulse.*

Chronic eczema.—Whatever may have been the primary symptoms, eczema often runs into a chronic state. The skin, perpetually irritated by the effusion of an ichorous fluid, and by the successive eruptions of vesicles, instead of regaining its natural condition, is deeply inflamed; excoriations take place and fissures occur, particularly at the articulations, and a continual and abundant secretion of fluid renders it necessary to change the linen constantly, as it becomes speedily imbued with the discharge; in doing this, great care must be observed not to remove it roughly and thus tear off the scabs, as this is

* Grocers are said to be liable to this form of eczema, from handling raw sugars; it also occurs in bricklayers, from the stimulus of the lime.—

often followed by a considerable flow of blood, and they leave red, swelled, flaccid surfaces exposed. The eruption may last for several months without the secretion of this fluid diminishing in any great degree.

At other times, after a certain time, the fluid is thrown out in less quantities; it thickens and forms layers of small, thin, soft, yellowish scales, having little adherence, leaving exposed on their separation, an inflamed but dryish surface. These layers form at greater intervals, they become dryer, and the disease seems on the point of disappearing, when, on a sudden, and without any assignable cause, the inflammation acquires greater intensity. The diseased spots again become red, and covered with vesicles, which soon discharge, and the affection goes through the same course. The disease may thus last for years, having these exacerbations more or less frequently.

In some cases there is not the slightest effusion or exhalation, the crusts becomes drier, more adherent, but less yellow, the skin is thickened, and splits, presenting deep fissures. The scabs, which are detached with ease, expose a surface but little inflamed. Sometimes, however, and above all, where chronic eczema is general, the skin remains, even for several months, of a vivid red, and covered here and there with thin, dry scales; it is also cracked, and there is no appreciable exudation of serum. In this state, eczema resembles and may be mistaken for certain scaly affections, (*psoriasis*,) particularly as the scales are not produced by the concretion of an effused fluid, but appear to be, (as in the scaly eruptions,) laminae of altered cuticle. The appearance of vesicles, however, will designate the true nature of the disease. We saw, in M. Biett's wards, several examples of eczema, which had thus become scaly affections. The vesicular appearance became more and more apparent as the patients recovered.

In some cases there is observed, particularly on the legs, that one or more small spots remain, around which the skin is smooth, tender, and shining, its surface is covered with whitish scales, extremely thin, as if cuticular, no vesicle is perceptible

on these shining spots, and the diagnosis would become extremely difficult, if a new eruption, or sometimes small vesicles dispersed around its circumference, did not explain the nature of the disease.

Chronic eczema, at first confined to a small space, may extend itself over large surfaces, and, in some rare cases, this eruption has been observed commencing about the size of a dollar, and extending by degrees till it covered a whole limb.

All these varieties of chronic eczema are constantly attended with the most intolerable itching, oftentimes more difficult to bear than violent pain. In vain does the patient strengthen himself by reason and fortitude, he cannot resist an imperious desire to scratch, thus augmenting the evil, which often returns with agonizing violence.

This itching is particularly distressing, and throws patients into agonies truly worthy of commiseration, when the disease is fixed in certain parts, thus when it has its seat on the internal and superior part of the thighs, (often induced in women by a chronic discharge,) it extends to the anus and vulva and induces a pruritus, which sometimes attacks the vagina, and is a horrible torment to the sufferer.

After some time the itching abates, the serous exhalation gradually diminishes, and shortly afterwards ceases, the scales become drier, and the skin less inflamed. The surface which is the seat of the eruption contracts in size, healing first at its circumference; the laminæ become thinner and smaller, and soon disappear; the skin remains somewhat redder than in a natural state, but this colour also rapidly vanishes. At last, the disease is reduced to an extremely small, dry, red spot, covered with very thin scales. The surrounding skin is smooth, tense, and even, and recovers its original character but slowly; the redness, as we have already said, remains for a certain time after the disappearance of the eruption. The duration of chronic eczema is indefinite, it may continue for months or even years.

Seat.—There is no part of the exterior of the body that is not liable to eczema, but there are certain portions very sub-

ject to it, as those which are furnished with hair, or where the follicles are numerous, as the pubis, arm-pits, groin, scrotum, &c. It may be confined to a single spot, as the breast, scrotum, scalp, or ears, and constitute some important local varieties.

It usually attacks several parts simultaneously, and we have seen it occupy the whole skin, both in a chronic and acute form.

Causes.—Eczema is not contagious, but under some exceedingly rare circumstances, it may be transmitted from one individual to another, by a prolonged contact of two mucous surfaces. M. Biett has mentioned in his clinical lectures several instances of eczema transmitted in coition. It often attacks adults, and women appear more susceptible of it than men; it occurs the most frequently in the spring or summer. The return of the seasons is in general the period when exacerbations of chronic eczema occur; sudden changes of temperature also induce them. It is often developed without any known cause, but is sometimes induced by an appreciable agent; thus it may be brought on by the action of a hot fire, the rays of the sun, (*E. solare*, Will.) and is frequently observed after the application of a blister.

It is also produced by dry frictions, and especially by those made with irritating ointments; it is thus that *eczema mercuriale* is caused. This does not differ from the other varieties, either in symptoms or course. In persons who work in sugar refineries, eczema is often induced by a burn; it is also occasioned by excess, particularly in spirituous liquors.

Whatever may be the influence of direct causes in the development of acute eczema, it appears to us, that its passing into the chronic state, and the length of time it remains in that form, must be attributed to some peculiar predisposition of the system.

Certain local varieties are produced and kept up by causes acting specially on the parts they occupy. Thus a chronic leucorrhœa will continue an eczema for an indefinite time. Working among the metals, contact with pulverulent sub-

stances, with sugar, &c. are all common causes of eczema of the hands.

Diagnosis.—Eczema in all its stages may be confounded with wholly dissimilar diseases, hence its diagnosis is of the highest importance.

Eczema simplex is often mistaken for itch, with which, at the first glance, it certainly appears to have some analogy; like it, it is developed without inflammation; both affect certain spots, as the wrist and sides of the fingers; both excite violent itching; but the vesicles of eczema are flat, whilst in itch they are acuminated; those of eczema are always conglomerated; in itch they are usually single and distinct, so that a few only are to be met with on a considerable extent of surface, which is never the case in eczema. The pruritus in this latter disease is a kind of smarting, very different from the exacerbations in itch; in the first case it is a real pain, while in the second, it is rather an agreeable than a painful sensation; finally, the itch is essentially contagious, whilst the eczema is rarely so.

Eczema rubrum presents characters which may cause it to be confounded with *miliaria*, but in the latter the vesicles are never confluent as in the former, where in a very small space an immense number may be perceived. These are larger in miliaria than in eczema. Besides, the general symptoms which accompany symptomatic miliaria, are always those of a serious disease, and will suffice to distinguish that affection from the one under consideration. That variety of miliaria which appears in persons who take much exercise during the heat of summer, much resembles eczema; but the vesicles are more scattered, there exists a greater or less degree of perspiration, and the disease rapidly disappears.

Eczema impetiginodes differs from *impetigo* in many important particulars; the vesicular affection always occupies large spaces, whilst the impetigo, on the contrary, is usually confined to a small spot. The pustules of impetigo do not contain a transparent fluid on their first appearance; they have a larger base and the fluid is much thicker. The pustular

vesicles of *eczema impetiginodes* are always vesicular at first, never contain true pus, but a yellowish serum, or a sero-purulent fluid. Besides, what proves still more the difference that exists between these vesicles and the pustules of impetigo, is the nature of their products. In impetigo the pustules constantly give rise to real scabs, which are always thick, of a yellowish colour, rugose and unequal, whilst the pustular vesicles of *eczema* form thin scales, broader than thick; and, moreover, in this latter disease there are always vesicles of *eczema rubrum* surrounding the vesicles, which is never the case in impetigo.

It is very likely that *eczema impetiginodes* will be confounded with *scabies*, when the vesicles of the latter affection are accompanied with pustules; but leaving these out of the question, they are in almost all cases but a complication with another disease, and paying attention to the vesicles alone, which are always very numerous, the same rule in their diagnosis is applicable as has been already laid down when speaking of *eczema simplex*.

Chronic eczema often presents greater difficulties in its diagnosis. Among the eruptions with which it may be confounded, may be cited *lichen*. This latter affection presents two states that are liable to be mistaken for *eczema*.

In the *lichen agrius* there is also an exudation of fluid, forming scales; but these scales are smaller, more yellow, and thicker than those of *eczema*, and approach to the nature of crusts: they expose, on their fall, not a smooth red surface, usually shining and slightly excoriated, as in *eczema*, but one that is studded with small prominent points, (papulæ,) generally perceptible to the sight, and always to the touch.

At other times, as happens in chronic *eczema*, the *lichen* presents thin, dry scales, without any perceptible exudation, or local inflammation, but then the skin is much thicker and more rugose; so much so, indeed, that it is often difficult to raise a fold of it. Besides, in *lichen*, some papulæ, easily distinguishable from their hardness and chronic course, are always to be found around the eruption, whilst *eczema* in most

cases presents vesicles in the vicinity of its eruption, which may readily be distinguished from the constituents of lichen.

But when these varieties of either lichen or eczema occur on the hands, great attention is necessary to discriminate between them.

Certain varieties of chronic eczema resemble *psoriasis*; but eczema may be distinguished by the presence of vesicles in the vicinity of the eruption, or by their consecutive development, added to which the scales are always less dry and friable. After their separation, the skin does not present, as in *psoriasis*, a red, smooth, and elevated surface, but is chapped and fissured.

Nevertheless, in certain cases of chronic eczema, (very rare it is true,) the eruption may be universal, and the skin offer a red colour, and at the same time be covered with whitish scales; here the diagnosis is the more difficult, if the first appearances of the disease have not been noted, and there should exist no exudation. This state of eczema may be distinguished from *psoriasis* by the skin not presenting any elevation or hypertrophy, as in the latter disease; and by the fissures being occasioned by the action of the muscles, and not covering the surface of the skin in all directions, as in *psoriasis inveterata*. But, we repeat, that much discrimination is requisite in these cases, and we are sometimes obliged to wait for a renewed exacerbation of the disease to dissipate all doubt.

Prognosis.—Eczema is ordinarily a slight disorder, particularly when it exists in an acute form; but when it becomes chronic, and at the same time is of some extent, it constitutes a very troublesome disease. The prognosis is worse when it has lasted for some years, and fresh eruptions appear at the moment it appears ready to terminate. Without endangering the life of patients, it imbitters their existence, when it thus remains for an indefinite time. It may occur with *lichen*, and, above all, with *scabies*. It is also often complicated with pustules of *impetigo* and *ecthyma*.

Treatment.—In *eczema simplex* it is sufficient in a majority of cases to keep the patient on the use of acidulated

drinks, and occasional tepid baths; these will remove the disease in a short time: but if it continues, and is accompanied with great itching, or the eruption is extensive, laxative drinks should be prescribed as well as alkaline or sulphurous baths; the alkaline baths are made by adding four to eight ounces of subcarbonate of potash or soda to a bath, according to the age of the patient or state of the eruption, and four ounces of sulphuret of potash for a sulphurous bath. Frictions, with the sulphuro-alkaline ointment, should also be employed, if the disease should last for any time.

Eczema rubrum and *impetiginodes* require the same treatment as acute inflammations, viz. diluent drinks, and a strict diet, when they are local and of little extent. But if they occupy a large surface, and are accompanied with excitement in the pulse, particularly if the patient be young and vigorous, it is necessary to recur to blood-letting, either general, or local, by leeches in the vicinity of the eruption; sometimes both modes are requisite. If the disease is very extensive, these should be repeated.

Diet, simple or emollient baths, or local bathing with a decoction of bran, or mallows, &c. and cataplasms made of potatoes and an emollient decoction when they break and leave a red and excoriated surface, are the only remedies required for acute eczema. The sulphurous preparations, so indiscriminately used in the cure of all the scabby eruptions, should be sedulously avoided. The same may be said of mercurial treatment; we have seen patients enter the Hospital St. Louis, in whom the *eczema rubrum* kept up and exasperated by these modes of practice, had passed into *eczema impetiginodes*, and was often attended with pustules, either of *impetigo* or *ecthyma*, lasting for months; and, on the other hand, we have observed acute cases, occupying the whole surface of the body, and appearing to constitute a serious disease, yield in twelve or fifteen days to a well-regulated antiphlogistic treatment. In all cases, the first thing is to remove the exciting cause; thus frictions must be put a stop to, or the patient taken from his habitual employment, if these

should be the origin of the complaint. We have several times seen, and among others, in a man employed in an apothecary's shop, the *eczema simplex* invariably return on his resuming his usual employment.

Chronic eczema, when it has not acquired that height which renders it a troublesome and serious disease, generally yields to the following remedies:—

Acidulated drinks and baths are to be freely employed. A half to one drachm of sulphuric or nitric acid to a pint of water is to be given—the nitric is more powerful than the sulphuric acid; these suit all those cases where there is an abundant exudation of fluid, accompanied with violent itching. The patient should take it in small quantities at a time, or even drink fresh water afterwards for the first few days, till the stomach becomes accustomed to its use.

The temperature of the baths should be from 25° to 27° of Reaumur, (88° to 92° Fahr.) and the patient remain in them for about an hour; they may be rendered emollient by the addition of mucilage or gelatine. The quantity of gelatine necessary for a bath is from a half to one pound.

Sometimes recourse must be had to laxatives; they may be employed alone or alternately with the acidulated drinks. Thus, veal water, or an infusion of chicory may be given, with the addition of half an ounce of sulphate of soda to the pint, or the same quantity of sulphate of potash; these may be augmented or diminished, according to circumstances. Whey, with the addition of two drachms of cremor tartar, will fulfil the same indication. Alkaline remedies may be employed with much advantage, both internally and externally. They are used in the latter way, when in despite of the use of emollients, the itching is very violent. Then local baths, with the addition of one or two ounces of subcarbonate of potash or soda, will afford great relief; the patient should make use of them before he retires to bed. Half a drachm to a drachm of the subcarbonate of potash in a pint of infusion of chicory may be given internally.

When the eruption is of long standing, and occupies a large

surface, more active means must be resorted to, as purgatives, sulphurous waters, vapour baths, and *douches*.

Calomel may be administered in doses of four to six grains for several weeks, or one or two of Plumber's pills, or those of aloes, jalap, or gamboge, in purgative doses, always regulating their employment by the state of the digestive organs. Seidlitz water is also useful: the patient should drink one or two glasses every morning. Sulphurous waters may be used either internally or to the surface: they are peculiarly suited to old cases, particularly where the eruption is fixed in the lower extremities, and presents a violet colour. Bareges, d'Enghien, and Cauteretz waters, are the most used: they may be artificially made, by adding to each bath two to three ounces of sulphuret of potash, varying the quantity according to the effect to be produced. In all cases, it is proper to use simple baths alternately with the medicated. When sulphurous waters are given internally, it is better to dilute them at first with two-thirds of barley-water or milk, and gradually augment the quantity until the patient can take them alone.

Local or general baths, either simple or rendered emollient, are, as we have already observed, the best suited to the commencement, or where the inflammation becomes more violent. In these cases, whatever may be the remedies employed, it is also advantageous to apply leeches to the vicinity of the eruption.

Vapour baths are sometimes very useful in cases of chronic eczema, but the patient should not be exposed to too great a degree of heat, nor approach the spot from whence the vapour issues. *Douches* of vapour are often of great utility when the disease is local.

When the eruption is confined, or reduced to a small spot, the cure is sometimes hastened by slight frictions with an ointment of the ammoniacal proto-chloruret of mercury, of the strength of ℞i. to ℥ss. to the ℥i. of axunge. In the course of the treatment, lotions of lead water, or of emulsion of bitter almonds, or even of a decoction of some of the poisonous plants, as dulcamara, hyosciamus, &c. should be often employed to allay the violent itching.

In certain cases, the chronic eczema resists all these means, and it becomes necessary to employ more powerful agents, if there does not exist any chronic affection of the digestive organs. In these cases of obstinate eruption, we have seen the following preparations succeed in an astonishing manner: 1st. Tincture of cantharides, especially in women. 2d. Some of the arsenical preparations, by the aid of which M. Biett has promptly cured many cases of severe and inveterate eczema.

The tincture of cantharides is given at first, in doses of three, then five drops, every morning in a little drink, and every six or eight days the dose augmented to five drops. It may be thus carried as far as twenty-five to thirty drops at a dose.

Among the arsenical preparations, those which succeed the best, are the Asiatic pills, of which one is to be taken a day, and their use continued for a month or six weeks.

The administration of these remedies demands much attention on the part of the physician; their use must be suspended when any signs of irritation manifest themselves; but the uneasiness the patient experiences on first using them, must not be mistaken for irritation; this soon disappears. However, it is often advantageous to relinquish their use for a few days, and again to recur to them.

In those cases where the eczema occupies but a certain space, and is of the scaly form, the skin dry, cracked, and a little thickened, (as occurs in the hands,) it is often useful to employ local remedies, somewhat active. In such instances, frictions on the eruption of *proto-nitrate of mercury*, (ʒi. or ʒss. to axunge, ʒi.) or *proto-ioduret*, (ʒi. to axunge, ʒi.) or *deuto-ioduret of mercury*, (gr. x. to xii. to axunge, ʒi.) are very advantageous. To allay the itching, camphor, grs. xij. may be added to these ointments. These mercurial preparations often produce happy results; but the advantages from those which have been prescribed internally, are at least doubtful, if not hurtful.

In these cases it is particularly beneficial to employ the sulphurous baths, either general or local, but the greatest benefits have been experienced from *douches* of vapour.

Cauterizations should never be employed in the treatment of eczema, the use of stimulating ointments is much preferable. M. Bielt has always regarded their employment as prejudicial.

Before finishing this subject, we will make a few observations on certain cases, where, from having a local seat, they present some peculiarities.

Chronic eczema of the breasts is often confined to a small spot; it regularly surrounds the nipple, and gives rise to deep fissures. It requires a very active treatment, is generally obstinate, and sometimes lasts for years.

Eczema of the scrotum, and that of the thighs in women, are always stubborn, as is also that which occupies the vicinity of the anus. *Douches* of vapour, sulphurous fumigations, and purgatives, are the means that offer the most advantageous results. In robust persons, enjoying good health, purgatives may be freely used.

Eczema of the ear is often very refractory; and, as it is sometimes accompanied with hypertrophy and chronic swelling, it may be necessary to introduce pieces of prepared sponge in the auditory canal, to prevent the closure of this opening.

Finally, *eczema of the scalp* may present itself with various symptoms, which sometimes cause it to be mistaken for *porri-go*. Alibert has even described, under the names of *teigne amiantacee* and *furfuracee*, two diseases, which, for a long time, M. Bielt has regarded as only varieties of chronic eczema of the scalp.

Thus may we see patients attacked with an eczema which often occupies both the face and scalp, but sometimes the latter only, with a secretion of fluid so abundant as to saturate the hair. At a later period of the disease the fluid thickens, and the scales in their formation surround the young hair. These scales are soon detached, either by natural exfoliation, or by the growth of the hair, but still remain adherent, and firmly attached to this substance. This phenomenon is less visible in females, but may be observed if the hair be examined near its origin. The presence of these scales of chaytoyant white

colour, like that of amianthus, among the hair, has a singular effect, particularly where the hair is dark, (*teigne amiantacee.*)

Sometimes the serous exudation is less abundant, and this liquid in drying occasions small, white, dry, branny scales, which are renewed with extreme rapidity, and are disengaged in great abundance by the least friction. This variety constitutes the *teigne furfuracee*, (*porrigo furfurans*, Will.) which also appears to have been mistaken in some instances for *pytiasis capitis*. These forms of eczema do not injure the hair.

Acidulated drinks and emollient lotions at the commencement, and afterwards alkaline washes and mild laxatives, are the only remedies these diseases require. It is sometimes sufficient in children, to wash the head with soap and water, and to pass a fine comb through the hair several times during the day.

It is proper to add, that the appearance of vesicles on the forehead, ears, &c. even at an advanced stage of the disease; the effusion of a serous fluid and the nature of the scales, are characters which will always distinguish these two forms of eczema from the different varieties of *porrigo*, which are pustular diseases.

HERPES.

The genus herpes corresponds to the *dartre phlyctenoide* of Alibert, who describes but two varieties; 1st, *Dartre phlyctenoide confluenta*, which appears to resemble both *herpes phlyctenodes* and *pemphigus*; 2d, *Dartre phlyctenoide en zone*, which is *herpes zoster*.

The word herpes, used for a long time in a vague manner, and having the same meaning as *dartre* or *tetter*, was applied to several diseases of wholly different characters, till Willan restricted it to a distinct class of eruptions.

It is characterized by an eruption of vesicles, always assembled in groups on an inflamed surface, so as to present

one or more perfectly distinct spots separated from each other by intervals of sound skin.

The form of these groups, and their seat, constitute species and varieties sufficiently distinct to be separately described.

The various species of herpes usually follow an acute march; their duration is generally one week, and is rarely prolonged beyond two or three.

Cases attended with violent general symptoms are very rare, if they exist at all. These generally consist in a slight uneasiness and langour, sometimes loss of appetite, but rarely fever. In some uncommon instances herpes is induced by direct agents, but in general it is developed without any appreciable cause, and even in those cases that arise from a direct influence, as a cold wind, (*herpes labialis*,) there exists at the same time a particular state of the constitution, of which *herpes* is one of the symptoms.

The aggregation of the vesicles in groups, on a circumscribed and inflamed base, will always prevent their being confounded with any other vesicular affections.

These diseases are always slight, usually follow a regular march, and only require a very simple treatment. Herpes may however exist, simultaneously with other diseases, either of a cutaneous or internal character.

Herpes phlyctenodes.

Under this head are included all those varieties of herpes that have neither a determined form or seat; the others are only separated because they possess one of these characters.

Herpes phlyctenodes is distinguished by the presence of vesicles, generally of a small size, but always aggregated, manifesting themselves on all parts of the body, in some cases on several of them simultaneously, and forming irregular spots, whose size varies from that of a dollar to that of the palm of the hand. In the same eruptions, vesicles may be found, some of which are imperceptible, whilst others are as large as a pea, but the number of the small ones always is the greatest.

It generally occurs on the upper parts of the body; the cheeks, neck, breast and arms, are its most frequent seats.

Herpes phlyctenodes is usually confined to one or two groups, and disappears about the seventh or eighth day. But either from its being developed on different points in succession, or from several groups making their appearance contiguous to each other, it may be retarded, though seldom beyond two weeks, and never more than three.

When this disease manifests itself in several groups, they are generally distant from each other, but however contiguous they may be, the intervening skin is always sound, and remains unaltered.

Symptoms.—Each group is developed in the following manner; on the spot which is about to be the seat of the disease, a multitude of almost imperceptible red points are to be observed, grouped around each other, and whose number is often very considerable, although confined to a relatively small space. On the next day there may be perceived a red inflamed surface, covered with prominent vesicles, hard to the touch, and whose size varies from a grain of millet to that of a small pea. The redness of each group extends for some lines beyond the vesicles. These vesicles, although they may be in great numbers, occupy but a small space. They are all hard, resisting, of a globular form, and transparent on the first day of their appearance; but on the following day, or even before, the transparency is followed by a milky tint.

A feeling of smarting, oftentimes of a severe character, accompanies the appearance of each group. The vesicles commence shrivelling on the third or fourth day, and on the seventh or eighth are dried up; some, however, contain a purulent fluid, whilst others are changed into brownish scabs. Desquamation soon takes place, but slight ulcerations are sometimes observable. A red colour, which slowly disappears, always remains for some days after the disappearance of the eruption.

In most cases this slight affection is neither preceded nor accompanied with general symptoms; a state of general uneasi-

ness, sometimes loss of appetite, and a little fever are the only ones present when the disease is of some extent: the local symptoms are, as we have already mentioned, a feeling of smarting and of burning. But these symptoms, whether local or general, only occur on the appearance of the eruption during the first two or three days.

Causes.—*Herpes phlyctenodes* usually takes place in children. Watching, excess in food, grief, and other causes of like nature, have often appeared to exercise an influence on its development, but in most cases it is produced by unknown causes, or by such as are difficult to appreciate.

Diagnosis.—The characters of *herpes phlyctenodes*, as already given, will serve to distinguish it from other eruptions, whether they are vesicular or bullar. *Pemphigus* is the only disease with which it is liable to be confounded, particularly as the descriptions of this eruption have been given as *herpes phlyctenodes*. They may be distinguished from each other, by the vesicles in herpes being grouped in detached spots, whilst in *pemphigus* the bullæ are isolated. Sometimes, it is true, these red surfaces are found in the latter disease, where the blebs are closely united, and almost confluent, but they will not be confounded with herpes, if it be recollected, that in this affection, vesicles, not bullæ occur. Some vesicles, it is true, may be transformed into bullæ, but these are very few in number, and very much scattered. As to the other forms of herpes, as they only differ in their form and seat, these circumstances form a sufficient differential diagnosis.

Treatment.—*Herpes phlyctenodes* is a slight disease, and in the generality of cases, only requires the use of diluents, some attention to diet, and a few warm baths. If the disease is of some extent, and there are general symptoms, a small bleeding may be prescribed.

a. Varieties from Situation.

These varieties only differ from *herpes phlyctenodes*, from their having a particular seat; they are two in number, *herpes labialis* and *preputialis*.

Herpes labialis.

This variety only differs from *herpes phlyctenodes* by its seat; it is characterized by groups of vesicles occurring round the mouth. In general, *herpes labialis* only occupies a certain extent of either the upper or lower lip. It always appears at the outer angle, and usually at the point of junction of the mucous membrane of the lip with the skin. Nevertheless, in certain cases, it only attacks the mucous membrane, and in others the skin near the line of junction. Sometimes the groups are irregularly placed, and may extend to the cheeks, the chin, alæ of the nose, and even, in some cases, to the pharynx.

Herpes labialis is sometimes preceded by a slight redness for some hours, at others, the eruption appears suddenly. The spot where it occurs swells, and becomes hot and burning, presenting a red, shining, and tumefied surface, painful to the touch, with here and there a few vesicles. The swelling of the lip extends beyond the group of vesicles. These last are rapidly developed, sometimes several are united, attain the size of small peas, and are filled with a transparent fluid. The heat is in general less violent after the formation of the vesicles; the transparent fluid they contain soon acquires a milky hue, and, on the third or fourth day, presents a yellowish appearance, and has become sero-purulent; the redness and swelling have almost disappeared, crusts soon form, which become brownish, and fall off on the seventh or eighth day of the eruption; if they are picked off too soon, they are succeeded by others, which remain for a long time. After the disappearance of the eruption, a small red spot remains, which soon vanishes.

Causes.—*Herpes labialis* is often occasioned by cold; thus, it often occurs from leaving a warm apartment, and suddenly being exposed to a cold and moist air. It is frequently accompanied with coryza, and a slight bronchitis. The contact of certain acrid and irritating aliments may cause the appearance of this variety of herpes. It often supervenes on intermitting

fever, and is sometimes complicated with inflammation of some interior organ, but particularly those of the thorax.

Diagnosis.—The disposition of the vesicles in isolated groups, their regular course, the large size which some of them acquire, and their containing a sero-purulent fluid, will suffice to distinguish *herpes labialis* from eczema of the lips.

Herpes labialis is usually a very trifling disease, and seldom requires any treatment. But in the cases where it is accompanied with a burning heat and painful swelling, these symptoms may be mitigated by lotions of cold water, to which may be added a few drops of sulphate of zinc, acetate of lead, or sulphate of copper. Emollients produce but little good, but neither treatment will prevent the disease from pursuing its regular course. In all cases, exposure to cold, or the heat of a strong fire, should be avoided.

Herpes preputialis.

Herpes preputialis is also a variety of *herpes phlyctenodes*, from which it only differs in its seat. It is characterized by occurring on the prepuce, either externally or internally, in the form of groups of vesicles.

It is first manifested by several red spots, which are more or less inflamed, and about the size of a franc piece, but often much less. These spots are soon covered with small vesicular globules, whose development differs somewhat according to their seat.

Thus the eruption may be confined to the interior or exterior of the prepuce, or occupy both. The groups which occur on the exterior are but little inflamed, the transparent and distinct vesicles follow the ordinary course of herpes, except that the fluid is generally absorbed, when the vesicles shrivel and a slight exfoliation takes place; in some cases, however, the fluid becomes turbid in a few days, small scales are formed, and the disease terminates on the seventh or eighth day at latest.

But in the groups situated on the interior of the prepuce, the

inflammation is much greater, the vesicles rapidly augment in size, and often are united two and two, three and three. They are extremely thin, and their transparency is so great as to permit the red colour of the surface they occupy to be seen through them. The fluid speedily passes into a sero-purulent state, the vesicles break and form small scales, which are soon detached either naturally or accidentally, leaving excoriations, which may be readily distinguished from syphilitic ulcerations; causing no cicatrix on their healing.

A slight uneasiness at the commencement of the eruption, and a little smarting when excoriation takes place, are the only symptoms that accompany this disease.

Causes.—This variety of herpes is only observed in adults: chafing of woollen clothing, certain chronic discharges from the vagina, the action of the matter which is so abundantly secreted between the glans and prepuce, if it is permitted to collect, may all occasion this eruption, but which generally occurs without any assignable cause. Strictures of the urethra, which may exist at the same time, have no other connexion with the eruption than their simultaneous appearance.

Diagnosis.—The seat of this variety may throw some obscurity on its diagnosis, if a superficial examination only is made; but in whatever state it occurs, it appears to us that it would be difficult to confound it with syphilitic eruptions or ulcerations. Is it vesicular? All the characters of the genus herpes are applicable to it, and permit no error. Is it covered with scales? No person can take these thin, flat scales, for the prominent and thick scabs of syphilitic eruptions. Finally, has it left excoriations? These all being superficial and the same depth at the centre as at the circumference, disposed in groups, like the vesicles which gave rise to them, &c. can never be mistaken for syphilitic ulcerations, which are remarkable for their depth, for their hard and elevated edges, and by the whitish exudation that covers them.

Treatment.—Lemonade and barley water, injections of a decoction of mallows between the prepuce and glans, and emollient local baths are all the means necessary to be used

for this form, which in general is cured with great facility. Nevertheless, in some cases, it may become chronic, and resist the most energetic treatment. M. Bielt has seen several examples.*

b. Varieties from Form.

The genus herpes also includes three important varieties, which appear to be distinct species, but which, attentively examined, only differ from *Herpes phlyctenodes* by their determinate form. However, as they constitute diseases of frequent occurrence, and as there exists doubt on the nature of some of them, it has appeared to us that they should be separately described. These are *Herpes zoster*, *H. circinnatus*, and *H. iris*, which latter constitutes an extremely rare variety, ranged by Willan in the exanthemata, and sometimes really approaching a variety of *roseola*, we have described as *roseola multi annulata*.

Herpes Zoster. Shingles. Zona.

This has been regarded and described as a species of erysipelas, but this error has so little foundation, that it almost suffices merely to notice it; in fact, none of the symptoms of that eruption are to be found in *Herpes zoster*, and, above all, no symptoms of herpes in erysipelas; we will, however, dwell for an instant on the probable cause of this opinion. It is doubtless based on the fact that certain cases of erysipelas are complicated with bullæ, but there exists a great difference between isolated, imperfect, and often extensive elevations of the cuticle, as occur in erysipelas, and the small, aggregated vesicles, rarely larger than a pea, which constitute herpes. This rea-

* The hydro-cyanic acid with alcohol, used as a lotion, has been very effectual in removing obstinate cases of herpes attacking the genital organs in females, the proportions are a drachm and a half to two drachms of prussic acid to six ounces of alcohol.—*Hufeland's Journal*, October, 1827.

M. Lisfranc has employed lotions of chloride of soda in obstinate cases of herpes with great success.—*TRANS.*

son, added to the regular march of *Herpes zoster*, which is identical to that of *H. phlyctenodes*, suffices to unite these two affections, and to distinguish the former from erysipelas.

In a recent work, the author, no doubt led away by a desire of novelty, wished to correct Willan, but it appears to us that he has transplanted this disease to an order to which it is as much unallied as to the exanthemata. For what in fact has it in common with the bullar eruptions? Nothing, absolutely nothing. Nevertheless, because some of the vesicles in a group may have acquired a somewhat larger size than usual, a pretext for correction has been found, but it is far from being a happy one.

In all the bullar inflammations, the small aqueous tumours are always isolated; in zona the vesicles are uniformly grouped together in great numbers. The bullæ in *rupia* and *pemphigus* are generally developed on several parts of the body at the same time, and in an irregular manner; zona is always confined to a particular seat, and appears in a peculiar form. The large size of some of the vesicles in this disease, is only accidental, and is found but in a few of the groups, whereas in the bullar eruptions, the volume of the aqueous tumours is remarkable in all. We do not therefore see why it should have been separated from herpes, as it possesses all the characters of the genus. We think with Willan, that this is its true and only place.

Herpes zoster is characterized by irregular patches of various sizes, and of a vivid red colour, which are covered with conglomerated vesicles, and presents the form of a half belt or zone on the body. The zone usually commences at the median line of the body, and runs to an opposite point, without ever passing this line.

This eruption is generally met with on the body, where, in a majority of cases, it forms an oblique demi-zone. It is not rare, however, to see it commence on the body, and finish on the limbs. Thus, often beginning on the middle of the inferior and posterior lumbar region, it obliquely surrounds the external and anterior iliac region to arrive at the groin, and

terminates on the internal part of the thigh, or commencing at the upper and middle part of the back, it reaches the posterior part of the shoulder, then the anterior, and terminates on the internal part of the arm, sometimes running down to the cubital border of the hand. Some cases are also met with, in which two lines arise from the half zone, one extending along a lower extremity, whilst the other follows the course of the arm. But the most common seat of this affection is the lower part of the thorax; it is rarely seen attacking a limb only. Nineteen times in twenty, zona is found on the right side of the body, without our being able to account for this singular predilection. It never exists on both sides at the same time.

In all cases, these half belts are formed, not by a succession of vesicles, but by isolated patches which follow the same course, and exhibit intervals where the skin is perfectly sound. Sometimes these patches are contiguous, and at others the intervals between them are considerable. The duration of the disease is from three to four weeks.

Symptoms.—Zona shows itself at first in irregular patches, of a vivid red colour, and at short distances from each other, which are successively developed, until half the body is surrounded. Sometimes these spots commence at the two extremities of the zone at the same time, and become united by successive eruptions. Those which begin and end this kind of chain are usually the largest, and present an irregularly rounded form, whilst the patches which are included between them are small. In some rare cases the development of these spots is preceded by a painful and burning sensation. If they are attentively examined, a multitude of small, white, silvery points will be perceived, which soon augment in size, and assume the form of distinct transparent vesicles, of the size and appearance of small pearls. They attain their greatest degree of development in three or four days, and rarely exceed in size that of a large pea, though in some instances they may acquire considerable bulk. At this time the surface on which the vesicles are situated, is of a vivid red colour; and this hue extends for some lines beyond the edge of each group of

vesicles. According as fresh groups are developed, they follow the same course.

Towards the fourth or fifth day from the appearance of the vesicles, the redness diminishes; the vesicles shrivel and become wrinkled. The fluid they contain, from being transparent, becomes opaque, or even blackish; and even pus is to be found in some: finally, small light crusts of a deep brown colour are formed, which fall off in a few days. Other groups follow the same march, and towards the tenth or twelfth day small red spots only remain, which gradually disappear. But it sometimes happens, and particularly where the disease is situated on the posterior part of the thorax, that the vesicles are succeeded by excoriations or even slight ulcerations, which appear to result from the chafing of the diseased parts against the bed; the duration of the disease is thus much prolonged.

Such is the usual course of *zona*, but it may present many varieties; thus absorption of the fluid may occur towards the fifth or sixth day, and the disease terminate by desquamation on the seventh or eighth; at other times, in persons enfeebled by age or privations, the vesicles acquire a considerable size, soon open, and leave large and painful ulcerations, followed by well defined cicatrices. In some very rare cases, particularly in old persons, *zona* has been followed by a gangrene of that part of the skin on which the vesicles were situated.

We have observed a great number of instances of *zona* in the Hospital of St. Louis, and have never seen it accompanied with those general symptoms, and particularly of a gastric nature, with which it has been asserted it is always attended; a state of uneasiness, in some rare cases a slight excitement of pulse, heat of skin, a sensation of tension, which is generally painful about the seat of the eruption, acute pain in those cases where the disease terminates in ulceration, and finally, a slight local pain remaining some time after the eruption has disappeared, (not acute, as has been said,) are the only phenomena, which, in a majority of cases at least, accompany this variety of herpes. If it was necessary to bring additional proof to this assertion, we would cite the opinion of M. Biett,

who has never seen those violent symptoms described by authors, in more than five hundred cases that he has treated at the Hospital of St. Louis.

Causes.—*Herpes zoster* most usually attacks young persons and individuals in whom the skin is fine and delicate; it is more often observed in men than women; it sometimes appears in the aged, and more usually manifests itself in the summer and autumn than in the spring or winter. It is sometimes met with after small-pox, and may reign epidemically.

Diagnosis.—This affection cannot be confounded with any other; its vesicular nature and peculiar form are two symptoms that preclude the possibility of error. Sometimes, at the commencement of an attack, or when its development is incomplete, a single group only is perceptible near the median line, and may be taken for *Herpes phlyctenodes*; but it often suffices in these cases to examine the opposite part of the body, when other groups of vesicles may be detected; added to which, small red points, the indications of new groups about to appear, generally exist on the line between these separated patches; but at all events the error is of no consequence, as the two diseases are nearly similar.

Prognosis.—*Zona* is seldom a severe disease, but when it terminates by ulceration it may be troublesome, and still more so when it is followed by gangrene of the skin, which has latterly been observed to occur in elderly persons.

Treatment.—In almost all cases *zona* disappears under a very simple treatment, as a regulated diet, rest, and diluent drinks, as lemonade, &c.; it is seldom requisite to recur to either local or general bleeding. A few simple baths are advantageous where the inflammation is high and the patients restless. Local applications are useless. Those which have been the most extolled are saturnine or other astringent lotions. If ulcerations take place, they should be treated with a slightly opiated cerate.

If the disease occurs in an individual who is enfeebled either from age or internal disease, tonic drinks, as ferruginous waters, may be given with advantage, and at the same time the strength of the patient kept up by a nourishing diet.

When it terminates in gangrene, recourse must be had to tonics and stimulating local applications. Is it necessary to speak of the application of the ectrotic treatment in this disease? It appears to us, to say the least, that it is useless in a malady, which, in the generality of cases, is slight and simple.*

Herpes circinnatus.

This name has been given to a frequent variety of herpes which appears in the form of rings.

It is characterized by globular vesicles, mostly of a very small size, disposed in such a manner as to form complete circles, the centre of which is generally in a healthy condition, and the edges, which are of different shades of red, are covered with small vesicles. This red band is often very large in comparison to its centre, particularly when the rings are small; the red colour extends beyond the vesicles on both circumferences.

Symptoms.—This eruption commences with a certain degree of redness of the spot, on which the vesicles are to appear. This redness, sometimes confined to a surface whose extent does not exceed that of a shilling, may in some cases be two inches in diameter. Though, generally, perfectly round, it sometimes presents an oval form. In small spots the redness is slighter in the centre, and in large ones the skin preserves its natural colour. In all cases, the circumference of the circle soon becomes covered with extremely small vesicles, closely set together, which, when examined with attention, appear of a globular form. Although at first transparent, the fluid contained in these vesicles soon becomes turbid, the vesicles break, and are succeeded by small scales, which are usually very thin, and soon fall off; and in a majority of cases the eruption runs its course in eight or ten days, leaving only a redness, which slowly disappears.

* Bateman says that this disease cannot be shortened by medicine. But from more recent experience, this is found to be an erroneous opinion, as the complaint will certainly, in some cases at least, yield to local treatment. Mr. Geoffroy has found beneficial results from lunar caustic. See *Rev. Med. Ap.* 1826.—TRANS.

Such are the most usual stages of this disease, but in some instances the centre of the ring is also inflamed, and a slight desquamation occurs without vesicles being formed. Sometimes the vesicles do not terminate by the formation of scales, but the fluid is absorbed, the vesicles shrivel and are detached by an almost insensible exfoliation. This usually takes place in the small rings, and in such cases the vesicles are so extremely minute as to require close observation to detect them. Finally, in some cases the circles are very large, and the vesicles attain the size of a grain of millet.

Herpes circinnatus generally lasts from eight to ten days, when there is only one ring, or when they are few in number and are developed simultaneously. But where the rings appear successively, the duration of the disease may be prolonged for two or three weeks. In persons with a delicate skin the redness often remains for a length of time after the disappearance of the eruption and scales.

Although this disease may occur on all parts of the body, it generally selects the arms, shoulders, or breast, and more particularly the neck and face. It is very common in young persons, and especially in girls, in whom the skin is white and delicate; to see small herpetic rings, about the size of a sixpence, on one or both the cheeks, and still more often on the chin.*

Causes.—*Herpes circinnatus* generally attacks children, young persons and women. It is especially observable in persons of fair complexion and thin skin. Sometimes its appearance appears to be induced by cold; it may also be produced on the face by stimulating lotions or other applications. But in the generality of cases no special cause can be assigned for its occurrence.

* There is a variety of *herpes circinnatus* that our authors do not appear to have seen. This does not heal with the disappearance of the first vesicles, but continually enlarges by the appearance of fresh vesicles on the outer margin, and thus the disease often proceeds to a great extent, the internal part of the ring healing whilst the ulcerous and vesicular circumference expands. This form occurs in warm climates; Bateman states that it is almost unknown in England.—TRANS.

A slight smarting and itching are the only symptoms that accompany the appearance of this eruption.

Diagnosis.—Characters so distinct and well marked, would appear to preclude any mistake. Nevertheless, a small herpetic ring, in which the vesicles are only followed by a slight exfoliation, and having a red and circular form, may in some cases be mistaken for a leprous spot, deprived of its scales. But on the one part, the depression of the centre, and the prominence of the edges, and on the other, the unity of the surface, and above all, the existence of the remains of vesicles on the edges of the rings, will always suffice to prevent error, which, at all events cannot be of long continuance, as an herpetic ring is on the eve of healing, when the vesicles disappear. Besides, it is very rare that only a single leprous spot occurs, and they will probably be found on other parts of the body with more distinct characters.

There will perhaps be more difficulty in distinguishing this eruption from *Porrigo scutulata*, particularly, as the name of ringworm has been applied to both diseases. But one, (*Herpes circinnatus*,) is a vesicular affection, and gives rise to scales only; its duration is short, it is not contagious, and when it occupies the scalp, does not occasion a loss of the hair. The other, (*Porrigo scutulata*,) is a pustular and contagious disorder; its duration is long and indefinite; it occasions scabs, which gradually increase in thickness; it only occurs on the scalp, and rapidly occasions the loss of hair wherever the eruption is developed.

The treatment of this disease is much the same as in the other species, except that great advantage is derived from lotions rendered alkaline by the addition of a small quantity of subcarbonate of soda or potash, (one or two drachms to the pint of water.) The itching and inflammation of the small herpetic rings that occur on the face, are often relieved by repeated applications of saliva. Lotions made astringent by the addition of alum or sulphate of zinc, are also useful.*

* It is said that the lime-water from gas-works, impregnated with the various absorbable products of the coal, is very efficacious in removing ring-

If the disease attacks several parts of the body simultaneously, alkaline baths and mild laxatives should be ordered.

Herpes Iris.

This name has been given to an extremely rare variety of herpes, which appears in the form of small vesicular groups, surrounded by four erythematous rings of different shades of colour. Patients often compare this eruption to small cockades. Bateman was the first who described this affection with precision, and ranged it in the genus herpes.

It manifests itself by small spots, which are soon followed by zones of different colours. On the second day, a vesicle forms in the centre, which is soon surrounded by small ones. In the space of two or three days, the central vesicle becomes flattened; the fluid it contains grows turbid, and assumes a yellowish hue; the erythematous circles are more developed, and form four distinct rings surrounding a central vesicular group, thus making a disk of about the size of a shilling, on which is observable, (beginning from the central point to the circumference,) a reddish-brown ring, then one of a yellowish-white, then a third of a deep red, and finally, one of rose-colour, which gradually fades into the natural colour of the skin. The number of these disks is sometimes considerable.

The third of these rings is usually the narrowest; they may all, but especially the first, be covered with vesicles.

The eruption terminates about the tenth or twelfth day, by an absorption of the fluid, and a slight desquamation. Sometimes the vesicles break and form small scales, which soon separate and fall off.

Herpes iris may occur on all parts of the body, but is more generally met with on the face, hands, insteps, fingers, neck, &c. It appears in some instances to select prominent parts, as the ankle.

worm, a solution of sulph. cupri will often succeed where other applications have failed, and we have lately had strong evidence of the utility of castor oil as a local application.—TRANS.

Causes.—This eruption usually appears in children, women, and persons of a fair complexion, without our being able to assign any special cause. It may occur simultaneously with other varieties of herpes.

The only disease that can be confounded with it is the variety of *roseola* with multiplied rings. This latter eruption differs, however, by the greater size of the disks, which are sometimes larger than a dollar, and by the absence of vesicles. This is probably the eruption Willan placed among the exanthemata. This variety may, nevertheless, be mistaken, when the vesicles of herpetic eruption have opened and disappeared; but even then, in most cases, fragments of them may be discovered on a close inspection.

This slight affection requires no treatment in a majority of cases, and if it does, the same remedies are applicable to it, as to *herpes circinnatus*.

It is exceedingly rare, and among the multitude of diseases of the skin observed by Dr. Biett during many years, he has met with it but three or four times.

SCABIES. *Itch. La Gale.*

Scabies is an essentially contagious eruption, characterized by vesicles, which are usually distinct, slightly acuminate, transparent at the summit, somewhat larger at their base, and accompanied with a greater or less degree of itching. Some authors have regarded and described it as a pustular affection, others have admitted one of its varieties to be of that nature, but it is an error. The pustules, which are only met with in a few cases, are accidental, and for a long time M. Biett has regarded the itch as vesicular. Nevertheless, under certain rare circumstances, some vesicles may become pustular.

Scabies may occur on all parts of the body, except the face, which is always exempt. But it particularly affects certain situations, as the fingers, wrist, and in general all the bends of the limbs. It is a very common disease, and attacks all ages, both sexes, appearing in all seasons, in all climates, and in all

conditions of life; but it shows itself more particularly among the poor, where every thing seems to invite it, misery, want of clean linen, and an absolute neglect of cleanliness. When it appears among the rich, it has generally been introduced by domestics, &c.

It never occurs spontaneously, and is not epidemic; this has been proved by numerous facts observed and recorded at the Hospital St. Louis. The epidemics of scabies, that have been so called, were, in all probability, vesicular affections of another kind, (*eczema*,) whose epidemic, also, is far from being verified. It is never epidemic, but is essentially contagious.

The time that elapses between the exposure to the contagion, and the invasion of the disease, offers some important points.

In children it generally declares itself at the end of four or five days, but this varies. Thus, if they are feeble and delicate, the incubation is longer, and is very prompt where they are strong and hearty, appearing in two days.

In adults it requires from eight to twelve days in the spring and summer, and from fifteen to twenty in winter.

In old persons it is still longer in making its appearance, as their skin being dry and hard, offers less facility to its transmission and development.

It is also a very long time in developing itself in persons who are affected with an inflammation of some internal organ.

The vesicles first appear where the skin is fine and delicate, or the number of lymphatics greatest, as the interval of the fingers, in the bend of the arm, &c. Certain professions, however, cause some varieties; in blacksmiths, locksmiths, and dyers, the eruption does appear at first in the fingers or wrists, as their skin is rough and thickened in these places. On the contrary, the hands of tailors and seamstresses are peculiarly obnoxious to it. It often commences on the right hand in fencing masters. Cases are cited where it has been transmitted to the face by the collar of a cloak. Was this really the itch? We doubt it, for we have seen thousands of persons with this disorder, (they arrive in crowds at the Hospital St. Louis,) and have never met with this eruption on the face.

Symptoms.—When scabies has been communicated, the individual who is attacked experiences an itching at the places where contact took place. This pruritus increases in the evening, from the heat of the bed, and by the use of spirituous liquors or high-seasoned food. Vesicles make their appearance, which slowly increase in size and numbers. They are pointed, transparent at top, present a slight red tinge in young persons, and contain a serous and viscous fluid. If the patient is feeble, the eruption makes but little progress, but if the contrary be the case, it rapidly extends. It occurs in the bends of the limbs, in the intervals between the fingers, in the arm-pits and sometimes on the abdomen. It may be general, except on the face, but is usually confined to a small surface, on the abdomen or arms. In some cases it merely consists of a few vesicles, dispersed here and there on the wrists and between the fingers.

If the vesicles are few, the itching they create is slight, and they preserve for a long time their original form. But if they increase rapidly, or if they take place in subjects whose skin is fine and delicate, the itching becomes intolerable. The patients, in scratching themselves, tear the vesicles, the liquid they contain flows out, and they are replaced by a multitude of small, red, inflamed spots. Finally, in some cases, the action of the nails, determined by the itching, augments the inflammation to such a degree that the disease may become complicated with pustules of *impetigo*, or even *ecthyma*, but this is never observed except in young, vigorous, and sanguine persons, or from an excess in food.

Whatever may be the extent of the eruption, it never occasions those serious symptoms that have been attributed to it. Other eruptions, as well as the inflammations of internal organs that may accompany it, are only complications.

Causes.—These are predisposing or proximate, youth, sanguine temperament, the sex, the handling of woollen goods, the spring, the summer, and warm climates, all appear to predispose to this complaint. It more particularly affects children and young persons, and the reason, as has been justly ob-

served by M. Bielt, is the greater proportion of individuals of these ages that exist. It results from the records kept at the Hospital St. Louis, that it is much more frequent among men. To what is this to be attributed? Are they more predisposed to it? No! but they are much more exposed to its contagion.

Lymphatic and sanguine temperaments are very obnoxious to its attacks; it rarely occurs in persons of bilious habits. But this may be because these exist in a less proportion. Finally, it is frequently observed in tailors, seamstresses, mattress makers, &c.

As to the proximate causes, it is still wholly unknown. Scabies has in turn been attributed to an acid principle, to a peculiar fermentation, and finally, to the presence of insects. This latter hypothesis is still admitted by a great number of physicians. Nevertheless, if we cannot affirm that they do not cause it, we at least are far from crediting it. Without impugning the good faith of those who believe in it, we are of opinion, that in a majority of cases they have mistaken a pedicular disease for itch; even Morgagni's account may be referred to this head. Let it be as it may, they were first admitted by Avenzoar, afterwards by Ingrassias and Joubert, then described at some length by Mousset, drawn from nature by Hauptmann, and finally, the development of the insect, and the manner in which it forms the vesicles, given in detail by Redi, in the seventeenth century; this *acarus* has also been classed and described by Linnæus, Degur, Fabricius, and Latreille. But its existence was still doubted, when, in 1812, the experiments of M. Gales, formerly apothecary to the Hospital St. Louis, were so successful, that they appear to destroy all uncertainty. His first researches were fruitless, but the latter ones were crowned with such success, that he collected more than three hundred of them, and even described their generation, manner of laying their eggs, &c. These observations present so many marks of authenticity; M. Gales was assisted by so many credible witnesses, that no person can doubt what he has advanced. Nevertheless, these experiments have since been repeated by individuals who possessed the necessary requi-

sites of faithful observers in as high a degree as M. Gales, yet they have never arrived at the same results.

In 1813, Alibert had them undertaken, by a skilful person, but he could find no insects. It is to be remarked, however, that lately in his history of *la Psoride pustuleuse*, (itch,) this author appears to retract his opinion, and to admit the existence of the *acarus*.

In 1818, 1819, &c. M. Biët repeated these experiments himself, in which he used the best microscopes, even that of Amici on the horizontal plan. These researches were made on a great number of individuals, and under the most favourable conditions to discover the insect if it really existed. But he has never succeeded in detecting it. The same result has attended observations made in other countries.*

It is therefore desirable that M. Gales, who has arrived to such a degree of quickness of sight, that he can discover with the naked eye the vesicles that contain the insects, would again visit the Hospital of St. Louis, and reiterate experiments which have hitherto been so successful. Till then, we shall think ourselves justified in believing that the *acarus* does not exist.

Diagnosis.—If itch is usually to be recognised with ease, cases also exist where it is very difficult to distinguish it from eruptions of a wholly different character, and which, moreover, are not contagious; it is, above all, of extreme importance to form a true diagnosis of this eruption, as the least error may not only compromit the reputation of a physician, but it may also on the one part give rise to unjust suspicions, or even deprive an individual of his situation, &c. or on the other, lull the apprehensions of a family as to the nature of a disease, the rapid contagion of which may soon involve every person in the house.

The eruption most generally confounded with scabies is

* Bateman appears to believe in the existence of these insects, but acknowledges that he has never been able to detect them. Heberden was equally unsuccessful, and he was informed by the best microscopic observers of his day, that they were in the same predicament.—TRANS.

prurigo. But independently of the primary characters, that are always present, as papulæ in one, and vesicles in the other, the usual seat of *prurigo* is in the back and shoulders, as well as the limbs on their surface of extension; whilst we have seen, that itch occurs most generally on the surfaces of flexure. In *prurigo* the papulæ are generally lacinated, and terminated by a small, dry, black, or blackish clot of blood. The vesicles of itch, on the contrary, when they break, are surmounted by a small, thin, yellowish scale. The pruritus is more violent and burning in *prurigo*, and finally, this disease is not contagious.

Lichen simplex may also be mistaken for scabies, but with a little attention it will be perceived that it is constituted of papulæ, that these are ordinarily almost confluent, which is never the case in itch, that they preserve the natural colour of the skin, whilst the vesicles of scabies are slightly rosaceous; that when it exists on the hands, (where above all it may be mistaken,) it appears on the backs, and not between the fingers, as the vesicles in itch; that it usually occupies the outside of the limbs; that there is but little itching, and that it is not contagious.

It may be distinguished from *lichen urticatus* with still more ease, although in this disease the itching is violent, but the papulæ being more inflamed, larger, and more prominent, are easily recognised.

Finally, scabies may be confounded with eczema, particularly with *E. simplex*, but the vesicles are flattened in this disease, whilst they are pointed in itch. They are more or less grouped in eczema, but are generally distinct in itch. The pruritus of eczema is a kind of general smarting, very different from the exacerbations characterizing that of scabies. Eczema is not contagious, at least in the generality of cases.

Scabies may be complicated with several eruptions of an entirely different order. Its most usual complication is with *eczema*, which is generally occasioned by lotions or irritating ointments; this is the eruption that is caused by the remedies of certain quacks, who persuade the public that they can make the itch strike out.

The irritation of the skin may be so violent and intense as to cause the itch to be combined with pustules of *impetigo* or *ecthyma*, which generally manifest themselves where the vesicles are in the greatest number; these cases have been mistaken for pustular itch, but it is a mistake; they are only complications, and are met with, especially in young, sanguine, and irritable subjects.

The inflammation, when exasperated by the action of the nails, may extend to the cellular tissue, and it is not uncommon to see a great number of biles supervene on the original disease. Sometimes vesicles of scabies, pustules of *impetigo* and *ecthyma*, and also biles, are to be seen on a patient at the same moment. In some very rare cases, small papulæ of *lichen* may occur with the itch, a short time after its eruption. Inflammations of the internal organs are very rare in this disease, and when they do exist, they are evidently concomitant diseases; and if some cases of inflammation of the gastrointestinal mucous membrane have coincided with the disappearance of the eruption, is it to this disappearance that they should be attributed, or is it not rather to the internal disease, that the retrocession of the cutaneous affection should be attributed?

Finally, itch may exist with *sypilis* or *scrofula*, without these diseases being in the least influenced by each other. Scurvy, in some exceedingly rare cases, imparts a livid colour to the vesicles of scabies.

Prognosis.—Scabies is a slight disease; its complications may however occasion some violent symptoms, but it never is itself accompanied with the danger spoken of by some authors. Itch never terminates spontaneously, it never has a crisis, and the cases that have been cited as presenting these peculiarities, were evidently of a different disease; it never occasions death, or ends in another disease; sometimes it happens that another eruption may exist with it, or be developed during its treatment, and remain after its disappearance, but this is not a conversion of one affection into another. Left to itself, it may continue for years, or even during life. When subjected to a rational treatment, its duration varies from ten

days to several months, according to the complications, which may oppose the proper treatment, and greatly retard the cure.

Treatment.—Itch is a purely local disease, and hence, only requires local remedies; bleeding and purgatives, which formerly were considered as essential in its treatment, are now seldom employed, and only to fulfil particular indications. Thus the local treatment will be much aided by venesection, in a young, sanguine and robust person, in whom the eruption is general, and accompanied with violent itching: or by the administration of a purgative, either at the commencement or during the course of the treatment, in a person of a lymphatic and feeble constitution, in whom an habitual constipation exists. The local means that have been proposed for the cure of itch, are too numerous to be all enumerated, we shall content ourselves with pointing out such as are dangerous, and those which may be employed in a majority of cases.

In general, the mercurial preparations, and particularly the ung. citrin. and the *quintessence anti-psorique*, which appears to have corros. sublim. as its base, may be replaced with much advantage by milder means, as they often induce symptoms of a very dangerous character. Thus, independently of the eruptions they generally occasion, which retard the cure, they almost always cause swellings of the salivary glands, salivation, and sometimes, even glossitis, &c. They should be discarded in the treatment of itch. Among the remedies that experience has shown to be peculiarly useful, we would mention in the first place, *the powder of Pyhorel*: this is sulphuret of lime finely powdered, which is to be incorporated with a little sweet oil, and half a drachm to be rubbed over the eruption, with the palm of the hand, twice a day. This generally is effectual in about fifteen days, but is only suited to recent cases, and where they are of moderate extent.

The liniment of Javelot is very apt to occasion other eruptions. Cure in about fifteen days. *Dupuytren's lotion* consists of four ounces of sulphuret of potash, in a pound and a half of water, with the addition of half an ounce of sulphuric

acid. The patients are to wash twice a day with this solution, those parts which are covered with vesicles; this is an advantageous and commodious plan, for patients who do not like ointments, but will not suit those of an irritable temperament, as it often occasions very painful smarting, and besides, it does not usually effect a cure under sixteen days. *Hellebore ointment* mixed in the proportion of a sixteenth with axunge: this preparation has been found by M. Biett, from observations on a great number of cases, to cure in about thirteen days and a half, and never to occasion accidents.

But of all remedies, that which has most generally and promptly succeeded without inducing other eruptions, is *Helmerich's ointment*, as modified, and almost exclusively employed by M. Biett for several years past. It consists of *sulph. sub.* ℥ij. *sub. carb. potass,* ℥i. *axunge,* ℥i.; half an ounce of this is to be rubbed over all those parts on which the eruption may exist, every morning and evening. The patient should also take a warm bath every day, or at least every other day. The usual time of treatment is twelve days.

In children, lotions of soap and water, and artificial sulphurous baths, are all that are requisite. Baths and fumigations are excellent auxiliaries in the treatment of scabies, but cannot be depended on alone, as the treatment is much prolonged. Sulphurous baths effect a cure more promptly, and never occasion other symptoms, the usual time of treatment is twenty-five days. Sulphurous fumigations are far from producing the marvellous cures that have been attributed to them; they are often useful as auxiliaries, particularly in old persons, but when used alone, the average duration of the treatment is thirty-three days, one fumigation being used each day, but this method is fatiguing, and will seldom be submitted to by patients. What are we to think of those, who advise two fumigations per day, in order to hasten the cure?

In general, simple baths only, are used in addition to the local means in the treatment of itch. But there are cases in which new vesicles are constantly formed, and where they dry up and disappear very slowly. In such a condition of

things, it is often useful to alternate them with sulphurous fumigations, or what is still better, with sulphurous baths. Alkaline baths are peculiarly advantageous, where the patient experiences violent attacks of itching.

Whatever plan may be adopted, if the disease be complicated with some other eruption, *eczema* for instance, the treatment must be interrupted; and diluent, or slightly acidulated drinks administered. Sometimes scabies is accompanied at its commencement, or afterwards becomes combined with *impetigo* or *ecthyma*. In such case, lotions and irritating ointments must not be used; on the contrary, simple baths, and laxative draughts, must be prescribed; and it is often useful to employ local baths of scalded bran, decoction of mallows, or greasy pot liquor, (*eau de vaisselle grasse*.) To ensure a cure, and prevent a relapse, the clothes, particularly those of woollen, should be purified by smoking them with sulphur, and the use of simple baths continued for some days. The patient should also change his linen as often as possible.*

* The bases of most of the quack remedies used in this country for the cure of itch, are sulphur or mercury, and sometimes both combined. The juice of the hemlock has been found useful in this complaint; the pustules are to be bathed with it for five or six days; this remedy is highly spoken of by Dr. Pelligrini.—*London Medical Gazette, Vol. I. No. 6.*

A solution of the chlorides of lime, soda, and potash, in the proportion of $\overline{3}$ ij. to distilled water, \overline{H} i. is also said to cure this loathsome disorder in six to ten days, without inducing any unpleasant symptoms.—TRANS.

ORDER III.

BULLAR DISEASES.

BULLÆ.

THE diseases arranged in this order, are characterized by elevations of the cuticle, sometimes of a large size, filled with a serous or sero-purulent fluid. These tumours, known under the name of *bullæ*, are usually of a circular form; their base is large, and their size, which varies from that of a pea to that of a goose-egg, distinguishes them from vesicles which are of infinitely less volume.

The bullar inflammations are, (properly speaking,) but two in number, *pemphigus* and *rupia*. The latter of these has been classed by Bateman among the vesicular diseases, but from observations made by Bielt for several years, it rather appears to appertain to the bullar affections. In some diseases of the skin, (not belonging to this order,) analogous lesions are observable, but then their development is entirely accidental; they are only simple complications, which cannot prevail over the elementary characters of the original disease, which always predominates in a marked manner. Thus, in a variety of *herpes*, (*zona*,) some vesicles acquire a larger size than the others, and constitute real bullæ. But the vesicles are in much the greatest number; besides which, as we have before said, in speaking of herpes, all the other symptoms are far from being analogous to those of the bullar inflammations. Hence it is an unfortunate innovation in some authors, overlooking all positive and fixed characters, and attending to anomalous symptoms alone, to have classed *Herpes zoster* among the bullæ. The appearance of this same lesion in *erysipelas*, should also be looked upon as fortuitous.

The bullar inflammations, though sometimes occurring in an

acute form, are usually chronic; they may attack in succession all parts of the body; for although they may affect large surfaces, it is rare for them to cover the whole skin at the same time; but, in the generality of cases they are confined to the limbs, and more especially to the lower extremities. Their duration varies from one or two weeks to several months, and they may even exist for an indefinite period.

Symptoms.—The appearance of bullæ is often preceded by a greater or less degree of redness, but in many cases the cuticle becomes vesicated without any erythematous redness being previously observed. This vesication is at first of little extent, but its base gradually enlarges, and the bleb acquires a considerable size; this usually occurs in forty-eight hours. The bullæ are tense on their first appearance, but they afterwards become flaccid, and at the same time the fluid they contain thickens, in other cases they break. In all instances they open more or less promptly according to the thickness of the cuticle, their distention, seat, and movements of the patient, and are replaced by scabs, which are sometimes very thin, and at others of considerable thickness. Those bullæ which are developed on the face are usually very small; these rapidly break, and are followed by scabs somewhat resembling those of impetigo. In some cases, the bullæ are replaced by superficial ulcerations, which, however, are deep in *rupia*.

Causes.—The causes of the bullar affections are generally difficult to ascertain; they appear, in a majority of cases, to depend on some derangement of the constitution.

Diagnosis.—These inflammations are, usually, to be easily distinguished. Vesicles which may be mistaken for them, differ in the much smaller size of the vesications. The diagnosis is more difficult when the bullæ have broken and are replaced by scabs of different thicknesses. But the essential characters of each species will suffice to mark whether they have or have not been preceded by bullæ; the same will apply to the traces the bullar affections leave on the skin. Nevertheless, it is by the aid of negative characters that we must proceed in these cases, which often require much practical knowledge to establish a true diagnosis.

Prognosis.—The bullar inflammations sometimes become serious, particularly when they have existed for a length of time, in persons enfeebled by age or an injured constitution: under these circumstances they often accompany a chronic affection of some internal organ, and especially of the liver.

They sometimes require an antiphlogistic treatment; at others, on the contrary, recourse must be had to tonics and ferruginous preparations; finally, they require, above all, good nursing and strict attention.

PEMPHIGUS.

By the term pemphigus, from *πεμφιξ*, *bulla*, is meant an affection characterized by the presence, on one or more parts of the body, of bullæ of different sizes, but generally very large, being sometimes upwards of two inches in diameter, containing a serous fluid which is at first very limpid, but soon becomes reddish; these bullæ are mostly isolated, but in great numbers, and the disease is prolonged by successive eruptions, which always give rise to thin scabs and superficial ulcerations.

Willan was induced, from the vagueness and discrepancies that reign in the descriptions that previous writers had given of this disease, to deny its existence, it having been described as an eruption of bullæ with a red and inflamed base, accompanied with fever. He only admits the chronic form, under the name of *pompholix*, and defines it as an eruption of bullæ, “without any inflammation round them, and without fever.” Bateman appears to have adopted the opinion of Willan, on the non-existence of an acute bullar disease, and Plumbe, in admitting that pompholix may offer acute symptoms, denies the occurrence of pemphigus. Nevertheless, Gilbert in his excellent *Monographie sur le Pemphigus*, has proved that this disease, which he describes with astonishing precision, often appears with the symptoms that Willan has doubted. From his authority, and from a number of facts observed in the Hospital of St. Louis, M. Bielt admits the existence of acute pemphigus.

Pemphigus presents two distinct varieties, according as it is acute or chronic.

Acute pemphigus may be partial, and only occupy a single region, but it is generally spread over a considerable space, and may even cover the greater part of the surface of the body. In these cases the bullæ are almost all distinct, a few only being confluent. Sometimes the precursory symptoms are very light, and only consist in a state of general uneasiness, accompanied with violent itching of the skin, and a slight acceleration of pulse. Sometimes, however, the skin is hot and burning, and there is thirst, anorexia, chills, and great frequency of the pulse. This state lasts from twenty-four to forty-eight hours, sometimes even for three days. The eruption soon commences, consisting at first of small, red circular spots, which soon augment in size, and become covered with vesications, resulting from the secretion of a serous fluid from the whole or part of the spot elevating the cuticle. Sometimes this takes place soon after the appearance of the eruption; at other times it is some hours before the bullæ make their appearance. In some cases, the bullæ cover the whole of the inflamed surface, and present the appearance of small, transparent, distinct tumours, from the size of a pea to that of a hazelnut, and of a circular form; in other instances, on the contrary, the cuticle does not become elevated over the whole extent of the red spot, but bulla merely appears about its centre; thus, on a spot equal in size to a quarter of a dollar, a bulla of only the size of a pea, is to be seen, whilst under other circumstances, the serous vesication is merely surrounded by an areola of a few lines in breadth. Finally, in other cases, erythematous spots occur, on which no bullæ are formed; but then in passing the finger over them, a slight tumefaction may be felt, and if they are rubbed for a short time, the cuticle becomes detached, and a slight exudation of a serous fluid takes place under it. The redness of the large areolæ is very vivid during the first few days, whilst that of the unvesicated spots is very moderate: the intervening skin always remains healthy. We have dilated on this redness, from the

circumstance of its existence being denied by some authors, as we already observed at the commencement of this chapter.

Sometimes several bullæ unite and form a tumour as large as a goose-egg. When they have acquired their full size, they contain a yellowish fluid, and soon begin to shrivel, and this fluid becomes turbid. Sometimes they break in twenty-four or forty-eight hours, though they usually last for several days. They are followed by small, thin, brownish crusts, which begin to form before the redness has disappeared. Sometimes, however, only small, dry, white, epidermic lamellæ are formed.

The general symptoms that accompany this disease are slight, not requiring the patients to keep their bed, but in some cases they may be very severe. We have seen a patient in the Hospital of St. Louis in whom this eruption was attended, not only with a gastro-intestinal irritation, but also with a pulmonary catarrh, an ophthalmia, and a very acute inflammation of the urethra. His tongue was much swelled, and his lips covered with blackish crusts. All these symptoms, as well as the eruption, entirely disappeared in the course of a month.

The usual duration of acute pemphigus varies from one to three weeks. It sometimes attacks children, and with the same symptoms. *Pemphigus infantilis* or *gangrenosus*, appears to us to belong to *Rupia escharotica*.

The *Pompholix solitarius* of Willan, seems to be a variety of acute pemphigus. The appearance of the bulla is preceded by a sensation of tingling; its course is rapid, and the epidermis is distended with several ounces of lymph. This vesication breaks within forty-eight hours, and leaves a superficial ulceration. Near this, another bulla arises in a day or two, and pursues the same march, and is sometimes followed by two or three others in succession, so that the disease may last from eight to ten days. This variety is extremely rare; it may also exist in a chronic state, an interesting case of which was exhibited by M. Biett in one of his clinical lectures.

Chronic pemphigus, (*Pompholix diutinus*, Willan. *Dar-*

tre phlyctenoide, Alibert,) is a more common disease than the acute form. It is observed in adults, and especially in elderly men, but rarely occurs in women. This affection may simultaneously attack all parts of the body, but sometimes is confined to a small space. Permanent febrile symptoms do not occur in this form, without the cutaneous affection is very extensive, but it may be indefinitely prolonged by successive eruptions.

Some days before the appearance of the bullæ, the patient experiences lassitude, pains in the limbs, and languor; but these symptoms are slight, and scarcely attract attention. Numerous red pimple-like points appear, accompanied with a sensation of tingling. In the centre of each small spot, the epidermis is elevated. The base gradually enlarges, so as often to form, in a few hours only, irregular vesications of the size of a hazelnut, or even of a walnut: the distention goes on increasing, and at the end of two or three days these bullæ may attain the size of an egg. Either from their size, or from the motions of the patient, some of them open and pour out a yellowish lymph; in such case, the cuticle wrinkles and shrivels, or, becoming partly detached, rolls up and lays bare a portion of the inflamed surface; it may also become entirely separated, and leave a red and painful ulceration, which ends in a slight exfoliation. Towards the third or fourth day, those bullæ which have not broken begin to wither and lose their transparency, whilst the fluid they contain becomes reddish; the cuticle loses its tension, and from being macerated in the fluid, it acquires an opaque, whitish colour, and forms small, brownish, thin, flat crusts.

Finally, other bullæ appear near the first, and follow the same course; so that, on the same individual, there may be seen bullæ distended by a yellowish, transparent lymph, thin lamellar scabs, and irregular spots of different sizes, which are slightly excoriated. Moreover, the skin of the patient in whom all these stages of the disease are visible, presents a peculiar appearance. Such is the most usual course of chronic pemphigus, and which may thus be prolonged for months.

In some rare cases, the eruption occupies the whole surface of the body. The bullæ are confluent; they unite, the fluid thickens, becomes purulent, and the whole body is covered with yellowish crusts, which may be mistaken for those of *impetigo*: these scabs are thin, and generally present at their circumference, or in their form, some mark, denoting that they have succeeded to bullæ. In fact, some of them being extremely thin, are arched, and their circumference from their extreme tenuity, presents a wrinkled form, like that of the corrugated skin. They constitute an almost continuous covering, the intersections of which are formed of scales, which somewhat overlay each other. This variety is sometimes confined to the face, which otherwise is not a common seat of this eruption.

Sometimes the development of the first bullæ is preceded by the appearance of red, circular spots, as in acute pemphigus, but the consequent eruptions do not present analogous phenomena, and *vice versa*; at other times the secondary eruptions may have erythematous areolæ. This disease may also be confined to a single point: we have seen in M. Biett's wards a man of thirty years of age, who had been affected from his infancy with a pemphigus, sometimes on one spot, sometimes on another, and the lower part of whose legs presented a purplish red appearance, similar to that produced by atonic ulcers. For a great number of years, bullæ of pemphigus were continually developed on this spot, sometimes of the size of an almond, at others, of a large nut; in some instances, they even become as large as the palm of the hand: in such case, the dermoid membrane was denuded to a great extent, and its unprotected surface offered every appearance of a large atonic ulcer, whose cicatrization would take place but slowly; but this was not the case, as this spot often healed in one day, when fresh bullæ appeared, and followed the same course.

In severe cases the patient is obliged to keep his bed, though fever rarely occurs; but, on the contrary, when the eruption is of moderate extent, this is not necessary, and the vesications go on, appearing on different spots for an indefinite period.

Pemphigus may exist with a multitude of other eruptions, but it most usually occurs with *herpes* and *prurigo*. In this last complication, (*pompholix pruriginosus*, Will.) the patient experiences violent itching. Chronic pemphigus may be complicated with a variety of chronic diseases of the internal organs.

From what we have said of the course of pemphigus, some idea may be formed of its indefinite duration; it varies from one, two, or three weeks, to months and years. Sometimes it appears in the summer, and ceases towards the latter end of the autumn.

Pemphigus generally terminates by a restoration of the health, but may occasion death: this is usually the result of some serious complication, as of a general or local dropsy, which frequently occurs in elderly persons, and who may have been afflicted with pemphigus for many years, or from chronic inflammations of the digestive apparatus.

Dissection.—We have been enabled to examine several bodies at the Hospital of St. Louis, but have never discovered bullæ on the mucous membranes, particularly of the pharynx; on the contrary, we have generally found these tissues pale, with an effusion of serum in the thorax. We have several times found the liver enlarged, and M. Bielt has informed us that he has frequently known this anatomical lesion to coexist with pemphigus.

Causes.—Pemphigus may attack all ages, but particularly adults and old persons; it is met with in both sexes, but females appear less subject to it than males. Some persons are affected with it several times, at irregular intervals; in others, the bullæ of chronic pemphigus may continue to appear for an indefinite period. Under some circumstances it is endemic, or rather, may attack a great number of individuals about the same time. The acute form often occurs during the summer, in persons who are exposed to the sun; dentition, excesses of the table, &c., have appeared in certain cases to exercise a marked influence on its development; it only attacks young subjects. Chronic pemphigus particularly affects the aged, and

individuals of a broken constitution. A poor and scanty nourishment, laborious employments, want of sleep, and living in low and damp situations, all appear to predispose to it. It has also been known to arise during chronic affections, either of a rheumatic character, or of the abdominal viscera.

Diagnosis.—The presence of bullæ, which are generally isolated, and succeeded by thin lamellar scabs, which cover the unprotected dermis, either entirely, or in part, will always prevent pemphigus from being confounded with other diseases.

It is distinguished from *rupia simplex*, by the vesications in the latter being rare, and followed by true ulcerations, which are covered by thick and prominent crusts.

In *ecthyma* the epidermis is sometimes raised to a certain extent by pus, and forms a kind of bulla; but in this case the fluid is purulent, and not serous. The elevated cuticle presents a brown spot at its centre; added to which, pustules of ecthyma, in various stages of progress, may be found on other parts.

In *herpes* the vesicles are always united in a group on a red and inflamed surface, whilst the bullæ of pemphigus are distinct, and in the majority of cases are not surrounded with an areola. Nevertheless, in some rare instances, a few of the bullæ in acute pemphigus may be small and conglomerated in various spots, and thus resemble the groups of *herpes phlyctenodes*, but then, distinct bullæ, possessing all their distinctive characters, may be seen in other places; besides which, these groups are formed of a union of bullæ, which, although small, are always larger than the vesicles that constitute those of herpes. The bullæ which occur on an erysipelatous surface, differ from pemphigus by the presence of the erysipelas itself, and of which they form an accidental character. In some cases the scabs that succeed to pemphigus may be mistaken for those of *impetigo*, but if they should even form, as above described, an almost entire envelope, they cannot be mistaken; for *impetigo* is generally confined to a certain space, and rarely covers the whole body. Besides, the scabs of the pustular inflamma-

tion are rugose and thick; whereas here they are thin, sometimes arched in the centre, corrugated at the circumference, and resembling in size and extent the bullæ to which they have succeeded.

The spots left by this eruption present some characteristic appearances, which may be appreciated by those who are versed in diseases of the skin, but which are difficult to describe. Thus we have several times seen M. Bielt draw a diagnosis from them, as to the previous existence of a bullar eruption, which had been cured some time before. They are of a dull red separated from each other, of an irregular form, of variable size, and forming slight exfoliations from time to time.

Prognosis.—Acute pemphigus is never fatal of itself; it always terminates happily, except from some complication. The prognosis of chronic pemphigus varies according to the individuals attacked; its danger depends on the extent of the eruption, its successive attacks, and whether it occurs in persons enfeebled by age, misery, or debauchery. It may be advanced, that chronic pemphigus usually indicates a deranged state of the constitution. Its severity is generally in direct relation to that of the chronic diseases with which it may be complicated.

Treatment.—*Acute pemphigus* is a mild disease, and health is often restored by the aid of diet, diluent drinks, and rest. But if symptoms of acute inflammation exist, or if the eruption is extensive, tepid baths, venesection, or the application of leeches to the anus, may be employed with advantage.

In chronic pemphigus, the treatment should at first be antiphlogistic, but with caution; diluent and acidulated drinks, (barley water with ℥ss. of sulphuric acid,) and afterwards tepid baths, are the best means at the commencement. At the same time, if the pain is acute, it may be assuaged by emollient applications and the administration of opiates, particularly where there is restlessness and want of sleep. This remedy is above all to be used if there should be diarrhœa, dull pain in the abdomen, &c. Blood-letting must also be resorted to, if an obstinate cough should supervene, accompanied with spitting of blood, or other symptoms of an inflammation of important

organs. But chronic pemphigus should not be considered as a purely inflammatory affection; and if, notwithstanding the use of the above remedies, fresh eruptions should continue to appear, the strength of the patient must be supported by generous diet, and the use of the acids; he may take, for example, a decoction of cinchona with the addition of a drachm of sulphuric acid to the pint, or some ferruginous preparations, Passy water, pills of sulphate of iron, chalybeate wine, &c.

The use of these remedies should not be restricted to elderly persons; they must also be employed in the young, when the eruption is of long continuance, and we have observed several cases of this kind in the Hospital of St. Louis, in which the tonic treatment produced the happiest effects; but they must be used with care, and adapted to the constitution and state of the patient.

RUPIA.

Rupia, from *ρῦπος*, *sordes*, is characterized by distinct, flattened bullæ of different sizes, filled with a fluid which is sometimes serous, and sometimes purulent and blackish, succeeded by thick scabs and ulcerations of various degrees of depth.

This affection is very analogous to *ecthyma*, of which, in some cases, it appears to be only a variety, as has been observed by Bateman and Plumbe; M. Bielt is also of the same opinion.

The lower extremities are the usual seat of rupia, but it may occur on the loins, thighs, superior extremities, and other parts of the body. In rupia but few bullæ make their appearance at a time, and generally widely separated from each other. It usually occurs in a chronic form, and its duration varies from two weeks to several months.

Several varieties have been established, but they in reality only differ from each other in their extent and intensity.

Rupia simplex, (Willan,) is usually met with in persons who suffer from want of clothing and food, and are enfeebled by misery, privations, and uncleanness. It is also often seen after small-pox, scarlet fever, or measles.

It appears in the form of round, flat bullæ, about the size of

a shilling, which are developed without any previous inflammation. They contain a transparent serous fluid, which soon thickens and becomes purulent: after this it shrivels, and the fluid dries, forming a brown rugose scab, thicker in the centre than at its circumference, where it is continuous with the surrounding cuticle, which is slightly elevated. A superficial ulceration exists under this scab, which falls off in a few days, and cicatrization speedily takes place; but, in some cases, a round ulcerated spot remains for some days and forms scales, which fall off, and are renewed several times, and after cicatrization has been effected, there still exists a livid red colour in the diseased spot. This eruption often accompanies certain cases of *ecthyma* where the suppuration is abundant, and in which the cuticle is elevated to a certain extent by a very fluid pus, forming a real bulla. The larger of these are soon transformed into thick scabs, elevated at their centre and thin at their circumference, which is continuous with the separated epidermis.

2d. The second variety, (*Rupia prominens*, Will.) differs from *R. simplex* by the greater size of the bullæ, the depth of the ulceration and thickness of the scab. It much resembles the chronic form of *ecthyma* described by Willan under the name of *Ecthyma cachecticum*. It is often observed in persons of a broken constitution, and enfeebled by age or intemperance. Its usual seat is in the lower extremities, and may exist but on one spot, whilst in other cases the bullæ are numerous, but always distinct and widely separated.

Rupia prominens commences with a circumscribed inflammation of the skin, followed by the appearance of a bulla, (which is sometimes rapid in its progress,) containing a serous fluid; but, usually, the cuticle is slowly separated from the dermis, not by a yellowish serum, but by a blackish and thick liquid. In some cases resolution may take place, and the inflammation disappear before the formation of scabs. But in general the fluid contained in the vesication concretes with rapidity, and forms a fluted scab, the size and thickness of which, though at first inconsiderable, soon augments. The cir-

cumference of it is surrounded by a red border of some lines in width, upon which a new scab arises and adds to the size of the former. The areola slowly extends itself, and fresh scabs are formed, till, by successive additions, the primitive crust augments in size and thickness, for some time, varying from two days to seven. It is now of a conical form, on which the successive additions may be perceived; its colour is brownish black, and its shape has been well compared to that of a small oyster-shell, if its superficies are greater than its height: when the contrary is the case, and it is more conical, it much resembles, as is observed by Willan, a limpet, (*patella*.) This incrustation often remains for a long time, and although in some cases it may be detached with ease, in others this is not accomplished without much difficulty. The exposed surface presents an ulceration of different degrees in extent and depth: this latter is greatest when the scab has remained attached for some time. Sometimes a new scab is formed very promptly, but at others an ulceration remains, which is deep and of a bad character, healing with great difficulty, particularly in aged persons. Its edges are of a livid red and swelled, the surface is unhealthy and bleeds on the slightest touch: its size is sometimes larger than a dollar. After some time, cicatrization takes place; but a purple spot remains, which lasts for a long period and disappears but slowly.

3d. The third variety, *Rupia escharotica*, (Willan,) appears to be the same affection, as is described by other authors as *Pemphigus gangrenosa*. This disease affects only infants and young children, from their birth to the end of the first teething. A cachectic state, produced by imperfect feeding, exposure to the effects of cold, or some internal disease, appear to be its predisposing causes.

The loins, thighs, neck, superior part of the breast, the abdomen and scrotum, are its most usual seats. It commences by livid spots, which are slightly prominent, and soon present considerable vesications. These augment and form large flat bullæ of an irregular form. The fluid they contain thickens and assumes a blackish colour. They are surround-

ed by violet red areola. They soon break and leave extensive and deep ulcerations, whose edges are red and inflamed, and covered with a fetid and ill-conditioned sanies. Fresh bullæ are successively formed, and follow the same course. The child experiences violent pain, there is much fever and wakefulness, and when the disease is extensive, death may follow in one or two weeks. If this should not be the case, cicatrization takes place, but extremely slow.

Diagnosis.—*Pemphigus* and *ecthyma* are most likely to be confounded with *rupia*. This however differs from the former, from its bullæ rarely containing a serous and transparent fluid, but usually a sanious liquid; added to which, the form of the scab, which is thick, rugose, and surrounded from the first by an areola, and resembling somewhat the shell of an oyster or limpet, will generally suffice, with the nature of the consecutive ulceration to distinguish it from *pemphigus*.

Ecthyma, as we have already said, offers much analogy to *rupia*; they are often met with at the same time, on the same individual, and side by side. The most simple variety of *rupia* does not resemble the pustules of *ecthyma*. This similitude only exists where the epidermis is distended by pus and forms a real bulla. We have seen several times at the Hospital of St. Louis, a considerable eruption of pustules of *ecthyma*, almost confluent, and in several points the cuticle distended to the size of a quarter of a dollar, forming true bullæ, filled with a purulent liquid, which in drying gave rise to the characteristic scabs of *rupia*. It is to be remarked that these scabs were only formed on the larger of these accidental vesications. In admitting the great resemblance that exists in certain cases between these two diseases, it must be observed, that the marked form of the scab, and the deep and obstinate ulcerations of *rupia*, establish a distinction, which, if not strong, is at least sufficient to render a separate description necessary.

Prognosis.—*Rupia* is never a fatal disease, with the exception of the *escharotica*; the age of the patient, the state of his strength, and the extent of the ulcerations, will serve as

guides to establish a prognosis, as to the duration of the disease.

Treatment.—The treatment of rupia generally consists in restoring, by a proper diet, the broken constitution of the patients; tepid alkaline baths where the cicatrization is tardy, or else lotions with honeyed or aromatic wine, and light cauterizations with lunar caustic, will suffice for simple cases of this disease. But in the large rounded ulcerations which so often succeed *Rupia prominens*, this treatment is ineffectual. Emollients, although they assuage the pain, do not diminish the surrounding inflammation or hasten the cicatrization; the same may be said of adhesive strips, so often useful in obstinate ulcers. It hence becomes indispensable to change the condition of the diseased surface, and caustics are the best means to fulfil this result. The ulcerated surface must be several times deeply cauterized with lunar caustic, or washed with nitric or hydrochloric acid, mixed with water; and in those cases, where, in spite of these modes of cauterizing, the healing process does not take place, it must be repeated with concentrated acids, or what is better, with the acid nitrate of mercury dissolved in nitric acid. A remedy we have often seen succeed with M. Bielt, is an ointment of the *proto*, or even the *deuto-ioduret of mercury*, in the proportion of ℥i. of the first, and gr. xii. to xv. of the latter to the ounce of axunge.

In all cases, repose and a horizontal posture are indispensably necessary, if the disease, (as usually happens,) is seated in the legs.

In *Rupia escharotica*, recourse must be had to emollients, at least during the continuance of fever. The decoction of cinchona, good wine, and tonics, so often prescribed in these cases, do not appear to be productive of any good.

ORDER IV.

PUSTULAR DISEASES.

PUSTULÆ.

THE diseases arranged in this order are characterized by the presence of small circumscribed tumours, formed by the effusion of a purulent fluid on the inflamed dermis, which elevates the cuticle. These small tumours have received the name of pustules.

The cutaneous inflammations marked by the development of pustules are *variola*, *vaccinia*, *ecthyma*, *impetigo*, *acne*, *mentagra*, and *porrigo*. The close alliance which exists between the vaccine and small-pox, the termination of the first by an evident suppuration, and the intensity of the local inflammation, have induced us to place the description of it after that of small-pox. As to *varicella*, which has latterly been classed among the pustules, we have already stated, when treating of it, the reasons that induced us to leave it among the vesicular diseases.

Every part of the body may become the seat of pustules, but among these diseases there are some, as *variola*, and sometimes *ecthyma*, that develop themselves at once on the whole surface of the body; others are partial, as *vaccinia*, *impetigo*, *porrigo*, &c. Although they may occupy large spaces, some are confined to particular seats, as *porrigo*, *mentagra*, *acne*, and even *vaccinia*, which only appears on the spot to which the contagious cause has been applied.

The course of the pustular affections is acute or chronic, but each pustule may separately run its course in from two days to a week. The essentially acute pustular eruptions are *variola* and *vaccinia*; *ecthyma* is generally acute, but it may become chronic. The duration of these diseases is from one to three weeks.

The chronic pustular diseases are *porrigo*, *impetigo*, and *acne*. Their duration is not certain, and is sometimes prolonged for an indefinite period. They may also be acute, particularly *impetigo*.

In these diseases the pustules present differences it is essential to pay attention to; they are generally *phlyzacious* in the acute affections, and *psyracious* in the chronic.

The phlyzacious pustules are larger, and, as their name indicates, have an inflamed base; the absence of this inflammation characterizes the psyracious, which are smaller.

Porrigo, as we shall mention, when treating of it, also presents two distinct species of pustules, the *favi* and *achores*.

The form of the pustules is almost always umbilicate, in *small-pox* and *vaccine*, and sometimes in *ecthyma*. A cicatrix of various degrees of distinctness is usually met with after *variola* or *vaccinia*.

In the pustular inflammations, whose duration is indeterminate, sometimes the pustules are irregularly scattered over the surface, and at others they are united in groups which oftentimes have a marked form. The scabs that succeed to pustules offer characters which differ according to the nature of the disease, but they merit much attention.

In *Porrigo favosa*, they are yellow, circular, and have a central depression, which lasts for a long time; when they have fallen off, they are not replaced until fresh favose pustules are formed.

In *impetigo*, the scabs which succeed to the pustules are thick, always rough, and are produced by the drying of a sero-purulent fluid, effused over the inflamed surface. They are of a greenish-yellow or brownish colour, and are replaced on their falling off, by similar crusts.

The scabs that supervene on the pustules of *mentagra* and *acne* are less characteristic and last but a short time. In these two latter pustular phlegmasiæ, a chronic inflammation may be often observed at the points where the pustules are developed; this causes callosities of different sizes, known under the name of tubercles. The chronic pustular eruptions, seldom

leave scars, but the skin in general preserves a red tinge for some time, which disappears but slowly.

The pustular diseases may be complicated with each other, without one interfering with the march of the other. This remark applies equally to *variola* and *vaccinia*, although it has been said that these affections are never developed simultaneously in the same individual. Other cutaneous inflammations, particularly the exanthematous and vesicular, are often combined with this class of eruptions. *Variola* is in many instances accompanied with different degrees of inflammation of some of the internal organs, but these complications are very rare in the other species.

Causes.—*Variola* and *vaccinia* are only developed under the influence of contagion. *Porrigo favosa* and *scutulata*, although they may occur spontaneously, may be transmitted in certain cases by contagion. The other pustular eruptions are usually produced by some internal cause, which it is very difficult to appreciate.

Diagnosis.—The presence of small elevations filled with pus, will suffice to distinguish the pustular affections from other cutaneous diseases. Vesicles, it is true, may contain, at a certain stage of their development, a sero-purulent fluid, but this is consecutive to a transparent and serous liquid; whilst in the true pustular affections the pus usually is formed from the beginning; and besides the physical characters of this pus, which is thick and yellow, distinguishes it without difficulty from the lactescent fluid contained in vesicles a short time before their disappearance. There are, no doubt, cases where the application of these rules is difficult, as for instance, in vaccine, where a pustule arises after a perfect vesicle, but in general, the distinction is well marked.

The copper-red colour of syphilitic pustules, with the other concomitant symptoms, will suffice to distinguish the ordinary pustular affections from those which originate from a venereal cause.

Prognosis.—With the exception of small-pox, the pustular eruptions, though often harassing, never end in death. The

prognosis is less favourable when the disease has existed for a length of time and a great number of remedies have been used without success.

Treatment.—It is very difficult to lay down general rules for the treatment of these eruptions, when in a chronic state; though it should be strictly antiphlogistic when they are acute: sometimes this latter succeeds, but usually, recourse must be had to more energetic treatment, in order to modify the particular state of the skin.

VARIOLA. *Small-Pox.*

Variola is a contagious eruption, characterized by phlyzacious pustules, which are generally umbilicated, and whose development is preceded and accompanied by general symptoms of different degrees of intensity.

Small-pox is divided into *natural* and *inoculated*, according as it results from an exposure to contagion, or from the introduction of this virus into the economy. It is also divided, from the relative number of its pustules, into *distinct*, or when they are scattered and disseminated over the surface of the body; and *confluent* when they are numerous, conglomerated, and as it were joined together. It is also termed *coherent* when the pustules, without being confluent, only touch at their edges. These last divisions, however, are very arbitrary, for the small-pox is often confluent in one place, on the face for example, whilst it is distinct in others. Besides, there exists between the slightest degree of distinct variola and the highest of the confluent, a host of intermediate varieties.

This affection may also be divided into *primitive* and *secondary*, the violence of the latter being much less than that of the former.

Sometimes variola, whether natural or inoculated, primitive or secondary, passes through regular stages; at others, on the contrary, its course is very irregular, its duration very short, and the disease, in fact, presents a very peculiar modification. This latter variety is only met with in persons who have been

vaccinated, or have already had the small-pox; it has been regarded by many physicians as a distinct disease from variola, and been described by them under the name of *varioid*, from its resemblance to this affection; but later researches have corrected this error, and it is now acknowledged by all who have studied this subject, that the varioid is only small-pox modified either by vaccination or a previous attack of small-pox. We shall first describe the true small-pox, and afterwards treat of the modified or varioid.

The course of small-pox, whether distinct or confluent, may be divided into five stages, which are known under the names of incubation, invasion, eruption, suppuration, and desiccation. This division, founded on the most prominent symptoms that the disease presents, although it is an arbitrary one, still affords a facility in the study.

The period of *incubation* comprises the interval of time that elapses from the infection to the beginning of the attack; its duration is from six to twenty days. It is not designated by any visible symptom, as the individual apparently continues in good health. It has been remarked that the disease was most violent when this period was short.

Invasion.—Distinct small-pox usually commences with slight chilliness, a feeling of general languor, lassitude, pains in the limbs, and particularly in the back and loins. At the same time, heat of skin, frequency of pulse, cephalalgia, violent thirst, nausea, vomiting, and pains in the epigastrium, sometimes of a very marked character, make their appearance; the tongue is white, though often red at its point; finally, a state of depression exists, that is peculiar and striking. These symptoms last for three or four days, and often increase in violence, a cough and oppression supervene, the tongue becomes of a vivid red, in adults there is a tendency to perspiration and sleep; drowsiness, coma, or even convulsions, in children, and a greater or less degree of frequency of the pulse; these symptoms diminish and cease when the eruption appears.

In confluent small-pox the eruptive fever is generally vio-

lent, the heat of skin very great, and the thirst ardent; the tongue is dry, arid, and covered with a blackish coat, as are also the lips; the depression is very great, sometimes there is diarrhœa, but in general an obstinate constipation takes place.

The *eruption*, which occurs towards the third or fourth day of the disease, first appears on the face, but in some rare cases on the hands, it then spreads over the neck, arms, and rest of the body, in about twenty-four hours. Sometimes it is preceded by an erythematous redness, and manifests itself by little red points, which resemble so many papulæ. When the eruption is very confluent on the face, this part is much injected, and the small red points are confluent from the beginning, but when it is distinct, it is easy to enumerate them both on the face and the other parts of the body. The eruption, as we have said, is terminated in about twenty-four hours; during this time the skin is hot and shining, there is often a marked exacerbation of the symptoms at the commencement, but they decline as the eruption appears. The period of eruption is separated from that of suppuration by an interval of four or five days; during this time the small red points augment in size, and as they increase, each pustule presents a central depression or a peculiar kind of flatness. This augmentation in size arises from the formation on each small inflamed spot of the dermis, of a whitish matter, which, though at first soft and of a lymph-like appearance, soon acquires a certain degree of consistence. This substance differs as much from pus, as it does from the whitish matter so often produced on blistered surfaces. On examining the skin on the second day of the eruption, a multitude of small elevations, having a red and inflamed base, will be seen. These elevations are rather vesicular than papular. But it is rare to find perfect vesicles, and, almost always, on opening them with the point of a lancet, there is no escape of serum, but it will be found that the cuticle is distended by a sort of semi-transparent, plastic lymph. At this period many of these pustules are acuminate, but others already present a central depression. On the third day of the eruption, this central depression is strongly

marked in most of the pustules, and even in those, that were at first pointed.

The umbilicated form of the pustules becomes more and more distinct as they increase in size, and as the epoch of suppuration approaches. They are whitish and surrounded by a light red areola, which extends in size about this time. At this period, the pulse is full and regular; the tongue often presents a certain number of pustules on its surface; they may even be perceived in some instances on the pharynx; deglutition is then impeded, and there is usually a little cough.

If the eruption is confluent, which often takes place on the face, when it is distinct on other parts of the body, the small papular points we have spoken of, unite and form a large, red, tumefied, and somewhat rugose surface. The face appears to be the seat of an extensive erysipelas, drowsiness takes place, and the pulsations of the carotid arteries are very evident. In these cases, the central depression is rarely seen on the pustules on the face, which, on the second or third day, is covered with a kind of subcuticular, whitish pellicle. This is identical with the effusion of the white matter in the distinct pustules. At the same time, the limbs are covered with white pustules, having the central depression, but they are less confluent on the body. The tongue is also studded with pustules, and a severe angina indicates that the eruption also exists in the pharynx. The presence of these pustules on the eyelids produces a violent and painful ophthalmia. Finally, the symptoms of coryza and cough which exist in a majority of cases, announce that the eruption has reached the nasal fossæ and the trachea.

Suppuration occurs on the fifth or seventh day of the eruption, and terminates in two or three. It usually commences with a secondary fever of different degrees of intensity, accompanied by a general swelling of the skin; this tumefaction is most strongly marked on the face and hands. In proportion as the pus is secreted, the cuticle is elevated, and the pustules lose their umbilicated form and become spherical, and at the same time, if they are situate at some distance from each

other, the intervals become red, swell, and the patient experiences a sensation of tension and pain. Suppuration is generally first established on the face, and lastly, on the hands and feet, where the pustules also remain a much longer time unbroken, from the thickness of the cuticle. The pustules are ordinarily yellow, but in some cases present a blackish hue. If a mature pustule be opened, which had previously presented a well-marked central depression, a yellowish pus will be found, below which, is a small white, umbilicated disk, perfectly resembling in form and size, the pustule before the pus had altered its shape. When the pustules have acquired their full development, they may remain stationary for two or three days, particularly those situated on the extremities; but in general they soon break and are replaced by scabs.

When the pustules are very confluent, they are usually small, and the development of each cannot be thus followed, particularly on the face. The subcuticular, whitish pellicle, which is formed on this part during the first days of the eruption, does not become covered, as in the distinct pustules, with a yellowish pus; but towards the fifth or sixth day of the eruption, and whilst the face is swelling, the surface of the epidermis becomes rough, and is soon covered with a scab which is at first thin and yellowish, but afterwards, as suppuration advances, assumes a thick and brownish appearance. On the limbs, where the tumefaction is less marked, and the epidermis more resisting, this membrane is often greatly distended by the pus, particularly when the pustules are very confluent.

A greater or less degree of fever, tumefaction of the face and hands, and ptyalism are the usual phenomena accompanying suppuration, and are more strongly marked, as the pustules are more confluent. It must, however, be remarked, that these symptoms are not always in relation to the extent of the eruption, and that they are sometimes very slight where this is very abundant. The tumefaction of the face generally commences towards the fifth or sixth day of the eruption, conjointly with the secondary fever. The eyelids, lips, and nose usually swell before the other parts, and that of the eyelids is sometimes so considerable, as to prevent vision for several days.

The swelling of the hands occurs about the same time as that of the face, and like it, diminishes towards the eleventh or twelfth day of the eruption, when the suppuration is terminated. Ptyalism sometimes occurs at the time of the eruption, but is generally observed from three to seven days afterwards. In some cases, it is scarcely visible, even when the eruption is abundant; in others it is profuse, and constitutes one of the most harassing symptoms. The general symptoms, besides those of the secondary fever, that usually occur during the suppuration, are diarrhœa, oppression, and drowsiness; this epoch is also frequently complicated by others, of which we shall hereafter speak.

Desiccation almost always begins on the face; and this part is often covered with scabs, when the pustules on the extremities have scarcely arrived at maturity. In distinct small-pox, sometimes the pustules break and form scabs, and at others, the cuticle becomes rugose, brownish, and the effused fluid in drying forms a crust of different thicknesses.

When the disease is confluent, the scabs are often formed on the face on the eighth or ninth day. The features are then hidden by a thick, brown incrustation, which is detached from the fifth to the fifteenth day from its formation, and is replaced by furfuraceous scales, which are often renewed.

During this period, the patient exhales a peculiarly nauseous odour, and at the same time his sheets and linen are more or less imbued with the purulent matter that flows from the pustules. A violent itching accompanies the formation of the scabs, and induces the patient to scratch himself. Hence, we often observe that in children the face or skin is deeply excoriated by the action of the nails.

When the scabs are entirely detached, the surfaces they covered, will be found of a vivid red colour, which disappears but slowly, and, as this takes place, the cicatrices become more and more visible. These, which are always most numerous on the face, are not separate as in distinct small-pox, but are united and form seams, that traverse the face in all directions, wholly disfiguring the features, in the confluent variety.

Such is the usual course of this disease, but it is far from being regular in its march. The fever that precedes the eruption, is sometimes very severe, and accompanied with violent symptoms. The eruption, which usually appears on the second or third day, may be retarded, and not occur until the fifth or sixth. These irregularities are most common in confluent variola, and where serious complications exist.

The eruption may also present peculiar characters, as, for instance, in the variety termed *crystalline*, where, instead of pustules, small phlyctenæ filled with serum are to be found. In these cases the disease is generally very severe.

When this affection is the result of inoculation, it is usually very mild. This process is performed by making slight punctures or excoriations in the skin, with the point of a lancet charged with the variolous virus; the other modes, as frictions, setons, blisters, &c. have been abandoned. Towards the third day a slight redness is perceived around the inoculated spot. At this time, and especially on the fourth day, a small circumscribed tumour is to be felt, on passing the finger over this spot. The redness is greater on the fifth day, and on the sixth the cuticle is found elevated by a fluid, at the same time a central depression is visible. On the seventh day, symptoms of irritation of the lymphatic vessels surrounding the puncture may be perceived, the motions of the arm become painful, and before the tenth, general symptoms of infection are developed, analogous to those of the invasion of natural small-pox. In some rare cases, inoculation may occasion general symptoms without giving rise to a local eruption, and sometimes this is not visible for eight, ten, or fifteen days after the operation.

The general symptoms are those of small-pox, and, although they may be severe, they are generally very mild. The eruption that succeeds them, is in most cases very slight, but may also become confluent, or even in some instances be wholly wanting. The local eruption begins to dry about the twelfth or fifteenth day from the inoculation. The scab which is formed, falls off towards the twentieth or twenty-fifth day, leaving an indelible scar.

The distinct, but above all the confluent small-pox, may be accompanied by a multitude of anomalous symptoms.

The invasion is sometimes announced by unpleasant phenomena. The chills are very violent, the heat of a burning character, whilst, at the same time, the head-ache and pain in the epigastrium are extremely severe. The nausea and vomiting may be obstinate. Sometimes violent pains in the loins, limbs, and sides, resembling nephritis, rheumatism, or pleuritis, make their appearance. In some instances, a profound lethargy or violent delirium, convulsions, or even death, may occur before the appearance of the eruption.

Among the symptoms which may accompany the *eruption*, may be enumerated, sanguineous congestions in the different organs, or hæmorrhages, as epistaxis, hæmoptysis, &c. When the congestion occurs in the internal organs, the nature of the symptoms depend on the viscus affected. Congestion of the brain and its membranes, is indicated by *subsultus tendinum*, convulsions, lethargy, coma, or apoplexy. At other times, it takes place in the thoracic viscera, inducing diffuse pulmonary apoplexy, pneumonia, pleuritis, and suppurative catarrh, which Laennec justly considers as an acute œdema of the lungs; in one case of this kind we have seen the subcrepitating rattle of œdema mistaken for the crepitating sound of pneumonia, so as to induce a belief in the presence of that disease. Sometimes the tissue of the skin becomes the seat of the congestion, this is easily known by the existence of petechiæ. Finally, ophthalmias are very common at this stage. Croup is happily but a rare accompaniment.

The period of *suppuration* is that in which death generally occurs; but in such cases the suppuration is seldom freely established. The symptoms occur at this time with frightful rapidity, and death may take place in a few hours, or even in a few minutes, without our being able to assign a cause for this fatal event. It has lately been attempted to be explained by the rupture of the pustules in the trachea, which causes asphyxia, and rapidly induces death. Salivation may become very troublesome at this epoch, and be accompanied with

cough, and a greater or less degree of difficulty in deglutition. Diarrhœa, which often occurs at this time, particularly in children, is far from being a bad sign, at least, if it is not profuse.

During the period of *desquamation*, much fewer alarming symptoms occur than in the preceding stages. Eruptions of *ecthymatus* pustules, or small subcutaneous phlegmonous tumours, in considerable numbers, may arise at this time. In some cases, *rupia* may take place on the lower extremities, followed by obstinate ulcerations.

Finally, a slow fever, and symptoms of gastric and gastro-intestinal irritation, bronchitis, catarrh, chronic ophthalmia, deafness, and blindness, may all supervene on variola; the development of pulmonary tubercles also appears to be hastened in certain cases by this disease.

The causes of these complications, are not always easy to understand, they are met with in the robust, and in those whose constitution is injured, either by age, excess, or internal diseases. They are, above all, to be dreaded in the heat of summer, or the middle of winter. Fear, mental affections, the sight in a looking-glass, of the hideously disfigured face, have all occasioned sudden and fatal consequences.

Dissection.—The pathological lesions generally observed in individuals who have died from variola, are sanguineous congestions in the encephalic and thoracic organs. Variolous pustules are often met with in the mouth, on the pharynx, œsophagus, and even in the larynx and trachea; the stomach and intestines are rarely affected, with the exception of the mucous membrane of the rectum. Care must be taken, not to confound variolous pustules with a morbid enlargement of the follicles of the mucous membrane of the intestines. The central orifice in these follicles give them, when thus swelled, somewhat of a resemblance to the umbilicated form of the variolous pustules. These pustules on the mucous coat of the intestines are more especially to be met with in persons who have died before suppuration was well established. At a later period, the epithelium detaches itself, leaving only small,

red, circular patches, which are not elevated in the centre. We have never observed in any of the bodies of persons who have died from small-pox, that we have had occasion to examine, any pustules on the mucous membranes that were distended with pus; it appears to us that the extreme thinness of the epithelium, particularly in the larynx and trachea, from its early rupture, prevents an accumulation of pus from taking place. We do not insist on this point, as it has been advanced, that the sudden and fatal termination of small-pox during suppuration often depended on the rupture of pustules situated either in the larynx, the trachea, or bronchia.* The gastro-intestinal mucous membrane, with the exception of the lower part of the rectum, never presents any variolous pustules. The internal surface of the stomach often appears dotted with red points, but that of the intestines is rarely injected. The heart is generally flaccid and filled with black blood; the lungs are often gorged with this fluid. The redness of the internal surface of the aorta is far from being a constant appearance, as has been advanced by some late authors.

On the skin, pustules are found in various numbers, and in examining their anatomical structure, particularly before the pus, by distending the cuticle, has destroyed their umbilicated form, the following peculiarities will be observed:—

1st. The cuticle preserves its natural thickness, and is easily detached, leaving exposed a whitish and smooth surface, elevated at the edges, and depressed in the centre.

2nd. A small umbilicated disk of various thicknesses, formed by a whitish substance, having a certain consistency, and which appears to be a real exudation from the inflamed dermis. This substance occupies the place of the mucous coat,

* Dr. Rennes, physician to the Military Hospital of Strasburg, is of opinion that most patients who fall victims to this disease from the tenth to the fifteenth day, perish from asphyxia rather than inflammation of the respiratory organs. To corroborate his assertion, he gives the result of the examination of four bodies of persons that died in this manner in confluent small-pox, in which the nostrils, pharynx, and sometimes the larynx and trachea were covered with thick layers of a tenacious mucus.—TRANS.

and at first appears to be continuous with the layer which is immediately under the epidermis, but afterwards is easily separated from it. This small body adheres to the dermis by its centre, where it is also much thinner, and often tears when it is attempted to be raised. Whatever may be the primary cause of the umbilicated form of the pustule, it is evident that this substance preserves it even when the cuticle is elevated by pus; if at this period it be examined with a little care, it will be found, as we have above said, at the bottom of the pustule, still presenting the form and size that the latter possessed, before the cuticle had been detached by suppuration. The varieties that this substance presents in form, thickness, &c. probably depend on the greater or less violence of the inflammation of the spot, where it is developed. Although it is usually found in the pustules, there are cases where it does not exist, but in such instances the pustule is very rarely umbilicated.

3d. Finally, below this small disk, the dermis is found of a red colour; sometimes covered with purulent matter. When the pustules are examined at a more advanced stage, there is always a quantity of thick yellow pus to be seen.*

Causes.—Variola depends on an unknown contagious principle which is communicable either mediately or by contact, and may be transmitted a certain distance by means of the wind. No sex or age, without even excepting the fœtus, is exempt from this affection, which appears in all seasons and in all climates. Although sometimes sporadic, it generally reigns as an epidemic, and in such case, exercises its ravages more particularly in the summer and autumn.

* M. Deslandes, in a paper on the nature of the pustules in small-pox, differs somewhat from our text. He says that the depressions visible on the skin when beginning to swell, are owing to attachment of the secretory ducts. That this is the cause of the central depression in the pustules of small-pox. Each pustule has for its base one or more of these ducts. The pustules are either infiltrated or they are true abscesses. The former are flat, and are much deeper than the latter; they are also more dangerous, and particularly affect the face. That there is sloughing in almost every pustule, and that the large scabs that frequently separate from the face, are real sloughs of the surface of the cutis.—*Revue Med.*—TRANS.

The contagious principle developed by variola, is far from exerting the same influence on all individuals; thus we see some persons, who are unaffected by it, even under circumstances the most favourable to its action; but these cases are rare, and these individuals generally contract the disease at another time of their life. In general, this contagion affects a person but once; but it is proved in the most incontestable manner, by a multitude of facts, that it may not only attack the same individual a second time, but also that the eruption may be very violent. We find in authors, and more particularly in the work of Thomson, a multitude of curious and well authenticated cases, which prove most positively that the variolous virus may develop more than once a decided eruption in the same individual. Among these, is that of a lady, who had the small-pox in her childhood; and who afterwards became the mother of six children, and was six different times attacked with this disease, contracted from suckling her children, whilst they were under the influence of inoculation. Each time, the eruptive fever and eruption were slight; but the course of the pustules was that of variola, and the cause of the attack was evidently the inoculated small-pox under which the children were labouring.

From these, and from several other well authenticated facts of the same kind, which came under our notice in the epidemic of 1825, we have been much surprised to see advanced in a work recently published on diseases of the skin, "that variola never affects the same individual more than once, and it is permitted to doubt the cases of secondary attacks reported either by authors, or more recently by physicians, who do not appear to have made a close study of the varieties of varicella." We are the more astonished at this opinion, as the author himself regards varicella, which, with Mr. Cross and some other writers, he divides into pustular varicella, (varioid,) and vesicular varicella; as a variety, or modification of variola, resulting from the feeble action of the variolous virus on the system. But, in these cases, one of two things must take place: either the variolous virus can develop a new dis-

ease, an affection *sui generis*, distinct from small-pox, or the same disease is again produced, but with much milder symptoms. If we admit the latter opinion, and the author does so, in regarding varicella as a modification of variola, it is at least advancing a singular hypothesis to deny the variolous nature of the disease, by saying it is only varicella.

When the specific cause of small-pox exerts its influence on vaccinated persons, it generally develops a disease which presents some peculiar characters, and has been designated of late years under the name of *varioloid*. This variety of small-pox is not confined to the vaccinated, but is also observed in those who have already had the small-pox; but it is to be remarked that this disease is more generally modified when it appears after vaccination, than when it occurs after small-pox. We have here another proof that the anti-variolous power of the vaccine is greater than that of small-pox itself.

As there has latterly been much discussion on the modified small-pox or varioloid, it appears right that we should enter into some details on this subject. This variety only differs from ordinary small-pox by the extreme irregularity and rapidity of its progress, by its mildness in the generality of cases, and, finally, by its usually terminating favourably. It is, above all, the irregularity and rapidity of its course, joined to the absence of all secondary fever, that characterizes this variety, which nevertheless may sometimes be a more severe disease than common distinct small-pox: in this latter case, the pustules, although not numerous, go through the usual stages of variola, which never takes place in varioloid.

The time that has elapsed since the epoch of vaccination or of a former small-pox, does not appear to modify the course of the varioloid in any respect. It may be seen, in fact, occurring with violence in persons who have been successfully vaccinated only a few weeks before, and constituting a very slight disease twenty years after this process; and the same thing takes place with regard to variolation.

The same person may be affected several times with this disease, on being exposed to the variolous contagion. Matter

taken from the pustules of modified small-pox, may develop the ordinary small-pox in its various forms in persons who have never had this disease, or who have never been vaccinated; but generally, the disease thus communicated is very light, and in a great number of cases the inoculation is not followed by any sign of general infection.

In this variety, the precursory symptoms of the eruption may scarcely appear; they are in other cases very violent and alarming, without the succeeding eruption being extensive. Thus, after much fever, accompanied with excitement and violent delirium, a very slight eruption of small pustules, whose number varies from one to twenty, may make its appearance, and is followed by a complete cessation of all the alarming symptoms: they dry up in four or five days; so that it is scarcely necessary for the patient to keep his bed. The duration of the precursory symptoms is two or three days, or even more.

The *eruption* may be preceded by slight erythematous red spots on different parts of the body. Sometimes, as we have said, there are scarcely any pustules, at others from twenty to one hundred may be counted on different parts of the body; but in certain cases the eruption is much more violent, and may cover almost the whole of the body.

The eruption generally commences on the face, but may frequently be simultaneously developed on different parts of the body: sometimes it begins on the limbs, and very often appears in a successive manner. Small red points are first to be observed, which form red, hard, and elevated papulæ, but which do not all follow the same course. A greater or less number disappear without being transformed either into vesicles or pustules; others become vesicular and pustular in twenty-four hours, and that on the same individual. The vesicles are small, pointed, and filled with a milky fluid: they are often changed into umbilicated pustules; but, in general, they break or dry up in two or three days, and are replaced by thin, round scales, which adhere but slightly. Sometimes a red areola surrounds these vesicles, and gives them a certain

resemblance to those of vaccinia. The pustules are often formed in twenty-four hours, but sometimes their march is slower. They are small and rounded, but never attain the size of those of ordinary small pox, even when they appear in great numbers and are most distinct. These pustules are never distended with pus; they are soft and flaccid to the touch; and seem to have been suddenly checked in their progress. Sometimes they are acuminate, and sometimes depressed in their centre: in the space of from one to four days, the fluid they contain is absorbed, and there are formed either thin, flat, rounded, brownish scales, which soon fall off, or small brown scabs, which are hard and shining, and as it were glued to the skin, which sometimes last to the twentieth day. It is evident, from the irregular march of the eruption, that there may be found at the same time, on the same individual, papular elevations, vesicles, pustules, scales or scabs. This phenomenon is more remarkable when successive eruptions occur during several days. In some cases, after the detachment of the scales, they are replaced, above all on the face, by elevations in the form of warts, which disappear but slowly, and by successive desquamations. When the eruption is confluent, as is sometimes observed on the face, small, yellow, lamellar scabs may be formed, but even in these cases the secondary fever is scarcely perceptible.

The duration of the disease, which sometimes scarcely merits this name, is from six to twelve days at the most. The termination is generally favourable, though sometimes slight scars may be left on the face or elsewhere.

Diagnosis.—The diagnosis of variola would appear to be very easy: the presence of pustules, generally umbilicated, whose appearance is preceded by fever and other general symptoms, joined to the peculiar stages of this eruption, will suffice in the generality of cases, to distinguish the small-pox, not only from other pustular affections, but also from all other cutaneous diseases. *Varicella* is the only eruption which resembles small-pox, and notwithstanding the diagnostic rules which have been established to distinguish them, there still

are cases where physicians of equal experience are far from being of the same opinion; the one calling it variola, and the other insisting that it is varicella.

Distinct small-pox, and above all, varioloid, have been confounded with varicella; but it must be acknowledged, that cases exist where the diagnosis is very difficult, and there are also a great number, where the opinion is formed on preconceived ideas. It is in cases of secondary small-pox, that the physician who does not admit the possibility of a second infection, or who avers that the small-pox can never be developed after inoculation, will deny the identity of the disease, by calling it varicella. From the same cause, they give the name of varicella to the modified small-pox that makes its appearance in vaccinated persons; advancing as an unanswerable argument, that the small-pox is never developed after vaccination.

In comparing the march of the modified small-pox with that of varicella, we find, it is true, that it resembles that disease in many points of view, and it is certain that the name of *petite verole volante*, or that of chicken-pox, have been equally applied to it in a great number of cases. In treating of varicella, we have spoken at length, (without prejudging their exactness,) of characters laid down by certain authors, as adequate to distinguish that affection, both from ordinary small-pox and its modifications. We again repeat, that we have found them fully sufficient to induce us to separate these diseases.

The diagnosis of the different diseases which may be complicated with small-pox, may be involved in much obscurity. The rapidity of their progress is oftentimes so great, that it scarcely gives the physician an opportunity of acting, before a mortal congestion takes place in one of the vital organs, and the patient perishes without even a development of the usual inflammatory symptoms. Coma, delirium, excitement, or convulsions, announce that in these cases there is a greater or less degree of irritation in the brain. In some attacks of the suffocating catarrh, the subcrepitating rattle of œdema may, as we have already said, be mistaken for the crepitating sound of pneumonia.

Prognosis.—The prognosis of variola is favourable, when the eruption is light, and its progress regular; but, in general, we should be cautious in our prognosis of confluent small-pox, for symptoms are often developed with astonishing quickness, and carry off patients in a very short time, where there was nothing to indicate so fatal a result. The prognosis is bad, when the disease appears in children during dentition, in plethoric and robust adults, in persons weakened and enfeebled by age, previous disease, or excesses. It is also unfavourable, when it occurs in pregnant women, or in those who have been recently delivered, as well as the young and beautiful, who naturally dread a disease so fatal to beauty.

The violence of the precursory symptoms is to be particularly dreaded, when they remain after the eruption has appeared, and the sudden retrocession of this last is always dangerous. The prognosis may also be based on the nature of the eruption; thus, when it is abundant and intermingled with petechiæ, or when the pustules are filled with blood, it is always dangerous. It is the same when the eruption does not advance, and the pustules remain white and flattened. But even in these cases, an unfavourable opinion must not be expressed, merely from the appearance of the eruption, a scrupulous attention must be paid to the general symptoms. The encephalic and thoracic organs, above all, must be closely watched.

Treatment.—When small-pox, whether distinct or confluent, pursues a regular course, without being accompanied by symptoms of inflammation of some of the vital organs, the treatment is to be very simple: confinement to bed, a moderate temperature, regimen, and diluents, are all that are requisite. Emetics are generally useless: if constipation continues too long, it may be obviated by simple or slightly laxative injections. Warm pediluviums, or the application of warm cataplasms to the feet, when the head is affected; soothing gargles if the angina is troublesome; emollient lotions on the eyelids, when the pustules on them produce great irritation, may also be employed with advantage in cases of simple small-

pox. When the eruption is tardy in its appearance, and this does not result from inflammation of some of the internal organs, an emetic and diaphoretics may be given, as the acetate of ammonia, or the patient may take a tepid bath, or, what is preferable, one of vapour.

Very often small-pox, instead of passing through its stages in a regular manner, presents, as we have said, various complications which demand an active treatment. We will now review these remedies, and the cases to which they are suited.

Blood-letting has been advised, and employed at all times in the treatment of small-pox: but its use has been denied by certain writers, who, considering this disease as an affection wholly different from other inflammations, think that instead of being advantageous, it may be highly prejudicial. Experience has proved, that unfortunately it is but too true, that in many cases blood-letting will not prevent fatal results, but it has not been demonstrated that this termination was the effect of its use; and, in fact, in those cases where the eruption was attempted to be hastened by the use of successive bleedings, if this result has not been obtained, the disease has not been aggravated. There can be no doubt, but that this remedy is prejudicial, if we wait till congestions take place before making use of it, or till nature has been overwhelmed by the violence of the disease; in such cases, bleeding will certainly hasten death.

During the period of invasion, when there is much fever, and the symptoms of gastro-intestinal or cerebral irritation are of a high grade, general or local bleedings may be employed with great advantage. The local detractions of blood should be made from the epigastrium or anus, from the neck, temples, or mastoid apophyses, according to the nature of the symptoms. When violent local pain exists, there need be no hesitation in applying leeches to the part.

When the eruption is very confluent on the face, and there is lethargy or violent angina, one or two applications of leeches to the mastoid apophyses, or front of the neck, will produce

much relief. General bleeding is particularly indicated in robust and vigorous adults, when the eruption is confluent; it is still more necessary when symptoms of inflammation of the vital organs are developed during the progress of the eruption. But bleeding does not appear to be so advantageous at the period of suppuration, when the strength of the patient is already exhausted by the flow of pus, by the previous treatment, the fever, &c. &c. Congestions in the different organs often take place slowly, and the course of the symptoms is then very insidious. There is supineness and depression, the eruption does not advance, the pulse becomes weak, there is slight delirium during the night, and the patient sinks before suppuration has been established. In these cases, blisters to the lower extremities, and purgatives, at least if the symptoms of gastro-intestinal irritation do not forbid them, are more useful than blood-letting; but there should be no hesitation in practising local detractions of blood, if there appears to be a necessity.

The utility of bleeding, in those cases where symptoms speedily terminating in death make their appearance, appears to be very great, if we reflect that an examination of the bodies after death usually reveals to us sanguineous congestions in vital organs, and particularly in the brain and lungs. But experience has not demonstrated that the advantages of this remedy are as great as the theory seems to promise; nevertheless, these means, with laxatives, offer the greatest chance of success. It is, no doubt, very easy to lay down rules, but it is often extremely difficult to apply them at the bed-side of a patient; for if, on the one side, it is essential to employ as soon as possible the remedies we have spoken of, on the other, it is very difficult to distinguish the premonitory symptoms of these anomalies, from those which usually accompany and spontaneously disappear with the eruption. In all cases it should be borne in mind, that bleeding is far from acting as efficaciously in inflammations accompanying variola, as when they occur by themselves.

Mild purgatives are often very useful at the period of the

suppuration, when congestion exists either in the brain or in the thoracic viscera, which is announced by coma or convulsions, or by a greater or less degree of difficulty in the respiration. It is perhaps, needless to add, that purgatives should not be used where there are marked symptoms of gastro-intestinal irritation. The best are castor oil, senna, jalap, calomel; or the milder kinds, as tamarinds, and cremor tartar. Mild laxatives, the application of a few leeches below the lower jaw, and soothing gargles, are very useful when the salivation is profuse.

Some physicians, in the hopes of hastening the eruption, have advised that the body should be violently rubbed with a coarse cloth, a short time after the appearance of the pustules, others recommend that the pustules on the face should be cauterized, either one by one, or in mass, with the nitrate of silver, to avoid cerebral congestions, and to prevent the face from being deformed by scars. These advantages are more imaginary than real, and results have even been obtained, which were absolutely contrary to the intended effect. The best mode of preventing cicatrices on the face, consists in opening each pustule with great care, evacuating the pus, and by emollient fomentations preventing a long adherence of the scabs. But, it may be readily supposed, that this cannot be done when the eruption is very confluent, and it is in such cases that disfiguring scars are most to be apprehended. The only thing to be done is to hasten the disengagement of the scabs.

Ablutions with cold water on the body, during and after the eruption, should never be employed. They may be useful in measles and scarlatina, when the skin is dry and arid, and the heat extreme, but in this disease there is a peculiar operation going on in the skin, which it appears to us should not be interrupted.

Emetics and the acetate of ammonia may be used with advantage, when the eruption is tardy in its appearance, and, combined with blisters, sinapisms and warm baths, they may be very useful, where from an exposure to cold, (as happens in the winter,) the eruption recedes or does not pursue its regu-

lar course, and where there exists at the same time, languor, general weakness, and a small, chorded pulse.

Tonics, such as wine, cinchona, camphor, &c. which have been advised in cases where the strength appears to fail, should be rarely used. They may be advantageous, where, at the period of suppuration, the patients remain in a state of prostration, but their employment requires much judgment; they should never be resorted to, where the only indications are dryness of the tongue, depression, and weakness.

The *opiates* are very useful, in cases of obstinate watchfulness, or profuse diarrhœa without much fever.

Towards the close of the disease, tepid baths, given with precaution, will favour the desquamation, and may diminish the tendency to the formation of biles, subcutaneous abscesses, or even of the pustules of ecthyma, &c.

Laxatives should not be used at this time, without some positive indication; it is true that this disease is followed by a peculiar state of the digestive organs, with loss of appetite, &c. but these symptoms will disappear under the use of mild aperients.

The symptoms that may arise as *sequelæ* on small-pox, each demand a particular treatment, but it is impossible to enter into the details in this place.

VACCINIA. *Cow-pox.*

Vaccinia is a contagious disease, which sometimes exists naturally on the udders of cows, or transmitted by inoculation from individual to individual, in order to prevent, or at least modify the small-pox; is characterized by one or more silvery, large, flat, multilocular pustules, depressed in the centre, surrounded by an erythematous areola, and giving rise to a brownish scab, which detaches itself about the twenty-fifth day, leaving a characteristic scar.

Vaccine is rather a vesicular than a pustular affection, but we have thought ourselves excusable in placing it immediately after small-pox, from the intimate relations that exist between these diseases.

Causes.—Vaccine often occurs in girls and children who have the care of cows, whose udder may present this eruption, known in England under the name of *cow-pox*, and it was the happy privilege that these individuals enjoyed of being exempt from the attacks of small-pox, when it was prevalent around them, that led Jenner to the discovery of this inestimable benefit.

A true vaccinia sometimes appears on the hands of grooms who have the care of horses affected with the grease. We have seen two cases of this kind in the Hospital of St. Louis, in which the characters presented a perfect identity with those of cow-pox. In the latter case, the anti-variolous power appears to be less marked, but it will require more numerous observations to determine any thing positive on this head.*

Inoculation with the vaccine virus is the most usual cause of this eruption. This virus may be taken either from the cow or from a pock induced by vaccination; this last method has been preferred, as it is milder, occasions fewer accidents, and is quite as efficacious.

The vaccine matter, either for immediate use, or for preservation, should be taken on the fourth or fifth day, dating from the development of the pustule, or the eighth or ninth day of the eruption.

Three modes have been proposed for immediate vaccination, from arm to arm, which is the most frequently used, as well as the surest. That by *puncture* is much preferable to those made by a *blister* or by an *incision*. These two last are in fact much less certain; the first, from the violent irritation it induces, and the latter from the flow of blood it occasions. Hence, the *puncture* should always be had recourse to. It may be practised on every part of the body, but the usual spot selected is about

* It is found by experience that vaccine will originate in cows that feed in pastures where there are no horses, so that the opinion which ascribes the origin to the affection of horses termed the grease, must be erroneous. Viborg, however, found that he could produce vesicles on the udder of the cow, by inoculation with the matter of grease, not only in the original place of insertion, but also around it.—*Ferussac. Bull.*—*TRANS.*

the lower insertion of the deltoid muscle. Vaccination may be practised at any age, but is generally performed on infants, though it should not be done where they are under six weeks old, except from an urgent necessity. The operator, provided with a needle, or what is better, a lancet, the point of which is charged with a drop of the vaccine virus, is to seize with his left hand the posterior part of the arm of the individual to be vaccinated, so as to stretch the skin, and with the other he is to introduce his instrument horizontally a few lines. The instrument is to be retained in the puncture a few moments, and pressed slightly so as to disengage the virus. It is advantageous to make several punctures, though only with the aim of augmenting the chances of the success of the operation, as a single vaccine vesicle, if properly developed, will as completely protect the constitution from the variolous contagion as three or four.*

Sometimes a peculiar idiosyncrasy in the individual will pre-

* Dr. Gregory gives the following directions for vaccinating:—"Select from a healthy child, lymph of the sixth, seventh, or eighth day. Be careful that your lancet be extremely sharp, and if it be broad-shouldered, so much the better. Let there be a tangible drop at the end of the lancet, and be not satisfied with a mere moistening of the instrument. Let the skin be kept perfectly tense during the time of insertion, by grasping the arm of the child firmly, and extending the skin between the thumb and forefinger. Let the lancet be inserted from above downwards, and at each fresh insertion dip the point of the lancet in the lymph that remains around the puncture first made. Make from six to ten punctures in a circular form, enclosing a space about the size of a shilling. At each insertion, press the point of the lancet firmly against the lower surface of the wound."—*Lond. Med. and Phys. Journ.*

In the United States, the dry scab is generally used, and with apparently as much success as attends the various modes practised in Europe. It has the great advantage of keeping longer in an active state than lancets or threads charged with the lymph: Dr. Gregory, says the former, can be preserved about six hours in summer by using great precaution. We have successfully vaccinated with a portion of a scab ten months after it had been taken from the arm. All that is required is to crush a minute portion of it between two pieces of glass, and moisten it with a little water. See an interesting paper on this subject, by Dr. Condie, in the *North American Medical and Surgical Journal*, Vol. IV. p. 14.—*TRANS.*

vent the action of the vaccine matter, and in some rare cases it is only developed after several successive operations. A previous small-pox or vaccination, the inflammation of certain organs, an acute exanthematous eruption, a flow of blood from the puncture will all oppose the proper progress of the vaccine diseases.

The method by incisions should only be used where you have threads imbued with the virus, as it is necessary to leave them between the lips of the wound.

Symptoms.—The progress of the vaccination may be divided into four periods.

1st. In the first, which lasts three or four days, the puncture does not offer any particular change, the slight redness that surrounds it at the commencement, is common to all wounds of this kind. This may sometimes be prolonged to fifteen, twenty, or twenty-five days.

2d. In the second, which commences towards the third or fourth day, and finishes about the eighth or ninth, there is first perceived a slight hardness, surrounded by some redness. This erythematous point becomes elevated, and on the fifth day, the cuticle is slightly raised by a serous effusion. An umbilicated vesicle now exists, which is still more manifest on the sixth day. Its colour is a dull white, and its form is round or even oval. It gradually augments in size, and preserves its central depression till the end of the eighth or ninth day, when the surface becomes flattened, and sometimes more elevated at the centre than the circumference; this is round, shining, and tense, is somewhat larger than the base of the vesicle, and contains a transparent, almost limpid fluid, enclosed in several cellules. It is at this time that the virus should be taken.

3d. The third period commences on the eighth or ninth day, the vesicle has then acquired its full development, and is surrounded by a circumscribed areola of a vivid red, the diameter of which varies from three or four lines to two inches; it is accompanied by a marked tumefaction of the skin and subcutaneous cellular tissue. This erythematous surface often

becomes the seat of small vesicles. The symptoms are most prominent on the tenth day; the patient complains of heat and itching; the arm feels heavy; sometimes there is an engorgement of the axillary ganglions, the pulse is often accelerated, and sometimes a rosaceous or erythematous eruption, which appears to commence at the areola, extends over various parts of the body; it consists, in the generality of cases, of small, circumscribed, and slightly elevated spots.

4th. The fourth period commences about the tenth day; the areola diminishes, the fluid contained in the vesicle becomes purulent, and at the same time it begins to dry at the centre, which assumes a brownish hue; on the following days the desiccation continues, the areola and tumefaction gradually disappear, and the vesicle is soon transformed into a circular, hard scab of a deep brown colour, which shrinks and becomes blackish as it dries, and finally falls off about the twentieth or twenty-fifth day from the vaccination. Its disengagement discovers a scar, which is depressed, circular, and honey-combed, exhibiting on its surface small pits, which indicate the number of cells of the vesicle; the traces left by this scar are indelible.

Such is the regular course of vaccine, and the characters it ought to present, in order to fulfil all the indications that have been regarded as necessary to prevent the occurrence of small-pox. Accidental vaccine eruptions may be produced by the patients themselves, from their scratching the original pock, and then accidentally vaccinating themselves by means of their nails, which have become charged with the virus.

As to the eruptions which occur during the course of the vaccine, in persons who have been exposed to the contagion of small-pox, and which many physicians have regarded as vaccine eruptions, resulting from the general action of the vaccine virus on the system, it is now known that they are mild cases of small-pox, modified by the vaccination. But this fact is very remarkable, and merits attention; for physicians have vaccinated with the matter taken from the supposed vaccine vesicles, and have developed, they say, true vesi-

cles of cow-pox; but one of two things must happen; either they have been grossly mistaken, or else this disease, induced by the vaccination, really had the appearance of cow-pox. In admitting the latter, what becomes of the distinction between vaccine and certain varieties of small-pox?

When the vaccination does not follow the course we have described, it may be regarded as incapable of protecting the system from variolous infection, and the name of *spurious vaccine* has been given it.

Often instead of a vesicle, a true pustule is formed. The inflammatory action begins on the day of the vaccination, or at most on that succeeding it, the puncture becomes surrounded by a well-defined areola; the pustule rapidly augments in size, its centre is more elevated than the edges; on the fourth to the fifth day it is replaced by a scab of a yellowish-brown colour, which soon falls off and leaves no scar.

The eruption may also be vesicular, but from its irregular progress, the disease that ensues will not serve as a protection against small-pox.

Willan admits three false vesicular vaccine pock.

1st. In one, the vesicle is perfect, but without an areola, or surrounding inflammation, on the ninth and tenth day.

2d. In the other, the vesicle is pearl-coloured, and much smaller than the genuine vesicle: it is flattened, the margin is not rounded or prominent, the base is hard, inflamed, slightly elevated, and surrounded by an areola of a dark red colour.

3d. In the third, the vesicle is smaller than in true vaccine; it is pointed; the areola is sometimes of a dilute red colour, and very extensive.

In these two varieties the areola appears on the seventh or eighth day, and vanishes about the tenth. A scab is then formed, which is smaller and more irregular than that which succeeds the true vesicle, as is also the cicatrix. Even when the vaccine pock follows a regular course, some vaccinators think that the formation of purulent matter on the ninth day, indicates a vaccination which ought not to be depended on, and still less if the scab that succeeds it is small and friable. Con-

stant chafing by the clothes, which breaks the vesicle and retards its progress, its being punctured too often to obtain the virus, may be considered as diminishing, in a greater or less degree, its anti-variolous power. Finally, we may regard as the cause of the appearance of the spurious vaccine, 1st. The vaccination of persons who have been already subjected to this operation, or who have had the small-pox. 2d. Vaccination with virus taken from a spurious vesicle, or even from a true one, but at too late a stage. 3d. The complication with scarlatina, measles, gastro-enteritis, or even with some chronic cutaneous affections, as *porrigo*, *eczema*, *prurigo*, *lepra*, &c.

Diagnosis.—The characters that have been already given will suffice to distinguish the true from the false vaccine. As to other eruptions, there is but the small-pox with which it may be confounded; but in the case of vaccine, the eruption is always local, and the infection only takes place by inoculation, and there are seldom any general symptoms. The pustules are larger, of a silver-white, and the scars are of greater extent, shallower, and present a peculiar character.

Prognosis.—Cow-pox is a very mild disease, and in most instances is only accompanied by local symptoms. In some individuals, however, it induces a little fever, or it is accompanied by a slight exanthema. In this case it only requires attention to diet and diluent drinks; but in most cases no treatment is necessary: care must be taken to prevent any chafing or pressure on the vaccine pock.

In those instances where the eruption has appeared on the hands of persons who have attended horses having the grease, lemonades, emollient local baths, sometimes cataplasms to diminish the swelling, one or two tepid baths and mild laxatives, are the only means that are necessary to be employed.

When vaccine appears in an irregular manner from cognizable causes, the operation should be performed a second time. Even when the vaccination has been perfectly regular, a multitude of facts prove that the variolous contagion may still exercise its influence on the system, but the disease that results is almost always very light, and does not pursue its regular march

Several modes have been proposed to ascertain if the vaccination has exercised a sufficient influence on the constitution, to protect it from the variolous infection. The first consists in revaccinating, five or six days after the first operation; a vesicle is the consequence, but it is surrounded by an areola almost as soon as the first. The second plan is also to revaccinate, but at the end of twelve days; if the first has produced the desired effect, an irregular vesicle only will occur on the second. Finally, the best means certainly is, to test it by inoculating with variolous matter. A small pustule generally results, which rapidly dries, and is unaccompanied with general symptoms. Sometimes, however, it produces a slight eruption, but this is usually very mild. But this means is not free from inconveniences.

Notwithstanding the assertion of some physicians, the space of time that has elapsed since the vaccination, does not appear to modify in the least, the anti-variolous power of the cow-pox; for on the one hand, persons who have been vaccinated for twenty years, resist the contagion as well as those who have undergone the operation a few years or months before; and on the other, the small-pox, when it appears in vaccinated persons, is always modified, whether the vaccination had been performed but a few days, or whether years had elapsed.

We have given the different appearances assigned by writers to the spurious vaccine, but it should be remarked that the real nature of this spurious vaccine is far from being established, why it sometimes arises where true virus has been used, and finally, what are the causes that produce it. It is the more important that these questions should be answered, as it is clearly proved that persons who present cicatrices which are far from being those of true vaccine, resist the contagion of variola, and when it does attack them, induces an eruption as modified as if the vaccination had been perfect.

What doubts! what obscurity! what anomalies! Thus different experiments have been made by inoculating with mixtures of vaccine and variolous virus, and the result was sometimes vaccine, sometimes small-pox. If the two poisons be intro-

duced separately, but at the same time, and if the punctures are near each other, the local eruptions may become mingled, and the virus drawn from one side will produce cow-pox, and from the other variola. In vaccinating a child exposed to the variolous contagion, it is sometimes entirely protected from its influence; sometimes, on the contrary, a modified small-pox is developed. Finally, in some cases, the variola appears in a confluent form, and pursues a regular march during the vaccine eruption.

Nevertheless, in vaccinating we intend to preserve the system from the variolous contagion, or at least to modify the eruption, and to dissipate all danger, and if incontestable facts exist, which prove that the small-pox is developed in vaccinated persons, it has also been known to attack the same individual after inoculation; but notwithstanding these, which moreover are very rare, and seldom of a severe character, vaccination, without inducing any danger of itself, is still a preservative means of the highest grade of utility, and is perhaps the most glorious victory of the art of medicine.

ECTHYMA.

By the term ecthyma, *Εχθυμα*, *pustular eruption*, is meant an inflammation of the skin, characterized by *phlyzacious* pustules, which are large, rounded, usually distinct, having an inflamed base, and which are succeeded by a thick scab, leaving on its disengagement sometimes a slight scar, but most generally a red spot, which lasts a considerable time. These pustules appear on all parts of the body, but they are more particularly observable on the limbs, the shoulders, thighs, neck, and breast, but rarely on the face or scalp. Although, in most cases, widely separated from each other, they may attack large surfaces, or even the whole body; but they are generally confined to a single place.

Causes.—Sometimes ecthyma is idiopathic, and produced by direct and appreciable causes; at other times it arises spontaneously.

In the first case it often results from frictions or irritating applications to the skin. Thus, real pustules of ecthyma arise in some instances from the use of the ointment of Authenrieth, or from the application of tartar emetic plasters. These pustules are contiguous to each other, and the epidermis is always distended to some extent by a purulent lymph; the elevation is usually umbilicated; they last some days, and are then replaced by scabs, which begin to form at the centre; the inflammation that accompanies them is sometimes active, but this is no disadvantage, as it is purposely induced as a means of cure for other diseases; where it becomes too violent, and is accompanied with pain, emollient applications should be resorted to. Idiopathic ecthyma is often produced by handling pulverulent or metallic substances, &c. It frequently occurs on the hands of grocers and masons, being induced by the action of sugar or lime.

Ecthyma also appears spontaneously, and as symptomatic of some peculiar state of the system; it attacks all ages, occurs at all seasons, but more especially during the spring and summer, in young persons and adults; women during pregnancy sometimes suffer from it. It appears in most cases to be produced by great fatigue, excessive labour, long and continued want of sleep, deficiency of nourishment, uncleanliness, violent mental affections, &c. and the action of these causes is more prompt, if the patients should be guilty of excesses.

Ecthyma also is developed during the active stage of certain chronic diseases of the skin, as *lichen*, *prurigo*, and above all, *scabies*; and also in the convalescence from some acute inflammations, as *scarlatina*, *rubeola*, and particularly *variola*. Finally, chronic irritations of the internal organs sometimes exercise an evident influence on the appearance of ecthyma, and in some rare cases, an eruption of ecthymatous pustules have been critical in acute gastro-enteritis.

Ecthyma may be partial, and pass through its different stages on one spot. In these cases, it lasts from one to two weeks. It may be general, and occur on all parts of the body, but usually by successive eruptions, and thus last for weeks or even months.

Symptoms.—When the disease is partial, the eruptions may all appear at the same moment, but they commonly occur in succession. It usually commences by red, inflamed points, which acquire a considerable size in a few days; their apex soon becomes prominent from the secretion of pus, whilst the base is hard, and of a vivid red colour; the purulent fluid dries in three or four days, and forms thick scabs, which leave spots of a deep red colour on their disengagement. The pustules are usually distinct, but sometimes they form irregular groups; the size varies from that of the small bean, to that of a franc piece, or even more. Their development is sometimes accompanied by violent pain. Suppuration, under some circumstances, takes place very promptly; at other times, it does not occur for several days: occasionally, the pus is in small quantities, and only occupies the apex of the pustule, the base of which is large, hard, and of a vivid red; but it may also be so freely secreted as to elevate the cuticle over the whole of the inflamed surface, assuming the appearance of a bulla; and in such cases, the purulent fluid is often confined to the interior by a small circular layer of a transparent serous liquid. This appearance usually occurs in the pustules that appear on the hands and feet.

Some of the pustules disappear by resolution, and are succeeded by thin, white scales; but in most cases, the suppuration occasions a thick, adherent crust, which leaves a deep red spot on its falling off, sometimes followed by a scar. When there has been a succession of pustules for some time, these red spots are numerous, and almost continuous; giving a peculiar appearance to the surface of the body, which is only observable after ecthyma. The pustules may also occasion ulcerations, particularly those which occupy the lower extremities, and are the sequelæ of scarlatina and small-pox. There is, in such cases, much inflammation of their base, the scabs are thick, and the ulcer is generally ill-conditioned, sanious, bloody, and painful.

In weakly, badly nourished, and cachectic children, and in those affected with enteritis, and its usual accompaniment, tumefaction of the abdomen, this eruption often occurs, (*E. in-*

fantile, Will.) In these instances, the pustules are commonly very irregular in size, their form is circular, and their colour of different shades of red according to the state of weakness of the child. Sometimes the large pustules break, and occasion a deep ulceration, which is at length replaced by a slight cicatrix. At other times, after having threatened to suppurate, they gradually diminish in size, and their surface undergoes several successive desquamations.

In persons advanced in age, who are cacochymic, and addicted to drink, a variety of ecthyma closely resembling *rupia* is often seen, (*E. cachecticum*, Will.) Its most usual seat is the legs, but all parts of the body may be affected. The skin is inflamed, and slowly swells, and to a greater extent than in other cases of ecthyma; it assumes a deep red hue, and, at the end of from six to eight days, the epidermis covering its surface is distended by a blackish exudation, mixed with blood; this soon breaks, and forms a thick, blackish scab, which is most elevated at its centre; its edges are hard, callous, and more or less inflamed; the scabs are very adherent, and are not detached for some weeks, they may even remain for months. If they are accidentally disengaged, an ill-conditioned ulceration ensues, which is healed with difficulty.

Sometimes general symptoms, as depression, anorexia, a slow fever, constipation, &c. precede, or accompany the eruption, but these symptoms usually disappear with it. In many cases, the lymphatic ganglions are engorged, and occasion violent pain, which must be combated by emollient applications or local bleedings. Suppuration and desiccation are the most common terminations of ecthyma; resolution and ulceration occur but rarely.*

Diagnosis.—The pustules of ecthyma are generally to be recognised with ease by their size, the inflammation of their base,

* Dr. Hewson details a very interesting case of ecthyma, accompanied with two views of the eruption, in Vol. I. p. 89, of the North Amer. Med. and Surg. Journ. This case presented some anomalies not mentioned in our text; the eruption on the patient's breast somewhat resembled Pityriasis.—

and their mode of development. These characters will prevent their being confounded with *acne*, *impetigo*, *mentagra*, or *porrigo*. Nevertheless, when the pustules of *acne* or *mentagra* present, (as is often the case,) a hard and red base, they might be mistaken for the phlyzacious pustules of *ecthyma*, if the state of induration, rather than the inflammation of the base of the former, and the peculiar characters visible in a majority, were not sufficient to prevent error.

The umbilicated pustules of *variola*, the multilocular vesicles of *vaccine*, and their contagious nature, prevent these diseases from being confounded with *ecthyma*.

It is more difficult to distinguish the pustules of *ecthyma* from those of a syphilitic nature, which present nearly the same characters, particularly as pustular *syphilide* may manifest itself by true *ecthymatous* pustules. In these cases, the coppery areola and concomitant symptoms must form the base for a diagnosis.

Scabies will never be mistaken for this eruption, if it is recollected, that there is no pustular it̄ch, and if among the vesicles some pustules are found, the characters assigned to those of *impetigo* and *ecthyma*, will designate to which of these they belong; but it must be remarked, that those of the latter eruption are most frequently observed, and are in the greatest number. Besides, the small vesicles with which they are intermingled will obviate all doubt.

Ecthyma is distinguished from *furunculus*, from the first being an inflammation of the skin, which commences outwardly, whilst that of the latter occupies the subcutaneous cellular tissue, where it occasions mortification to a small extent, and terminates by expelling this portion of dead flesh through an opening in the skin.

Finally, *rupia* offers much resemblance to *ecthyma*, and these two diseases sometimes appear to be two degrees of one and the same inflammation: they are often seen together, and if there are positive characters by which simple *ecthyma* may be distinguished from *rupia*, there are none by which they can be identified in cases of *E. luridum*, where the epidermis is

distended by a blackish blood, and a thick scab is formed, which covers a deeply ulcerated surface.

But an elevation of the cuticle occasioned by purulent serum, and constituting a true bulla, prominent scabs resembling the shell of an oyster or limpet, and finally ulcerations, which oftentimes are deep, differ from the phlyzacious pustules with a hard and inflamed base, and the irregular scabs and superficial excoriations of ecthyma, in a sufficient degree to enable us in all cases to distinguish rupia from *ecthyma simplex*.

Prognosis.—Ecthyma is not a serious disease, its prognosis varies according to the extent of the disease, the age and state of the patient, and the nature of the concomitant diseases.

Treatment.—When the disease is partial, slight, and follows a regular course, it only requires diluent drinks, simple or emollient baths, and low diet. If it is more severe, and accompanied with much inflammation, a small bleeding may be ordered, or some leeches applied to the anus.

When the disease is prolonged, particularly in persons of a broken constitution, the hygienic treatment holds the first rank. The patient is to use moderate exercise, and to live on nourishing food. He is to take simple or slightly stimulating or alkaline baths. Mild laxatives are useful, if their use is not counter-indicated by the existence of evident symptoms of gastro-enteritis. The patient must carefully avoid all excess in eating, the use of spirituous liquors, fatigue, &c.

Sometimes recourse must be had to tonics, as the decoction of cinchona, ferruginous preparations, &c.

The ulcerations which follow the detachment of the scabs, are generally ill-conditioned, and heal but slowly. If there is much inflammation, emollient applications are to be used, but on the contrary, it is generally necessary to excite the surface, either by touching it with nitrate of silver, or repeatedly washing it with aromatic or slightly stimulating decoctions. The hydrochloric acid, weakened with water, is sometimes very useful in exciting the surface and altering the inflammatory action. As this becomes increased, the ulcerations heal with great rapidity.

IMPETIGO. *Dartre Crustacée.*

La dartre crustacée (*herpes crustaceus*,) of Alibert, corresponds to one of the forms of impetigo. He has divided it into three species: 1. *Dartre crustacee flavescence*, which corresponds with *impetigo figurata*, Will. 2. *Dartre crustacee stalactiforme*, which is a sub-variety based on the form of the scab. 3. *Dartre crustacee en forme de mousse*, which appears to resemble many different diseases.

By the term impetigo is meant a non-contagious disease, characterized by an eruption of *psyrdracious* pustules, generally contiguous to each other, which form thick, rugose, yellow scabs. The pustules are sometimes grouped, and occupy a greater or less, but at the same time circumscribed extent of surface, and which generally has a regular form, constituting *impetigo figurata*, Will. Sometimes the pustules are scattered and are in irregular groups. This variety is termed by the same author *impetigo sparsa*. Many intermediate degrees exist between these varieties, but they do not offer characters of sufficient distinctness to be separately considered. Both may occur in an acute or in a chronic state.

A. The *Impetigo figurata*, (*Dartre crustacee flavescence*, Al.) generally appears on the face, and particularly on the cheeks; it is also observed on the limbs or even on the body. Children about the age of dentition, young persons and females of a sanguine or lymphatic temperament, whose colour is fresh and skin fine and delicate, are often attacked with it. It usually occurs in the spring, and some individuals are periodically subjected to its invasion at this time, for many years in succession. Its appearance is rarely accompanied with other general symptoms, than a slight uneasiness or head-ache.

When this variety is developed on the face, it may occupy a very variable extent of surface. Sometimes one or more small, distinct, red spots are seen, which are a little elevated, and are soon covered with small, closely set pustules; these inflamed places may be isolated, or they may become united

by the occurrence of pustules at their edges. Sometimes the eruption is more extensive, and the inflammation more active. Thus the two cheeks, or all the chin, may be attacked at the same time; and in this case, as in the former, there is much itching, and even a kind of erysipelas precedes and accompanies the eruption. This is pustular from the commencement: the pustules are small, conglomerated, and but slightly elevated above the level of the skin. They do not remain long in this state, but in the space of thirty-six to forty-eight hours, or at most in three days, they break and effuse a purulent fluid.

The heat, pruritus, and swelling, become at this time much stronger. The fluid, which is poured out in great abundance, rapidly dries, and forms scabs of different thicknesses, of a yellow colour, very friable, and semi-transparent, which somewhat resemble the gum of certain trees, or dried honey. The weeping continues, the scabs increase in thickness, and it is in this state that patients usually come under the notice of a physician. Scabs of a yellowish-green colour, friable, and of various degrees of thickness, are now seen; these cover a red, inflamed surface, of an irregular circular form, from which a sero-purulent fluid is discharged.

Towards the edges of this surface, there are still found unbroken, psudracious pustules, and also some on which the effused fluid has scarcely coagulated. The features are scarcely recognisable, if the disease is of any extent.

Impetigo figurata remains in this state from two to four weeks, if it is not prolonged by successive eruptions: when the heat and itching diminish, as does also the weeping, and the scabs fall off in an irregular manner; the exposed surface is red and tense; and there are often small fissures from which a fluid is discharged and forms fresh scabs, but much thinner than the former. When the crusts are finally detached, the skin remains a long time redder than natural, it is shining, the cuticle is very thin, and a slight chafing will sometimes reproduce the disease.

Impetigo figurata may only occupy a small space at its commencement, and afterwards extend by the successive de-

velopment of psudracious pustules at its edges; in these cases desiccation begins at the centre of the eruption.

Sometimes reiterated eruptions prolong the disease for months and years, and although it is then chronic from its duration, the successive inflammations are all acute. The causes which thus lengthen the disease are excess in food, the use of stimulating applications, as caustics, or the injudicious employment of the sulphurous remedies. In these cases the skin may become inflamed to some depth, and thicken, but the diseased surface never presents that state of dryness, that is observed in some attacks of chronic *Impetigo figurata*, where it is situated on the limbs.

Impetigo figurata of the face only occurs on a very small space. We have seen it in the Hospital of St. Louis, confined to the eyelids, and there form elevated, conical scabs, that Alibert has compared to the stalactites in certain caves. It kept up a chronic ophthalmia. At other times we have observed it around the upper lip, and extending downwards on each side equally, so as to present a uniform appearance, of about five or six lines in length, somewhat resembling a pair of mustachios.

Impetigo figurata may occur on the limbs and body. When it occupies the lower extremities, the diseased spots are usually of a large size, and of an irregular oval form, whilst they are smaller and more circular on the arms. The pustules are developed in the same manner as on the face; they are soon followed by thick scabs of a greenish or brownish yellow. When they fall off, others are formed by the drying of the sero-purulent fluid that is secreted from the inflamed surface. The duration of the disease is very variable; sometimes it becomes chronic, but the successive eruptions of pustules do not take place; they only appear from time to time on some point of the inflamed surface, particularly about the edges. The dermoid tissue itself appears to be inflamed to a certain depth, and acquires a morbid thickening. On the same individual may be found scabby patches of this eruption of a large size; sometimes one large patch occupies the internal

part of one of the thighs, whilst others are found on the external portion, or on the leg, and in some cases on the abdomen. In some instances the scabs that cover these patches acquire a great thickness, and the disease corresponds to the *Impetigo scabida*, Will.

When the disease is chronic, no pustules may be visible, but the peculiar form of the patches, that of the scabs, and the partial eruptions that occur from time to time, will always suffice to characterize it.

When a cure takes place, either naturally, or from medical treatment, the heat and itching diminish, the effusion of lymph becomes less abundant, and the scabs thinner; the edges begin to dry, and in a short time the diseased surface does not form scabs; though the skin regains its natural colour but slowly in these spots.

B. *Impetigo sparsa* only differs from the preceding by the irregular and scattered distribution of its pustules, except which, it follows the same course, and equally gives rise to thick, rugose, yellowish-green scabs. This variety is particularly prevalent in the autumn; it continues during all the winter, and disappears about the commencement of the spring. It has more tendency than the other variety to pass into the chronic state. *La teigne muqueuse*, Al. appears to be identical with this variety of impetigo.

Although it may occur on all parts of the body, *Impetigo sparsa* particularly affects the limbs, above all at the articulations. Its peculiar seat seems to be the legs. Sometimes it is confined to one spot, and at others, covers a whole limb, or even several at the same time.

The pustules are developed in the same manner as in the preceding variety, but, instead of being grouped, they are irregularly scattered on the diseased surface; they are accompanied by violent itching and soon break. Yellow scabs rapidly form from the partial drying of the effused sero-purulent fluid; these scabs are rough, thick, friable, and do not form large laminæ, like the scales of eczema; they soon cover the whole diseased spot, but in most cases detached pustules are to be

seen. At this period the disease corresponds to the *dartre crustacee* of Alibert. When the scabs fall off, either naturally or under the influence of medical treatment, an inflamed surface appears, offering here and there superficial excoriations, and a few irregularly dispersed pustules; a sero-purulent fluid exhales from this surface, and in partially drying, renews the scabs. This weeping is often very abundant, and soon embues any dressings that may be applied.

In some cases, and especially in individuals of a certain age, whose constitution is injured, the scabs acquire great thickness; they are of a deep yellowish-brown, and have been compared to the bark of a tree by Willan, who has termed them *Impetigo scabida*. Sometimes these scabs encase a whole limb, and renders its motions difficult and painful; there is at the same time much heat and a very uncomfortable itching. These thick crusts split in a short time, and when portions become detached a new scab is formed in its place. When the disease is thus violent, and occupies the lower limbs, it is sometimes complicated with anasarca and extensive ulcerations. If it reaches the toes, the nails may be destroyed, which, when they reappear, are thick and irregular, as in certain cases of *lepra* and *psoriasis*.

Finally, impetigo, although usually unaccompanied by general symptoms, may nevertheless, under certain circumstances, be attended with a strongly marked inflammatory diathesis. We have seen several patients at the Hospital of St. Louis, in whom there existed at the same moment, a general derangement of the functions, fever, a burning pain, much heat, and an erysipelatous injection of the skin, (*I. erysipelatodes*, Will.)

It may be well supposed, that there exists a multitude of intermediate stages, which it is impossible to describe, but which are more or less allied to one or the other.

The duration of impetigo is very variable, it may terminate in three or four weeks, or it may be indefinitely prolonged.

Causes.—Certain external causes may develop this disease, by acting in a direct manner on the skin; such are the erup-

tions that so often appear on the hands of individuals who work among irritating substances, as raw sugars, lime, or metallic powders. The same causes often induce pustules of ecthyma. Impetigo is observed at all seasons, but especially in the spring and autumn. Children at the time of their dentition, and women at the critical period, are particularly liable to it. It has been remarked that persons of a lymphatic or sanguine temperament, whose skin is fine, and whose colour is fresh, are peculiarly predisposed to it. Any excess or violent exercise, sometimes appear to occasion this disease, and strong mental affections, especially grief and fear, exert in some cases a remarkable influence on its development. Impetigo is often complicated with other diseases of the skin, and above all with *lichen*.

Diagnosis.—The occurrence of psudracious pustules, either in groups or scattered, giving rise to thick, rough, yellow scabs, will suffice to distinguish impetigo from the vesicular or vesiculo-pustular eruptions of eczema, which are succeeded by thin lamellar, or scaly scabs, and in which are constantly to be recognised the elementary lesions or vesicles.

When *impetigo figurata* is situated on the chin, attention is requisite not to confound it with *mentagra*. In impetigo, the pustules are small, yellow, and contiguous, the weeping of serum is abundant, the scabs are thick, of a greenish-yellow, and semi-transparent, and besides which there are neither callosities nor tubercles: the pustules of *mentagra* are larger, less yellow, isolated, and more prominent than those of impetigo, the weeping is much less abundant, and the scabs are drier, of a deeper colour, and are not reproduced.

Impetigo of the scalp may be mistaken for different species of *porrigo*. The distinct pustules of *porrigo favosa*, which, firmly adhering to the cuticle, are transformed into dry, yellow scabs, in the form of cups. The pustules of the same kind of *porrigo scutulata*, which, by their aggregation, are still more allied to impetigo, will suffice to distinguish them; besides, these two species of *porrigo* are contagious, and occasion a loss of the hair, two circumstances that do not occur in impetigo.

The nature of the scabs in *la teigne granulee*, (*porrigo scutulata*, var. Will.) which have been compared to fragments of plaster, distinguishes impetigo from this affection; as to *porrigo larvalis*, it offers the same characters as *impetigo sparsa* or *erysipelatodes*.

When impetigo is complicated with scabies, the slightest attention will suffice to recognise the vesicles; it must be remembered that the pustules, which in almost all cases are complications, are always either psudracious pustules of impetigo, or phlyzacious pustules of ecthyma.

The thick crusts formed on the face in syphilitic ulcerations, have been taken for those of impetigo, even by persons who might be supposed to be conversant with the differential diagnosis of diseases of the skin. There exists at this moment in the Hospital of St. Louis, a patient who has every character of the best marked *syphilide*, and who was a few months since treated in vain at the Charité for an *impetigo figurata*. Large, black, thick, adherent scabs, covering violet-looking ulcers, and here and there environed by indelible scars, and leaving, on their falling off, deep ulcerations, a certain rounded form of the eruption, taken generally, and a peculiar aspect which it suffices to have seen but once to never mistake it, are characters sufficiently marked to have prevented so gross an error.

Prognosis.—Impetigo is not a disease that endangers the life of a patient, and consequently the prognosis is not fatal; but if it is without danger, it is very uncomfortable, and often extremely repulsive. In making a prognosis, great care must be taken not to promise a speedy cure; a promise that time often belies. The disease is more severe when it is of long continuance, and when the patient is old or of an injured constitution, than if it be acute and the patient young and robust.

Treatment.—In the treatment of impetigo, the utility of sulphurous preparations has been admitted on too wide a basis, and they are too often resorted to in the commencement as a specific. Instead of being constantly useful, their injudicious employment often aggravates the disease and greatly prolongs

the attack. In general, they should not be used in the commencement. When the impetigo is of little extent, and the symptoms of local irritation slight, emollient lotions of decoction of mallows, of poppy heads, tepid milk, scalded bran, or emulsion of almonds, are all that are necessary. The patient should take some cooling drinks. But if the disease is extensive, if it occupies a greater or less part of the face, recourse must be had to blood-letting, either local or general, paying attention to the strength of the patient. Both are sometimes indicated. Venesection in the foot, and one or more applications of leeches to the mastoid apophyses or the anus, will fulfil this double intention.

When the disease occupies so irritable a spot as the face, it is highly necessary to bleed at its very commencement; this means is also useful in cases of *impetigo figurata*, fixed on this part, and which has been aggravated by a stimulating treatment. Emollient lotions, and at the same time laxatives, as infusion of chicory with half an ounce of sulphate of magnesia or soda, to the pint, should be conjointly employed.

General baths are also very useful, even when the disease is fixed in the face; for they act by diminishing the general erythism; but they should be 25° to 27°, Reaumur, (88° to 92°, Far.) used hotter they might occasion a dangerous congestion in the head. When the inflammation is diminished, weak alumnised lotions may be substituted for the emollient. These simple means are sufficient in many cases, and towards the end of the treatment, baths, and *douches* of vapour, may be advantageously employed; these are particularly useful if the disease is obstinate, as they appear to act by changing the action of the skin.

In these cases, more energetic measures must be had recourse to, and purgatives have been followed with the greatest success in most instances. But at the same time, due regard must be paid to the state of the digestive organs. Those which are most employed are calomel, Epsom and Glauber salts, jalap, and castor oil. Under the same circumstances, acidulated drinks may be given to the patient, made by adding from

half a drachm to a drachm of sulphuric acid to a pint of water. He should also take tepid baths, either local or general, and rendered alkaline by the addition of subcarbonate of soda or potash. Lotions of the same nature should be also used on the eruption. These may be alternated with acidulated washes, particularly of the medicinal hydrocyanic acid in the proportion of two or three drachms to half a pint of distilled water, with the addition of half an ounce of rectified alcohol. It is necessary before using these different lotions, to cleanse the diseased surfaces as much as possible from the scabs that cover them. This may be done by a repeated and prolonged use of tepid baths.

When the disease thus passes into a chronic state, the sulphurous preparations are advantageous, and have produced happy results. The mineral waters of Bareges, Enghien, Bonn, and Cauteretz, are the most generally employed. They may be either taken as baths or internally; in the latter case, either alone or with milk. Sea-bathing is also very useful. The artificial sulphurous baths are prepared by the addition of from two to four ounces of sulphuret of potash to a bath. This preparation may also be used as a lotion. Vapour-baths, and especially *douches*, directed on the patches of *Impetigo figurata*, are very successful when this disease is in a chronic state. The patient should keep himself at some distance from the jet of vapour, and make use of this remedy for about ten to twenty minutes each time.

These means combined and employed judiciously, will often cure the most obstinate cases of impetigo, and may be used, not only with the young and vigorous, but also with the aged and enfeebled.

In some cases, all these remedies are unproductive of the desired result, and it has been proposed to cauterize the diseased surfaces with a diluted acid, and the preference has been given to the hydrochloric, which, it has been said, never occasions scars; but this is a mistake, and any other acid will fulfil the same intention, that of changing the action of the skin. In confining the use of caustics to those cases which

have resisted other modes of treatment, the accidents that result from its injudicious employment will be avoided. In such cases this plan has often been followed by beneficial results. They may be made with either a weak solution of nitrate of silver, or with an acid. To apply them, a camel's hair pencil should be dipped in the solution, and then applied over the whole of the diseased surface, which is to be immediately afterwards well washed with water, to prevent the caustic from acting too violently.

Under similar circumstances, the ointment of the proto-nitrate of mercury has been very successful: it is made by adding from one scruple to one drachm of the salt to an ounce of axunge, according to the excitement that is wished to be produced. It is sometimes useful, where the eruption is extensive, to modify the morbid action, by the application of a blister to the diseased surface.

All these means are oftentimes of no avail; the disease will then require still more energetic treatment, and the arsenical preparations are sometimes followed by unlooked for success. Pearson's solution will often produce a rapid and permanent cure. It is at first used in the dose of a scruple to half a drachm, which may afterwards be increased to a drachm daily. The use of this preparation should be relinquished for a few days, and again resumed; and is thus to be continued for a month or six weeks, taking care to keep the digestive organs in a good state.*

ACNE. *Couperose. Gutta Rosea.*

The word *Acne*, from *αχνη* or *αχμη*, has been given to this disease, because it often affects young persons of both sexes about the age of puberty. Aetius, and afterwards

* Dr. Hendrie has given some instances in the Philadelphia Journal of the Medical and Physical Sciences, Vol. VIII. p. 400, where obstinate cases of impetigo were cured by means of the expressed juice of the *Sanguinaria canadensis*. This being an acrid and stimulating application, may succeed in chronic cases. It being a common plant throughout our country, renders a farther trial of its powers in eruptive diseases very desirable.—TRANS.

Sauvages, employed this term, which was also adopted by Willan.

To the varieties which constitute the genus acne, may be referred *la dartre pustuleuse couperose*, and *la dartre pustuleuse miliaire*, Alibert.

This disease is a chronic pustular affection, characterized by the presence of small isolated pustules, whose base is more or less hard, of a deep red colour, and which often forms after the disappearance of the pustule, a small, hard, red, circumscribed tumour, nearly indolent, the resolution of which takes place but slowly. This disease is observed from puberty to the age of thirty-five or forty; but it is most violent in young persons. Both sexes are equally subject to it.

The pustules of acne usually appear on the face, and particularly on the forehead, temples, chin, and sometimes on the neck, shoulders, and upper part of the breast; but their most common seat is the posterior and superior part of the body: in some cases, the back is studded with them.

Acne exists in this situation on a multitude of individuals, whose face is entirely free from them; whilst, on the contrary, when it occurs on the face, it generally also appears on the back. The limbs are never subject to it, except where it exists over the whole of the back, when a few pustules may be found on the posterior part of the arms.

Three varieties of acne may be admitted, not only as facilitating the study, but also from their presenting some differences; though it is impossible to draw a marked line of demarcation between them, for the same individual may be simultaneously attacked with all three, or at least in rapid succession: they have been denominated by Willan, *Acne simplex*, *indurata*, and *rosacea*. As to *Acne punctata*, which is also admitted by this author as a distinct variety, it is nothing but a complication that may occur in the two first, and consists in a morbid accumulation of sebaceous matter in the follicles which secrete this substance. The orifice of the follicles presents a black point, giving a peculiar aspect to the disease.

Acne has been regarded as a tubercular disease by Willan and Bateman; but Professor Alibert has assigned it its true place in arranging it with the pustules, and M. Bielt, also adopting this opinion, has long since described it as a pustular eruption. In fact, the circumscribed indurations of the skin, which have received the name of tubercles, and are so often to be seen in this disease, are only a termination of pustules, and do not constitute an elementary lesion.

Some authors, and particularly Plumbe, regard the pustules of acne as the result of inflammation of the sebaceous follicles, which is produced and kept up by the matter secreted in them. There is no doubt, but that we find on the face, and on the chin especially, small pustules which evidently result from this cause, and from which can be squeezed a small oval body, formed by hardened sebaceous matter, and moreover a morbid accumulation of this substance accompanies many cases of acne, (*A. punctata*;) but this is far from constituting a genus; it would be a variety, at most, and perhaps only a complication. Indeed, we often see persons whose follicles are in this state, and yet who present no traces of acne. This latter disease, on the contrary, may exist without being accompanied with this state of the follicles; and when it is complicated with it, these black points never change into true pustules of acne: finally, by compressing these last, at the period of suppuration, pus escapes, and not hardened sebaceous matter.

Acne simplex particularly affects young persons about the age of puberty; it occurs on the spot where the whiskers will appear, or on the forehead: it is often observed in girls about the time of their first menstruation. A multitude of young and robust individuals enjoy perfect health, whilst their shoulders and the upper part of their thorax may be covered with this eruption. These pustules usually appear in succession, in the form of small, inflamed points, which soon become pustular, having their base surrounded with a red areola; they pass through their respective stages, without occasioning any general symptoms; and commonly without pain or local heat.

It is not rare to see individuals attacked with a considera-

ble eruption of pustules of *Acne simplex*, on the back, and be wholly unconscious of their existence. Sometimes, as occurs in girls, the pustules appear to be developed simultaneously, and in great numbers; in some cases covering the whole forehead. In general, if they exist in considerable quantity, the sebaceous follicles seem to experience a certain degree of irritation; for the skin appears unctuous and shining, the process of suppuration is slow, sometimes it does not commence for eight days, or even later, the pus is in small quantity, a very thin scab is formed, which soon falls off: it is sometimes scarcely perceptible; at other times the suppuration is more abundant, this especially takes place on the back, the scab is then thicker, but is soon detached by the chafing of the clothes. Even when the pustules are contiguous, they never become covered with thick crusts, as those of *mentagra*, under certain circumstances. When the suppuration is finished, and the scabs fallen off, a red and slightly elevated point remains, which gradually disappears: at other times, the redness and tumefaction continue; if this is the case in many of the pustules, and at the same time if others appear, the disease approaches more or less to the state of *Acne indurata*, and may even present all the characters of it.

The pustules of *A. simplex* are often intermingled with small, black points, formed by the accumulation of sebaceous matter in the follicles.

In *Acne indurata*, the inflammation of the skin is deeper, the suppuration is more slowly established; and after it is over, the skin and subcutaneous cellular tissue present partial indurations of greater or less extent. This variety usually affects the face, but it is also frequently observed on the posterior part of the thorax; and we have seen several cases in the Hospital of St. Louis, where it covered the whole posterior part of the body. It particularly attacks young persons, but it is always difficult to assign the cause: we frequently see it in individuals who are strong, robust, and enjoying perfect health; at other times it occurs in young persons addicted to Onanism, or even in individuals subject to abdominal irritations. Some

occupations appear to predispose to it, as those in which it is necessary to keep the head low and near a furnace. It may be very light; some points of inflammation may appear on the temples or masseter regions; a pustule slowly rises, and suppuration is established in two or three weeks, or even, though rarely, does not occur at all. Other pustules form and suppurate; the skin at the base remains hard and red, and the subcutaneous cellular tissue assists in forming a kind of tubercle, or chronic induration.

But in other cases the disease is much more violent, and the features of the face may be entirely disfigured. The face, in such instances, is studded with tubercles of a livid red, particularly along the lower jaw, on the temples, lower part of the cheeks, and nose; a multitude of pustules, either just arising or in a state of suppuration, occupy the intervals between the tubercles, and are disseminated on other parts of the face: there are, besides, red spots, and here and there thin scabs. The skin appears of a red colour, but this redness is greater in some spots. Often, instead of all these symptoms, a number of black points, resulting from the accumulation of sebaceous matter in the follicles, occupy the nose, cheeks, and masseter regions; in fact, all the intervals that exist between the pustules and tubercles. The skin is then shining and greasy, the subjacent cellular tissue is engorged, and the deformity is very great. Nevertheless, the general health may remain good, and the patient attend to his occupations. Sometimes there may be cephalalgia, or an uncomfortable sensation of heat in the face.

When *Acne indurata* occupies the back, it may be light, or may present all the above-mentioned symptoms, without the face being in the slightest degree affected. In these cases, as when it appears on the face, the duration of the disease is very long, and it is impossible to fix the time of its disappearance. When this takes place naturally, or from medical treatment, it is always very slowly, and the patients remain predisposed to fresh attacks.

The pustules of *Acne indurata* often leave indelible marks,

and it is not rare to find persons whose backs are covered with small scars, which are the remains of former eruptions of this kind.

The third variety, or *Acne rosacea*, differs from the preceding, from usually occurring in adults, and by being accompanied with an erythematous redness of the skin of the face. This variety often affects females at their critical period, those who indulge in drink or high living, and those who lead too sedentary a life. It frequently results from an hereditary predisposition; it is often observed in plethoric individuals who are subject to hæmorrhoids. In young persons who appear to have great hereditary predisposition to this disease, there is often observable, after a prolonged exposure to the sun, or after violent exercise, or great excess, red, irregularly circumscribed spots, situated on the face, sometimes occupying the cheeks, sometimes the nose, or even the whole face, which then presents a peculiar appearance; but this red tint is only transitory; sometimes several scattered pustules may be developed at the same time.

In adults, this disease generally commences on the nose; the extremity of this organ assumes a violet red colour, after a slight excess, or even after an ordinary and simple repast. Gradually this redness of the nose becomes habitual, and gives a peculiar aspect to the physiognomy. Some pustules are developed here and there, but suppuration does not take place, or, if it does, it is in an incomplete manner: in these points the redness becomes more vivid. Sometimes the disease is confined to the nose, which acquires, after a certain time, a very large size. The cutaneous veins become varicose, and form bluish veins irregularly disposed, which contrast strongly with the red colour of the diseased part; but this augmentation of the nose does not always occur, its form is only altered: the disease extends to the cheeks, forehead, chin, and finally covers the whole face. The red tint is not uniform in every part; it is strongest where there are any pustules. Suppuration does not take place freely: there always remains a kind of induration, and the skin preserves an injected appear-

ance. When the disease has lasted for some time, the skin of the face becomes rough and granulated; and even if the disease disappears, it never recovers its natural state.

Acne rosacea is often connected with a chronic affection of the gastro-intestinal apparatus. The redness is generally increased in the evening, or after dinner. Finally, it may disappear and return on the same individual, each time differing in its violence. The pustules are numerous, and the yellow colour of their summits has an extraordinary appearance on the livid red of the face. In all cases, the features are more or less altered, and sometimes the appearance of the patient is highly repulsive.

Causes.—We have indicated, when speaking of each variety, those causes which appeared to exercise the greatest influence on their development; as excesses at the table, certain professions which require the head to be inclined, and particularly where it is at the same time exposed to a violent heat; strong mental affections, cold drinks, some local applications, cosmetics, irritating lotions, &c. *Acne rosacea*, in particular, is often connected with a chronic affection of the mucous membranes, either of the stomach or intestines, and in some cases with a morbid alteration of the liver. In general, all that tends to check or increase the circulation of the blood to and from the head, will cause this affection in persons who are predisposed to it.

Diagnosis.—*Acne* is ordinarily to be easily recognised. *Ecthyma*, and some cases of *syphilitic tubercles*, can alone be confounded with this eruption; but the pustules of acne are small, their progress is slow, and their base remains hard for a long time, whilst those of *ecthyma* are large and superficial; they are never accompanied with chronic indurations, and form thick scabs, which are more or less prominent, and which are never seen in acne. The peculiar appearance of syphilitic pustules, which are surrounded by a copper-coloured areola, with large, shining, flat tubercles, of the same hue, will easily distinguish *syphilide* from acne; besides, there always exists, in secondary syphilis, other symptoms

indicative of the disease. Thus, the syphilitic tubercles are usually ulcerated at the summit, particularly when on the alæ of the nose, the angle of the lips; and the pharynx and palate present unequivocal marks of the disease.

Acne can never be confounded with *dartre rongeante*, (Lupus,) when this is in an advanced stage, though at its commencement, as it only presents a few scattered tubercles on the cheeks or nose, there may be some difficulty in distinguishing them from those of acne; but then, no pustules are formed as in the latter disease. They are not surrounded by the erythematous colour that almost always accompanies acne, when occurring in such a situation: they are larger, flattened, and of a rosaceous colour; they give rise to a certain degree of desquamation, and are accompanied by a species of subcutaneous turgescency.

Prognosis.—The prognosis varies with the variety. Thus, *Acne simplex* is often of very short duration, and is unattended with any inconvenience. *Acne indurata* is much more troublesome, particularly when it is extensive and violent: it is very often exceedingly obstinate under the best regulated treatment. Finally, *Acne rosacea* is an affection that is very seldom curable. Besides this, the prognosis must vary according to the length of time the disease has lasted, the constitution of the patient, &c.

Treatment.—The treatment of acne offers marked differences, not only according to the variety that is to be combated, but also, according to its causes, the state of the patient's health, and the relative duration of the disease.

When the pustules of *Acne simplex* are few in number, they scarcely merit attention; but when the eruption is abundant, recourse must be had to various local and general remedies. Thus, a cooling regimen; and for drink, whey, or an infusion of chicory, should be prescribed to the patient; at the same time he is to be recommended to abstain from the use of wine, spirituous liquors, and coffee. If the patient is young and vigorous, venesection may be practised, particularly if the disease attacks young persons about their first menstrual period,

and this discharge should be excited by semicupiums, the application of leeches to the upper and inner part of each thigh, or by directing *douches* of vapour to the genital parts; lotions of scalded bran, emulsion of bitter almonds, of warm milk, or a decoction of quince seeds, will greatly assist the treatment; when chronic indurations remain, means must be used to hasten their resolution: these will be indicated when speaking of the next variety.

In *Acne indurata*, bleeding, either local or general, is almost always indicated even in individuals who do not at first appear to possess a strong constitution; they should be repeated as often as there is occasion, and antiphlogistic regimen and cooling drinks insisted on. But other means must be resorted to, to hasten the resolution of the tubercles, and to endeavour to excite some action in the diseased parts. For this purpose, lotions, of rose water, of sage, or lavender, are useful; to which is to be added a certain quantity of alcohol, according to the state of the pustules: it should be a quarter, a third, or even a half, if it is wished to create much excitement of the inflammation. A lotion, that is often beneficial in these cases, is a solution of five or six grains of corrosive sublimate in half a pint of distilled water, to which is to be added one ounce of rectified alcohol. Gowland's lotion, so much employed in London, for this affection, does not appear to be any thing but a solution of this mercurial preparation, with the addition of some emulsion. Another very advantageous means consists in frictions on the pustules and tubercles, with a mixture of the *ammoniacal protochloride of mercury*, in the proportion of a scruple or a drachm, to one ounce of axunge. The addition of the ammonia to the calomel, appears indispensable to obtain the desired result.

But of all the preparations to hasten the resolution of the tubercles in acne, none appears to us equal to the *Ioduret of sulphur* mixed with axunge, in the proportion of twelve, fifteen, or even twenty-four grains to the ounce. For eighteen months past, M. Biett has employed it in his wards with astonishing success in a multitude of different eruptions, and among

others, we have seen the worst cases of *Acne indurata* yield to it, and the tubercles disappear with surprising rapidity.

Baths, and above all *douches* of vapour, directed for twelve or fifteen minutes on the face, may efficaciously co-operate with the other means, which, if properly employed, will render cauterizations wholly unnecessary, either with nitrate of silver or hydrochloric acid. Besides, it is very difficult to restrain the action of these caustics within proper limits; for if they should penetrate too deep, they will give rise to large and painful ulcerations, and sometimes leave deep scars.

In some instances it is advantageous to change the morbid action of the skin, by the successive application of blisters, particularly if the eruption is confined to a small space. We have seen in the Hospital of St. Louis, this means crowned with the happiest success. If during the treatment new eruptions should appear, or if the congestion towards the head seems unabated, no hesitation should be entertained of resorting to one or more detractions of blood; and at the same time, according to the state of the eruption, the use of repellents is to be suspended or continued; they are to be relinquished if there is much inflammation, the tubercles painful, and the pustules numerous; they are to be persisted in, on the contrary, if the tubercles are hard, indolent and large.

1st. Purgatives should be banished from the treatment of this disease; laxatives may, in certain cases, aid the action of other means, particularly in strong and robust individuals whose intestinal canal is in a normal state, and where there is a marked congestion towards the head.

2d. The sulphurous mineral waters, especially those of Barges, Enghien, Cauteretz, Aix in Savoy, &c. may be employed with advantage, either externally, as lotions, or internally. As general baths, they have less effect, and simple baths, not hotter than 26° to 27°, (90° to 92° Far.) produce a better result. Patients should take two or three a week.

When acne disappears, cold sulphurous *douches* have often been used by M. Bielt with great success, particularly where the disease was complicated with the black spots, &c.

The treatment of *Acne rosacea* differs in many respects from that of the other varieties. Here blood-letting should in most cases be local. It is often advantageous to apply several leeches near the affected parts, but when the eruption affects females at the critical period, the application is attended with the happiest consequences. It must be remembered that this variety of acne is very obstinate; topical remedies, the employment of which is so often useful in *Acne indurata*, are much less advantageous in these cases, and may even be injurious. In *Acne rosacea*, all the treatment should consist in hygienic measures. The abstraction of all causes that may exert any influence on the development of the disease, such as excess in eating or drinking, the use of spirituous, liquors, &c. a regular and sober mode of living, a regulated diet, habitually composed of white meats, fresh vegetables, fruits; a constant avoidance of fatigue, either mental or bodily, remaining long in hot situations, &c. are the preventive means on which we must in a great measure rely.

A prolonged immersion of the legs in hot water, to which two ounces of nitro-muriatic acid has been added, to each ten quarts of water, has been recommended; this means may be employed as a useful auxiliary.

Finally, in those cases where the tubercles are very indolent, *douches* of vapour directed on the face, should be used, or even frictions or lotions, with some resolvent.

MENTAGRA. *Sycosis menti*

This disease corresponds with the first variety of the fifth species of Alibert, *Dartre pustuleuse*. First variety—*Dartre pustuleuse mentagre*.

Mentagra is characterized by the successive eruption of small, acuminate pustules, somewhat similar to those of acne, on the chin, sub-maxillary and lateral parts of the face. It is essentially pustular, and this character is easily recognisable; it has nevertheless been mistaken by several English writers, as Willan, Bateman, and Plumbe, who regard tubercles as its

primitive lesion. Alibert and Biett have shown that these are but consecutive, that they do not exist in all cases, and finally, that the disease always commences with pustules.

Symptoms.—Mentagra usually occurs in adults, but is sometimes observed in elderly persons. It very seldom happens before it declares itself in a decided manner, that it has not been preceded, for some months, and often for some years, by small, partial eruptions, either on the upper lip, the chin, or on the lower jaw; the pustules soon disappear, and the scabs which succeed them, dry, and fall off in a few days. Afterwards, the eruptions become more abundant, and attract the attention of patients; they occur in most cases, from the influence of some occasional cause, as excess in drink, &c. The appearance of pustules is almost always preceded by redness, and heat of the chin, with a painful sensation of tension; numerous red points soon are visible, which become pustular in about three days; these pustules are acuminate, and usually distinct, but when they are assembled in groups, and their number is considerable, the upper lip, and a great part of the chin, are covered with small, prominent tumours, of different sizes, the centre of which is traversed by a hair, and containing a yellowish-white pus. The pustules remain in this state six or seven days, and give the physiognomy a peculiar aspect; they finish by breaking, and are soon covered with brownish scabs, but there is no flow of matter as in impetigo. The scabs insensibly detach themselves, and the disease terminates from the tenth to the fifteenth day, if a new eruption does not take place. Ordinarily, there is a succession of partial eruptions, and the skin becomes the seat of a chronic eruption, either confined to certain spots, or extended over a large surface; the skin on which the pustules are situated with the subjacent cellular tissue, inflames deeply, there is then much heat, violent pain, and the scabs are sometimes thick.

The extent of the eruption is variable; it is sometimes confined to the upper lip, at other times, to one side of the chin; in some cases, it only occupies a portion of the lower jaw, at other times, the lateral parts of the face are affected, and final-

ly, the whole of these points may be simultaneously attacked. Oftentimes the eruption does not appear at once, but several pustules are developed, disappear, and are followed by others for an indefinite period. In such case, the skin becomes rough, the cuticle throws off small, white exfoliations, in the middle of which may be seen new pustules.

In many instances, the inflammation is far from being decided, resolution takes place but imperfectly, and tubercular swellings occur. This form of the disease especially affects persons who are feeble, the aged, and those who, though apparently strong and robust, have an injured constitution. These chronic engorgements present a multitude of varieties; they are sometimes as large as a cherry; in some cases, notwithstanding the existence of tubercles, the inflammation becomes violent; when this happens, the pustules, scabs, and tubercles, occupy the whole lower part of the face, which, from the swelling, becomes quite prominent: the eruption may also be found in all parts of the body that are furnished with hair, not excepting the eyebrows. Pustules are often developed on these tubercles; but it is incorrect to state, as has been done by Plumbe, that the centre of each tubercle contains a purulent matter. In some cases, the inflammation may be very severe in one spot, and extend to the cellular tissue, producing phlegmonous inflammation.

When the disease has existed for a long time, the bulbs of the hair participate in the inflammation, and it is easily detached; sometimes even spaces occur where it has been entirely destroyed, though it may reappear after a lapse of time, at first, light coloured and weak, but gradually regaining its natural hue and consistency.

When the disease terminates, either naturally, or from medical treatment, the tubercles gradually diminish, the scabs fall off, the pustules only appear here and there; the spots which were the seat of the disease, remain red or purplish, and slight epidermic exfoliations take place for some time. At times, mentagra is confined to the middle of the upper lip, and several pustules aggregated on this spot occasion a thick, blackish

scab, forming a remarkable prominence, (*Dartre pustuleuse labiale*, Al.) But the varieties of mentagra are very numerous, and at the same time it would be useless to attempt to designate them.

The duration of this disease is exceedingly variable; in some persons it will continue for an indefinite time, in spite of the most judicious treatment. It is also very apt to return, particularly in those who live freely.

Causes.—Mentagra particularly attacks young persons and adults; those who are of a sanguine and bilious temperament, and those who have much beard. Climate appears to exercise but little influence on its development; it is most frequently observed in the spring or autumn, or rather it makes its appearance at these times, and continues through the other seasons. Those who are much exposed to the action of heat, as cooks, founders, blacksmiths, &c. are very liable to it, especially if they are habitual drunkards. It often occurs in persons in a state of extreme poverty and uncleanness, or addicted to all kinds of debauchery; nevertheless, it also manifests itself in persons in an elevated rank in society, and who neglect no means of cleanliness. Patients generally attribute the appearance of the disease to the use of a dull razor, but, as M. Biett justly observes, this is only an excuse of self-love, which would rather assign any external cause, than to avow that a particular condition of their system had any influence on its appearance. But, if the eruption is once developed, the action of a razor certainly augments the inflammation. Mentagra very rarely occurs in females.

Diagnosis.—The differential diagnosis of mentagra is very important, and has been perfectly treated on by M. Biett; it is highly necessary to distinguish it from the different eruptions that may appear on the chin, and particularly from *Impetigo figurata* and the *syphilides*, whether they are pustular or tubercular.

The pustules of *ecthyma* are larger than those of mentagra, and their base is more inflamed; the scabs of this disease are also larger, thicker, and more adherent; besides, it is never ac-

accompanied with circumscribed indurations of the skin, or subcutaneous cellular membrane.

In *Impetigo figurata* the pustules are flat, and hardly elevated above the level of the skin; they are disposed in groups, and their march is acute; in mentagra the pustules are more or less acuminated and prominent; they are generally isolated and distinct. In impetigo the pustules break the third or fourth day, and discharge a fluid which promptly dries, and forms large thick pustules of a shining yellow colour. In mentagra the pustules do not break until the fifth or seventh day after their appearance; the scabs which replace them are of a deep brown, much thinner, and drier than those of impetigo, and finally, in this latter affection there are no tubercles, as in mentagra.

It may be difficult to distinguish all these symptoms when the eruption is very extensive, the inflammation violent, and the pustules confluent; it is therefore often necessary, in these cases, to suspend our judgment, and wait the progress of the disease.

Syphilitic pustules differ from those of mentagra, by the absence of heat, pain, and tension; they are flat, rise from a livid, or coppery base, and their progress is much slower. The pustules of mentagra are pointed, and their base is of a vivid red; besides, it is seldom that syphilitic pustules appear on the lower part of the face only; they are almost always to be found on the alæ of the nose, on the forehead and angles of the lips.

Syphilitic tubercles differ from the chronic indurations that succeed the pustules in mentagra, in being shining, of a dull copper colour, and only appear to affect the superficial layers of the dermis; whilst, on the contrary, the tubercles of mentagra are conoidal, and their base is implanted deeply in the skin; finally, the venereal eruptions are in most cases followed by scars, and are accompanied with pains in the bones, inflammations of the throat, &c.

Mentagra can scarcely be mistaken for *furunculi*, which have a core, and leave small scars.

Prognosis.—Mentagra never occasions death, but caution should be used in giving an opinion as to its duration. According to the frequency and succession of the eruptions, will the disease be prolonged.

Treatment.—In the treatment of mentagra, the first indication to be fulfilled, is to remove all causes that appear to exert any influence on the development of the disease, especially if it affects persons who are addicted to drink, or those who are, from the nature of their professions, exposed to the heat of fire; every thing that tends to keep up or aggravate the disease, must also be forbidden; thus the patient must avoid, shaving, and cut his beard with scissors.

When the eruption is abundant, and the inflammation violent, leeches should be applied several times, either behind the ears, or under the jaw. If the patient is strong and robust, a general bleeding may be ordered; at the same time emollient fomentations and cataplasms of potatoes or of crumb of bread, may be employed with advantage. Topical blood-letting, and especially emollients, ought not, however, to be merely confined to these acute cases. This treatment is also of great utility, where, notwithstanding the duration of the disease, and the presence of chronic indurations of the skin, there also exists some inflammation; an antiphlogistic regimen, and cooling drinks should be employed as adjuvants. Laxatives are proper in all cases, except where there is a gastro-intestinal irritation; calomel in the dose of four grains, sulphate of potash, soda, or magnesia in the dose of two drachms, or half an ounce to a pint of ptisan, are generally used; they must be continued for a long time, at least till there is a marked change for the better.

When the disease lasts for a certain time, the tubercles large, and the skin and subcutaneous cellular tissue offering chronic engorgements of different sizes, it is in vain to make use of emollients; recourse must be had to other means; as frictions, made with an ointment of the *ammoniacal protochloride*, or of the *deutoxide* or *sub-sulphate of mercury*, in the proportion of ℞i. to ℥i. to axunge ℥i.

To these means may be added, with great advantage, the use of vapour baths, *douches* of sulphurous acid gas or of simple steam. Under the influence of these, and particularly of the last, the circulation becomes more active, the diseased parts, become bathed in sweat, and the tubercles often disappear with astonishing rapidity. We have seen these happy effects produced at the Hospital of St. Louis in a multitude of instances.

If the eruption reappears to some extent, the use of frictions is to be suspended, but no attention is to be paid to a few scattered pustules.

Cauterizations with either the nitrate of silver or concentrated acids, ought not to be employed, except in cases where the disease has become entirely chronic; still they must be used with great precaution.

Finally, under certain circumstances, where all rational means have failed; we have observed, at the Hospital of St. Louis, treatment of a very different character followed with success; thus we have seen patients cured by the use of tonics, consisting of the ferruginous preparations; in others the muriate of gold has been productive of good effects; M. Biett administers it in the dose of two-sixths and afterwards three-sixths of a grain, by frictions on the tongue. The mercurial preparations taken internally, and particularly the *Sirop de Larrey*, have been followed by beneficial consequences.

PORRIGO. *Tinea. Les teignes.*

The old writers characterized the genus porrigo as ulcerations attacking the scalp and destroying the hair; others regarded it as constituted of the scaly affections; modern authors, however, have observed that the ulcers were usually preceded by pustules.

Hence they have designated under the generic name of *porrigo* or *teignes*, eruptions of psudracious pustules, generally contagious, and which are seated on the scalp, but may extend to other parts of the body. According to the characters as-

signed to the genus, the species have been extended or restricted.

Alibert described five varieties under the generic name of *Tinea*: *la teigne faveuse*, *la teigne granulee*, *la teigne furfuracee*, *la teigne muqueuse*, and a fifth, of which he was the first describer, *la teigne amiantacee*. Willan, under the name of *porrigo*, gives six species: *P. larvalis*, *furfurans*, *lupinosa*, *scutulata*, *decalvans*, and *favosa*. As these two authors are most generally followed, it must be remarked that in their descriptions they have not always assigned the same name to the same species.

The *Porrigo favosa* of Willan is very distinct from the *Teigne faveuse* of Alibert. By this term, the latter author means an eruption which is at first pustular, and is succeeded by scabs of a large size, of a beautiful yellow colour, sometimes bordering on white, and depressed in their centre; this is the *P. lupinosa*, of the former, who, on the contrary, has given the name of *favosa* to a pustular affection, promptly followed by thick scabs of a yellowish-brown, similar to those of *Impetigo* or *Porrigo larvalis*; it appears to be only a variety of this last. The *P. favosa* we shall describe, is that of Alibert.

The *P. scutulata*, or *Teigne annulaire*, known in England by the name of ring-worm, is characterized by the development of pustules analogous to those of *P. favosa*, but assembled and grouped in such a manner as to form circular patches. Bateman considers the *P. scutulata* as having *achores* as its elementary lesion; but from a great number of facts, observed with the most scrupulous attention, M. Biett has been led to the conclusion, that it was, on the contrary, constituted of *favi*, that is to say, of pustules analogous to those of *P. favosa*, from which it is only to be distinguished by the arrangement of these pustules, and, at a more advanced stage, by a certain difference in the state of the scabs. It is a common occurrence, and we have several times observed it, for the original lesion to reappear, after the falling off of the scabs of the *P. scutulata*, and thus giving an opportunity of seeing that they were favose

pustules, so distinct from achores, that they could not be mistaken for an instant.

Porrigo larvalis, thus denominated because the features of the face are often hid under thick crusts, is the same affection described by Alibert as the *Teigne muqueuse*; the *P. favosa* of Willan, is also analogous to this, its nature being equally pustular.

Porrigo granulata, *Tiegne granulee*, is also a pustular eruption of the scalp, which gives rise to irregular, rough, gray, or brownish scabs, which occur in considerable quantities among the hair, and detach themselves in spots, in the form of small, grayish, dry, hard granulations. This affection is not, as has been supposed by Bateman and Plumbe, a variety of *P. scutulata*; it rather resembles *P. larvalis*, which itself appears to be an *impetigo*.

Porrigo furfurans, or *Teigne furfuracee*, to which Alibert has assigned the presence of scales, as a specific character, appears, in some circumstances, to be *Pytiriasis capitis*; but in general, it is evidently a chronic eczema, and the scales result from the desiccation of a fluid which is slowly effused from the surface of the scalp. When this is very abundant, the hair becomes united together, and presents a grayish, silky, and chatoyant lustre: this constitutes the *Teigne amiantacee* of Alibert.

Finally, the partial baldness described by Willan under the name of *P. decalvans*, ought not to be considered as a distinct species, as it often results from the others.

From what we have said, in order to dissipate any obscurity that might rest on the subject, it is easy to perceive that diseases which present marked differences, and some of which evidently belong to affections already described, have been arranged under one common head.

The pustules and scabs in the *Teigne faveuse*, those of the *Teigne annulaire*, and the rounded form of its patches, distinguish these two species from all others; and they seem only to differ from each other by the arrangement of their pustules, and a certain condition of their scabs. They have a special

character, their contagious nature, which, however, does not appear to be constant. In these two diseases, the hair is soon detached in the affected spots, which has occasioned Underwood, Luxmore, and Duncan to think that in *P. favosa*, the seat of the disease was in the bulbs of the hair; they are readily distinguished from other cutaneous eruptions.

The *Porrigo granulata*, and *larvalis*, are closely allied, and are perhaps only varieties of *Impetigo*, or *Eczema impetiginodes*. The characters of the scabs in *P. granulata*, will no doubt suffice to distinguish it, notwithstanding the resemblance of the primitive eruptions, but these characters are only well marked when the scabs have existed for some time.

As to *Porrigo furfurans* and the *Teigne amiantacee*, they are evidently chronic *Eczemas*, and they occur with all the characters of vesicular affections. If species must be made, M. Biett is of opinion that they must be reduced to two, *Porrigo favosa* and *scutulata*. In fact, these two species alone, present characters which are not to be found in other orders. But although persuaded of the utility of this reform, yet not to swerve too much, in an elementary treatise, from established methods, and from the fear of passing lightly over two affections of such frequent occurrence, we shall describe both the *granulata*, and the *larvalis*; although, we again repeat it, they belong in every respect to the impetiginous eruptions.

But we entirely reject *Porrigo furfurans* and the *Teigne amiantacee* as belonging to *Eczema*; they are vesicular affections, and consequently cannot be included in a genus the primary character of which is a pustule.

These different species scarcely ever exist simultaneously. They may attack all ages, and both sexes, but are most common in infancy. They appear, in most cases, to be connected with a peculiar state of the system; but in some instances, uncleanliness, misery, bad food, and deep grief, have either separately or collectively had a manifest influence on their development. At other times, they are produced by contagion, arising from a direct infection. The most common variety is *Porrigo favosa*, and after that, *Porrigo scutulata*.

The treatment has often been, and sometimes is still empirical; as the same remedy is frequently applied to entirely different diseases, and the most simple varieties are treated in the same manner as the most violent, and we every day see the reputed means of cure for these eruptions applied to affections of another nature; this explains those prompt and marvellous cures, which would otherwise astonish those who have seen all the varieties of porrigo, resist the best regulated treatment.

Varieties.

Two kinds of pustules occur in this genus—1. *Favi*, which appertain exclusively to *Porrigo favosa* and *scutulata*.—2. *Achores*, which constitute *Porrigo granulata* and *larvalis*.

It may be useful to establish the characters of these different constituents.

1st. The *Favi* are small, circular, and inserted, as it were, in the epidermis, containing a fluid which rapidly concretes, and forms a straw-yellow substance, presenting a central depression, which, by the aid of a microscope, can also be distinguished in the commencing pustule. At the end of some days, this matter being constantly increased, forms a thick cellular scab, more or less prominent, which augments in size for a long time, at one moment presenting cup-like depressions, and at others losing this character, and appearing as thick crusts of a yellowish-gray colour and very hard.

2d. The *Achores* are generally somewhat larger, are always superficial, having an inflamed base, are more or less irregular, confluent, and formed by the collection of a purulent fluid which raises the epidermis. At the end of some days, the pustules break and discharge a fluid which concretes and forms large yellowish or brown crusts, made up of layers, very different from the thick incrustations that succeed to the *favi*. The *achores* which Willan and Bateman admit as varieties of pustules, differ but little from the psyrdracious pustules of *impetigo*.

Varieties whose elementary constituents consist of Favi. A. PORRIGO FAVOSA. *Teigne faveuse.* *P. lupinosa*, Will.

Porrigo favosa is characterized by an eruption of very small, flat pustules, which rapidly dry and appear to remain glued to the epidermis for a long time, forming small, very adherent scabs, of a bright yellow colour, and cup-like form. These scabs increase in size, preserving their central depression and circular form, if they should not be complicated with other affections; but even then the central pit is discernible. It is essentially contagious.

The special seat of this disease is the scalp, but it may occur on the forehead, the temples, the chin, and the eyelids; but in the majority of cases it primarily exists on the scalp, and extends from thence to the other parts. We have several times seen it at the Hospital of St. Louis, appearing on the shoulders, at the inferior part of the scapula, on the elbows, forearm, front of the knees, the external and upper part of the legs, the thighs, and if it attacks the body, the scrotum may also be implicated; it usually occurs on the back part of the body, though it can affect the abdomen. The hands may also be attacked, and in such cases, the disease arises from immediate contact.

Symptoms.—*P. favosa* commences by extremely small psudracious pustules, which are scarcely perceptible on the first day. They appear in the form of small yellow points, and remain on a level with the surface, being as it were implanted in the epidermis. They have scarcely formed, before the small quantity of yellowish matter they contain concretes, and there may be perceived, either with the naked eye, or by means of a magnifier, a minute central depression, which becomes more apparent, as the scabs augment in size, and is very evident at the end of five or six days. The pustules are generally distinct at the beginning; sometimes, on the contrary, they are grouped and multiplied to such a degree as to form a continuous surface. Their development is always

accompanied by itching, in whatever situation they may occur; the skin that surrounds them is very red. When they are distinct, their base is sometimes elevated and inflamed; in most cases, each pustule is traversed by a hair.

The scabs slowly augment in size, preserving their circular form and central depression, which becomes more and more apparent; they may also acquire an extent of several lines, and M. Biett has seen them more than one inch in diameter. When the pustules are contiguous, these scabs become united at their edges, and thus form yellow incrustations of some size, and presenting a host of alveolar depressions, each of which corresponds to a former pustule. These pits have been happily compared by Alibert to the cells in a honey-comb, or the cups on the lichens which cover the trunks of certain trees. Sometimes a kind of scabby cap covers all the head; at other times there is a slight epidermic desquamation in those parts on which there are no pustules.

At this time the scabs are of a yellow or deep fawn colour, and if they are removed by means of emollient cataplasms, or by lotions, either of a simple nature or alkaline, slight erosions are found, which do not again become covered with a crust: to form these, a fresh eruption of pustules must take place. When the disease is left to itself, the scabs being very adherent, remain attached for months or even years; but then they become thicker and white, and are accidentally broken and detached in spots. As the disease follows this course in one point, there are often other pustules formed in another, which pursue a similar march.

When the scabs have existed for a long time, the skin becomes the seat of a chronic inflammation, which is deep-seated and severe; and the layers of the dermis are successively involved. It sometimes reaches the lamellar tissue, or even the pericranium and bone.

If the state of the hair be examined in persons affected with *P. favosa*, it will be found that it can be pulled out with the greatest ease, wherever the pustules are developed, at the very commencement of the eruption. At a later period the scalp

becomes bald, and the skin remains smooth and shining, wherever the hair is wanting. This is rarely restored, at least it never regains its original appearance; but presents, on the contrary, a woolly appearance, that is very striking.

Porrigo favosa is never accompanied with general symptoms at its commencement, but the itching is sometimes very violent, and becomes more so from want of cleanliness, for instances often occur where lice exist in great numbers under the scabs. This causes the patients to scratch, which tears the scabs, and increases the inflammation. In such cases, the head exhales a very disagreeable odour, which resembles, as has been remarked by Alibert, that of the urine of a cat.

It should be remarked, that when the head is cleansed from the scabs and insects, the smell becomes heavy and sickening. The excoriations which occur on the surface of the dermis, do not produce scabs with a depressed centre, but there flows from them a fetid and reddish pus, which forms irregular crusts, but new eruptions soon appear, which give rise to fresh favose scabs.

This disease may determine small subcutaneous abscesses; the lymphatic ganglions of the neck are often sympathetically swelled; but it rarely happens that this eruption is complicated with inflammation of any of the internal organs. It must be observed, that those individuals who are attacked with it often remain small and diminutive; their intellect is usually weak.

The seat of the favose pustules has been placed in the reticular tissue by most pathologists. Duncan says, that it is in the bulbs of the hair, and in fact, in almost all cases, it is very easy to pull out both the hair and its bulb, wherever the pustules are formed; they seem as if they were fixed in a soft substance. This is not only observed when the disease is of long standing, but also in all points where new pustules arise; if the extracted hair be examined with a microscope, a small swelling may be perceived, but the enlargement of its base, by which it is attached to the dermis, is wanting.

The duration of this affection is indefinite; it is impossible

to fix a term to it. When a cure takes place, and no new eruptions occur, the scabs fall off, the subjacent surfaces dry, and a reddish spot remains. It is seldom that the hair reappears with its normal characters, but we have seen, among others in the wards of M. Biett, a man, in whom they had been renewed, to all appearance, precisely similar to those that had been destroyed.

Causes.—*P. favosa* is evidently contagious; in some cases, however, it has been attempted in vain to provoke the disease. It is developed at all seasons; it attacks both sexes indifferently, as well as all ages, though it is usually seen in children and young persons. Various circumstances, which act by deteriorating the constitution, appear to assist in its development, such as the want of proper food, misery, and uncleanness, a lengthened residence in unhealthy, humid, and low situations, such as prisons, &c. It is also observed in persons of a lax, lymphatic, and scrofulous constitution.

Diagnosis.—The presence of small, yellow pustules, imbedded in the epidermis, the existence of yellow, dry scabs, which are cup-shaped, are characters which are sufficiently distinct to prevent this disease from being confounded, not only with other eruptions, but also with the other species of porrigo. At the same time, it does not differ from *P. scutulata* except in the disposition of the pustules, which are usually distinct in the *P. favosa*, whilst they are grouped in the *P. scutulata*. When many scabs exist, they are then of a whitish-yellow, dry, and sometimes breaking into powder; in this case they somewhat resemble those of *P. granulata*, but in general, the scabs of the disease under consideration, preserve their distinctive characters; added to which, the hair is almost always destroyed on the spots occupied by the disease, when it is thus of long standing, which never takes place in *P. granulata*.

It is almost needless to attempt to describe the differences which may exist between the eruptions of other genera and this disease, as its characters are so prominent that they will always be recognised. At the same time we have seen a phy-

sician, who, from his situation, would have been supposed to be acquainted with diseases, which daily came under his notice, confound a case of *favus*, which occupied a large portion of the surface, with *lepra*. But such errors can be but seldom committed, even by the merest tyro.

Prognosis.—The prognosis is unfavourable from the duration of the disease; it is the more so, when fresh eruptions constantly appear on the first being healed.

Treatment.—There is perhaps no disease for which so many remedies have been proposed, as *P. favosa*; and in general, each of these was infallible, if we were to believe its projector. Nevertheless, whatever means may be employed, the result is but too often unsuccessful. The treatment is all external. In some cases only, it is advantageous to support the strength of the patient by the use of bitters; and in some instances, also, recourse may be had to mild laxatives with advantage.

But the first thing in the treatment is cleanliness; the hair is to be cut very short, or, what is better, shaved off, the scabs are to be detached, and the surface washed with an emollient decoction, which is to be alternated with the use of soap and water. These means, simple as they may appear, are auxiliaries which are useful, and indeed indispensable in the generality of cases; it is to them that should be attributed certain cures of which the credit has been given to some useless remedy, to blisters on the arm, for instance, a method of treatment which is of very ancient date, as it is described in Vandermonde's Journal of Medicine.

In a great majority of cases, these means will not suffice; it becomes necessary to modify the state of the skin by more energetic applications. The cap has fortunately been abandoned for some time, and we can scarcely credit, that ignorance would now dare to make use of so cruel a method; besides, it only appears to act by the evulsion of the hair, which always attended its employment. Is the presence of the hair as prejudicial as some authors insist? and when it falls off from the effects of the disease, does this disappear? On the contrary, the scabs often remain for years on places where there

is no hair; besides, its extraction, by means of small forceps, but only on the diseased spots, is not as painful as might be supposed. In fact, the hair has very little attachment at these spots; but it can be destroyed by much milder means, the alkaline preparations fulfil this end very well, and, at the same time, which is not less essential, they very advantageously modify the morbid state of the skin. The remedies on which reliance ought to be placed, in addition to cleanliness, are the alkaline and sulphurous preparations, and acidulated lotions.

The alkaline preparations which should be used, present many differences, according to the action that is wished to be produced; when it is wished to destroy the hair, and at the same time make some impression on the scalp, the subcarbonate of potash or soda, mixed with axunge, in the proportion of one or two drachms to the ounce, and rubbed on the diseased spots for five or ten minutes each day, will in a short time detach the hair; mild alkaline lotions, made by adding two drachms of these salts to a pint of water, may be employed at the same time. Before beginning their use the hair must be cut off, and large emollient cataplasms applied, as well as lotions with warm soap and water, in order to detach the scabs and cleanse the surface.

At the Hospital of St. Louis, we have several times seen the sulphuret of potash used with much advantage, in the proportion of one or two drachms to a pint of distilled water, or what was still better, the following lotion, (called Barlow's,) sulphuret potassæ, ℥ij. sapon alb. ℥iiss. aqua calc. ℥vij. spt. vin. rect. ℥i. Finally, in some cases, the patients were much benefited by the use of the chloride of lime.*

* Barlow's lotion, as given by Burns, in his midwifery, differs from the above in its proportions, being as follows: ℞ kali sulph. ℥ij. sap. alb. ℥iiss. aqua calcis, ℥viiss. spt. vini. ℥ij. M.—He also observes, that Underwood recommends the decoction of tobacco, or lotio sapon; Dr. Franck, urine, and Heberden, a decoction of white hellebore.

Heberden also agrees with our text, in remarking that he has found little benefit from internal remedies. Burns, however, thinks that he has derived advantage from the use of a decoction of the woods, sulphur, and small doses of calomel.—TRANS.

Mild sulphurous *douches*, repeated every day, will be of great service; they, as well as the lotions, prevent the ointment that has been used from remaining too long in contact with the skin. The physician must have great patience, and see that his orders are fully complied with. The remedies of the Mahons, are, (it has been ascertained,) composed of alkaline preparations, and the precaution they take of conducting the treatment with their own hands, ought not to be overlooked, as a cause of the numerous cures they have obtained. We are far from wishing to dispute their success, but there can be little doubt that it would be much less, if they reduced the number of diseases to the tineas, properly speaking, (*P. favosa* and *scutulata*,) and we think that these two varieties, which we have so often seen resist the best regulated treatment, will also prove as refractory under their plan of cure, as under the various methods made use of, at the Hospital of St. Louis.

Some acids, much diluted, such as the muriatic and the nitric, have been employed with success in some cases; these acidulated lotions may be replaced with advantage by those of the hydrocyanic acid, in the proportion of a drachm to each pint of distilled water.

The other means that have been employed by different practitioners with success, are solutions of the sulphates of zinc and copper, nitrate of silver, in the proportion of three to six grains to the ounce of distilled water; or, finally, corrosive sublimate, in the same proportions. To these solutions, two or three ounces of alcohol to the pint of water, may be added.

Those ointments which have been the most praised, are sulph. sublim. mixed with axunge, in the proportion of ℥ij. to the ounce, and as much white soap; calomel, ℥ij. axunge, ℥i. oxide of manganese in the same proportions; and, finally, Bayner's ointment, litharge, ℥ij. calcined alum, ℥iiss. calomel, ℥iiss. axunge, ℥ij. Venice turpentine, ℥ss. But of these remedies, the most prompt and successful certainly is the ioduret of sulphur, latterly employed by M. Biett, and applied by him to the cure of these diseases. We have seen, in a few

weeks only, this remedy modify the morbid action of the skin; under its influence the pustules ceased to appear, and it was during its use that we have seen the hair reappear of its natural consistency and colour. The diseased parts are to be lightly rubbed, night and morning, with the following ointment, ioduret of sulphur, $\mathfrak{D}i.$ to $\mathfrak{zss.}$ axunge, $\mathfrak{z}i.$

In the use of all these means, great care must be taken to detach the scabs as fast as they form, by the aid of emollient or alkaline lotions perseveringly applied. But, M. Biett commenced, some time since, a series of experiments, not only on the methods of cure already known, but also on many substances which have been recently introduced in the *materia medica*. The results of these experiments still presenting some uncertainty on many essential points, M. Biett has thought proper to postpone their publication.

Baths are always useful, and should be prescribed from time to time, particularly where the disease is on the body or limbs. Sulphurous baths are very advantageous in some cases.

When the disease is local, and only consists of some pustules scattered here and there, after removing the scabs, the surface may be cauterized with nitrate of silver. Cauterization has also been proposed and employed with success in some very obstinate cases, and to accomplish it, the concentrated acids have been used, as the nitric, sulphuric, hydrochloric and acetic; in employing them, after the scabs have been removed, and the diseased surface perfectly cleansed, the end of a quill dipped in one of these acids is to be passed over the eruption, and before the caustic has had time to extend its action too far, the parts are to be washed with cold water. Setons, blisters, and issues, are less useful than has been supposed. Finally, in the treatment of this affection, it should never be forgotten, that a single remedy is far from being always successful, that much perseverance is necessary, as well on the part of the physician as on that of the patient, and that in all cases, whether successful or not, cleanliness is sedulously to be attended to.

B. PORRIGO SCUTULATA. *Teigne annulaire. Ringworm of the Scalp.*

Porrigo scutulata is a chronic inflammation of the scalp, characterized by favose pustules, not isolated and distinct, as in *P. favosa*, but united in groups, and so disposed as to form circles, at the circumference of which these small, yellow pustules are in greater numbers than in the centre; they are followed by scabs, which, though thin at first, often become very thick; and by the aggregation of the *favi*, constitute incrustations of a large size. This eruption is essentially contagious.

P. scutulata particularly appears on the scalp, which is its special seat; but it may exist at the same time on the forehead and neck. When it is observed on other parts of the body, which is but rarely, it is generally produced by direct contagion.

Symptoms.—This disease commences by red, circular spots, on which very small, yellow pustules may soon be perceived. These do not rise above the level of the skin, and appear to be set in the epidermis. These pustules are grouped, and are much more numerous towards the circumference of the patch than in the centre; violent itching accompanies their formation, and that of the erythematous spots which precede them. The pustules of this variety are absolutely similar to those of *P. favosa*, though perhaps not of as bright a yellow: like them, they have a central depression, are generally traversed by a hair, and they dry quite as quickly. They first form thin scabs, which gradually augment, and become more prominent; and if they are permitted to accumulate, they unite and constitute large incrustations, generally circumscribed by a circular line. If they fall off, or are detached by emollient applications, the skin is found red, shining and inflamed; other analogous pustules soon appear and follow the same course. This eruption particularly takes place at the circumference of the former, which gradually extends, and may even acquire a diameter of two inches.

From the commencement, it will be perceived that the hair which covers these spots, has become thinner, dry, and woolly, and the slightest effort will detach it; it is evident that the bulbs are affected very soon after the appearance of the disease. It is finally destroyed as the eruption advances.

In most cases, when the disease has lasted some time, the other parts of the scalp which are not affected with the eruption, become the seat of a slight epidermic exfoliation. When the circular patches are numerous, either from being spontaneously developed, or from the patient inoculating other spots by scratching, they may extend and unite: these confluent pustules form scabs of great thickness, and in some cases, the incrustation may cover the whole scalp. The patient then presents a remarkable appearance, especially if the disease is of long standing; his head is occupied by a kind of thick cap, whose circumference presents evident marks of the original form of the disease. Thus, quarter and half circles are distinctly seen, and no hair is found, except at the junction of the scalp with the skin of the face; above this kind of crown, formed by thin and woolly hair, is to be perceived a crustaceous covering of a grayish-yellow, which does not, like *P. favosa*, present central cup-like depressions, but dry, friable scales, which fall off in small portions, and resemble mortar, coarsely broken, or plaster fallen from a wall, and sullied by dust and moisture. Sometimes the disease in this state, instead of occupying all the head, is confined to one or more spots; and the eruption may be seen in all its stages. Thus, patches of a vivid red may be perceived, especially at the circumference, then a greater or less number of yellow pustules at a little distance, thick scabs, and finally, white spots, entirely deprived of hair, and near them, slightly inflamed points, which are the seat of an epidermic exfoliation.

The disease may remain in this state for an indefinite period; it may last for months, but at last, either spontaneously, (which is rare,) or from the effect of medical treatment, the scabs fall off, the surfaces they leave exposed, become less inflamed, the eruptions take place less frequently and numer-

ously, the scabs are not as thick; they gradually cease to form, and the disease disappears, leaving places of various sizes, on which the hair remains for a long time, thin, soft, and discoloured, and even in some cases, never reappears.

Causes.—When this affection is spontaneously developed, it is only observed in children, in individuals of a lymphatic temperament, badly nourished and clothed; but it is usually propagated by contact; the use of the same towels, combs or caps, may occasion it; it is also observed, but less frequently, in adults.

Diagnosis.—The diagnosis of this eruption may present some difficulties in certain cases. *P. favosa* is the only species of porrigo with which it can be confounded. It differs, in fact, from the others, in a marked manner, by the nature of its pustules, (*favi*,) by the colour and form of the scabs, by the baldness they occasion, and finally, by its contagious character.

As to *P. favosa*, the *P. scutulata* has the same elementary lesions; small yellow pustules imbedded in the epidermis, and depressed at their centre; but here they are grouped, and form by their union, distinct circles, characters which are not found in the former, the distinct pustules of which never unite so as to form a regular figure. Nevertheless, in cases where the scabs of *P. scutulata* cover almost the whole of the scalp, they may be confounded with the thick crusts of *P. favosa*, which also form a kind of cap which is spread over the whole of the head, but the scabs of the latter, when examined with attention, present here and there some points, where the cup-like depressions may be found; and besides, these large incrustations are never circumscribed by regular lines, whilst those of *P. scutulata* always have portions of circles at their edges, indicating the original form of the eruption, and finally, in this latter disease, the cup-like pits are never to be seen; but instead of them, fragments of scabs resembling broken mortar.

Impetigo figurata may also be mistaken for this disease, when it is seated in the scalp, or else the *P. scutulata* may be confounded with the former if it is developed on the limbs;

in fact, *Impetigo figurata* is characterized by a union of pustules, giving rise to thick scabs, regularly circumscribed, and often perfectly round; but these two diseases present very great differences, both in their pustular and their crustaceous state. In the first, the superficial and slightly prominent pustules, arising from a red and highly inflamed surface, which characterize *Impetigo*, cannot be confounded with those of *Porriigo*, which are deeper seated, and imbedded in the epidermis, are only accompanied by a very slight inflammation at their base, and finally present a concrete matter almost from the period of their formation; whilst the psudracious pustules of *Impetigo* contain a liquid, which gradually thickens, and requires some days to form a true scab. In the crustaceous state, the differences are less marked; the scabs of *Impetigo* are thinner: when they fall off, they are replaced by a seropurulent effusion, whilst it requires fresh pustules in *Porriigo* to give rise to new incrustations: besides, the former is always confined to small spots; its patches are often distinct, and the latter, when in this state, is easily recognised; its crusts being thicker at the circumference than in the centre, whilst the contrary is the case in *Impetigo*.

Besides, if it be remembered that *Impetigo* is not contagious, that, when it is seated in the scalp, it never occasions a loss of the hair; that, on the other hand, the presence of *Porriigo scutulata* on the limbs is extremely rare, and almost always coincides with the same eruption developed on the scalp; we shall have characters sufficiently well marked, to prevent us from ever confounding these two affections, which it is very important to distinguish.

The patches of *Herpes circinnatus* at their commencement, or of *Lepra* deprived of its scales, when seated on the scalp, may perhaps be taken for those of *P. scutulata*, when it is just beginning, and is only characterized by the small, red, circular spots, which precede the appearance of the pustules: it is almost useless to add, that the development of each of these diseases will present symptoms of sufficient distinctness to prevent any doubt, and which will speedily correct any error.

Prognosis.—*P. scutulata* is not serious of itself, but it may become so from its duration, and its obstinacy in resisting the different plans of treatment: nevertheless, it is generally less troublesome than *P. favosa*.

Treatment.—The basis for the treatment of this disease, is generally the same as that for *P. favosa*, and as in that eruption internal remedies are of little benefit, so here, external means are to be relied on. Frequent lotions, with warm water, or milk, cutting the hair very short, or even shaving it off, if this latter operation does not occasion inflammation; and emollient cataplasms, to disengage the scabs, are the only means to be employed at the commencement: at a later period, it becomes necessary, as in the *P. favosa*, to modify the state of the diseased parts; and recourse may be had, (according to the violence of the disease,) to one or other of the remedies we pointed out, when speaking of the latter disease, as the sulphurous and alkaline preparations, Barlow's lotion, solutions of the sulphates of zinc and copper, or even of corrosive sublimate, with the addition of a certain quantity of alcohol. Frictions may be made with sulphurous or calomel ointments; but, above all, if the disease is obstinate, with that of the ioduret of sulphur. Simple baths, sulphurous *douches*, and especially cleanliness, are very efficacious.

In fact, the same treatment is to be made use of, as we have indicated for *P. favosa*, under the head of which all these means are spoken of at large.

B. *Varieties in which the elementary lesions are composed of Achores.* PORRIGO LARVALIS. *Teigne muqueuse.*
Crusta lactea. *Tinea muciflua.*

Porriigo larvalis is characterized by an eruption of superficial pustules of a yellowish white colour, more or less confluent, united in groups, which are succeeded by yellow or greenish scabs, sometimes lamellar and thin, sometimes thick and rough, and offering the greatest analogy to those of *Eczema impetiginodes*, or *Impetigo figurata*.

This disease is particularly observable in children, and especially in infants: it may be developed on all parts of the body; but those most subject to it are the scalp, the ears, and lips: the face is often almost covered with thick scabs, which hide it, like a mask, from whence is derived the name *larvalis*.

P. larvalis offers many varieties which result from the degree of inflammation, and the greater or less thickness of the scabs. In very young children, the disease only consists in the appearance of small pustules, which are scattered over the scalp, temples, &c., and soon form thin scabs, but which sometimes become thicker as the effusion increases: these are what authors have designated as the milky scall. In these cases, the affection is very mild; but it often is much more violent, and shows itself either on the face, scalp, or on both these places and different parts of the body at the same moment.

On the face, the disease usually commences on the forehead or cheeks, by small pustules grouped on a surface of greater or less extent; violent itching accompanies their appearance: they soon open either spontaneously, or by the action of the nails, and a viscid, yellow fluid is effused, which forms thin, soft crusts of a yellowish-green colour: the effusion continues; new crusts form, the first augment in thickness, and are found thick, soft, and rounded in one place, whilst they are thin and lamellar at another. When they fall off, they leave a red surface, highly inflamed, upon which fresh crusts are formed: the effusion is sometimes so abundant, that the fluid does not concrete; so that the surface of the dermis is exposed, and a viscid, thin, and acrid fluid may be seen issuing from a multitude of small points. When the disease is of a certain extent, the itching and pain are often very violent: when it occupies the forehead, the cheeks, or the chin, all these parts are covered with a large, thick crust, like a mask, the nose and eyelids alone usually appear to be exempt.*

* Mr. Christian, of the Liverpool Ophthalmic Infirmary, has described an inflammation of the eye, which he says is a very common attendant on eruptive diseases, and particularly of *Porrigo larvalis* and *favosa*, to which he has

In other cases, the pustules are larger; they develop themselves behind the ears, around the mouth, and on the chin, soon giving rise to thick crusts of a greenish-yellow colour. Under some circumstances, the mouth is surrounded with large, thick, yellow incrustations, which are of a deep brown in certain spots, where a little blood has mixed with the dried fluid; in these instances, the movements of the lips are much impeded: at other times, these large incrustations occur behind the ears. These crusts exhale a sickening odour: very often the adjoining lymphatic ganglions inflame, and may even suppurate; sometimes the eyelids are the seat of a chronic inflammation, and there is often coryza, and an abundant flow of mucus from the nasal fossæ.

When the disease approaches a cure, the effusion diminishes, the crusts are formed more slowly, and become thinner and whiter, the surface on which they rest is less and less red; they are soon replaced by a slight desquamation, which also soon disappears, and there only remains a light rosy tint on the spots that were the seat of the disease; this also gradually fades away. Such is the usual termination of this variety: sometimes, however, fissures occur; and, in some cases, at the moment when all appears about to terminate, a new eruption is developed, and the disease recommences. It never causes cicatrices, and if they have sometimes been observed, they were evidently the result of scratching; as children, if great attention be not paid to them, will sometimes tear themselves to such a degree as to cause the flow of a considerable quantity of blood.

When this affection attacks the scalp, the pustules are closely set, they are of a yellowish-white colour, and sometimes occupy the posterior portion of the head only; at others, all those parts that are covered with hair are affected; at times, the pustules are very small and intermingled with vesicles, the greater part of which become pustular, whilst others acquire a transparency: they are accompanied with great itch-

given the name of porriginous ophthalmia. This appears principally to affect children.—TRANS.

ing; they soon open, but are generally torn by scratching; they effuse a thick, viscous fluid, which glues the hair together, and in drying forms irregular scabs of a yellowish brown colour. These are sometimes scattered and sometimes confluent, and cover a considerable space; the effusion continues, and if the hair is long and there is a want of cleanliness, a great portion of the scalp is at last covered by a very thick, brownish crust, which in drying breaks into small friable portions, and finally presents all the characters which it will be seen are assigned to *P. granulata*. When these incrustations are thick and extensive, and the patient keeps his head wrapped up in rags, which are suffered to remain for months impregnated with the discharge, the odour is fetid and insupportable on their removal, and thousands of lice may be seen, which augment the pruritus and inflammation.

On the contrary, when the scabs are removed with care, by means of emollient lotions, the surface is found but little inflamed, and presenting slight excoriations, which secrete a viscid fluid of a heavy smell from a multitude of points: sometimes the subcutaneous cellular tissue is inflamed in spots, and forms small, circumscribed, purulent abscesses, which rarely terminate by resolution, and are obliged to be opened.

When the disease lasts for a long time, and the crusts have remained for months without any attempt to detach them, the hair falls off; but this baldness is totally different from that which constantly attends the two former varieties, being only accidental and temporary; the bulbs are not destroyed, but inflamed: hence the hair soon reappears, of the same colour and consistence as that which covers the sound parts.

Not only the scalp, forehead, mastoid regions, and all the face may be more or less affected at the same moment, but the disease may also extend to the body and limbs; they appear in this case to be smaller, and less confluent, the scabs which succeed them thinner, and the disease is closely allied to *Impetigo*.

The duration of this disease is very variable; although less

obstinate than the two former species, it may, notwithstanding, last for several months.

Causes.—*P. larvalis* is never contagious, and is generally observed in children: it appears about the period of the first or second dentition. The causes are difficult to ascertain in a majority of cases; for if it occurs in the badly nourished and weak, it is also to be seen in the strong and healthy: want of cleanliness may have some influence on its appearance. This disease also affects adults.

Diagnosis.—The characters heretofore assigned to *P. favosa* and *scutulata*, are certainly so well marked that they can never be confounded with this disease.

It is more difficult to draw a line of distinction between this affection and *P. granulata*, which is perhaps but a variety of the same species, particularly at its commencement: at a later period, the form of the scabs, which in the latter become dry, very hard, and grayish, is the only character by which they can be discriminated.

It is still more perplexing, not to say impossible, to distinguish it from *Impetigo*, or other eruptions of the same nature, such as *Eczema impetiginodes*: the same constituents, same appearances, same form of scabs, except that the seat being in the face and scalp, and the greater or less violence of the inflammation, may make some slight difference.

In describing the *P. favosa* of Willan, which is only a variety of *P. larvalis*, Bateman observes that the *Dartre crustacee flavescence* of Alibert, appears to be a *P. favosa*, situated on the cheek; but this eruption being *Impetigo figurata*, it is evident that the appearances of *P. favosa* of Willan are the same as those of *Impetigo*; and it is consequently clear, that Bateman, who admits that the *P. larvalis* is a variety of this eruption, also agrees that it is the same as that described by Willan under the name of *P. favosa*. Finally, Burns, in his work on the diseases of children, describes as identical diseases, those known under the name of *Crusta lactea*, *Tinea muciflua*, and *P. larvalis*, but offering varieties according to the violence of the inflammation: we repeat that it is im-

possible to establish the distinctive characters between this disease and *Impetigo*, or *Eczema impetiginodes*.

Prognosis.—The general health is seldom affected by this eruption; in some cases, however, gastro-intestinal irritations and diarrhœa supervene, and the children become attenuated. The prognosis of *P. larvalis* is usually favourable, and this affection is only fatal when it is accompanied or followed by some disease of important viscera. If the eruption has lasted for a long time, if it gives rise to a very abundant discharge, it is unfavourable, particularly when it thus occurs on a very young, weak, and debilitated infant, and in a condition where it cannot receive the proper attentions.*

Treatment.—In the generality of cases, lotions of tepid water, milk, or decoction of mallows, which unite the double advantage of preventing the scabs from accumulating, and of calming the violence of the inflammation, should constitute the whole treatment; and in children at the breast, the best remedy is to direct the nurse to wash the diseased parts with her milk. When there is great itching and much irritation, recourse must be had to tepid emollient baths. It is often useful to change the milk of an infant, if it is possible, or at least to permit it to suck but seldom, feeding it on water gruel or barley water.

As to blood-letting, it should not be employed, except in children who are from two to three years of age, and when there is much inflammation, a topical bleeding, by two leeches behind each ear, will fulfil the desired intention. The treatment is similar in young persons and adults, except that if the scalp or face is attacked with a violent irritation, general bleeding should be used, and leeches applied behind the ears, or on the mastoid apophyses.

The hair should be cut very short when the disease occu-

* Dr. Dewees, in his "Diseases of Children," states that he has seen two instances of death from this eruption: in these cases, the itching was unceasing: the disease continued many months, till at last the children were destroyed by the pertinacity of the fever and the profuseness of the diarrhœa.

pies the scalp, and emollient cataplasms of bread and milk, or potatoes and a decoction of mallows, applied to the part, and frequently renewed. When the eruption has lasted for some time, and is extensive, it becomes necessary to change the state of the skin; for which purpose, sulphuro-alkaline lotions, made by adding one drachm of sulphuret of potash and two drachms of subcarbonate of potash or soda to a pint of water, are very advantageous. These lotions and mild ointments should be used two or three times a day.

Mild laxatives are sometimes useful: the syrup of chicory may be employed in very young children: in those who are older, in young persons and adults, calomel in the dose of two to four grains a day, the sulphate of soda in the dose of two drachms, or half an ounce in a pint of barley water, &c. will sometimes produce happy results.

Sulphurous *douches* may become useful, and when the disease appears on the body and limbs, and is obstinate, sulphurous, alternated with tepid emollient baths, should be prescribed. Issues, and the application of blisters to the arm have also been advised, but their use only adds to the irritation of the skin.

In some rare cases, the appearance of *P. larvalis* has appeared to have acted beneficially, and to have tended to the cure of more dangerous diseases. Under these circumstances, and, above all, when the abundance of the discharge appears to coincide with the disappearance of the first disease, the treatment must be undertaken with the greatest prudence, and it is often useful to confine it for some time to simple palliatives and cleanliness.

PORRIGO GRANULATA. *Tinea Granulata. P. lupinosa.*

Porrigo granulata is characterized by the presence of small, scattered, grayish scabs among the hair, of a very irregular form: these scabs, compared by Alibert to fragments of mortar coarsely broken, resemble the detached portions that are sometimes seen in the thick incrustations of *P. scutulata*,

and still oftener in *P. larvalis*, of which this eruption appears to be but a variety. They succeed to small pustules, which are in most cases irregularly disseminated over the scalp.

It particularly occurs in children and young persons, but may also be seen in adults. It usually occupies the back part of the head, but may cover the whole scalp.

Symptoms.—*P. granulata* first manifests itself by pustules of a yellowish-white colour, accompanied with some inflammation, and much itching; these pustules are traversed through their centre by a hair, and open in from two to four days, when an abundant discharge takes place. Brown, rough scabs soon form, which often agglutinate several hairs together. These crusts, in drying, acquire, after a certain time, the characters that constitute this variety. They become hard, rugged, and unequal, and of a brown, or dark gray colour. Small, unequal, dry, friable, irregular granulations become detached, and remain disseminated through the hair, which is stiff and bristling.

The hair is never destroyed, but when the disease is extensive, it is formed into bundles from the agglutination of the scabs. The head exhales a disagreeable, sickening odour, which is sometimes so great in persons of filthy habits, that they infect all around them; in this case, lice are found in great quantities, both among hair, and under the scabs. This smell does not exist in patients who are cleanly; even the scabs do not, in a majority of instances, present their distinctive characters, but perfectly resemble those of *Impetigo*.

The duration of this eruption is very variable; it seldom, however, lasts more than a few months. When left to itself, it may continue longer, but usually, when recourse has been had to a proper treatment, or even to cleanliness, it ceases in a few weeks.

Causes.—This eruption is not contagious. Misery, uncleanliness, privations, and unhealthy residences, are all causes that influence its development. It is the rarest of all the varieties of *Porri*go, which may be explained from the want of

stability in its characters, which depend on a peculiar state of an impetiginous affection.

Diagnosis.—The diagnosis of this affection does not present any difficulty when it presents rugose, brown, or dark-gray scabs, resembling small bits of dirty plaster. Nevertheless, there are certain cases where *P. scutulata* offers a multitude of analogous granulations, and indeed, many of the descriptions which have been given of *P. granulata*, may be referred to this eruption. But *P. granulata* never has the large, thick, and continuous incrustations that are to be met with in the other variety. Besides, when these scabs are detached, the circular form of the patches, and the nature of the pustules in the latter, will always suffice to distinguish it. As to *P. favosa*, independently of other characters, the colour of its scabs, and their cup-like depressions, will prevent any error.

It is more difficult to distinguish it at its commencement, from *P. larvalis* or *impetigo*. In fact, there are the same pustules, the same scabs, &c. As to the peculiar appearance of those of *P. granulata*, when in a dry state, it may be regarded as accidental.

Prognosis.—This disease is seldom dangerous; sometimes it is obstinate, though much less so than the other varieties.

Treatment.—To detach the scabs, cut the hair, and expose the diseased surfaces, are the first indications to be fulfilled; this should never be forgotten, whatever may be the plan of treatment. Lotions and emollient applications are the only means that are suited to the commencing stage; at the same time the patient should take diluent drinks, rendered laxative by the addition of half an ounce of sulphate of potash or magnesia to the pint, or from two drachms to half an ounce of sulphate of soda, &c. It is often necessary to continue the emollient applications for a long time, but at a later stage, when the inflammation of the scalp is slight, alkaline preparations should be used, as great benefit is often derived from them.

Lotions, sulphurous *douches*, &c. also hold a high place in the treatment, which however is perfectly analogous at this period, to that of *P. larvalis*.

ORDER V.

PAPULAR DISEASES.

PAPULÆ.

THE diseases arranged in this order, are characterized by small, solid, resisting elevations, which have received the name of *pimples*. Sometimes they are only constituted of a morbid enlargement of the papillæ, and sometimes they are true elevations of the skin. Somewhat prominent, they never contain serum or pus; they are always attended with a greater or less degree of itching; which is sometimes intolerable. These affections are generally chronic, though they sometimes follow an acute course. Their duration varies from one or two weeks to several months or even years; the *Prurigo*, for example, may remain for an indefinite time.

Seat.—There is no part of the skin, which is not liable to be attacked with papulæ. The eruption, sometimes confined to a single region, may at others become general; but in most cases it occupies several parts, sometimes widely separated from each other at the same moment. On the limbs, the eruption usually appears on the external surface; on the body, it is principally to be seen on the posterior part. Finally, it generally manifests itself on surfaces of extension.

Symptoms.—The papulæ are ordinarily developed in a slow manner, and preceded by a greater or less degree of itching. They appear in the form of small, slightly prominent points, which are usually of the colour of the skin; sometimes, however, they are red, and in some cases of *Lichen*, (strophulus,) on the contrary they are white. They gradually become more visible, and can be felt with the finger, which on being passed over the eruption, receives a sensation as from small, prominent, hard bodies. They are in most cases

regularly rounded, and distinct, small in *Lichen*, and large in *Prurigo*. These eruptions are seldom accompanied with general symptoms.

The papular affections terminate by resolution, or by a slight desquamation, which is the most usual, and sometimes by slight ulcerations which take place on the summit of each pimple, and change the appearance and condition of the disease, (*Lichen agrius*.) An almost inevitable consequence of the papular eruptions, is a yellowish fawn-coloured appearance on those places that have for a long time been the seat of the disease. This may last for years.

Causes.—None of these diseases are contagious; they are generally developed without any appreciable cause. Sometimes they evidently arise under the influence of dirt and misery, this is the case with the generality of the *Prurigos*.

Diagnosis.—The diagnosis of papular inflammations, is generally easy, sometimes difficulties may arise, especially in distinguishing them from *Scabies* and certain cases of *Eczema*, but in the majority of instances, not to say all, a little attention will always detect the primitive constituent lesion, even when the disease has been disfigured to a certain degree, by small scabs which have succeeded to the ulcerations of which we have above spoken.

Prognosis.—The prognosis is seldom unfavourable, but may sometimes become so, from the duration of the disease, which may attack all the dermoid tissue, and particularly from the pruritus of certain local species, which may become insupportable, and occasion dangerous symptoms, as in *prurigo* of the penis, &c.

Treatment.—Sometimes the papular affections yield to the most simple remedies; often, on the contrary, they are obstinate and untractable, and even in certain cases require the use of very energetic measures. The papulæ constitute two genera, *Lichen* and *Prurigo*.

LICHEN.

The word *Lichen* from the Greek λειχων, admitted by the Latin authors as synonymous to *Impetigo*, has been applied by the English pathologists to papular affections.

Lichen is characterized by full, solid, elevations, which are usually very small, sometimes of a light red colour, but generally of the colour of the skin, almost always aggregated, and accompanied with pruritus. It may be acute, but in most cases it is chronic.

It may appear on all parts of the body, sometimes general, but ordinarily local: in which case the hands, the fore-arms, the neck and the face, are its most frequent seats. It may present two very different states, *Lichen simplex* and *agrius*.

1. *Lichen simplex*.—This appears in the form of very small pimples, rarely larger than the size of a grain of millet, aggregated in greater or less numbers, and presenting differences according as it is acute or chronic. In this eruption the pimples are red and inflamed, it is accompanied with heat and uncomfortable itching. At the end of three or four days the redness diminishes, a slight surfuraceous desquamation is established, and the disease terminates before the second week, unless there should be successive eruptions.

When it assumes a chronic state, which often is the case, the pimples are little if at all inflamed, and are generally of the same colour of the skin. Preceded by a slight itching, they appear in the form of small prominences perceptible to the hand, which on being passed over the eruption, receives the sensation of small hard bodies, with which the skin seems studded. In these cases, it is far from terminating at the end of seven or eight days; the papulæ remain stationary during an indefinite time; fresh ones are developed, and the disease may last several weeks, and sometimes even months. *Lichen simplex*, when chronic, is always accompanied with a greater or less thickening of the skin, and often gives rise to an extensive exfoliation.

Lichen simplex, when acute, is most generally fixed in the face, or on the body; in a chronic state, it is almost always met with on the limbs, as especially on the hands, of which it occupies the dorsal surface in most cases.

Symptoms.—Developed without other symptoms than a little smarting, and sometimes a great degree of itching, the *Lichen simplex* is rarely attended with general symptoms, it is only preceded by a little uneasiness, and a slight fever in extensive and general cases where it is in an acute form. Sometimes the pimples appear on those parts of the body which are furnished with hair, (*L. pilaris*,) in such instances it lasts for a long time. At other times, and particularly in individuals enfeebled by misery and privation, the eruption assumes a livid hue, (*L. lividus*,) the pimples are soft, flat, and seated on the inferior extremities, and are often mixed with purple and hæmorrhagic spots. This variety is very rare.

The papulæ of *Lichen*, although generally aggregated in irregular groups, may, in some instances, unite and form regular figures, (*L. circumscriptus*,) as circles, whose edges are well marked, and which are continually increased and augmented by new eruptions, at the same time that the centre heals with a slight exfoliation; these circles are rarely isolated, but appear in considerable numbers, and end in becoming confluent from their increase in size.

There is another very rare form which is not noticed by writers, notwithstanding its remarkable appearance. M. Biett, who has observed and described it several times, has bestowed on it the name of *Lichen gyratus*. In fact, we have seen in a recent example at the Hospital of St. Louis, the papulæ forming a kind of band, which, commencing at the anterior part of the breast, reached the internal portion of the arm, along which it extended in gyrations to the extremity of the little finger, exactly following the course of the cubital nerve.

Independently of these anomalies in situation, aspect, and form, which are only modifications of *Lichen simplex*, it presents two really important varieties, *Lichen urticatus* and *strophulus*.

L. urticatus.—This is an eruption of a considerable number of papulæ, which are larger than the usual size in this species; they are inflamed, prominent, large, confluent, and resembling the stings from a nettle; they appear suddenly, and occasion a burning and uncomfortable itching; they are generally fixed on the neck and face, and particularly attack young persons and women in the spring and summer; they also appear in individuals whose skin is thin and delicate, and may occur in infants. The eruption is transient and irregular, usually disappearing spontaneously to reiterate its attack in a short time; it terminates by a furfuraceous desquamation.

L. strophulus.—This affection is a variety which is peculiar to infants at the breast; it always exists in an acute state, and consists in an eruption, (which is almost always general,) of papulæ, either redder or whiter than the skin, accompanied with violent itching, which is augmented by the heat of the bed, and is subject to well-marked exacerbations. It presents a multitude of varieties in colour, form, and dimensions, which are usually to be seen in different eruptions, but may sometimes occur at the same time.

Sometimes the papulæ are red, much inflamed, and prominent, and are scattered here and there, intermixed with small erythematous patches, (*S. intertinctus*,) or else they are smaller, more contiguous, and much more numerous, and constitute an eruption of some severity, (*S. confertus*,) or even they may appear in small groups, regularly rounded and at considerable distances from each other, (*S. volaticus*.)

Sometimes the papulæ are white, and in this case, they may be small, of little extent, and encircled with a slight inflammatory areola, (*S. albidus*,) or large prominent, and without inflammation at their base, (*S. candidus*.)

This disease is generally developed under the influence of some unknown cause, and often accompanies the first dentition, sometimes appearing to be connected with inflammation of the internal organs. Its duration varies from one to three or four weeks. It is usually an ephemeral disease, and always unattended with danger; it seldom requires any other treat

ment than a few tepid baths for the child, and cooling drinks for the nurse; but should always attract the attention to the causes which may have produced it, and which sometimes require immediate treatment.*

2. *Lichen agrius*.—This may occur spontaneously, or succeed to *L. simplex*.

The first manifests itself by a multitude of very red, small pimples, which are much inflamed, and developed on an erythematous surface; they are small, in great numbers, prominent, and acuminated; the surface they occupy is generally of small extent, and surrounded by a strongly marked inflammatory redness, accompanied with heat and painful swelling; the solid elevations increase in size, and the inflammation, far from diminishing on the fourth or fifth day, appears to augment; the summit of the pimples becomes the seat of small ulcerations, and discharge a sero-purulent fluid, which concretes in the form of real prominent, small yellow scabs, somewhat rough, but soft, and slightly adherent; these crusts fall off, and are replaced by thin scales. Sometimes the redness then diminishes, and a slight exfoliation occurs, the disease terminating in twelve or fifteen days; but in most cases, an abundant secretion continues, the scales fall off, and are again renewed for an indefinite time. The *Dartre squameuse* of Alibert, which, as we have seen, corresponds to *Eczema*, is also analogous to this state of *Lichen*.

This variety is accompanied with itching, which is sometimes so violent that the patient cannot find substances sufficiently hard to scratch himself with; sometimes it is aggravated by painful exacerbations and fresh eruptions. It may last in this state for several weeks; sometimes, however, it passes at once into a chronic condition: the quantity of sero-purulent fluid secreted becomes less and less abundant, the scabs become

* The varieties of *L. strophulus* are all known under the common name of tooth-rashes. The confertus being the tooth-rash, the intertinctus the red-gum, and the albidus the white-gum. As stated in the text, they require little medical treatment more than to keep the bowels in a soluble condition, and strict attention to cleanliness.—TRANS.

drier, and are replaced by a farinaceous desquamation; this state is accompanied with a thickening of the skin, which is sometimes very considerable, and may last for months.

L. simplex may pass into *L. agrius*; in this case, the patient experiences, instead of the constant itching, an unaccustomed smarting and heat. The pimples appear to become confluent, and are surrounded by a small, reddish areola; they acquire a great redness, and the eruption then pursues the same course as spontaneous *L. agrius*; in these cases, all the eruption may not participate in the inflammation, which is besides always less violent, of less duration, and instead of being unfavourable, is often attended with salutary effects.

L. agrius may be developed on the face, but it is rarely general; it is most usually observed, not, as has been said by a modern author, on individuals enfeebled by age, &c. but in young persons and in sanguine and vigorous adults.

Causes.—*Lichen* affects all ages, from the infant at the breast to old persons, and is met with in both sexes; it particularly arises in the spring and summer; elevated temperatures influence its development in a remarkable manner; it is often produced on the face by the heat of the sun; it is very common in tropical regions, and a species, though erroneously, has been constituted from these cases, (*L. Tropicus*;) it is sometimes the result of prolonged watchings, of violent mental affections, excesses, particularly in spirituous liquors. Some causes appear to produce certain local varieties; it is observed on the hands, for instance, in persons who work among pulverulent substances, as sugar, &c. it is also seen on the arms of cooks and blacksmiths from being exposed to an ardent fire; finally, it sometimes appears to be the result of internal inflammations, especially in children.

Diagnosis.—The diagnosis of this disease is often very difficult; the *L. simplex* may above all be confounded with *Eczema*, *Scabies*, and *Prurigo*; but the essential character of the *Lichen* is, full solid pimples, usually appearing on the outer side of the limbs, and accompanied with itching; whilst *Ecze-*
ma is characterized by transparent vesicles, mostly situated

on the abdomen and internal surface of the arms, &c. and only attended with a little smarting.

Scabies, independently of its constituents being so different, (it is vesicular,) attacks the surfaces of flexion, the bends of the articulations, and the spaces between the fingers. The vesicles are distinct, the papulæ in *Lichen* are grouped; and finally, the former is contagious.

The papulæ of *Prurigo* have their seat as in *Lichen* on the external faces or surfaces of extension of the limbs; but they are larger and flat; their summit is almost always lacerated, and covered with a small blackish scab, formed of a small drop of dried blood. The pruritus of *L. simplex* is usually very slight, whilst it is violent and burning in *Prurigo*.

Lichen circumscriptus may be confounded with *Herpes circinnatus*, but the edges of the latter rest on a more inflamed surface than in the former. They are better marked in *Lichen*, and generally retain the natural colour of the skin. The patches are papular, both at their centre and circumference, and it is only at a very advanced stage of the eruption that the first becomes healthy. On the contrary the centre is generally untouched in *Herpes*, added to which it is never vesicular. Finally, with a little attention, the essential character will be found in most cases of *Herpes*, either in the vesicles themselves, or in their remains, which present a multitude of small red, rounded points surrounded by a small whitish band, which is formed by the portion of epidermis that constituted the base of each vesicle. The surface of *Lichen* is rough to the touch.

Lichen urticatus, from the size of its papulæ, may sometimes be mistaken for *Erythema papulatum* or *sypilitic lichen*; the patches of *Erythema* are much larger, not as red, and less prominent, they are never accompanied with the violent itching that constantly exists in this variety of *Lichen*; finally, the erythematous affection does not, like *Lichen*, disappear and return successively. In this *sypilitic lichen*, the papulæ present a coppery tint; they are never inflamed like those of *L. urticatus*, and are not attended by a continual itching.

The syphilitic papulæ follow a much slower course, and are never transient. Finally, they are seldom the only characters by which the venereal disease shows itself, as it is usually attended with concomitant affections, and particularly Iritis, of which we have seen several examples in the Hospital of St. Louis.

Lichen agrius in its different stages, may resemble acute *Eczema*, *Impetigo*, chronic *Eczema*, or *Psoriasis*. The confluent and ulcerated papulæ may be taken for acute *Eczema*; but the diseased surface itself, or the environs, always present some of its constituent principles, (*papulæ*), in a less advanced stage, which will soon dissipate the error.

It ought not to be confounded with *Impetigo*, for in *Lichen*, the small scabs are thin, soft and but little adherent; besides, they are consequent on ulcerated papulæ and not on pustules, a lesion that is never to be observed in these cases, whilst a multitude of inflamed papulæ are always to be seen around the eruption.

It is much more difficult to distinguish it from chronic *Eczema*; the pruritus, the thickening of the skin and the existence of some papulæ, are the only characters by which we can ascertain the presence of the *Lichen*.

In cases of *Psoriasis*, the scales are always larger than the small farinaceous exfoliations of *L. agrius* in a chronic state; they leave on their disengagement a red slightly swelled surface, which is never observed in *Lichen*, without it be a *Psoriasis inveterata*, but in such cases the characters are so well marked that no mistake can ensue.

Prognosis.—*Lichen* is never a dangerous disease, but its obstinacy, its pruritis, and frequent returns, render it in many cases a very unpleasant malady. *L. simplex* is usually a very slight affection, and the duration of which is rarely extended between two or three weeks. *L. agrius* is generally more dangerous, and above all more refractory.

In chronic *Lichen* the skin is dry, rough, hard, and furrowed by deep fissures, especially at the articulations. At the spots which are the seat of the eruption, the exhalent system is in a state of complete inertia, and M. Bielt has several times observed that, under the influence of a vapour bath, these spots still preserved their dryness.

Lichen may be complicated with vesicles, with pustules of *Impetigo*, or even of *Ecthyma*. As it always terminates by resolution or desquamation, it may remain stationary for a long time; but it is never converted into *Psoriasis*, and still less into *Impetigo*, as has been said by Willan, and by the author of a recent work.

Treatment.—Acute *L. simplex* does not require any other treatment than a few diluent drinks and tepid baths, or even those of river water, which, in the generality of cases, are all that should be advised in cases of *L. urticatus*.

When it is chronic, recourse must be had to lemonades, mild laxatives, alkaline and sulphurous baths, to local emollient bathing, at first, (scalded bran, &c.) and afterwards rendered alkaline by the addition of subcarbonate of potash, in the proportion of half an ounce or an ounce to four or five pounds of water: there is rarely occasion to employ more energetic means, which, besides, would be the same as we shall indicate for *L. agrius*. It is sometimes, however, advantageous to anoint the surface of the eruption with a salve composed of calomel and camphor, (pulv. calom. ℥ss. gum. camph. gr. xij. axunge, ℥i.) or of protoioduret of mercury, gr. xij. to ℥i. to axunge, ℥i.

In *L. agrius*, at its commencement, if the patient is young, vigorous and sanguine, one or two general bleedings should be practised. Topical bleedings are also often useful, but not on the eruption; diluent drinks, emollient cataplasms, and simple tepid baths should also be ordered; the patient is to be put on a severe regimen, or even very low diet, particularly if symptoms of irritation of the gastric organs exist; if, on the contrary, these viscera present no signs of alteration, the mineral acids, as the sulphuric and nitric, may be employed with advantage in the dose of ℥i. to a pint of barley water.

At a more advanced stage, mild purgatives may be administered; calomel, in the dose of four grains daily, or castor oil in small doses, (one ounce,) two or three times a week. Alkaline and sulphurous baths should never be given at the beginning; they aggravate the disease: at a later period, on the contrary, when the inflammation is diminishing, they are

very useful. Finally, if the disease continues, recourse must be had to the arsenical preparations, as Fowler's and Pearson's solutions: the first in the dose of five drops at the beginning, and successively augmented by five drops every eight days, up to twenty-five or thirty, intermitting its use from time to time, or even discontinuing it, if any symptoms of gastric irritation should supervene. The other is given in the dose of half a drachm, to a drachm, for a month or six weeks, with the same precautions. The Asiatic pills have often been employed both in these cases, or even those of chronic *L. simplex*, with success, the patient is to take one, daily, for a month or more. The local frictions, spoken of above, also are useful in chronic *L. agrius*, but it is advantageous to make them stronger; as, for example, the deutoioduret of mercury with axunge, in the proportion of fifteen or twenty grains to the ounce.

PRURIGO.

This denomination, introduced by Willan, was adopted by Alibert, but he has latterly used the term of *Psoride papuleuse*.

Prurigo is characterized by papulæ, which are larger than those of *Lichen*, without any change in the colour of the skin, generally appearing on the surfaces of extension, and accompanied by a pruritus which is sometimes intolerable. It is always chronic, and its duration varies from a month to several years.

Seat.—It usually occupies several surfaces, but is sometimes more violent, and may extend over the whole body, limbs, and even face, but the neck and shoulders are its usual seats. When it appears on the limbs and face, it is always of long standing and severe; it is also entirely local, and confined to a circumscribed spot.

There have been three varieties established: *P. mitis*, *P. formicans*, and *P. senilis*; the two first only differ in intensity, and hence no distinction should be made; the latter, however, presents a peculiar modification.

Symptoms.—*Prurigo* manifests itself by papulæ, sometimes small, little prominent, appreciable to the touch, and accompanied by an uncomfortable itching, (*P. mitis*;) sometimes larger, more prominent and flattened, attended by an intolerable pruritus, which augments in the evening from the warmth of the bed, and has been compared to the bites of insects or ants, or to pricking with hot needles, (*P. formicans*.) These papulæ are distinct and isolated, generally of the same colour as the skin, when they have not been lacerated by the action of scratching, and occupy, in most cases, the back part of the body, and internal surface of the limbs. They may be few in number, and the itching slight.

At other times, on the contrary, and especially in young persons, they are very numerous, the pruritus is excessive, the nails irritate them continually, and they become torn at their summits, from whence flows a small drop of blood, which coagulates and forms a small blackish scab, constituting an accidental but specific character. In some cases the scab falls off and exposes a prominent point, which is, however, very small, sometimes even the papula has entirely disappeared. Those which have not been lacerated, either disappear by resolution or by a slight desquamation, and the disease terminates in two or three weeks; at other times, and more generally, the papulæ remain for a longer time, new ones are formed, and the disease lasts from one to three months. Under some circumstances, which are frequently met with, especially in elderly persons and in debilitated children, the disease lasts for two or three years, sometimes indeed for an indefinite period; it becomes general, the papulæ are hard, very large and prominent; the eruption is accompanied by a thickening of the skin, which is sometimes very considerable, and presents violent exacerbations from time to time, during which the papulæ become confluent, the skin swells and inflames for a considerable extent; it may be covered with vesicles, pustules, and biles, and sometimes forms abscesses; there are often general symptoms, as fever, excitement, and wakefulness, and sometimes gastro-intestinal inflammation, &c. Finally, in these obstinate and re-

fractory cases, the patient is tormented with a terrible pruritus, and it is to these particularly that the exaggerated descriptions of the torments experienced by persons labouring under this disease, are most applicable.

When the papulæ in *Prurigo* are very numerous, and when they are developed several times successively, on the same surfaces, they appear to affect the dermoid system more profoundly, as on the places they have occupied are seen small slight cicatrices, but at the same time visible to the naked eye.

Causes.—*Prurigo* attacks all ages, and both sexes; but it is generally met with in old persons and children; it appears at all seasons, but more especially in the spring and autumn; it may be found in all ranks of life; nevertheless low and humid habitations, want of linen, misery, uncleanliness, privations, salt food, fish, and shell-fish appear to be so many causes of its development; it sometimes supervenes on violent mental affections. Its special causes are very obscure.

Diagnosis.—The diseases with which *Prurigo* may be confounded are *Lichen*, and some of the vesicular affections.

The papulæ of *Prurigo* are larger and more diffused than those of *Lichen*; the latter is never surmounted by the small blackish scabs which so often occur in the former; in *Lichen* the pruritus is much less.

By making a close examination, this eruption can never be mistaken for the vesicular affections; the elementary lesions are wholly different; besides, it has not the same seat, the same kind of eruption.

Nevertheless, *Scabies*, in some instances, might perhaps to a certain point, be taken for *Prurigo*; but the papulæ of this last are flat, and of the same colour as the skin; the vesicles in *Scabies* are acuminate and rosaceous. *Prurigo* always presents a multitude of papulæ surmounted with a small blackish crust, whilst the small scale that sometimes covers the lacerated vesicles of *Scabies*, is yellowish and thin; *Prurigo* has its seat on the back, shoulders, and the limbs on their surface of extension; *Scabies* occupies just the opposite points; it is met with on the abdomen, the internal surface of the

arms, and the thighs on their surface of flexion; in this case, the itching is much less acute. *Prurigo* is never contagious.

Prurigo may exist with *Lichen*, with *Scabies*, and with *Ec-zema*; and may be complicated with pustules of *Impetigo* and *Ecthyma*.

It terminates by resolution, and by a furfuraceous desquamation; this last is very common in chronic *Prurigo*.

Prognosis.—*Prurigo* being often refractory, constitutes a disease, which though not serious of itself, is at least troublesome from its obstinacy, and the pruritus that accompanies it; it is subject to frequent relapses. It is sometimes incurable in debilitated persons, who are plunged in misery, and who have been attacked with it several times.

Treatment.—The treatment of *Prurigo*, (*mitis* and *formicans*,) consists in the simple cases, of alkaline drinks, (barley water with two drachms of subcarbonate of potash to the pint,) and some baths. Willan has advised sulphur united to the alkalies, (the subcarbonates of soda and potash;) M. Bielt has often obtained good effects from them in the proportion of one part of the salts to three of sulphur. In more serious cases, recourse is sometimes had, and with advantage, to acidulated drinks, made by adding one drachm of nitric or sulphuric acid to the pint. When the constitution is injured, the patient should be kept on a generous diet; when the digestive organs are out of order, a milk diet is proper.

If the skin is delicate and irritable, all stimulating applications are to be avoided; if, on the contrary, it is rough and dry, saline and alkaline lotions, alkaline baths alternated with those of vapour and of sea-water, must be resorted to. In general, ointments are of little use, but in some cases, sulphuro-alkaline lotions, (sulphuret of potash ℥ii. subcarbonate of potash ℥i. water ℥ss.) are advantageous, particularly on the decline of the disease, when the pruritus has diminished.

Lotions of the acrid plants have been recommended, as white hellebore, stavesacre, &c. They are generally useless, and always inflame the skin.

Sometimes opiates are obliged to be used internally, to

calm the irritation and general excitement which is induced by the exacerbations of the pruritus in some cases. Finally, in young persons, and especially in children, it is sometimes useful to make use of sulphur combined with magnesia, (sulph. sub. magnes. ust. āā ℥ss. divided into four doses,) the patient is to take a powder every day: to this is to be added diluent drinks, simple baths, at first emollient, and afterwards rendered alkaline by the addition of one, two, three, or four ounces of subcarbonate of potash to a bath, according to the age of the patient.

Blood-letting is usually of little service, and should be only used in young and vigorous individuals. All these means should also be seconded by an appropriate regimen.

Prurigo senilis, (pediculaire.)—This differs from the preceding but little as to the papulæ; they are, perhaps, less prominent, rather flatter, and less numerous. The dryness of the skin, which in *P. formicans* is only accidental, is here a specific character; but the great difference is, that all the body is covered with insects; the ancients attributed this disease to the anger of the gods.

It generally attacks old persons. Nevertheless, M. Bielt has seen a woman who was still young, affected with it after delivery. It is, however, almost always met with in the decline of life, in individuals enfeebled by misery, but rarely in robust and healthy elderly persons. The skin is brown, its functions are almost destroyed; the body is covered with insects, which increase and multiply with astonishing rapidity. These insects usually belong to the genus *Pediculus*. Willan has also observed the genus *Pulex*. The presence of these insects is a character sufficiently remarkable and characteristic to prevent this disease from being confounded with any other affection. It is a serious and often incurable disorder; it may, however, be moderated.

The means we have advised above, are applicable to the treatment of this disease: but there are some remedies that are peculiarly suited to it, as the sulphurous baths; but one of the most efficacious modes is the use of fumigations with cinna-

bar, which almost always will destroy the insects; it acts more promptly, and is more easily used than mercurial frictions, which have been advised in these cases, but they are often attended with many inconveniences. Finally, it is generally advantageous to give the patient some ferruginous preparations, (chalybeate wine, &c.) bitters, and generous diet. Cleanliness must be attended to as much as possible.

Willan has admitted several local species, in which it is extremely rare to discover papulæ, but which appear to appertain to *Prurigo*, by the itching that accompanies them. The pruritis may be confined to a small spot, and constitute several varieties, the most interesting of which are *Prurigo* of the genitals, and that of the anus.

Prurigo of the genitals.—This variety occurs in the scrotum in men, and the pudendum in women; it may, in both, extend to the adjoining parts; it often reaches the interior of the vagina, and may exist with *P. podicis*. In men, there is a secretion of sebaceous matter; in most cases, there are no papulæ to be met with; in some rare instances, however, slight papular elevations may be observed: the skin of the scrotum becomes brown, and sometimes thickens; there is constantly an intolerable pruritus, which the patients can scarcely bear: they scratch and tear themselves terribly. It comes on in exacerbations. In women, the symptoms are even more severe; the disease gains the vagina; it often causes Onanism, at first from merely scratching to relieve the itching, afterwards to create a voluptuous pleasure. In many cases, nymphomania may take place. M. Bielt has seen it in a woman of sixty years of age; he examined the genital parts with a glass, but could discover nothing. Nevertheless, this woman had frequent pollutions; the disease at first began with itching, this augmented and assumed the character of nymphomania; the patient had fainting fits at the sight of young men. This terrible pruritus, the absence of all redness, of all signs of vesicles, distinguishes this disease from certain cases of *Eczema*, which sometimes occur in this spot, and are accompanied with itching.

This eruption is often developed without any appreciable

cause. Chafing of woollen garments, violent exercise in hot weather, and the general causes of *Prurigo* may influence its appearance. It often accompanies a chronic discharge in women; it also frequently occurs at their critical period, and finally, it coexists with *P. podicis*. This only differs from the preceding by its seat; it particularly attacks sedentary persons; and often attends hæmorrhoids or ascarides in the rectum, or even a chronic inflammation of the intestine. It may also be produced by the same causes as the other species of *Prurigo*.

The patients experience a most troublesome itching around the sphincter, which sometimes extends into the intestine; this pruritus, which augments in the evening, and from any excess, sometimes plunges them in a state of excitement and agitation that is horrible.

These local species are sometimes very serious; they are always obstinate, and there is often great difficulty in allaying the itching. In some cases, however, they yield to applications of leeches around the affected parts, to lotions, at first emollient, then cold, and sometimes alkaline or opiated, to local cold bathing, and alkaline or sulphurous baths. The sulphurous, and sometimes the cinnabar fumigations, are particularly useful under these circumstances.

This latter means has, above all, been employed with decided advantage by M. Biett, in several cases; but as it is obliged to be used for some time, it results that general fumigations, by means of the apparatus of Darcet, will eventually greatly weaken the patient, which determined M. Biett to invent an apparatus, by the aid of which he could apply the fumigation to the affected part only. This is daily used in the Hospital of St. Louis, and the bathing establishment at Eng-hien. Nevertheless, in spite of the employment of these various plans, the *Prurigo* of the genital parts, particularly in women, may last six months and upwards. We have seen it remain for years: it has perfect remissions, and prompt and frequent returns.

It is wrong, it may be perhaps said, that we should describe

diseases, which, in most cases, do not present the constituent character; but, besides that this is sometimes observed, though rarely, it is true, the pruritus which allies them to *Prurigo*, and their importance have determined us not to reject them entirely, added to which, they have been described by Willan.*

* Dr. Dewees, in his work on "the diseases of females," has discussed this complaint at some length; as it is impossible to present his views in a short note, we refer our readers to that excellent and practical treatise.

Dr. Ruan, of this city, has also published a short notice of this disease in Vol. VI. p. 234, of the North American Medical and Surgical Journal, in which he tried various remedies in different cases, and was successful in one case with the balsam copaiba given internally. Here the pruritus appeared to have been excited from the occurrence of strangury. This remedy was also successful in another instance, but failed in some others, which were cured with a solution of borax, and powdered lapis calaminaris.—TRANS.

ORDER VI.

SCALY DISEASES.

SQUAMÆ.

IN this order are arranged those chronic inflammations of the skin, which are characterized by the formation on the diseased surface, of a lamellar, inorganic substance, of a grayish-white colour, dry and friable, of various thickness, and more or less adherent. These whitish lamellæ have received the name of *scales*; they generally surmount elevations of the skin, which are more or less prominent, and leave this membrane, on their disengagement, in a red and inflamed state. Being a morbid secretion from the epidermis, they are very different from the scales that are observed in the vesicular affections, which are the result of a concreted fluid.

The diseases described by Alibert under the common name of *Dartre squammeuse*, do not all belong to this order; it is only the *Dartre squammeuse lichenoïde*, and the *Dartres squammeuses orbiculaire* and *centrifuge*, which are only varieties of the first, that correspond to the scaly diseases, properly speaking. The *Dartre squammeuse humide* of this pathologist, belongs, as we have already said, sometimes to *Eczema* and sometimes to *Lichen*. On the other hand, it is here that two eruptions, which constitute a particular order of the same author, should be placed; the *Dartre furfuracee volante* and the *Dartre furfuracee arrondie*: the first has been described by Willan under the name of *Pityriasis*, the second is the *Lepra* of the English pathologists.

All these affections follow a chronic march, they are generally developed in a slow manner, but sometimes so rapidly that the eruption takes place in two or three days; they often last for several months or even years.

Symptoms.—At the commencement, several points may be observed on the surface of the skin, which are red, slightly tumefied, isolated, and distinct. Sometimes these small centres of inflammation are contiguous to each other, become joined and confluent, and at the same time are covered with scales; they appear in certain fixed forms, and thus constitute such or such a genus or species. These diseases take place without general symptoms, even the patient is unconscious of them, in most cases, until the eruption is developed, and the epidermis on the point of exfoliating. These affections occur more frequently on the legs than elsewhere, nevertheless they are also to be met with on the body and head; the patches of eruption are often widely separated and few in number, but they may also cover a whole limb, and form, as it were, a complete case to it. The nature of the scales differs according to the variety, but they appear in all cases to be a diseased secretion of the epidermis; they are sometimes thin and light, and seem to be nothing more than portions of this membrane become dry and white, and are detached with great ease and in great quantities: sometimes they are more adherent, and are formed of altered and thickened cuticle.

All the train of symptoms that are found in authors, as constantly accompanying the scaly affections, and with great severity, exist, on the contrary, but seldom; and when they are accidentally observed, they are far from being well marked. The patients may, it is true, feel some itching, but even this is not a constant symptom. Sometimes, the movements of the joints are impeded, if they should be surrounded by a great number of patches of eruption; and when the disease is of long standing, that part of the skin on which it is seated, and the functions of which have been for a long time in a diseased state, undergoes an alteration, and thickens.

Causes.—None of these chronic inflammations of the skin are contagious; they may, however, be hereditary. One of them, (*Ichthyosis*,) is very often congenital. They attack individuals of all ranks, both sexes, and all ages, but more particularly adults. They appear at all seasons, but they some-

times seem to have a kind of predilection for a certain season; thus the disease developed in the autumn, may cease after some time, and again take place the succeeding autumn.

Diagnosis.—These affections cannot be confounded with any of the diseases belonging to the other orders. The presence of the scales is a sufficient character: it is true there are some acute eruptions, which also present this morbid change; but they are not, as in these cases, simple laminæ of epidermis in different degrees of alteration, but, being preceded by small serous or sero-purulent effusions, they are the result of the concretion of these fluids; they are not thin, dry, grayish, and friable, but are large, soft, yellow deposits, resting on soft and inflamed surfaces, and constantly surrounded by primitive lesions, similar to those which produced them, as the vesicles of *Eczema* or the papulæ of *Lichen*. Even deprived of their scales, and without an inflamed surface, these eruptions may be distinguished by their form, by the surface they leave exposed, by the absence of the primary lesions, &c. The squamose diseases rarely occasion serious consequences; but they are often obstinate, and require energetic treatment.

This order contains four genera: *Lepra*, (*Dartre furfuracee arrondie*, Al.) *Psoriasis*, (*Dartre squammeuse lichenoide*, Al.) *Pityriasis*, (*Dartre furfuracee volante*, Al.) and *Ichthyosis*, which, with Willan, we retain in this order, as it presents the same essential characters as the other genera, although it differs in its nature and in the deep alteration of the skin.

LEPRA. *Lepra Vulgaris*, Will. *Dartre furfuracee arrondie*, Al.

For a long period of time, and especially from the revival of learning, when the *Elephantiasis* was regarded as synonymous to *Lepra*, by the followers of the Arabian school of medicine, this last denomination has been employed for a variety of different affections, including almost all the diseases of the skin; this necessarily caused the greatest confusion,

till Willan, supporting his opinion upon what the Greeks had originally termed *λεπρα* from *λεπις*, *Squama*, a scaly disease, manifesting itself in the form of circular patches, has restored it to its original signification. We understand, with him by the word *Lepra*, a scaly eruption, characterized by rounded patches, elevated at the edges, depressed in the centre, and sometimes becoming confluent, so as to form a continuous eruption over the body, or some of its parts.

The varieties that have been admitted cannot be preserved. One, *Lepra alphoides*, only differs from the *vulgaris* by its less size, and rather whiter appearance of the patches; it is observed in children and debilitated persons; the other, *Lepra nigricans*, is a rare disease, which Willan, and after him, in all probability on his authority, Rayer, have erroneously arranged with this disease; it is evidently a *syphilide*, and will be described in its proper place.

Symptoms.—*Lepra*, although it may appear on all parts of the body, generally attacks the limbs, around the joints, and particularly the elbows and knees; at least it usually commences in these places, in the form of small red points, which are scarcely visible, and slightly elevated above the level of the skin. These smooth, shining elevations, become covered with an extremely thin scale, which is soon detached; little by little the patches increase, always preserving a circular form; the scales are renewed, become thicker, and overlay each other, particularly on the elevated edges; the centre remains healthy, except in some rare cases, where isolated patches are met with, whose character is disguised by the scales which occupy their whole extent. This orbicular appearance continues till they have attained a diameter of some inches, and even in some instances far greater, but in general they do not arrive at this size; the disease now becomes stationary, and circular patches are observable, whose size ordinarily varies from that of a shilling, to that of a dollar; the healthy centre is depressed, and the edges are elevated and covered with numerous, grayish, adherent scales.

These circular spots are not always entire and distinct; even

from their first development, the small elevations become united, so that their edges intersect each other, giving rise to irregular and confluent patches. This form is very common, and indeed almost universal, around the articulations. Whilst this individual development is thus advancing, the general eruption is also increasing; it progressively extends over the abdomen, the shoulders, back, and breast, sometimes over the scalp and forehead, and in rare cases includes the face and hands.

The scales fall off and are renewed continually, they leave on their disengagement, a red surface slightly inflamed; smooth if the eruption is recent, and furrowed and rough, if it is of long standing. Such are the characters with which this disease appears in the majority of cases; but it sometimes occurs with symptoms, which, if not widely different, are at least very remarkable.

Thus, on the one hand, departing in its development from its usual course, the eruption may manifest itself by small red points, disposed in a circular manner, and which become joined at their circumference; either from one, or several of the elevations acquiring a great size; and on the other part, the patches may never be covered with scales, or else having fallen off from some unknown cause, they have not been renewed; we have seen many patients at the Hospital of St. Louis, where the eruption presented the following characters: The body, and especially the back, was the seat of large, very red patches, sometimes more than a foot in diameter, they were constituted by a prominent circle, of only a few lines in breadth, and accompanied on both its inner and outer edge, by a reddish band of about the same width; the centre presented a large surface, and was perfectly healthy. These prominent edges were not covered with scales; and sometimes two or three rings alone, and even in some instances but one, occupied the whole back. We have seen patients on whose body, the *Lepros* being of this immense extent, and unaccompanied by scales, impressed a most singular aspect.

At the same time there are patches on the limbs, which fol-

low the usual course, and present the common characteristics of the eruption as above described. *Lepra* may remain stationary for a great length of time, without producing any other symptoms, or without the internal functions being sensibly altered; except that at last a swelling of the joints may occur, that occasions some difficulty in their movements. As to ulcerations taking place, and leaving scars; they never exist, or are the result of some rare accident, wholly independent of the eruption.

If left to itself, *Lepra* may disappear and return again, or it may remain for a greater or less time, and only yield to the most energetic treatment. Whether it disappears under the influence of some unknown cause, or from medical treatment, the progress of the cure is very slow. At first the patches heal in the centre, the scales are formed more rarely, they are less numerous, and finally they cease to be evolved, the cure always taking place from the centre towards the circumference, the circles become disjoined in several places, the elevations disappear, and the patches vanish. In that variety, where the *Lepra* appears in the form of immense circles of a red colour and without scales, before disappearing, the surfaces become much more inflamed, the edges soon fade, portions of the circle sink to the level of the skin, the colour becomes lighter, and at last a slight injected appearance, (which soon ceases,) is all that is apparent.

Causes.—*Lepra* is not contagious, it appears at all seasons, but is most frequently met with in the autumn. It more commonly attacks men than women; perhaps because they are more exposed to the different causes that may produce it. It is seldom observed in children. The causes that act in its production are but little known; nevertheless we have been able at the Hospital of St. Louis, to verify some, among the great number that have been assigned. Thus it may appear from the effects of a cold and damp atmosphere; it frequently arises from the ingestion of salt meat or seafish. Certain professions predispose to it, as for example, those in which persons are exposed to the action of pulverulent substances, or of the metals.

One of the most common causes is to be traced to the mental affections; hence it is not rare to see *Lepra vulgaris* supervene on a fit of anger, or violent grief or fear. It may also be hereditary.

Diagnosis.—The diagnosis of *Lepra* is very easy in a majority of cases, and the slightest inspection will suffice to distinguish it from diseases of the other orders. We will however indicate the characters in which it differs from those with which it has sometimes been confounded.

Porrigo scutulata, at certain periods, either at its commencement, or when the scabs have fallen off, and left a red and annular surface, may be at first mistaken for a *Lepra* having its seat on the scalp, particularly if, as sometimes happens, there are some spots of the former on the body. But it is still more rare to see the *Porrigo scutulata* on the body and limbs, than to find the *Lepra* on the scalp, so that the error will soon be corrected. This variety of *Porrigo*, is constituted of favose pustules, and in the commencing stage of the rings these will soon be perceived. It is useless to allude to all the differences between these diseases, as the presence and nature of the scabs, the alteration and destruction of the bulbs of the hair, for the contagious nature of the first will always suffice to separate them.

The round form of the syphilitic diseases, may in some cases of tubercular *Syphilide* be a cause of mistaking them for *Lepra*, particularly when occurring on the forehead or back. But passing over the coppery and livid colour, the cicatrices that are almost always found in the vicinity of the eruption, the attendant symptoms, &c.; if an attentive examination be made, it will be easy to see that it is not a continuous circle, but that it is composed of isolated tubercles, disposed in rings it is true, but having marked intervals between them; that these tubercles are prominent and smooth; that they are not covered with scales, or at least in the rare cases in which these do occur, they are extremely thin and hard lamellæ, always smaller than the circumscribed induration which they surmount. In some cases where the tubercles are beginning

to disappear, and are less prominent, they may readily be mistaken for *Lepra* in a healing stage, but the characters alluded to above will always distinguish them.

Finally, *Lepra* may be confounded with an eruption that has been latterly described under the name of *Lepra nigricans*, Will. and which is only a variety of scaly *Syphilide*. The black colour of the patches is fully adequate to mark its character.

If we now compare *Lepra* with the diseases of the same order, we shall see that its marked symptoms are sufficient in most instances, to distinguish it at the first glance from the irregular patches of *Psoriasis*, which alone can be mistaken for it. Nevertheless, there is a variety of this eruption, the *Psoriasis guttata*, characterized by isolated patches, which in some cases, it is difficult to separate from *Lepra*, especially when in the healing stage. But the patches of the former are always smaller than those of the latter, are never as regular, their centre is always diseased, and has no depression, and even where in *Lepra* some parts of the circle have disappeared, those that remain will suffice to establish the diagnosis. Finally, in the cases of *Lepra*, where the spots are aggregated and confluent, by a little attention, portions of the different circles may be distinguished at the edges of the eruption, or even in the centre of the diseased surface; and on other parts of the body, a new patch in its commencing stage may be found, which will leave no doubt as to the nature of the eruption.

Prognosis.—*Lepra* never occasions any danger; but in all cases it may be considered as very obstinate, and difficult of cure.

Treatment.—The treatment of *Lepra* is composed of external remedies, internal medicines and hygienic means. But in undertaking any plan of treatment, attention must be paid to the age and strength of the patient and the state of the disease.

If he is young, strong, and vigorous; if the disease has made rapid progress; if the skin is red and inflamed, the pulse full and active; recourse must be had to blood-letting, simple

baths, diluent drinks, a rigid diet, and rest. We here mean by blood-letting, venesection; for to attempt to apply leeches to the vicinity of the diseased parts, is impracticable in most cases, and never attended with any beneficial results.

In feeble elderly persons, and in those whose constitutions are injured, or enfeebled by misery and privation, and where the eruption is little if any inflamed, tonics should be used for some time, before commencing an active treatment. These precautions having been taken, the disease itself may be attacked, by both external and internal remedies.

If we except baths, which are such powerful auxiliaries in the treatment of *Lepra*, the external remedies, particularly those so much praised by the earlier writers, and which consisted of lotions, and applications, made up of irritating substances, such as briony, calcined alum, &c. are always useless, and often attended with ill consequences; they may succeed in some rare cases where the disease is confined to very small surfaces. This remark also applies to the spirituous lotions, &c. and above all, to the ointments of resin, or tar, &c. which have been recommended in England. Independent of their real inefficacy, it may be readily conceived what would be the effect of topical applications of tar ointment, in those numerous cases, where the disease exists not only on the limbs, but also on the back, abdomen, &c. All these means, which are rather the fruits of speculation, than the results of practical experience, should be rejected, and with them blisters and caustics.

Amongst the external applications, however, we will cite one which we have seen employed with great success, for several months past in the Hospital of St. Louis, by M. Biett, in several diseases of the skin, and among others in *Lepra*: this is a resolving ointment, composed of ioduret of sulphur, gr. xii. to xv. and axunge \bar{z} i. The ioduret may be increased to half a drachm. This remedy may be used in recent eruptions of *Lepra* in feeble individuals, who could not support an energetic treatment, but the success of this preparation, as we have seen exemplified, has led us to believe that it will

hold a very high place among the therapeutic agents in the cure of diseases of the skin. Whilst the patient is at the same time on the use of a bitter decoction, frictions with this ointment are to be made night and morning, on several of the patches of the eruption; in a short time a greater degree of vitality is established, the skin inflames, the scales fall off, the elevations disappear, at the end of a few days, the resolution is complete, and the skin regains its natural state; other diseased parts are then to be treated in the same manner.

Baths are all more or less useful in the treatment of *Lepra*, but they are not sufficient of themselves to produce a complete cure. Sulphurous baths, and those of sea-water, have been extolled, and with reason. They will, without doubt, advantageously modify the march and state of the eruption; those which act in the surest and most effectual manner, are the vapour baths; they render the circulation more active, the skin becomes more natural, they induce perspiration, which detaches the scales, underneath which it may also be perceived, but in much less quantity than on the sound skin. Sulphurous fumigations are far from being attended with the success that has been attributed to them; they only produce transient good, and even totally fail in a majority of instances.

A disease so obstinate as *Lepra*, a disease which often occupies a great part of the surface of the body, cannot, (in most cases at least,) be combated with advantage by external remedies, which are generally useless, and very often inapplicable. Recourse must therefore be had to internal treatment, and the materia medica has furnished many energetic articles, to which a majority of cases will always yield. The pyramidal elm, the *Daphne mezereon* and *cnidium*, the powder of hellebore, the *Rhus radicans*, &c. have each been extolled, but have not always merited the eulogies that have been bestowed upon them by practitioners, who have drawn their opinions from far too few facts. Almost all these preparations are good auxiliary means, some even induce a sensible melioration, but rarely a complete cure, and from their uncertain action, their use has become much less frequent.

The properties of the bitter sweet, (*Solanum dulcamara*), appeared to be verified in a much less vague manner. Extolled in France by Carrere, it has been latterly introduced into England by Dr. Crichton, physician to the Westminster Hospital. The numerous experiments made by this practitioner, and which are given in some detail in Willan's work, appear to prove that the stems of this plant have been employed with much advantage in certain cases of *Lepra vulgaris*. At the same time, similar trials, made first by Professor Alibert, and more lately by M. Biett, have not been followed with the same results.

This plant, administered to a considerable number of persons suffering under *Lepra vulgaris*, produced in some a slight amendment; but in the majority, it was attended with no sensible effects; two individuals only, who presented more favourable conditions for its use, were entirely cured. In the greatest number of cases, M. Biett has remarked that when this plant was given in large doses, it occasioned a slight derangement in the mental faculties; at other times, it gave rise to nausea, and even vomiting. These symptoms do not appear to depend on an inflamed state of the gastro-intestinal mucous membrane. The bitter sweet should therefore be classed among those remedies, which may be useful under certain circumstances, but whose properties should be still farther investigated.

Sulphur has acted as a useful auxiliary; antimony, and especially its sulphuret, which appears to have produced advantageous results as a revulsant, has often failed; metallic mercury, and its deuto-chloride do not appear to have been more successful. Calomel has often produced good effects, but only as a purgative. Tar has been followed with various results; the same may be said of the sulphureted sulphate of soda. There is scarcely any necessity to speak of viper broth, formerly so celebrated.

From numerous experiments made at the Hospital of St. Louis, for several years past by M. Biett, it appears that this disease may be treated with success, by three different me-

thods.—1. By purgatives. 2. By the tincture of cantharides. 3. By the arsenical preparations.

It would be difficult to designate in an exact manner the cases where each method is to be preferred, as we often see purgatives succeed, where the tincture of cantharides has failed, and vice versa. Nevertheless, from a great number of facts, we have been enabled to establish some positive data.

Purgatives.—This method succeeds best, says Hamilton, when the *Lepra* is recent, of little extent, and has appeared for the first time; it is the only one that is applicable to children. It consists in administering every morning, before eating, sometimes a dose of calomel of four grains, sometimes a like dose of a mixture of equal parts of this mercurial preparation with jalap. Sometimes it is sufficient to add a mild dose of some purgative salt, to a pint of bitter ptisan—two drachms, or half an ounce of sulphate of magnesia or soda for instance. At other times, recourse must be had to more active means, and aloes, extract of colocynth, resin of jalap and gamboge, &c. either alone or combined, produce very good effects. But the choice of the purgative cannot be fixed *a priori*, it must vary according to the individual, to the state of the eruption, and above all, according to the effect produced. Calomel, however, is without doubt, that which succeeds the most often and promptly. It is not rare to obtain a complete cure in two months, or even in less, by the aid of this preparation, which administered every day, in the dose of four grains, scarcely ever induces accidents. It is true, that in some cases it occasions a salivation, which obliges us to relinquish its use; but, whatever may be said, these cases are rare, when used in this dose. It is peculiarly beneficial in children, and may be given in the proportion suited to their age, mixed with a little sugar. Whatever may be the remedy chosen, it should be borne in mind that it is not a sudden and sometimes dangerous revulsion that is to be produced, but a slow and certain change of the system; hence the remedies to be continued a long time, should always be given in small doses; it is also ad-

vantageous to intermit their use for two or three days at a time, during the treatment.

Tincture of Cantharides.—When *Lepra* has reappeared after a greater or less interval, from the effect of some unknown cause, when it exists in persons of a delicate constitution, when it occupies a large extent of surface; finally, when it has resisted purgatives, it sometimes yields in an astonishing manner to a well regulated employment of the tincture of cantharides. The patient is to be placed on a strict diet, and to take every morning three to five drops of this medicine in a tea-spoonful of ptisan. The state of the digestive and genito-urinary organs are to be closely attended to; and if they do not appear to suffer, the dose may be augmented five drops every six or eight days. If, on the contrary, it occasions much heat in the epigastrium, nausea, purging, ardor urinæ, or priapism, &c. (which, however, are rare,) the use of it must be suspended; but, administered with prudence, and in a gradual manner, it may in general be raised to twenty-five or thirty drops, or more, without occasioning any unpleasant symptom. Often, and especially in females, a permanent cure will be obtained in forty-five or fifty days; and, among other remarkable examples which have presented themselves to our observation, in the Hospital of St. Louis, we have seen a case of *Lepra*, which had lasted for eighteen years, and which disappeared in the space of a month by the use of this preparation.

Arsenical remedies.—If *Lepra* has existed for several years, if it has involved almost the whole superficies of the body, if the skin is thick and altered, it will, in all probability, resist the above mentioned methods. It must be attacked with the arsenical preparations, not that it is necessary before employing this remedy, to wait till the disease has attained this height, but very advantageous results have been obtained, where all other means have failed: it may even be said, the effect of this plan is almost certain. Among the various preparations, those which have been employed with the greatest advantage are Fowler's and Pearson's solutions. The latter has for its base, arsenite of soda in the proportion of one

grain to the ounce of distilled water: it is much less powerful than the first, but it is much more readily managed. It should be employed in women and debilitated persons: the dose at first is a scruple, which may gradually be raised to half a drachm, or even a drachm. Fowler's solution contains eight grains of arsenite of potash to the pound of water; it is one of the most powerful agents of the materia medica. It is to be given in the dose of three drops in some inert vehicle, in the morning, fasting, and every five or six days it is to be augmented two or three drops. It may be carried as high as twenty or twenty-five drops, but it is prudent not to go beyond this quantity; and often, as in the use of the tincture of cantharides, to interrupt its use from time to time; and when it is resumed, not to recommence with the same quantities as were last given, but in decreased proportions. Sometimes this preparation will succeed very well where Pearson's solution has failed.

If symptoms of inflammation of the gastro-intestinal mucous membrane should supervene, these remedies should not be persisted in, but by paying strict attention to the state of the digestive organs, it would be criminal to refuse a patient the use of so precious an article on account of the chimerical fears of some irresolute practitioners. The arsenical preparations may be dangerous, it is true, in imprudent and inexperienced hands; but given with prudence, they will not, on the one hand, occasion any unpleasant symptoms, and, on the other, they are attended with the greatest success. Here, for example, their effects are constant: these consist, at first, of an increase of activity in the eruption; the patches become endowed with more sensibility, the centre heals, the edges split, gradually fade, and often, at the end of two months, a serious and inveterate disease, which has lasted for years, will be seen to disappear.

The *Hygienic treatment*, alone, will not suffice to cure *Lepra*, but it is useful in completing the restoration to health. Thus, the patients should avoid all causes that might have had an influence in producing it; in many cases they should give up their profession. It is, above all, indispensable that they

should observe a strict diet, and renounce the use of spirituous liquors; they should also take baths, from time to time, to keep up and stimulate the functions of the skin. It has been from a want of these precautions that relapses have sometimes occurred, and which have been attributed to want of efficacy in the treatment. We have seen in the Hospital of St. Louis, habitual drunkards, or persons who exercised a profession which acted more or less on the development of the disease, remain in the wards two or three months after an entire cure had been effected, without the least trace of a new eruption making its appearance, and yet return in a fortnight or three weeks after their having left the hospital, covered with patches of *Lepra*. The disease was evidently reproduced by excesses, or by the influence of their profession.

PSORIASIS.

Psoriasis is derived from *Psora*, an old word formerly employed in two senses: 1. For an ulceration of the skin, ψωραε λχωδες, which appears to belong to *Impetigo*; 2. ψωρα, to designate the scaly affections.

Psoriasis is characterized by patches of greater or less extent, which are irregular, slightly elevated above the level of the skin, and covered with thin scabs of a chatoyant-white colour. It constitutes, if not several species, at least several distinct varieties, some from the form and intensity with which they present themselves, the others from their seat.

A. *From their form and intensity*.—Sometimes the patches are separated, and of little extent; sometimes they are larger, confluent, and irregular; at others, again, they are very large, and form a continuous surface; finally, they may appear in the form of long, spiral striæ; thus constituting four principal varieties: *Psoriasis guttata*, *diffusa*, *inveterata*, and *gyrata*.

1st. *Psoriasis guttata*.—This may be considered an intermediate species between *Lepra* and *Psoriasis*; it is characterized by small, rounded, irregular patches, more elevated

in the centre than at the edges. At first—small, distinct, red spots appear, in the centre of which may soon be perceived a slight scale; the patches become circular, and extend, though never more than a few lines; they remain isolated, being separated by healthy intervals, and somewhat resemble drops of some liquid sprinkled over the skin, (*guttata*.) The scales are more or less adherent, and leave, on their falling off, a surface which is oftentimes very red, somewhat painful, and prominent.

They are observed on all parts of the body, but more particularly on the posterior part of the trunk, and the external surface of the limbs. They are seldom accompanied with general symptoms, except that in the evening and night the heat of the bed occasions a slight itching; and either from the action of the nails, or from a natural desquamation, the epidermic scales fall off, but are soon renewed. This variety is not rare; it is most generally met with in adults, and is comparatively a mild disease.

2. *Psoriasis diffusa*.—This manifests itself by patches of a much larger size, flat, angular, and very irregular. At the commencement there are also small, separated elevations, a kind of red papulæ, which soon become confluent: these do not assume the appearance of distinct scaly disks, but of large, irregular surfaces, covered with scales of different thicknesses and adherence. Although it may be seen on all parts of the body, it particularly attacks the limbs: it is not uncommon to see a single patch cover the whole anterior part of the leg, or the posterior part of the forearm; the elbows and knees are especially affected, and even when it has entirely disappeared from other parts, it remains fixed in these spots, and resists every means of cure for a long time.

In some rare cases, this eruption may present a multitude of patches on different parts of the body, and we have seen it at the Hospital of St. Louis, occupy a great part of the back, abdomen, arms, even extending to the fingers, and forming on them a kind of case, which was partly raised; the edges were detached, and whiter than the centre, exhibiting under them red and polished surfaces. It is generally preceded by some

general symptoms, as cephalalgia, uneasiness, troublesome itching, and sometimes intestinal pains: these symptoms soon diminish, and cease entirely on the appearance of the eruption. Sometimes, and indeed ordinarily, the patches are but little inflamed, and the patient only complains of a little tingling. But, in some rare cases, the inflammation is more violent; the patches are more prominent, the scales are thicker, chaps and fissures occur, which sometimes are open and ragged, particularly where the eruption is very extensive, and encases the forearm, fingers, &c.

This disease usually attacks adults, but may also be observed in young children, (*P. infantilis*, Will.) It is sometimes developed with extreme rapidity. At all events, this affection is very common, and often severe; it may last for years, and is often very obstinate under the best treatment.

3d. *Psoriasis inveterata*.—This is the same disease, but in a more aggravated form. Either from having lasted a long time, and not having been submitted to any treatment, or that it has been irritated by causes constantly acting on it, or from being developed in elderly persons, and in those who are debilitated by misery, uncleanliness, or those who are addicted to all kinds of debauchery; this variety may make a gradual progress, and acquire a great degree of intensity; the skin becomes thickened, or even in a state of hypertrophy; it is split in all directions, so as not to present scales, but a mealy substance, which, filling all the interstices formed by the numerous fissures, gives rise to a most abundant desquamation: in this stage of *Psoriasis*, the surfaces may even be entirely destitute of scales; they are red, but little inflamed, and furrowed in all directions. If the skin is attempted to be pinched, or to be raised between the fingers, it appears to be altered even in its lowest layers, and it leaves on the fingers the impression of a rough, unequal body.

Sometimes the eruption is confined to the limbs; at others, it covers the whole body; and in such case, the patient appears to be enclosed in a scaly covering. The least movement occasions folds or rents in the skin, followed by a flow of blood.

The nails become yellow, split, fall off, and are replaced by scaly, deformed incrustations. Sometimes the mucous tissue is affected; and symptoms of gastro-intestinal inflammation may occur; but, on the contrary, and especially when the disease appears in young and robust persons, the reverse takes place, and it seems as if the digestive organs had acquired an extraordinary activity. This is the most severe form of *Psoriasis*.

4th. *Psoriasis gyrata*.—This variety consists in long, vermiform patches, assuming a spiral form, narrow, few in number, and generally occurring on the body. It is extremely rare, and has often been confounded with *Lepra* and *Syphilitic eruptions* in their healing stage. M. Biett, under whose observation such multitudes of diseases of the skin have fallen, has only met with two or three examples of it.

We have observed a vast number of intermediate states between these four varieties, and which were allied more or less to some one of them; but it would be useless to enumerate them. Thus, for example, to speak of one which is remarkable, we have several times seen in young and light complexioned subjects, whose skin was fine and delicate, patches of a circular form, but neither elevated at the edges, or the centre. The eruption consisted of one or more circles, almost always distinct, of the size of half a dollar, having an even, flat surface, covered with thin, light scales, which had but little adherence to a rosaceous base, which was also but slightly inflamed. These occurred on the body and arms. This variety corresponds very well with the *Dartre squammeuse orbiculaire*, Al.

B. *Varieties from situation*.—*Psoriasis* presents some peculiarities in its seat, which it is important to notice, not only because it is often entirely local, but also because in the generality of these cases it is attended with symptoms wholly dependant on the spot it occupies.

Psoriasis ophthalmica.—This is characterized by small scales attached to the angle of the eyes, or to the eyelids, which are swelled and impeded in their motions: it is remarkable

that this variety, although it often accompanies that of the face, sometimes exists alone, especially in children. It sometimes occasions a high degree of itching, and the disease often involves the conjunctiva, thus rendering its cure very difficult.

Psoriasis labialis.—This usually exists alone; it appears in the form of a circle completely surrounding the mouth, sometimes to the extent of half an inch, in every direction, (*Dartre squammeuse orbiculaire*, Al.) This circle is furrowed by a multitude of lines, which, commencing at the circumference, reach the lips, and give to these parts a corrugated appearance, that imparts a disagreeable aspect to the physiognomy. The epithelium is thickened, and the scales much larger than in the other varieties. It is in general very obstinate.

Psoriasis præputialis.—The psoriasis of the prepuce often exists by itself; it may, however, accompany that of the scrotum: it is characterized by a thickening of the folds of the skin, and by so great a corrugation as to occasion a phymosis: the least effort to uncover the gland is painful, and often followed by a flow of blood. It is a long and painful disease.

Psoriasis scrotalis.—This affection of the scrotum, and that of the labia pudendi in women, is rare, and the diseases that have been described as belonging to this genus have generally been chronic *Eczemæ*. Nevertheless, the *P. diffusa* may sometimes occur in these parts: the skin is then dry, rough, thick and split; it presents fissures; the disease may even extend to the penis, which becomes covered with a scaly envelope. As to the patches of *P. guttata*, that have been observed in this spot, they have frequently been confounded with syphilitic tubercles, of which these parts are so often the seat.

Psoriasis palmaria, (*Dartre squammeuse centrifuge*, Al.)—This variety at first manifests itself by a slight inflammation, and appears in the form of a solid, red elevation in the palms of the hands, and more rarely on the soles of the feet. Sometimes it is accompanied with smarting and great heat. This elevation soon becomes covered with a white, dry scale, at times of some size: this falls off, and an eccentric layer

takes place, and as the centre heals, the circumference extends till the disease may involve the whole hand. The uncovered centre assumes a livid colour; the scales remain hard, the skin thickens and splits, fissures occur, the palmar surfaces of the fingers are attacked, and cannot be straightened, the least attempt inducing painful twitches. In women, this variety is sometimes complicated with that of the labia pudendi.

It is a difficult disease to cure, and very subject to relapses; as it often occurs in individuals accustomed to hard labour, which causes a return of it when they have been perfectly cured.

Sometimes the *Psoriasis* is exclusively confined to the back of the hand, and gradually extends to the dorsal surface of the fingers: it presents larger, drier, and harder scales, and is complicated with deep and painful fissures at the articulations. This disease has been termed the *baker's itch*. In fact, although it is observed in some rare instances in other professions, it usually affects people employed in this business, and those who are exposed to the action of pulverulent substances, as grocers, &c. It has been observed in washerwomen, occasioned by the constant irritation from the soap.

Causes.—The causes of *Psoriasis* are quite as obscure as those of *Lepra*; it is never contagious, but it may be hereditary. It attacks both sexes, at all seasons, but especially in the spring and autumn. Although it may be observed in the midst of comfort, and even of luxury, it is more common to see it in the poor, the badly clothed, and unclean. Excesses in food, certain salted articles, sea fish, &c. the mental affections, are all causes that may occasion it. Direct irritating agents may also act in a greater or less degree on the development of the local varieties.*

Diagnosis.—It is sometimes very difficult to distinguish

* Most writers on cutaneous disorders maintain that *Psoriasis* and the scaly diseases generally, are not contagious. Dr. Graves, however, relates, in the Dublin Hospital Reports, Vol. IV., that he has met with several cases which render it probable, that in some instances it may be communicated by long-continued contact.—TRANS.

Psoriasis from *Lepra*, especially as in certain cases this latter disease appears to change into the former. Generally, however, these two affections can be discriminated, if it be recollected that in *Lepra* the patches are large, rounded, depressed in the centre, and elevated at the edges, while in *Psoriasis guttata*, which is the form that would usually be mistaken for it, the patches are small and have an elevated centre; in *P. diffusa*, they are quadrangular, irregular, and unequal; finally, in *P. inveterata*, there are large, furrowed surfaces, which may envelope a whole limb, &c. The form of *P. gyrata* is always sufficient to designate it.

One of the most common forms of the scaly *syphilide* may be taken for *P. guttata*. The syphilis sometimes manifests itself on the skin in rounded, isolated, prominent spots; but in *Psoriasis* they are of a vivid red, and covered with scales; whilst in the syphilitic disease they are of a copper colour, they are not covered with scales, or at least if so, they are extremely thin; and, besides, there is always a constant pathognomonic character, which M. Bielt has often pointed out in his clinical lectures: this is a small, white band, analogous to that which succeeds to vesicles, encircling the base of each elevation.

Sometimes the remains of the patches of *scaly syphilide*, and especially *syphilitic* tubercles in their healing stage, have been taken for *P. gyrata*. But here, as in the preceding case, independently of the peculiar characters of each eruption, the colour and concomitant symptoms will suffice to correct the error.

The edges of the large patches of *Lepra* have often been taken for this last variety; but in making a careful examination, it will be seen that these edges affect a circular form, portions of the rings will be observed, and in uniting the disjointed parts, in idea, it will be perceived that they would have formed complete circles, very different from the curved lines that characterize the *P. gyrata*.

The thickness of the scales, the presence of solid elevations, which are more or less prominent, will prevent those cases of

Psoriasis which have their seat on the scalp from being mistaken for *Pityriasis*: it, however, is more difficult to distinguish it from a chronic *Eczema*. Nevertheless, in the vesicular affection, yellowish scales are to be found, covering a surface which is usually moist; and the constituents of the disease may generally be perceived in the vicinity.

Psoriasis of the lips approaches more closely to the appearance of *Eczema* when it presents chaps and fissures, which are generally to be seen in the chronic vesicular affections. Here the diagnosis should be based on the absence of vesicles, the size and hardness of the scales, and the thickening of the epithelium. Various squamous affections may exist simultaneously; thus, not only may patches of *Psoriasis* be seen in individuals affected with *Leprosy*, but even many varieties of it on the same person. This affection may also be met with, although rarely, existing with eruptions of another order. We have seen a very remarkable case in the Hospital of St. Louis, where *Psoriasis* of the scalp existed with *Porriago favosa*.

Prognosis.—*Psoriasis* is generally a serious disease, particularly from its obstinate duration. The prognosis, however, varies according to the species, the length of time the disease has lasted, and the state of the patient. Thus, the *P. guttata*, although less formidable, is very refractory; the *P. diffusa* is still more so, especially when it attacks old persons, or individuals debilitated by privations of all kinds. Finally, the *P. inveterata* is much less violent, although it often resists all curative means.

Termination.—This disease may disappear without any treatment; the patches become paler, and diminish, and the skin regains its natural colour. At other times one species may turn into another. Thus, *P. guttata* and *diffusa* may change to *inveterata*.

In a majority of cases, when treated in a proper manner, it gradually heals; the scales fall off, are formed more slowly, and become thinner; the elevations are less and less red and prominent; the large diseased surfaces become intersected by

intervals of sound skin. Finally, little by little, the epidermis every where regains its normal characters; then resumes its pliability, and all that remains is a light tint on those places that have been occupied by the disease.

In some more violent cases, the eruption resists all means; the skin gradually thickens, and becomes affected down to the cellular tissue; the nails themselves, as we have already observed, participate in the general alteration of the integuments. The disease continues for years, without inducing any serious symptom, but sometimes the patient perishes from a chronic inflammation of the gastro-intestinal mucous membrane.

Treatment.—The treatment of *Psoriasis* is similar to that of *Lepra*, and all that we said when speaking of that disease is applicable to this, except that as it is generally more obstinate, it more frequently requires the employment of energetic means, and particularly of the arsenical preparations. It has not been without surprise, at least to those who have seen *Psoriasis* cured by these means, that they have observed in a recent work, that the treatment of *P. inveterata* should be confined to narcotics and emollients. As for us, who believe that so violent a disease requires something more than the use of palliatives, and who think that it would be inhuman to leave an individual a prey to an affection which poisons his existence, and will abridge his life, when we have seen it yield to this kind of treatment more than a hundred times; we do not fear to state, that by the aid of the arsenical preparations, permanent cures may be obtained, and without fear of accidents, when they are properly administered, and also, that it is often the only remedy to oppose to the *P. inveterata*. This opinion is not grounded on specious theories, but is the positive result of a great number of facts.

We should add, in these cases, to Pearson's and Fowler's solutions, the use of a preparation which has always been of the greatest advantage in this disease: this is the Asiatic pills, which are formed of the protoxide of arsenic mixed with black pepper, in the proportion of fifty-five grains of the protoxide of arsenic to nine drachms of pepper, of which eight hundred

pills are to be made; one of these is to be given every day, they each contain about the thirteenth of a grain of arsenic. They may be increased to two, but not beyond; indeed, in most cases, one is sufficient. No precise limit, as to time, can be assigned for their use; this must depend on the state of the patient, and that of the eruption. But their employment must be given up, if at the end of fifteen or twenty days they do not appear to have produced any sensible melioration. Where the contrary is the case, they may be continued for six weeks, suspending their use from time to time, and using the same precautions as in the employment of the arsenical solutions.

M. Biett made a series of experiments on another preparation of this mineral, in 1819 and 1820, which had not hitherto been used, the arsenite of ammonia: he administered it in the same doses and under the same circumstances as the arsenite of soda, and obtained satisfactory results, particularly in several cases of *P. inveterata*.

Whatever may be the method employed, there often remains at the close of the treatment some refractory spots, especially about the articulations. In these cases, it is useful to excite the skin by some stimulating ointment. The proto-nitrate of mercury mixed with axunge, in the proportion of a scruple to an ounce, will usually succeed. The patient is to be anointed on the diseased spots night and morning.

The local varieties, independently of general treatment, which should generally consist of purgatives, also require particular remedies.

In *P. ophthalmica*, it is often useful, especially at the commencement, to apply three or four leeches behind each ear, and, at a more advanced stage, frictions with the ointment of the protochloride of mercury should be made on the diseased spots, both in this and in *P. labialis*. Emollient local baths, as well as frictions with the above ointment, are generally very advantageous in *P. preputialis*. *P. scrotalis* is often successfully combated by sulphurous fumigations. Sometimes fumigations with cinnabar may be attended with happy results.

In *P. palmaria*, after having softened the surfaces by local baths of scalded bran, &c. recourse may be had, with much advantage, to slightly stimulating and resolving ointments. The iodurets of mercury will fulfil this indication in a very satisfactory manner. (*Proto-ioduret of mercury*, gr. xii. to ℥i. or *Deuto-ioduret*, gr. xii. to xv. and *axunge*, ℥i.) In this last variety, resort must often be had to the arsenical preparations. The ioduret of sulphur may also be very advantageously used in these local eruptions. All these general and local remedies should be aided by the use of baths; vapour baths or *douches*, in the local varieties, are preferable to all others, with the exception of *P. scrotalis*, which is usually more promptly benefited by certain fumigations.

PITYRIASIS. *Dartre furfuræce volante*, Al.

The word *Pityriasis*, which comes from *πιτυρον*, *furfur*, was employed by the Greek physicians to signify a farinaceous exfoliation of the epidermis. It is a chronic inflammation of the skin, in which the epidermis throws off small, white scales, which are extremely thin, and are detached and reproduced with astonishing facility, and in great abundance.

It may occur on all parts of the body, but is most generally observed on the head, and those parts furnished with hair. Thus the scalp, the eyebrows, and the chin, are frequently its seat.

Symptoms.—It is difficult to follow its development, and it is only known by the presence of small scales. It is never accompanied by any other symptom than that of violent itching: the patient scratches, and occasions the disengagement of scales, which are almost immediately replaced, and no inflamed point is perceived on their falling off; on the contrary, if a small scale is raised with the nail, which is easily effected, there is often a soft point found underneath: on scratching this, another small scale may be raised analagous to the first, and sometimes several may be thus successively detached, without arriving at an inflamed surface. But however this

may be, a multitude of extremely thin, small, dry, white lamellæ may be perceived on the skin, usually adhering at one extremity, and detached at the other: they are not scattered here and there, but occupy a large space: they resemble an envelope which had been split and divided, until it was reduced to a very thin and small laminæ. The least movement gives rise to a most abundant furfuraceous desquamation.

Sometimes this exfoliation is composed of small portions of epidermis, similar to bran: on the chin, for example, merely passing the hand over it, will occasion their disengagement: in a few moments they are replaced by others. On the scalp, on the contrary, the scales are larger: they sometimes are of the size of a small bean, and which they somewhat resemble in shape, except in being perfectly flat.

Causes.—The causes of this disease are difficult to understand. On the head, it sometimes coincides with a want of development or activity in the bulbs of the hair. It is often observed in infants whose hair has scarcely appeared, and in the aged, where this has fallen out: in these cases, it is perhaps occasioned by the action of the hair, causing a slight inflammation of parts which are not yet, or which are no longer sufficiently protected. On the chin it is often induced, and still oftener kept up, by the action of shaving. Sometimes it has been seen to arise spontaneously over the whole body, in consequence of a violent affection of the mind.

Diagnosis.—The size and prominence of the patches in *Psoriasis*, the form of those of *Lepra*, as well as the strongly marked characters of these diseases, will prevent the slightest difficulty in distinguishing them from *Pityriasis*. The farinaceous exfoliation in this affection, can scarcely be confounded with the furfuraceous desquamation that is sometimes the sequel of other cutaneous inflammations. Thus, in the desquamation that occurs after certain exanthematas, they are not small portions of epidermis, which are immediately replaced by others, but large surfaces which become bare at the same moment, and which exhibit extensive portions of sound skin, surrounded by a whitish and regular band, which forms the

line between the sound cuticle and the diseased surface. Besides, the concomitant symptoms will obviate all error.

A desquamation sometimes takes place after chronic *Ecze-ma* and *Lichen*; but the vesicles of the one, the papulæ and thickening of the skin in the other, will be sufficient to discriminate between them; added to which, the exfoliation is very different, and the scales are replaced by others, as in *Pityriasis*.

The size, irregularity, and above all, the colour of *Ephelides*, and of other alterations of that kind, which have erroneously been made varieties of *Pityriasis*, are easily distinguishable. Finally, this disease will not be confounded with *Ichthyosis simplex*, which might be mistaken for it, if it is recollected that in the latter case the disease is confined to a mere alteration of the epidermis, but that the skin is more or less affected; that it is rough, thick, and harsh to the feel; that in *Pityriasis*, on the contrary, it is rather softened; that the scales have a grayish appearance, whilst they are white in *Pityriasis*; that the one is, in a majority of cases, a congenital disease, and the other occurs accidentally.

Prognosis.—*Pityriasis* may sometimes exist with other chronic inflammations; it is often a disease of long duration, but never severe. When it terminates, the itching becomes less violent, the desquamation less abundant, the scales are formed more slowly, and little by little the epidermis loses its chapped appearance, and regains its natural state.

Treatment.—Bitter ptisans, rendered laxative by the addition of sulphate of soda, in the proportion of half an ounce to the pint, or else subcarbonate of potash in doses of one to two drachms: alkaline lotions on the affected parts; alkaline baths, sometimes vapour *douches* are the means by which this slight affection may be treated. When it is seated on the chin, the beard should be cut with scissors—not with a razor.

In children, it is often of so little consequence, that it is sufficient to merely brush the head lightly; the skin being thus irritated, becomes excited, and the exfoliation ceases.

ICHTHYOSIS.

Ichthyosis has been arranged by Willan and Bateman among the scaly diseases, and there is no doubt but that it presents some symptoms which are similar to those of the affections of this order; but it also differs from them in many respects. Thus, this disease does not consist merely in lamellæ of epidermis, either altered or thickened, but it is evidently an organic lesion of the dermis which is deep-seated, and possesses peculiar characters. Nevertheless, as the order of the scaly diseases is only based on external appearances, and as these appearances also appertain to *Ichthyosis*, which manifests itself by scales, we have thought it right to class it in the same manner as those pathologists. Besides which, in the actual state of the science, it would be very difficult to establish, why it could not belong to this order as well as *Pityriasis*, which is unaccompanied by any heat, any morbid congestion, and whose small scales, on being removed, discover little or no signs of redness.

Professor Alibert has divided *Ichthyosis* into three species: 1st. *Ichthyose nacree*, of which he makes two varieties, from its resembling either the skin of fish or of serpents, *Ichthyose nacree cyprine* and *Ichthyose nacree serpentine*; 2d. *Ichthyose cornee*, which is characterized by an entire degeneration of the skin, and of which he distinguishes three varieties by their forms, *Ichthyose cornee epineuse*, *Ichthyose cornee onguleuse*, and *Ichthyose cornee arietine*, (the excrescences of which resemble the horns of a ram;) 3d. *Ichthyose pellagre*, a peculiar disease, unknown in France, and which reigns epidemically in the plains of Lombardy. We shall treat of this hereafter.

Ichthyosis is characterized by the development, on one or more parts of the skin, and generally on the whole of it, of scales of different sizes, which are hard, dry, of a grayish white colour, somewhat imbricated, formed of thickened epidermis, never resting on an inflamed surface, and unaccompanied with heat, pain, or itching, and constantly attended by a morbid alteration of the subjacent layers of the skin.

Ichthyosis may develop itself on all parts of the body, but the palmar surface of the hands, the soles of the feet, and all those regions where the skin appears to be most fine and delicate, as the internal surfaces of the limbs, the arm-pits, groin, the face, and especially the eyelids, are less frequently attacked, and even when the disease is almost general, these parts remain uninjured, or only become the seat of attack at long intervals, and in a less degree. We have seen a child of twelve years of age, who was under the care of M. Biett for a long time, who was suffering from a congenital *Ichthyosis*, occupying the whole body, but whose face was entirely free from disease; but a most remarkable phenomenon took place in him: when he experienced the least irritation of the digestive organs, (which often occurred, notwithstanding a strict attention to his diet,) or even of any internal part, his face became of a sallow hue, and was covered with small, grayish, dry scales, the skin was also slightly thickened; these were much thinner than those that covered the rest of his body, which, on the contrary, were hard, large, and dark-coloured, &c.; this gave him a most peculiar aspect, resembling that of a little old man. Gradually, as the inflammation of the digestive organs declined, these scales detached themselves by degrees, the face regained its natural condition, and the eruption entirely disappeared from it, there only remaining an habitual but slight thickening of the skin; no change was perceptible at these times in the scaly covering of the rest of the body, which was almost universal. This little patient was well grown for his age, and enjoyed tolerable health, except that the slightest deviation from his regimen, excited an irritation of his digestive organs.

Ichthyosis generally manifests itself, and the morbid envelope is much thicker, on the external surfaces of the limbs, particularly at the articulations, at the knees, elbows, neck, on the posterior and superior part of the body, and where the skin is naturally thick. It is usually general; sometimes, however, it is confined to one region: this is often the case when it is accidental. We have seen it several times at the

Hospital of St. Louis only occupying the arms or legs, for the accidental form of the disease ordinarily affects the limbs. But it is almost always congenital, and remains during the whole life of the patient; that which is accidentally developed may also last for an indefinite period; sometimes, however, it disappears, and in such case its duration varies from several months to many years. Congenital *Ichthyosis* is seldom strongly marked at birth, but the skin instead of presenting that fineness and polish that is observable in newly-born infants, is dry, thick, and rough; gradually, as the child grows, the disease becomes characterized, and may assume different appearances. Sometimes the skin, although altered and slightly thickened, remains soft; it is covered with small scales of epidermis, which are unequal and grayish, and the disease appears to be confined to a peculiar kind of dryness, accompanied by a continual farinaceous exfoliation, and a slight thickening of the skin. This state corresponds to the *Ichthyose nacre serpentine*, Al. According to this author, this variety almost always attacks old persons; it is true that in some individuals advanced in years, the skin being withered and furrowed, presents a somewhat analogous roughness, but this is not a real *Ichthyosis*, as it wants all the essential characters—the presence of scales.

At other times, *Ichthyosis* is accompanied with much more severe symptoms, which are violent in proportion as the patients advance in years. The skin is thick, furrowed, and covered with real scales, which are dry, hard, resisting, and of a gray colour, sometimes, however, of a pearly-white, often shining, and in some cases surrounded by a kind of blackish circle. These scales are formed of thickened epidermis, which being fissured in all directions, is divided into a multitude of small, irregular portions, of different sizes, detached in the greater part of their circumference, and slightly imbricated at their point of adhesion. Some are small and surrounded by a great number of small farinaceous points, which correspond to the furrows which almost cover the epidermis; others are larger and cover these furrows. These scales may be removed

without occasioning the least pain, with the exception of the larger, which being more adherent are detached with more difficulty, and occasion a sensation, which, if not absolutely painful, is at least disagreeable. They never expose a red surface on their removal. They sometimes occasion such a degree of roughness, that in passing the hand over the skin, it gives the same feeling as a piece of shagreen, and even in some cases it resembles that produced by the back of a fish, (*Ichthyose nacreæ cyprine*, Al.) The scales are particularly apparent and thick on the limbs, at the anterior part of the knee-pan, the elbow, and the external faces of the legs and arms.

Whatever may be the extent of this scaly covering, which sometimes extends over the whole body, or whatever may be its thickness, it never occasions any great change in the system or derangement of the functions; it is never accompanied by any pain, or itching; the skin, however, is no longer the seat of insensible perspiration; this in some cases is wholly wanting, in others, on the contrary, it is said that this function exists in certain parts, and is even very abundant. This may perhaps be the reason, that in most instances, the soles of the feet are exempt from scales, from their being habitually moist from perspiration. Congenital *Ichthyosis* rarely undergoes any changes; sometimes, however, this happens, but most generally in the accidental forms, which at certain epochs and seasons, or under the influence of an inflammation of some internal organs, really undergoes some modifications; the scales become thinner and softer, the skin less arid and rough, &c. But at a later period, as the return of the season at which it first appeared, the disease is again produced, with all the characters which had but disappeared for a short time.

Dissection.—A careful examination of the organs of individuals who have died whilst labouring under this disease, does not present any pathological alteration, which appears to be dependent upon it; in the small number of cases, in which these researches have been made, appearances have been met with, wholly different from those that could have been occasioned by the cutaneous disease; as to the skin itself, not only

is the epidermis found thickened and divided into a multitude of small scales, which are easily detached, but it may also be seen that they penetrate beyond the superficial layers, and appear to depend on a deeper alteration of this membrane.

Causes.—*Ichthyosis* may be congenital or accidental. Congenital *Ichthyosis* often appears to be hereditary; at other times it seems to depend on some strong mental impression received by the mother; accidental *Ichthyosis*, and especially partial *Ichthyosis*, may be attributed to the influence of external causes; thus, according to Alibert, it is endemic in some countries, manifesting itself particularly in those which are contiguous to the sea, where it may be determined by the ingestion of putrid fish, stagnant and brackish water, and by the constant humidity that surrounds the inhabitants of these countries; nevertheless, as this disease has been observed in individuals under entirely different circumstances, both as to their food and habitation, there still exists a great obscurity on the causes of accidental *Ichthyosis*, which may, it is said, be occasioned by fear, a fit of anger, violent grief, &c. It attacks both sexes, but we have more generally seen it in men. In more than fifty cases that have been admitted into the Hospital of St. Louis, or who have attended the dispensary attached to that institution, M. Biett has found the proportion of females to males was one to twenty.

Diagnosis.—General *Ichthyosis*, and especially that which occurs with large and hard scales, presents itself with characters of sufficient distinctness, never to be confounded with any other disease of the skin; as to partial *Ichthyosis*, and particularly that in which the epidermis is divided into extremely thin and small lamellæ, and appears in the form of an almost farinaceous exfoliation, it may be taken for the desquamation that succeeds to certain inflammations of the skin, and above all, for that which is frequently observed after *Eczema* or *Lichen*, if the dryness of the diseased surfaces, the hardness of the scales, small as they are, the grayish tint of the skin, and especially its thickness, were not characters sufficient to obviate all error; besides the origin of the disease, the absence

at the beginning of those elementary lesions which characterize the vesicular and papular affections, will greatly aid the diagnosis.

Prognosis.—Congenital *Ichthyosis*, is beyond the resources of the art, which can only oppose it with palliatives, to correct the inconveniences that result from the great dryness of the skin. Its prognosis, however, is not fatal, as it is seldom accompanied with any alteration of the internal organs, and those persons attacked with it usually enjoy a good state of health.

Accidental and local *Ichthyosis*, which always is less severe, may however be very obstinate, and last for life; it nevertheless appears to have been sometimes successfully treated.

Treatment.—From what we have said, it is easy to perceive that the only treatment of congenital *Ichthyosis* consists in palliatives, which are wholly external; thus mucilaginous lotions, repeated baths, and particularly those of vapour, may, in some cases, be of great use, in modifying the roughness of the skin, by slightly exciting its vitality. Several remedies have been recommended for the accidental forms; among others, Willan has highly praised the internal administration of tar, by means of which he restored the skin to its natural condition. We have seen several analogous cases in the Hospital of St. Louis, where this as well as other remedies were unattended with success. The only advantageous results that were obtained, were owing to external applications, as emollients and baths.

We do not think it proper to give an account of those accidental productions of various forms and dimensions, which are developed on the surface of the skin, and which Alibert has arranged with *Ichthyosis* under the names of *Ichthyose corneae epineuse*, *onguleuse*, and *arietine*, according as they were conical and pointed, or curved in the shape of horns, &c.; these morbid growths are no doubt sufficiently curious to be mentioned in the history of the art, but do not belong to a work which is essentially practical, particularly as they are gene-

rally beyond the resources of medicine, and any treatment that can be applied must be surgical.*

* Professor Francis has given an extremely interesting paper on this disease, in Vol. 2. p. 257. Am. Journ. Med. Sci. in which he gives a detail of several cases, accompanied with a plate of a singular form of the eruption.
—TRANS.

ORDER VII.

TUBERCULAR DISEASES.

TUBERCULA.

THE diseases arranged in this order are characterized by small, solid, persistent, circumscribed tumours, which are more or less voluminous, and always being primary affections, differ from the indurations we have spoken of, as succeeding to certain pustules, and constitute a very remarkable elementary lesion.

These small tumours have received the name of tubercles, a denomination which, as received in cutaneous pathology, is taken in its true sense, and is far from meaning the same kind of affection as is generally described under this name.

The real tubercular diseases are seldom seen, at least in France; but the case is very different in tropical countries, where they are exceedingly common.

They are three in number—*Elephantiasis Græcorum*, *Frambæsia*, and *Molluscum*. These are the only genera we have thought could be adopted of all those mentioned by Willan and Bateman; the others are, in fact, either pustular inflammations, which we have already described, (*Acne*, *Sycosis*, &c.) or real alterations of texture, which not only cannot be included under the head of tubercles, but are even out of place in a work of this nature, (*Phyma*, *Verruca*,) or else they are diseases which consist in a true decoloration of the skin (*Vitiligo*,) or even a serious affection, which can neither be arranged with tubercles, or with any of the orders; this is *Lupus*, (*Dartre rongeante*, Al.) which sometimes commences, it is true, by circumscribed indurations, but also may appear with very different symptoms.

As to the *Noli me tangere*, which, under the name of *Cancer* is classed in a recent work, among the tubercular inflammations, it appears to us to be a peculiar disease, wholly different from those which belong to this treatise, and which seems to have nothing in common with diseases of the skin, but its seat. We have thought it right to leave it in the domain of surgery, to which it properly belongs, and shall only speak of it in the diagnosis of *Lupus* to distinguish it from that affection. The tubercular diseases are all chronic, are developed in a slow manner, and last months, or even years.

Symptoms.—The tubercles are usually red in *Frambæsia*; reddish, or sometimes without change of colour in *Molluscum*; and livid in *Elephantiasis*; they are of very variable size, being sometimes as small as a pea, and sometimes exceeding an egg in volume. Though usually distinct and isolated, they may nevertheless be united in groups, as in *Frambæsia*, for instance, where they occur in bunches. Rarely accompanied with general symptoms, except in *Elephantiasis*, which is often complicated with a chronic inflammation of the mucous membranes, and particularly those of the digestive canal; the tubercular eruptions are most generally confined to particular spots. Under some circumstances, however, they may become general; they may remain stationary, and then either disappear by resolution, or ulcerate at their apex and become covered with scabs. These crusts detach themselves after a certain time, leaving ill-conditional ulcers. At other times, there may be slight excoriations, and a formation of a partial exudation, which gives rise to dry, thin, but very adherent incrustations.

Causes.—The causes of the tubercular affections are very obscure; they are all very rare in France; some of them, however, are very abundant in tropical regions. The *Frambæsia*, and one variety of *Molluscum* may be transmitted by contagion.

Diagnosis.—As will be seen in the particular description of these diseases, they present such peculiar characters, that they differ not only from eruptions of other orders, but also

from each other, in a very distinct manner. To them alone belong small, solid, persistent tumours of different sizes, &c. elementary lesions that can never be mistaken. There is, it is true, a variety of *Syphilis*, in which it manifests itself by tubercles; but there exists marked differences between these two affections, both in the form of the eruption, the colour and march of the eruption, as well as in the totality of the symptoms.

Prognosis.—The tubercular diseases are generally severe; this generally arises from their duration, and their obstinacy in resisting all curative means. The *Elephantiasis* is particularly violent, not only by its effects on the system, but by the diseases with which it is complicated, which sometimes resist all remedies, and often occasion death.

Treatment.—As all these affections are very rare in France, and as they have been but little studied in the countries in which they occur, there is much obscurity attending their treatment; that which is best known among them is *Elephantiasis*. For the cure of this a host of remedies have been tried; it is often obstinate, and requires very energetic means, particularly if, (as but too often happens,) the treatment is not commenced until the disease has made considerable progress.

ELEPHANTIASIS GRÆCORUM. *Lepre tuberculeuse. Leontiasis. Satyriasis.*

Alibert has described this disease under the name of *Lepre tuberculeuse*, and it especially corresponds with the first variety, *Lepre tuberculeuse leontine*, (*Lepra tuberculosa leontiasis*;) the second, *Lepre tuberculeuse elephantine*, (*Lepra tuberculosa elephantiasis*;) rather appertaining to the Barbadoes disease, (*Elephantiasis of the Arabs*.)

Elephantiasis Græcorum is characterized by tubercles, which are prominent, irregular, soft, and red or livid at their commencement, but afterwards presenting a fawn or bronze colour; at times they are indolent, but at others, on the con-

trary, are painful on being touched. These tubercles being accompanied with a swelling of the subcutaneous cellular tissue, often give a hideous appearance to the parts on which they occur. This disease may manifest itself on all parts of the body, but is more generally to be seen on the face, and especially on the ears and nose; on the limbs, and particularly the lower extremities. Sometimes it is confined to a single region, at others it is almost general. It seldom attacks the body, even in those cases where it has made great ravages on the face and limbs.

Its duration is generally very long, and even indefinite; sometimes, however, it disappears in a short time, particularly where it is only constituted of a few tubercles, and on its first attack; but it may return again, and with tenfold violence.

Symptoms.—The appearance of tubercles is usually preceded by light spots of a different colour in blacks than in whites; in the first, they are darker than the rest of the skin, and usually fawn-coloured or reddish; in the latter, the tubercles soon appear, sometimes very rapidly, and at others in a slow manner, in the form of small, soft, reddish or livid tumours, of a size which varies from that of a pea to that of a nut, or even larger. The skin at this time may become so sensible, that we have known patients, who, on being touched, even in spots where no tubercles existed, said that they felt a pain which they compared to that which is experienced from a contusion of the cubital nerve, when the elbow is struck. These tubercles, as we have said, are usually developed on the face, and often occasion a general tumefaction.

Sometimes they are confined to a very limited surface; thus we have seen them only occupy the nose or the ears; in these cases the subjacent cellular tissue was in a state of hypertrophy, and these parts acquired an enormous size, presenting unequal, deformed tumours, giving a hideous expression to the face. The eruption may, on the contrary, be confined to the legs, in which case it generally occupies the inferior part of the thigh or about the ankles: in the latter instance it is frequently accompanied with an œdematous swelling.

The disease may remain stationary for a long time; but it also may make rapid progress; it is no longer a few tubercles scattered here and there, but the whole face becomes covered with knotty tumours, separated from each other by deep furrows. There is a horrible change in the features, the nostrils dilate, and mishapen tubercles are developed on them; the ears become immense, the lips are swelled, the eyelashes and eyebrows fall out, the skin assumes a general bronze hue, which extends to the adjoining mucous membranes. The limbs are deeply furrowed, shining and unctuous, covered with enormous flat tumours, particularly on their external faces. The subjacent cellular tissue is swelled, and these parts often present a disgusting and repulsive appearance. The sensibility, which was so acute, now becomes quite obtuse, or may entirely disappear; the voice is weakened; the sight fails, smell is but excited by the most powerful stimulants, and the touch is almost destroyed or else is strangely defective.

The general state of the patient also undergoes an alteration, he is depressed, loses his moral energy, and falls into a state of utter listlessness and apathy. As to the *libido inexplibilis*, which according to some authors, almost always accompanies this disease, we have never met with it in the few cases we have had occasion to see in the Hospital of St. Louis.

But this disease may appear with characters of even more violence than the foregoing; the tubercles inflame, they become the seat of ill-conditioned ulcerations, and are bathed in a sanious discharge which concretes and forms adherent, blackish, thick crusts. These often leave scars, and may be a favourable termination of the eruption, if it is confined to small surfaces; but when all the body is covered by it, it can readily be supposed what a horrible appearance an individual labouring under this hideous disease must present.

But it is generally circumscribed, and accompanied with an extreme susceptibility of the mucous membranes. It is often complicated with *Ophthalmia*, and at a more advanced stage with *Iritis*. We have seen a patient, in whom the

cornea of each eye was surrounded by a turgid circle, similar to that observable in *Chemosis*, except that it presented a fawn-coloured tint, resembling that of the skin. The functions essential to life are usually uninjured, the patients experience no pain, except in such cases of extreme severity as we have alluded to above, and which soon put an end to their existence.

Dissection.—The pathological alterations observed in those who have fallen victims to *Elephantiasis*, are very variable; they are in a great measure dependant on the duration of the disease, and the violence with which it attacked the different organs.

The *integuments*, as we have already said, are studded with tubercles of different sizes; some appear to be developed in the dermoid tissue itself, others are the result of inflammation of the subjacent cellular tissue; this inflammation appears several times on the same spot, and leaves a tubercular induration, of a whitish colour, and firm consistence. The skin which covers these indurations, is usually thin and shrivelled.

The *mucous system* is also the seat of alterations; that of the lips and conjunctiva is sometimes thickened and changed in colour. The mucous tissue of the tongue is often thick and split; that lining the palate, presented, in most of the cases examined by M. Biett, tubercles which were in groups, ulcerated at their summit, and extending over the uvula; in several individuals whose voice had been much altered, the mucous membrane of the larynx also was studded with tubercles, either in the lateral ventricles, or on the duplicatures that cover the vocal ligaments. In a young man from Gaudeloupe, who fell a victim to this disease, the arythenoid cartilages were even found carious and in great part destroyed. The gastro-intestinal mucous membrane is almost always in a diseased state in those individuals who die of this affection. In the greatest number of cases this consists in ulcerations of the ilium, the ileo-cæcal valve, or colon, which inevitably cause death. These ulcerations sometimes take place on tubercles which have been formed there at different

times, and at others on the follicles of Peyer. Other subjects presented morbid appearances in the lungs; in many, tubercles* were found in different states of development, some ulcerated, the others in a forming stage. Alibert relates several analogous cases in his great work, and M. Biett has also observed the same lesions in an individual from Guyana, and also in a person who had been in India several times.

Tubercles similar to those of the lungs, have been discovered in the mesentery by Larrey, who has also detailed, in an interesting case published some time since, some pathological alterations he had observed in the liver.

Alibert and Ruette have likewise seen the bones in a soft spongy state, and deprived of their medulla; in fact, it may readily be supposed that so violent a disease, implicating as it does all the tissues, can also alter these parts. As the greatest part of the pathological researches as regards this disease, have been made by physicians in Europe, and particularly by Schilling, Valentin, Raymond, Alibert and Biett; it is very desirable that they should be repeated by practitioners in tropical countries, where this disease generally exercises its ravages.

Causes.—*Elephantiasis* is an uncommon disease in France, and most of the individuals who are seen suffering from it, have been attacked in warm countries; it is, however, frequently to be met with in Gaudeloupe, St. Domingo, the Isle of France, &c. It has been said that it is contagious, hereditary, and even that it was a secondary syphilis. These opinions are far from being confirmed by experience; it appears, however, that it may be hereditary; Alibert states that he has seen two women in the Hospital of St. Louis, who had thus received the disease from their parents. But this does not always occur, as has been shown by a number of examples; M. Biett had the care of a lady from the West Indies, who was afflicted with a high degree of *Elephantiasis*; she had borne many children after the appearance of the disease, in

* By tubercles we mean the true pulmonary tubercle, as described by Bayle and Laennec.

none of whom was there the slightest trace of this affection; on the contrary, they enjoyed the most perfect health. As to its contagious or syphilitic nature, well-authenticated facts have fully proved that such an idea is imaginary.

Independently of general causes, some more direct agents appear to exert a marked influence on the appearance of this disease; it attacks both sexes and all ages, though it is less frequently seen in children.

Low, damp spots, the vicinity to marshes, and the use of salt meats, may all excite its development; in some countries it is generally attributed to the use of hog's flesh. In persons who have already been attacked, or who are predisposed to it, its appearance seems to be hastened by great fatigue, by the cessation of an habitual discharge, abuse of spirituous liquors, and by violent mental affections. This latter cause, if we are to believe a learned pathologist, in acting on a pregnant woman, has occasioned *Elephantiasis* in the fœtus.

Diagnosis.—The vagueness that has necessarily resulted from the same denominations having been given to different diseases, has for a long time thrown some obscurity over three affections, which are essentially distinct in their nature and form. At the same time, the disease under consideration will scarcely be confounded with *Leprosy*, which has been described among the scaly diseases; hence it will be only necessary to speak of the others, whose characters, however, are so well marked that a little attention will always distinguish them.

The *Elephantiasis of the Arabs*, is a wholly different affection; it does not present large tubercles, or small deformed tumours separated by deep fissures, existing both in the skin and the cellular membrane, but it consists of a uniform swelling of parts of the body, and particularly of the legs, constituting a disease in which the skin is not implicated, at least at the commencement.

Elephantiasis of the Greeks has also been mistaken for *Syphilis*, and some authors have even regarded it as a modification of this latter affection. If it was necessary to prove that it was an entirely distinct disease from *Syphilis*, it would

be sufficient to mention a single case, (and they are not rare,) where it was developed without the patient having ever had the slightest symptom of a venereal taint; but this opinion has been overturned for a long time. As regards the diagnosis, the tubercles of *Elephantiasis* may always be distinguished from those of *Syphilis*, by bearing in mind that the latter are smaller, hard, and copper-coloured, whilst the former are real tumours of a larger size, soft, &c. These syphilitic ulcerations, in which the edges are hard and regular, the bottom of a grayish colour, deeply excavated, and surrounded by an indurated cellular tissue, besides being of a circular form, are very different from the smooth, superficial ulcerations of a soft and fungous tumour, &c. which occur in *Elephantiasis*.

Prognosis.—This eruption is generally of a severe character, and almost always incurable. After an indefinite period, the patients are carried off by it: morose, unhappy, depressed, discouraged, and deprived of most of their faculties, a slow fever gradually destroys them. At other times the alteration of the skin extends to the mucous membranes, and the sufferer sinks from the effects of a violent chronic gastro-enteritis.

Sometimes, however, it terminates in a more happy manner; the indolent tubercles become the seat of a salutary inflammation; vitality increases in the affected parts; the small tumours insensibly diminish, and after some time a complete resolution is accomplished. At other times this inflammation is more violent and occasions superficial ulcerations. These become covered with blackish, adherent crusts, which, on their disengagement, leave permanent cicatrices. Unhappily, these cases are rare, and are only met with when the disease is of little extent, when it attacks young, strong, and vigorous subjects, who have not been long exposed to its exciting causes, and finally when it occurs for the first time.

Treatment.—The different remedies for *Elephantiasis* are usually of little avail, from two reasons: first, the patients who present themselves have in most cases been affected with it for some years, and it is only after having fruitlessly tried every means, that they have left the country where they were

attacked, to come to Europe in hopes of a cure; on the other hand, this disease in an advanced stage is often complicated with an irritation of the mucous membrane of the digestive canal, which does not permit the use of those energetic means, which have sometimes triumphed over this terrible disorder.

If it can be combated at its commencement, when there are only spots accompanied with indolent swellings of the cellular tissue, the great object is to increase the energy of the parts, for which purpose dry frictions may be advantageously employed, or recourse may be had to volatile liniments, or what is still better, the application of blisters to the diseased spots themselves. It was thus, in a case where the disease appeared in a young man just arrived from the West Indies, that M. Biett resorted to repeated blisters on the parts primarily affected, and which eventually restored sensibility to the surfaces on which they were placed.

When the disease, even in a more advanced stage, is confined to small surfaces, to the ears, for example, as we have sometimes seen it in the Hospital of St. Louis, resolving ointments may be advantageously made use of, as that of the hydriodate of potash, in the proportion of ℥i. to axunge ℥i. but above all *douches* of steam should be used for fifteen or twenty minutes at a time, on the diseased part, and during the administration of which the patient should constantly rub the tumours, which are sometimes of an uncommon size. If the eruption is more general, these *douches* may be replaced, though with less chance of success, by vapour baths.

When it is still more extensive, in whatever state it appears, whether the tubercles are still whole, or present scabs, the remedies should always be directed to the same end. Slightly irritating lotions, and alkaline or sulphurous baths, may often be useful. But we are to expect much more from a tolerably active, internal treatment, if the state of the digestive organs does not oppose its employment. This should consist of the sudorifics, the tincture of cantharides, and the arsenical preparations. The patient may take a decoction of *guaia-cum, rad. Chinæ*, and *sarsaparilla*, with the addition of a small

quantity of *Daphne mezereon* or *cnidium*, the sudorific syrup, or he may be put on the use of the tincture of cantharides. This preparation, which succeeds very well, especially in women, should be given in the dose of three, and at the end of a few days, of five drops, in the morning, fasting, paying strict attention to the state of the digestive and genito-urinary organs. This may be augmented to twenty or twenty-five drops, by increasing the dose by five drops every eight days. But of all the remedies, those which have the most direct and decided action on the skin, are the arsenical preparations, as Fowler's and Pearson's solutions, and the Asiatic pills. The first is to be administered in the dose of three or four drops, augmenting it in the same proportion every eight days, and may be carried to twenty-five or thirty drops; the second, in the dose of a scruple to a drachm; finally, when the pills are used, one may be given every day, two have been used in some rare cases.

But in many instances, none of these means can be employed, as the patient, independently of the cutaneous affection, may also be labouring under a continual irritation of the mucous membranes. Under such circumstances, all idea of an energetic treatment must be abandoned, at least for a long time, and the proper remedies applied to the latter diseases. These are diluent and mucilaginous drinks, a strict regimen, tepid baths, and particularly opiates.

Whatever may be the constitution of the patient, the duration, or state of the eruption, it is always advantageous for him to leave the country in which he may have been attacked.

FRAMBESIA. *Pian. Yaws.*

The disease which occurs in America, and has received the name of *Pian* or *Epian*, is the same known in Guinea by the denomination of *Yaws*; they have been described by Bate-man under the common head of *Frambæsia*, which, like the term *Yaws*, corresponds to a frequent form of the disease, in which it resembles raspberries, or ripe mulberries. Alibert has also treated of it, and admitted two varieties, *Pian ru-*

boide and *fungoide*. The first is precisely the same as *Frambæsia*, and is not, as has been said by mistake in a note to Bateman's work, a neglected *Porrigo* or *Sycosis* of the scalp. As to the second, it evidently belongs to *Molluscum*.

This disease is extremely rare in Europe; it appears to be indigenous in Africa, and is very common in the West Indies and America. We have had occasion, at the Hospital of St. Louis, to see a very remarkable case.

Frambæsia is characterized by surfaces of greater or less extent, covered with tubercles, similar to small, red vegetations, generally distinct at top, but united at bottom, and often presenting the form, colour, and sometimes the size of raspberries or mulberries. It may appear on all parts of the body, but is generally observed on the scalp, in the arm-pits, groin, margin of the anus, and organs of generation. Its duration is indeterminable, but is usually very long; it varies according to the state of the patient, and depends on the weakness or strength of the constitution. It ordinarily lasts for years.

Symptoms.—It is seldom preceded by any general symptoms, though in some cases there may be a slight uneasiness, and some pain in the loins; it appears in the form of small patches of a dull red, similar to flea-bites, and usually grouped around each other. Each of these spots becomes the seat of a protuberance, which is at first papular; the epidermis is destroyed by a slight exfoliation; the prominences acquire more and more distinctness, and at last there may be perceived a surface, sometimes of great size, covered with vegetations, divided at their apex, but united at their base; they are of a dull red colour, and indolent. Sometimes, when confined to a small space, they resemble raspberries or mulberries: under other circumstances, on the contrary, they are much more extensive, and in the case which we saw, the eruption occupied all the middle, anterior and inferior parts of the thigh; the epidermis was entirely destroyed, and the disease appeared to be constituted, not of accidental tumours developed in the dermoid tissue, but by the skin itself in a state of hypertrophy, and divided into a multitude of vegetations.

The parts in the vicinity of the eruption, are hard and callous, the tubercles themselves are also firm and resisting, the inflammation is not active, and they become covered with thin, dry, and adherent scales. In some instances, however, the diseased spots inflame, the vegetations ulcerate at their summit, and in different points of their circumference, and effuse a yellowish fluid, which is sometimes sanious and of a disagreeable odour. This fluid spreads over the small spaces which separate the tubercles, soon concretes, and forms scabs of some thickness, which may, for a time, disguise the real nature of the disease. Such appears to be the most common course of *Frambæsia*. It may be supposed, however, that a disease so little observed, at least in Europe, may present a multitude of states and varieties, which, although differing from this description, still appertain to the disease. We have seen in the Hospital of St. Louis, a young girl, in whom an eruption, which appeared to belong to this disease, had occurred in the form of rounded, livid tubercles, the size of which varied from that of a pea to that of a hazelnut; they occupied the internal and inferior part of the thigh, and being united in a circular shape, formed a kind of fungous excrescence, very firmly attached to the subjacent parts, and surrounded on all sides by scars which had succeeded to former tubercles. Some tubercles were also to be seen on the back and dorsal surface of the foot. Finally, in some cases, when the eruption has attained its greatest height, one of the tubercles may become larger than the others, even acquiring the circumference of half a dollar. It is much flattened, and changes into a large ulceration, which is bathed in an ill-conditioned fluid of so acrid a nature as to corrode the neighbouring parts. This tubercle has received in the West Indies the name of *Mama-pian* or *Mother of Yaws*. The disease may last for an indefinite time, without producing any marked derangement in the health, except in some cases, where the itching is very violent.

Causes.—*Frambæsia* appears to be contagious, but is only communicable by immediate contact with the matter that

flows from the ulcerated tubercles. It has been supposed in the tropical regions, where it is so frequent, that it may be communicated by insects, which, attacking both the diseased and healthy, may thus be a means of transmitting the disease from the former to the latter. It is also said that the same individual can only be attacked with it once in his life. It is spontaneously developed. *Frambæsia* attacks all ages, and both sexes; nevertheless, it has been remarked that children are more subject to it than adults or old persons. Certain external causes, and among others, the influence of some atmospheric phenomena, the poor nourishment of the negroes, their uncleanness, the habit they have of anointing the body with unctuous substances, and their living in dirty, unhealthy, and humid cabins, appear to favour the occurrence of this disease. Finally, the *Yaws* generally attacks weak, feeble, scrofulous, and rickety persons. Independently of all effects of locality, it seems to take place more frequently among the blacks, and that the contagion is transmitted with difficulty to the whites.

Diagnosis.—The characters of *Frambæsia* are too peculiar for it to be ever confounded with any other disease. Nevertheless, it may not be useless to dwell for an instant on the differences that exist between it and *Syphilis*, especially as some authors have mistaken the two diseases and even thought that such manifest relations existed between them, that they were identical.

On the one side, if the general characters be considered, it will be seen that there is not the slightest resemblance. *Syphilis*, it is true, like the *Yaws*, is communicable by actual contact, and sometimes appears in a tubercular form, but very different from this latter; it attacks whites equally with the blacks, and it never arises spontaneously. Besides, far from being only capable of attacking a person but once, it may manifest itself ten, nay, twenty times, and even the tubercular form, the only one in which it can be mistaken for this disease, generally accompanies a secondary *Syphilis*.

On the other hand, the particular symptoms of tubercular

syphilide are very different from those which characterize *Frambæsia*. It never presents red, fungous tubercles, united at their base, and extending over considerable surfaces, but is accompanied by distinct indurations, of a livid or copper-colour, and circumscribed extent, &c. are also attended by a multitude of symptoms which are peculiar to *Syphilis* alone.

Prognosis.—*Frambæsia* does not appear to be immediately dangerous. It is less severe in whites than in blacks. Certain forms are more obstinate than others. It usually disappears in women sooner than in men, in young persons than in the aged. Its duration and danger are usually in direct relation to the state and extent of the eruption. When it is not severe, nature herself sometimes effects a cure. The tubercles gradually disappear by resolution, but in most cases, the fungous growths are destroyed by natural ulcerations, or caustic applications, leaving indelible scars. Under some circumstances, the *Yaws* resists all curative means, and the disease may last for an indefinite time, without inducing any serious consequences. Sometimes, on the contrary, it finishes by becoming deep-seated, and attacking the cartilages and the bones, causing softening, caries, &c. and death results from the extent of the disorganization.

Treatment.—*Frambæsia* requires external treatment; at the same time, some internal remedies have been highly praised. Thus, it appears that sudorifics and purgatives have been used with advantage; but mercury has united the more suffrages in its favour, as affording the most striking results. Some authors, however, are of opinion that it is not only useless, but that it may augment the disease, and that the cases where it has been successful, were syphilitic affections, which had been mistaken for *Frambæsia*.

But in most cases, the patient should be kept on a regimen appropriate to his situation. If he should be scrofulous, or his constitution be feeble and shattered, he must be put on the use of bitters and the tonic preparations. The arsenical remedies may be employed with advantage. Fowler's and

Pearson's solutions are useful in exciting energy in the skin. The first is to be given in the dose of three or four drops, in some inert vehicle, and successively augmented every eight days, from three to four drops, till it reaches twenty-five or thirty; the second is to be prescribed in the dose of from twelve drops to a scruple, progressively increasing it to a drachm. These means are sometimes very efficacious, but they must be intermitted if any symptoms of irritation of the mucous membranes should supervene. The principal reliance must, however, be placed on external remedies. To induce resolution, frictions with ointments of the proto-ioduret and deuto-ioduret of mercury are very useful; the first is made by adding ℥i. to ℥ss. of the salt, and the second, gr. xii. to ℥i. to axunge ℥i. But more energetic means are often requisite; if resolution does not take place, the tubercles must be destroyed. The best caustics to employ under these circumstances are the arsenical paste of Frere Come, and the acid nitrate of mercury. In a very severe case, in which all other means had failed, M. Biett had recourse to the actual cautery with complete success.

The arsenical paste of Frere Come is an excellent remedy, and we have often seen it employed by M. Biett in other diseases, without occasioning any unpleasant consequences; but it is indispensable that it should only be applied to very small surfaces at a time, to an extent, for instance, never exceeding that of a quarter dollar.

The acid nitrate of mercury also acts very energetically, and it is necessary to use the same precautions with it. Finally, baths, and especially those of vapour, in the form of *douches*, may advantageously aid all other remedies by exciting a healthy action in the skin.

MOLLUSCUM.

The name of *Molluscum* has been given to this disease, on account of the analogy of the tubercles that characterize it, to the unciform prominences that occur on the bark of the maple.

The history of this disease is very obscure, and Bateman was the first who called the attention of pathologists to it. It is the fungoid eruption of *Bontius*, and to this affection may also be referred the *Pian fungoide*, Al. Both before and since these authors, *Molluscum* appears to have been observed and described under other names; but it occurs too rarely to enable us to arrange its varieties.

It is characterized by tubercles which are generally very numerous, and scarcely possessing any feeling, the size of which varies from that of a pea to that of a pigeon's egg, they are sometimes rounded, and sometimes, on the contrary, flattened and irregular; generally presenting a large base, but at times occurring with a sort of peduncle; they may be of a brownish colour in some cases, but usually preserve the natural colour of the skin.

These tubercles are developed very slowly, and follow a chronic march; they may last an indefinite time, or even during life. They may occur on all parts of the surface of the body, or even in some cases be general. Their usual seat is the face and neck; Bateman has divided this disease into *contagious* and *non-contagious*.

The latter consists in small indolent tumours of various forms and sizes, of which several are supported on a kind of peduncle, and is less rare than the other variety. Nevertheless, there has been much dispute as to their nature; and this name has been applied to very different affections, resembling each other, however, by the presence of tubercles. Tilesius has published a very extraordinary case of this disease, in which it occupied the face and all the surface of the body, under the form of small tumours which contained an atheromatous matter. M. Biett has seen several analogous cases, but the tubercles were hard, consistent, and did not appear to contain any fluid. In the wards of the Hospital of St. Louis, we have seen, in a patient affected with *Prurigo senilis*, a multitude of small indolent tumours, which existed on different parts of the body. The largest were about the size of hazelnuts, others were about that of small peas: they appeared to

be formed of a dense, fibrous substance. Pressure on them produced no pain.

M. Biett has met with another form of non-contagious *Molluscum*, in several individuals, and especially in young females after delivery; it consisted in small, flat, irregular tumours, slightly fissured at their summit, of a brown or fawn-colour; these tubercles occurred in greatest numbers on the neck.

Contagious Molluscum is a very rare affection, and does not appear to have been as yet seen in France; Bateman himself, only saw two cases. It is characterized by round, prominent hard tubercles of different sizes, these are also smooth, transparent and sessile, exuding a whitish fluid from their apex, &c.

One of the examples cited by Bateman, occurred in a young woman, in whom the face and neck were covered with a great number of small tubercles; their size varied from that of the head of a large pin to that of a small bean; they were hard, and semi-opaque; their colour was nearly that of the skin, and their base was smaller than their body. In compressing the larger of these tumours, a small quantity of lactescent fluid could be squeezed out, through a central opening, which was only visible at such times. The disease had existed for a year, and yet but few of these tumours had augmented in size; among those which had, some appeared to have a tendency to suppuration. Her general health was bad, and from the time of the appearance of the eruption, the patient had become much thinner. In this case, the *Molluscum* was developed in consequence of a direct communication with a child, which she suckled, and who had a similar tumour on the face. From all the information that could be obtained, it appeared that this child had taken the disease from a servant whose face was affected with it.

The second case observed by Bateman, was in a child, who was seized with the disease, after having been often carried about by an older child who was affected with this eruption.

Dr. Carswell, of Glasglow, has communicated a remarkable case of *Molluscum*, analogous to those given by Bateman.

It was observed by Dr. Carswell at Edinburgh, conjointly with Mr. Thomson, in an infant at the breast, who appeared to have caught the disease from its brother, who had himself contracted it, in all probability, from a boy at school. One remarkable fact was, that after appearing on the face of this infant, the disease afterwards occurred on the breast of the mother, and on the hands of two others of the family. The child died, but it was impossible to obtain permission to examine it. In all these cases, however, the disease presented the characters indicated by Bateman.

Causes.—There is nothing positively known as to the causes of this disease.

Diagnosis.—The form, colour, disposition and progress of the small tumours which constitute *Molluscum*, will always be sufficient to distinguish it from either *Syphilitic tubercles*, or from those of *Frambæsia* or *Elephantiasis*. Certainly the strongly marked characters which belong to contagious *Molluscum*, will afford discriminating marks between it and the non-contagious variety, and perhaps, if there was a certain number of exact observations on these two diseases, it would be found that there existed but little analogy between them. But their history is as yet too obscure for us to do otherwise, than to leave them as Bateman has classed them.

Prognosis.—The prognosis of *Molluscum* offers nothing serious, when it is not contagious; the development and progress of the tubercles do not appear to be connected with any internal disease; they are rarely the seat of any marked irritation, and after having arrived at a certain degree of growth, they remain stationary for an indefinite time, or even during the life of the patient, without inducing any serious consequences. Contagious *Molluscum* appears to be much more dangerous. It is usually a very obstinate disease.

Treatment.—The treatment cannot be established in an exact manner from the few cases that have been observed, and the little knowledge we possess of this disease. M. Biett has tried a multitude of remedies in non-contagious *Molluscum*. In the first variety, he has endeavoured to determine some mo-

dification in the tubercles, but has never been able to produce the least change. As to the second form, he has been successful in procuring a melioration by the aid of stimulating and styptic lotions. Thus, by means of lotions of a solution of sulphate of copper, repeated several times a day, he was able to remove small molluscous tumours, which occurred in a young female, on the whole anterior part of her neck.

Finally, in contagious *Molluscum*, Bateman appears to have obtained good effects from the use of the arsenical preparations, and especially from Fowler's solution.

ORDER VIII.

MACULÆ.

THE skin, as we have seen, may be the seat of acute and chronic inflammations, which manifest themselves by a multitude of different external characters; it may also present important alterations in its colour, which essentially differ from the morbid congestions that accompany, constitute, or follow these various inflammations. But if it belongs to cutaneous pathology to describe the colours which the skin sometimes offers, depending in all probability on some alteration of the pigment, we are far from thinking that it also includes all those changes of colour, which are dependant on another disease, and have nothing to do with this membrane. Hence, we shall avoid, in the fear of uselessly enlarging this order, noticing affections of such a character, (as has been done by a modern author,) *Chlorosis* and *Icterus*, for instance; we are too well aware that both these have no alliance with cutaneous diseases; that the first, a symptom of a much more serious disorder, is the result of a deranged state of the circulation; that the other, the evident mark of an entirely different malady, is produced by the presence of bile in the capillaries, and does not even constitute a lesion confined to the skin, as other membranes offer the same colour; that neither one nor the other depend on a derangement or diminution in the secretion of the pigment. Besides, we could not treat of *Icterus* without being led into discussions wholly foreign to the nature of this work, without we should pursue the plan of the writer above alluded to, and describe the symptom only, and overlook entirely the original disease; but it appears to us that it would be as erroneous to give a history of *Icterus*, without that of the lesions of the digestive organs of which it is the result, as

to describe as a disease of the skin, the loss of feeling of this membrane, separate from an account of the alterations of the nervous system which may produce it.

We shall therefore only include in this order the alterations of colour, which themselves depend on some change in the pigment.

The diseases arranged in this order are characterized by discolorations or decolorations of the skin, which appear in the form of spots of various sizes, and differ in a more or less striking manner from the colour of the surrounding parts, or at least from the usual hue of the skin.

Maculæ are general or partial; when they are partial, they may, it is true, occupy almost all the skin, but then there is not a continuous patch as when they are general; they consist of spots of various sizes, leaving intervals between them, where the natural colour remains uninjured; sometimes they occur on one region only, as is often seen in *Lentigo* of the face. At other times, again, there may be but one single spot of small size, as in *Nævus*. The duration of these affections varies according to the species; that of congenital discolorations and decolorations, of general *Maculæ*, of some of those which are partial, is generally indefinite; it is only in the *Ephelides*, properly speaking, that we are able to assign a term of their continuance; this generally varies from one to three months.

These *Maculæ* appear to be seated in that layer of the mucous tissue which is charged with colouring matter, (*Gemules*, Gaultier,) and they evidently depend on an alteration of the pigment. It is, therefore, highly important to distinguish them from those hues which are produced under the influence of the vascular system, and which may depend on a congestion of the capillaries, or even on a want of action in these vessels, and in other cases again on the presence of foreign bodies in the circulatory system. But, notwithstanding the labours of skilful anatomists, notwithstanding the learned researches of Gaultier, the anatomy of the skin is still far from being perfectly known; although the nature and formation of the pigment are not the least obscure points, and whilst wait-

ing for more positive information, it is reasonable to suppose that there must be a great difference in the nature and seat of *Ephelis* and *Icterus*, of *Vitiligo* and *Chlorosis*.

Causes.—The causes of the generality of *Maculæ* is still entirely unknown; thus it has been often remarked, that the internal administration of the nitrate of silver, will sometimes produce a general dark hue of the skin; but as yet, the labour of chymists, the observations of physicians, and the researches of anatomists, have not been able to explain this singular phenomenon.

We have no guide to explain the reason of *Nævi materni*, beyond the vulgar belief which attributes them to moral impressions sensibly felt by the mother. We can scarcely believe, in the generality of cases, in these effects of an excited imagination, effects that are often attributed to a transient cause, and to which so little attention was paid at the time of its occurrence, as to be with difficulty recollected. Nevertheless, there are cases so well authenticated, and there is often such an exact resemblance between the objects which have excited the feelings of the mother during gestation, and the marks on the body of the child, that, in spite of ourselves, we are tempted to believe that a certain influence may, under some circumstances, be exercised on the fœtus, through impressions received by the mother.

Ephelis is generally developed under the influence of causes which are to a certain degree appreciable.

Diagnosis.—*Maculæ* present characters of sufficient distinctness, to be in most cases distinguished from other diseases of the skin. The symptoms of each of the varieties will always prevent their being mistaken for each other. Nevertheless, there are some discolorations which may be confounded with syphilitic spots; but as these latter can only be taken for *Ephelis*, we shall point out in the diagnosis of that disease the differences that exist between them.

Prognosis and Treatment.—Although the *Maculæ* are for the most part incurable, they are seldom serious, and exercise little influence on the general system. *Ephelis* appears to be

the only one which is susceptible of being cured; it is far from obstinate, and usually yields to very simple means. As to the other varieties, the obscurity which still exists as to their nature, will explain the little success that has attended any attempts to combat them. The order of *Maculæ* corresponds to the *Ephelides*, Al. who has divided it into *Ephelide lentiforme*, (*Lentigo*,) *Ephelide hepaticæ*, (*Ephelis*,) and *Ephelide scorbuticæ*; this latter variety cannot be referred to the *Maculæ*, but rather belongs to *Purpura*, which constitutes a very distinct affection.

Under the common head of *Ephelides*, Alibert only describes one species of discoloration.

We shall divide the *Maculæ* into *discolorations* and *decolorations*.

DISCOLORATIONS.

Independently of the changes of colour, that we have said above, depend on the capillary circulation, and do not belong to diseases of the skin; this membrane presents a multitude of different tints, which succeed to diseases, of which it is the seat, or which accompany them, the study of which, is of the highest importance; thus the spots which succeed *Pemphigus* the fawn colour of *Elephantiasis Græcorum*, the peculiar hue that accompanies the syphilitic eruptions, &c. assuredly present differences which cannot escape an attentive observer, but are actually impossible to describe. Some day, no doubt, when the intimate structure of the skin is better known, these different appearances will be satisfactorily accounted for.

Those discolorations of the skin, which are really idiopathic diseases of this membrane, are either general or partial; the *bronze colour* is the only one that is general; to the partial discolorations, belong *Lentigo*, *Ephelis*, and *Nævus*.

Bronze colour of the Skin.

There are many instances of individuals in whom the skin has more or less promptly assumed the bronze hue. This morbid discoloration is particularly observable after the internal use of nitrate of silver; but it has also been seen in persons who had never made use of this remedy, and we have ourselves twice met with it in patients, in whom it had arisen spontaneously under the influence of some unknown cause. M. Biett has also observed several instances of it. In these cases, the discoloration is much less deep than when it is the result of the ingestion of nitrate of silver; the skin seems rather to present a dirty appearance than a bronze tint.

It is, on the contrary, very dark, when it succeeds to the administration of this salt, where it has been employed for some years as a remedy in *Epilepsy*. Sometimes followed by a complete cure, or at least, by a manifest melioration, the use of this substance occasions in many cases a slate-gray colour of the skin, which, in the light, appears of a greenish tint, and differs entirely from the colour of mulattoes, to which it has been erroneously compared. M. Biett has employed it with success in many epileptic patients, and in some, its use was followed by this discoloration of the skin. Among them, three came under our notice. In two of these, the fits were so constant that they menaced the existence of the patients, and they were so much relieved that they only had them every three or four months, and then very light; in the other, the disease was entirely cured, and no symptom of return has been experienced for more than ten years. The nitrate of silver left a dark colour of the skin, but did not injure the health of the patients in the slightest degree; the case of one of whom has been reported erroneously, and embellished with imaginary incidents, in a work recently published.

C— was, in fact, admitted into the Hospital of St. Louis for an *Epilepsy*, the attacks of which were so frequent that they endangered his life. He was put on the use of the nitrate

of silver, which he continued for fifteen months, and not for three years, as has been said. This remedy, which was intermitted from time to time, was given in a dose of half a grain at first, and progressively augmented to eight grains daily. Its administration never occasioned the slightest ill consequence, and it is erroneous, that it caused a gastro-enteritis, which lasted for a year, and from which the patient has not yet perfectly recovered. The fact is, that C—— has never experienced any symptom of gastro-intestinal inflammation, that the state of meagreness in which he now is, existed before his entrance into the hospital, that his digestive functions are very active, and are in a normal state. The nitrate of silver, therefore, has had the effect in this person of relieving him so much, that the fits only return at intervals of some months; that they are extremely light, and do not occasion a loss of his senses, and has been followed by no other inconvenience than the dark colour it has occasioned in his skin.

This appearance usually manifests itself some time after the employment of the nitrate of silver has been commenced; the skin at first assumes a bluish tint, and gradually becomes slightly bronze-coloured; this is the more evident where the coloured parts are exposed to the light. It appears on all parts of the surface of the body at the same time, but is generally most sensible where the skin is delicate; and particularly in those exposed to the action of the light, as the face and hands. The discoloration gradually assumes a darker tint, till it may, in some instances, become almost black. It should be remarked that the conjunctiva usually presents a coppery, livid hue, that the mucous membrane of the mouth, at the points of junction with the skin, where it is exposed to the light, is the seat of an analogous discoloration.

A very remarkable phenomenon is, that in the face this bronze colour becomes darker, from all the causes which usually produce paleness; it is, on the contrary, lighter where redness would naturally take place.

It may last a considerable time, or even preserve its intensity during life. M. Biett has seen two persons in Geneva,

in whom this discoloration had existed for more than twenty years, and for the fourteen years in which he has used the nitrate of silver in *Epilepsy*, he has observed a number of individuals in whom this colour has remained as dark as when it first appeared. There are some cases, however, in which the discoloration has progressively diminished, but there is as yet no example of its entirely disappearing.

It is never accompanied with any general symptoms, or derangement in the functions; and even those parts which are connected with the skin, experience no alteration. Thus, the hair remains uninjured, though the nails are usually of a bluish tint. In most cases, cicatrices which existed before this change took place, are also implicated; sometimes, however, they do not participate in it; those that occur afterwards, M. Biett has observed, remain white, especially if they were somewhat deep.

This discoloration, the cause of which was for some time misunderstood and denied, has been observed by a host of practitioners, who have had occasion to employ the nitrate of silver in *Epilepsy*, &c. Without speaking of Fourcroy, who was the first to draw attention to this important fact in physiological pathology, there may be cited Powell, Marcet, and Roget in England; Albers, Reimar, Schleiden, in Germany; Butini, Delarive, and Odier in Switzerland; Biett, who has himself observed in twenty-three cases, (seven women, and fifteen men,) without including those he met with in England and Switzerland. The greater part of these individuals have been observed several years after the first appearance of the discoloration, and in the generality of them it had not in the least faded.

What influence has the nitrate of silver on the secretion of the pigment? Are these effects to be attributed to a chymical combination, in which light appears to exert great influence? In the actual state of our knowledge, this phenomenon is not susceptible of a clear explanation; all the hypotheses which have been made, may be met with strong objections. The most part of the questions that Albers, of Bremen, addressed to

the Medico-Chirurgical Society of London, on this subject, are yet to be answered.

This discoloration is not dangerous; in fact, it can scarcely be called a real disease.

We possess no means which are capable of destroying this morbid colour, and of restoring the skin to its natural state. So far the trials that have been made to attempt to modify it have failed. M. Biett prescribed to two of his patients, who have been under his care for near fourteen years, sea-bathing alkaline and ferruginous baths, but without obtaining the least change. Dr. Badely is mistaken, in asserting that blisters will restore the skin to its natural colour. M. Biett, whom we are again obliged to cite on this point, applied them to the hands of one of his patients, but the skin still retained its morbid hue. Nevertheless, it is probable, that reiterated applications, taking care to often wash the denuded parts, might considerably diminish the intensity of the tint, as cicatrices produced by excoriations have been known to regain the natural colour. At the same time it must be remarked, that in making these repeated applications of blisters, at least on the face, (where it is most striking,) almost insurmountable obstacles will be met with in the eyelids, conjunctiva, &c. An individual, thus partially discoloured would present a kind of chequered appearance, more disagreeable than a uniform colour, however unnatural. This reason has hitherto prevented M. Biett from pushing the plan any farther.

LENTIGO. *Taches de rousseur. Ephelide lentiforme, Al.*

Lentigo, which is generally known under the name of *Freckles*, is characterized by small spots, usually of a yellowish fawn-colour, rarely exceeding a small bean in size, and generally much smaller. These are in most cases congenital, but in some instances are developed after the age of nine or ten, and last the whole life, though they are more evident at certain times. Thus they are very numerous, and more strongly marked in youth; they generally occupy the

hands, the neck the upper part of the breast, and above all, the face. Hence it is evident, they affect those parts which are exposed to the light; they may, however, cover almost all the surface of the body, and we have seen individuals, the whole of whose skin was thus spotted.

Symptoms.—They appear in the form of small spots of a yellowish colour, and nearly round, scattered here and there without any order, and leaving intervals of different extent between them, in which the skin preserves its natural colour. Sometimes they unite, particularly on the nose and cheeks, and form large patches. They are not in the least prominent, occasion no pain, not even itching, and are rather a blemish than a disease.

Causes.—*Lentigo* is only observable in persons of a fair complexion or those with red hair, in whom the skin is fine, white and delicate; it is very seldom seen in brunettes. It is sometimes occasioned by exposure to the sun. Thus it is not rare to meet with small yellow spots, &c. in persons living in the country, particularly in children, and those who expose themselves to the action of the sun; in these cases it is accidental, and may disappear by age or change of climate. It is most common in warm countries, and is often met with in persons of a lymphatic temperament; it is seldom seen in the dark-complexioned, or in those who are strong, vigorous and sanguine. It is usually congenital.

Diagnosis.—The characters assigned to *Lentigo* are too well marked, and it is a disease too well known for any mistake to occur. Nevertheless, when situated on the body, it may in certain cases, be taken for a variety of *Purpura*. In fact, this latter disease sometimes manifests itself by small round patches, not larger than a bean, and oftentimes much less; but the spots of this disease are of a livid red, whilst they are yellowish in *Lentigo*; the first may occur on the body and limbs without showing themselves on the face, which is very seldom their seat; the latter, on the contrary, scarcely ever exist on the breast or abdomen, without at the same time affecting the face and neck. Finally, the spots of *Purpura*

are accidental, and in these cases, generally very transient; they almost always coincide with some derangement of the system, whilst those of *Lentigo* are ordinarily congenital, last during the whole life, and are never accompanied by the slightest disturbance of the functions. When several of the spots are united, they may be confounded with *Ephelis*, but the presence of small isolated *Maculæ*, their duration, and the absence of itching, are characters which are more than sufficient to distinguish them.

Lentigo sometimes disappears, but it most generally is persistent; it never constitutes a disease, properly speaking, and requires no treatment.

EPHELIS. *Pityriasis versicolor*. *Taches hepaticques*. *Ephelides hepaticques*, Al.

Ephelis is characterized by irregular patches of a much larger size than those of *Lentigo*, of a saffron-yellow colour, usually accompanied with itching, and sometimes giving rise to a slight exfoliation. These eruptions may appear on all parts of the surface of the body; but they are generally met with on the anterior part of the neck, the breast, on the breasts in women, on the abdomen, groins, and internal parts of the thighs. They are never seen in the face, except in pregnant women, when they are evidently dependant on this state. Their duration varies from some days to two months or more. Often arising in a sudden and spontaneous manner, they rapidly disappear; in other cases they may be developed a short time before the menstrual period, and vanish when this evacuation makes its appearance. But in most instances they appear gradually, and in a slow manner, and last several weeks, and if no remedies are applied, may remain for months.

Symptoms.—Preceded by a slight itching, these eruptions manifest themselves by small round spots, which are at first of a grayish colour, but afterwards acquire a yellow tint, which sometimes is as vivid as that of saffron. But their colour varies greatly, according to the individuals or the part that may be affected. They at first offer different diameters; some

being of the size of a dime, others much smaller, whilst some again may greatly exceed this. They are at first isolated, distinct, and scattered here and there, leaving large intervals between them, in which the skin preserves its natural colour; but they soon multiply, enlarge, unite and form large irregular patches, which sometimes occupy surfaces of such an extent, that on a superficial examination, we might be tempted to consider the unaffected spots the diseased part, and the disease the natural colour of the skin. They are not prominent, and are not elevated above the surrounding skin; nevertheless, in passing the finger over the surface, a slight prominence may be felt, which depends in all probability, on the furfureous desquamation which they often occasion.

These eruptions are not accompanied with any general symptoms, and give rise to no derangement of the functions, but they always determine troublesome itching. The pruritus is considerably augmented by any mental excitement, and especially by any excess. It is usually most violent in women and girls about their menstrual periods. It sometimes becomes so violent that patients cannot resist the propensity to scratch themselves, which, far from calming it, only increases the evil. This itching is often increased by the heat of the bed, and sometimes occasions long and painful vigils.

Sometimes *Ephelis* is accidental and transient, terminates by resolution, and disappears in a few days, and in some cases even in a few hours; in other circumstances, it gives rise to an epidermic exfoliation, and follows a slow march, remaining for a long time.

Causes.—These eruptions may appear on all persons; they attack both sexes indifferently, but they are more often met with in females, and principally in those who are fair and have a fine and delicate skin, although it is not rare to find them in those of an entirely opposite appearance, having black hair, and a dark complexion: in these cases, the spots are much darker coloured. They are sometimes occasioned by exposure to the action of the sun, by excesses, by the ingestion of certain salted or smoked meats, &c; they often coincide with a

suppression or diminution of an habitual discharge, as the menstrual or hæmorrhoidal; in some females, they appear to depend on the latter cause, and soon disappear. These spots have been met with in persons who were at the same time affected with a chronic inflammation of the liver, and their origin has been attributed to this organ, (*Ephelides hepaticus*.) This complication, which only occurs in some rare cases, is far from constituting a disease always dependant on the same cause. The hepatic *Ephelis* is not more under the dominion of the liver, than it is under that of the stomach or lungs. In the generality of cases, persons who are affected with it, enjoy very good health, and the disease wholly consists of an alteration of the pigment of the skin. The spots so often occurring on the face of pregnant women, belong to this eruption.

Diagnosis.—The characters assigned to *Ephelis* are too well marked in the generality of cases to render their diagnosis difficult. There are, however, some diseases of the skin, which may, under certain circumstances, be mistaken for them; these are *Pityriasis*, *Syphilitic spots*, and *Nævi*.

Pityriasis.—This is a scaly disease, and the spots under consideration are not merely followed by a slight farinaceous exfoliation, but by a desquamation formed of the disengagement of small lamellæ of altered epidermis. The absence of the yellow tint which characterizes *Ephelis*, will suffice to distinguish it from *Pityriasis*, although at the first glance, it may appear to resemble the latter, from its exfoliation, and the slight degree of prominence.

Pityriasis is never accompanied with the pruritus, which is so common in *Ephelis*.

Syphilitic spots.—The livid or coppery colour, the want of exfoliation, the absence of all itching, of concomitant symptoms, &c. will always distinguish those discolorations which arise from a venereal cause.

Nævi.—Some *Nævi*, when their colour is of different shades of yellow, somewhat approaching that of *Ephelis*, and which at the same time, do not rise above the level of the skin, may

sometimes be confounded with the disease under consideration; but it may easily be conceived, that independently of their small number, sometimes indeed their unity, the absence of all itching, their congenital origin and incurability, are characters which will soon dispel any error, and clear up every doubt.

Prognosis.—*Ephelis* constitutes a very mild disease; those which appear in the first period of pregnancy, sometimes disappear during the first months; at other times, they last until delivery has taken place, but they ought not to occasion any uneasiness, and do not require any kind of treatment. Those which precede or accompany the menstrual periods, are extremely transient. Under other circumstances, they are attended with no other inconvenience than the itching, which, however, in a majority of cases, will yield to an appropriate treatment.

Treatment.—Astringent lotions, detersive liniments, alkaline ointments, and all those resolving applications which are efficient in giving tone to the skin, are at least useless, and may even be hurtful. The treatment of *Ephelis* is extremely simple. Sulphurous waters internally, as those of Enghien or Cauteretz, two or three sulphurous baths a week, and in certain cases, some mild laxatives are all that are necessary in most cases. In commencing the use of the Enghien water, the patient should at first mix it with two-thirds of barley water or milk, and gradually augment its strength till he can take it pure.

In some instances, where *Ephelis* occupies certain regions, as the internal part of the thighs or groin, and occasions a violent pruritus, the patient should wash these parts with a lotion made by dissolving one ounce of sulphuret of potash in two pints of water, on the days when he does not take a bath. It is scarcely necessary to add, that the patient should avoid all excess, and particularly refrain from spirituous liquors.

Nævi Materni.

Under the denomination of *Nævi materni*, are included all those congenital marks on the skin, which are vulgarly attributed to impressions made on the mother, and transmitted to the fœtus. These different affections have been designated under the names of *Spili*, of Σπιλος, *Macula*, of *Nævi*, properly speaking, and of *Moles*. Thus, on the various parts of the body, coloured spots and marks are often to be seen of remarkable forms, &c.

1st. Sometimes these marks do not rise above the level of the skin, (*Spili*,) and evidently consist in an alteration of the pigment; they may appear on different parts of the surface, without any reason being assignable why they occur in such or such a situation. They are, however, most frequent on the face. They are congenital, and may diminish in depth of colour, but they never disappear entirely, and last a lifetime.

They present a multitude of shades of colour, of form, and size, which it would be impossible to describe. There are few tints that these *Nævi* have not assumed, but they are most commonly yellowish, or entirely black; in these latter cases especially, they become covered with harsh and short hair. Their form is generally irregular; sometimes, however, they strongly resemble that of certain objects, which has been one great cause of the belief of their being caused by some impression made on the mother. Sometimes they are confined to very small spaces; but on the contrary, under some circumstances, they may occupy very extensive surfaces; half the face for example, the whole of a limb, a great part of the body. These coloured spots do not occasion any pain, and are unaccompanied with itching. Sometimes their hue diminishes a little; at other times it remains the same, and lasts for life.

2d. Sometimes these marks on the skin, (*Nævi*,) are not merely an alteration of the pigment, but are connected with, and under the influence of the vascular system, and may present two different states.

In one, they are entirely superficial, and constitute spots whose tint is entirely under the influence of all causes which quicken the circulation. Usually of a red or violet colour, (wine marks,) they are augmented in intensity by excesses, by a strong mental impression, at the approach of the menstrual period, &c.; the skin, in some instances, may even appear tumefied. In the other, they are more or less prominent, rounded, flattened, or raised on a footstalk; they constitute almost the whole of the erectile tumours of Professor Dupuytren. We shall confine ourselves merely to the mention of these *vascular Nævi*, from their being connected in a certain degree with the *Maculæ*, but their history and modes of cure belong to surgery.

3d. Finally, by the term *Moles*, are meant small, brown spots, sometimes superficial; in other cases, on the contrary, slightly prominent, generally of a round form, scarcely exceeding a small bean in size, and in which hairs are always to be seen. *Moles* sometimes belong to the spots, sometimes to the vascular *Nævi*. They generally, however, appertain to this latter variety; for they may occasion itching, swell, and become painful from the effect of some irritating cause. They are most commonly developed on the fœtus, but they have been seen to arise after birth, in which case they are susceptible of augmenting and disappearing.

We are entirely ignorant of what may be the proximate cause of *Nævi*, and in allowing, according to the common belief, some influence to emotions of the mother, effects which are evidently wanting in the majority of cases, but which cannot be entirely overlooked in all instances, there still remains great obscurity as to their mode of formation. It has been said that *Nævi* were most frequent in those infants whose mothers were subject to inflammations of the skin. This observation, if it was rigorously true, which has not been demonstrated, would still be but a simple fact, and would not throw any light on the etiology of these cutaneous alterations.

Nævi do not, in general, require any kind of treatment; they must be left to themselves—at least those which depend

on an alteration of the pigment, (*Spili.*) They can only be destroyed by caustics or the knife; but these operations, which would only be undertaken to remove disagreeable spots, since they can scarcely be termed a disease, are useless, from their leaving scars quite as unsightly and deformed as the spots themselves.

As to the vascular *Nævi*, and particularly those which constitute tumours of greater or less prominence; their seat, and the danger resulting from any injury to them, by exposing the patient to a violent hemorrhage, are sometimes such as to render it indispensable that they should be removed; their treatment, however, belongs to surgery. It consists in compression of the tumour, in removing it by means of ligatures or the knife, and, finally, in tying the arterial trunk, from whence it derives its blood. Cauterizations have appeared to have been attended with serious consequences.*

DECOLORATIONS.

Not only may the skin present changes in its usual colour, depending on an alteration of its pigment, but it may also in some instances, be entirely deprived of this substance; this decoloration may be congenital or accidental, partial or general.

Albinism.

General and congenital decoloration constitutes that singular state, known under the name of *Albinism*, which is the

* Vaccination has been successfully employed in removing these obstinate, and oftentimes unsightly tumours. Dr. Young, in the Glasgow Medical Journal, gives the result of two cases in which this was tried, and observes, that if early attended to, after the birth of the child, that nothing farther is required to effect a cure, than to establish the process of suppuration by cow-pox, caustic, &c. As the most gentle of these means, the vaccine is certainly entitled to a preference. He also seems to think that an antimonial plaster would be a good substitute, if vaccination had been previously performed, without the *nævus* having been adverted to. This hint deserves attention.—TRANS.

more remarkable, as the *Albinos* do not form a distinct race, but are observed throughout the whole human species.

The skin of persons thus uncoloured, is of a dead white, somewhat resembling that of milk; their hair is smooth and silky, often feeling like that of the goat; and is sometimes of a brilliant white; the eyebrows, eyelashes, beard, the hair in the arm-pits, and around the genital parts, are of the same colour; all the rest of the body is covered with a silky down, of a snow-white colour, and remarkable softness. The iris is rose-coloured, and the pupils present a well-marked red tint; changes which depend on the absence of the pigmentum nigrum from the choroid and uvea. The eyes cannot support a brilliant light; its impression always appears to be painful. Thus, when they are exposed to a glare, they are continually winking, and the pupil has a rapid oscillatory movement. On the contrary, towards night, and when the day is dark and obscure, the *Albinos* can distinguish objects with great ease. The physical and moral development of *Albinos*, like the decoloration of their skin, is indicative of general feebleness of organization. They are usually small, delicate, and feeble. Their intellectual faculties are ordinarily obtuse, and it is not rare to find *Albinism* accompanied with idiocy. We do not know of any example of accidental general decoloration.

These decolorations appear, as we have said, to depend on the absence of pigment; as to the primary cause, it is wholly unknown. *Albinism* does not appear more dependant on certain races, than on climate; it affects both blacks and whites, and is met with as well in Europe as in Africa, although it is certainly more common in some countries than in others.

Albinism presents such marked characters, that it is impossible to mistake it; it is a state which is visible at the first glance, and is, as may well be supposed, beyond all resources of art, and never requires any medical treatment.

Vitiligo.

The skin may also become the seat of partial decolorations, and this disease, known under the name of *Vitiligo*, may be congenital or accidental. The first is only met with in negroes, who sometimes present white spots, of various forms and dimensions, on different parts of the body. When these spots occur on those parts which are covered by hair, this also becomes deprived of colour. Those negroes who exhibit this peculiarity are termed piebald.

But *Vitiligo* is most usually accidental, and this is the only form observable in whites; it may occur on all parts of the body, but is usually met with on the scrotum in men: it appears in the form of milk-white spots, which are very irregular in their shape, being sometimes in longitudinal striæ. In other cases, on the contrary, it manifests itself in superficial patches, which are unaccompanied by either heat or itching. These spots, which occur most frequently in the aged, may gradually increase in size, till they cover a considerable surface.

Causes.—*Vitiligo* is developed under the influence of causes which have not as yet been discovered.

Diagnosis.—It presents itself with such peculiar characters that it can never be mistaken. But, at the same time, care should be used, not to confound it with the white lines observable on the skin of the breasts, when they are over-distended with milk during suckling, or with those which take place on the abdomen, from ascites or during pregnancy; these white lines, to which the name of *Vitiligo* has also been applied, (*Vitiligo hydropicorum, gravidarum*, J. Franck,) are not mere decolorations, but result from the destruction of the rete mucosum, caused by rents or tears from the over-distention.

Treatment.—We have seen several examples of *Vitiligo*, at the Hospital St. Louis; but it rarely occurred that the patients had entered the wards for this affection. Those who were treated for it, received no benefit from the usual means employed for such diseases; in fact, we do not know a single case in which any change took place, and would not advise that a cure should be attempted. It is a very slight affection, and is attended with no disturbance of the system.

Diseases which from their Nature cannot be arranged in any of the foregoing Orders.

ORDER IX.

LUPUS. *Dartre rongeante. Lupus vorax. Herpes exedens.*

THIS disease has been described under the name of *Dartre rongeante*, by Alibert, who has divided it into three varieties, based on the causes which produce them: 1st. *Dartre rongeante idiopathique*; 2d. *Dartre rongeante scrophuleuse*; 3d. *Dartre rongeante venerienne*; this last evidently belongs to the syphilitic complaints, and the author himself describes it under that head.

Lupus is a disease which sometimes commences with spots of a violet red colour, but most generally with livid, indolent tubercles, and is above all characterized by its tendency to destroy the surrounding parts and subjacent tissues, under the form of ill-conditioned, ichorous ulcers; which become covered with very adherent brownish scales, which on falling off discover that the disease has continued its ravages.

Lupus presents many differences, not only in its seat, the rapidity of its progress, and the extent of the destruction it produces, but also in the mode in which these ravages are committed, and in the form of the ulceration. Thus, sometimes it confines its attacks to the surface, sometimes it successively invades the subjacent parts, at others, again, it is accompanied with a real hypertrophy of the skin; hence M. Bielt has divided it into three varieties: 1st, That which destroys the surface; 2d. That which destroys the subjacent parts; 3d. When it is accompanied with hypertrophy. This division is wholly practical, and much facilitates the study and description of the disease.

The most general seat of *Lupus* is on the face, and the nose is the point on which it ordinarily exercises its ravages, we are not, however, able to explain this singular predilection:

the cheeks, lips, and chin are also favourite spots of attack, but it may also occur on the body and limbs. On the body it is usually to be found on the breast or shoulders; on the limbs its seat is generally around the articulations, on the external part of the forearm, back of the hand, and on the foot. Finally, it is not uncommon to see this disease on the neck. In certain cases, it is confined to one point, in others it attacks, simultaneously or progressively, several regions.

It usually commences with an obscure red point, which is hard, prominent, and seldom of any great size. These small indolent swellings, whose progress is slow and gradual, have been considered as tubercles. They may remain stationary, or nearly so, for a long time; sometimes, on the contrary, their volume is very considerable from the first; in all cases they are of an obscure red colour, and appear at the commencement only to affect the most superficial layers of the skin. Their summit sometimes becomes covered with small, dry, white scales; in many cases, several may unite and form a large diseased surface, which, however, is not painful; it is soft, and finally ulcerates.

Although this is the most common appearance of *Lupus*, it does not always occur with these characters, and hence it is erroneous to class it with the tubercular inflammations, for it very often happens that tubercles are not the primary lesions of *Lupus*. Thus it sometimes begins by an inflammation of the mucous membrane of the nasal fossæ, accompanied with swelling and redness of the nose; a thin scab is formed, this is torn off, it is replaced by another, and the ravages of the disease commence. In some instances, it manifests itself by a violet redness on some part of the face, but especially at the extremity of the nose, which, at the same time, is the seat of a slight swelling lasting for some months, the colour slowly augments, the surface becomes inflamed, a slight ulceration occurs, and a scab is formed, which soon becomes thick, and covers an ulcer which is gradually becoming deeper. Finally, the skin may slowly become thin and present the appearance of a scar without having been preceded by tubercles or ulce-

rations, and without having offered any other lesion than that of a livid hue, accompanied from time to time by a slight desquamation; so slight, indeed, as in some cases to be scarcely appreciable.

Lupus destroying the surface.—*Lupus*, when spread over an extent of surface, offers some peculiarities, which merit attention. Thus, in some rare cases, the disease appears to affect but the most superficial layers of the dermoid tissue. This variety is especially observable on the face and cheeks; it does not commence with tubercles, nor does it form scabs, but the skin assumes a red colour; epidemic exfoliations take place on the diseased surface; the skin generally becomes thin; it is smooth, shining, red, and presents the appearance of a cicatrix left from a superficial burn; the redness disappears on pressure; the patient experiences no pain, except on the diseased spot being touched. The surface becomes sensible after violent exercise or excess in drinking. When the disease ceases to make any farther progress, the redness disappears, the exfoliation no longer takes place, but the skin remains thin and shining; it is smooth to the touch, and appears deficient in thickness.

In other cases one or more small tubercles of a dull red colour appear; after remaining stationary for some time, they suddenly increase and multiply, the skin becomes the seat of a slight œdematous swelling in the intervals which separate them; their bases join, the summit ulcerates, and in a short time there is a cutaneous surface, presenting an irregular, ill-conditioned ulceration. This is soon covered with a very adherent blackish scab, and gradually extends. In most cases when the disease thus has a tendency to extend to the surrounding parts, white, wrinkled, irregular scars, somewhat resembling those which result from large burns, are formed on the original points of attack. This phenomenon especially takes place during a well-directed curative course. *Lupus* may gradually spread over large surfaces; all the face for instance; it may often occur with even greater violence, and whilst it successively extends to the surrounding parts, the

former cicatrices also become involved in the ulceration. In fact, as they always are closely united at some point with red prominent tubercles, which seem to serve as a point of attachment to them, the ulceration which occurs in these tubercles soon extends to the cicatrices and destroys them. It is always by the formation of fresh tubercles, which circumscribe the ravages of *Lupus* for a time, by a kind of hard, rough, swelled ridge, which afterwards ulcerate, that this disease extends. We have seen in the Hospital of St. Louis, a *Lupus* of this kind commence on the sub-maxillary region, gradually extend, and in spite of all treatment, in the course of a few years involve all the chin, a great part of the cheeks, and the whole anterior part of the neck. Sometimes, the tubercles are developed on one or both of the angles of the lips; thick incrustations succeed to the ulcerations, and it is with the greatest difficulty that the patient can open his mouth. The nose, which is rarely the primitive seat of this variety of *Lupus* is, however, not exempted from its attacks, and in many cases the scabs which are there formed, carry off with them on their disengagement, portions of its alæ or its extremity. When the scabs are removed under a well-regulated treatment, they are not replaced by others. Sometimes the surface is rough, and studded with small, dull-red tubercles; at others it presents a more healthy appearance, and becomes covered with small thin desquamations, and a firm white cicatrization takes place at several points. In this state of the cure, when the ravages of the disease have been extensive, the face presents a remarkable appearance; there are a number of irregular scars, sometimes of a large size, of a white colour, tense, shining, thick in some spots, and so thin in others as to appear transparent. These latter characters occur on parts that have been attacked several times, and where the cicatrices have been destroyed by successive ulcerations. These cicatrices are almost always formed between tubercles, to which they seem to serve as connecting links. At other times, blackish scales may be observed on different points of their circumference, which often remain for a long time.

This variety of *Lupus* may also occupy large surfaces on the breast, the limbs, the anterior part of the thighs, and even on parts that are seldom the seat of this form.

2. *Lupus destroying the subjacent parts.*—This variety principally affects the nose, and is developed either on its alæ or extremity; in a majority of cases its appearance is preceded by redness and swelling accompanied with coryza. One of the alæ swells and becomes painful, and is the seat of a livid redness. A slight ulceration takes place, a small scab is formed; if this is picked off, it is replaced by another which is thicker, and each time that it is removed it occasions a loss of substance, but little perceptible at first, but very visible after a short lapse of time. This redness and swelling often extend, and the parts become covered with a scab which gradually augments in thickness; the patient experiences but little pain, the skin and the cartilages are destroyed under the scab; on removing which an ill-conditioned ulcer will be seen, which discharges great quantities of a sero-purulent fluid. A fœtid discharge often takes place from the nose, the loss of substance is not easily discoverable from the swelling, but when this diminishes it is very visible. In other cases there is neither coryza nor swelling; a single tubercular, red, smooth, soft point is developed, and sooner or later ulcerates.

The extent of the destruction is very various; sometimes almost all the nose disappears; at others, the extremity alone is destroyed; but the disease does not confine its ravages to this point only; tubercles form on the cicatrices, and new ulcerations succeed them. The parts that were before exempt, are now entirely destroyed, and the nose may disappear even to the septum itself; a single opening leading to the nasal fossæ, replaces this part when it is entirely wanting. Oftentimes the nose is only diseased at its surface, but in an equal manner, so that in place of an organ of the usual size, there may be seen one of small dimensions and pointed, the nostrils of which have a tendency to become closed up; it is always red, except at the angle where the alæ join the septum; at this place the projecting cartilage presents a yellowish hue, which

is very perceptible through the transparent cicatrix. But this disposition to closure of the nostrils is still more remarkable in *Lupus* accompanied with hypertrophy. In other cases the nose is not lessened in this manner, but appears as if a part of it had been removed with a cutting instrument.

The destruction of substance is not in proportion to the duration of the disease; sometimes, after it has lasted several years, a small part only may be found wanting, whilst in other instances it may be entirely eaten away in from ten to fifteen days. We seen a case under the care of M. Biett, that was very remarkable for the rapidity of the ulceration; it was that of a woman aged about thirty-six, in whom this disease had destroyed in a few months, a part of the left side of the nose; the disease was checked by means of the *Pate arsenicale*; but the extremity assumed a livid red colour; scabs were formed in the nasal fossæ, which also discharged a puriform fluid. This livid red colour of the end of the nose sometimes disappeared, and again became very strong. It much resembled the appearances produced by *Acne rosacea*, but it should be remembered that there were no tubercles. Finally, this colour became deeper, a slight ulceration took place, followed by a scab, which in a few days was very thick, at the same time the patient suffered violent pain. This scab was removed four or five days after its formation, by means of lotions and emollient cataplasms, but the extremity of the nose was already destroyed. The disease was checked with a solution of the acid nitrate of mercury; but about three weeks afterwards, this part again assumed a red colour, and fresh ulcerations commenced. A red point appeared on the right side of the upper lip, which was very painful, and was soon covered with a thick scab. The ulceration rapidly advanced, and a part of the lip was destroyed in fifteen days. Antiphlogistics, lotions, with Labarraque's liquor, having produced no effect, the disease was again put a stop to by the use of the *Pate arsenicale*. From this case it may be seen, how rapid the course of this disease may be, and also that it is not always preceded by tubercles. A morbid redness with a slight tume-

faction of the end of the nose, were the only forerunners of the ulceration and destruction of this part, and on the upper lip these only preceded the ulceration by a few days.

In almost all the cases of *Lupus* of the nose, there exists, at the same time, an affection of the mucous membrane of the nasal fossæ; and even, in some cases, all the septum may be destroyed before the external part of the nose has materially suffered. At other times this destruction commences in the skin, extends to the pituitary membrane, involves all the mucous membrane of the nostrils, and reaches that of the palate, and even may attack the gums, and there occasion loss of substance. We have spoken of those cases where the nose only was affected, but too often the disease, at the same time, spreads over the face, and produces terrible ravages.

Lupus with Hypertrophy.—This variety presents many remarkable phenomena; it usually commences on the face, (which is almost exclusively its seat,) by soft indolent tubercles, which are not very prominent, though they are numerous; they occupy large surfaces, a considerable portion of the cheek, for instance, and sometimes the whole face; they do not ulcerate at their summit, at least very rarely, but their base gradually enlarges, the skin and subjacent cellular tissue become the seat of an indolent engorgement, so that the swelled and diseased surfaces present a sort of puffiness that is very remarkable; after a certain time the face is studded with reddish points, which are tubercles, that, from the swelling of the subjacent parts, do not rise above the surface; here and there white points may be seen; these are scars, which have succeeded to former tubercles. What is very singular in this disease, is the formation of these scars, which supervene on small circumscribed tumours, without these having been the seat of ulceration or incrustations. In fact, the tubercles are the seat of an insensible and constant exfoliation, and it appears as if all the layers of the hypertrophied skin are successively pushed outwards, and gradually destroyed by successive desquamations.

The face may, under such circumstances, acquire a size that

is truly astonishing; the cheeks are soft and flabby, they present a tissue which preserves to a certain degree any impression made on it by the finger, somewhat resembling the state of these parts when they are affected with *Elephantiasis*. The forehead and eyelids are swelled, and the eyes hidden under these tumefied parts, are buried as it were, in their orbits. The lips form two great cushions, and their mucous membrane is exposed from this over-distention. Even the ears may participate in this general puffiness of the face.

We have seen among other cases, this state even carried to a greater degree in two patients in the Hospital of St. Louis, whose appearance, as may be supposed, was at once singular and frightful.

These tubercles, as we have already said, rarely become the seat of ulceration; when this does take place, it is usually very slight, and forms thin and adherent scabs. Their surfaces are generally dry; they present a bluish colour, and are the seat of a constant, but slight exfoliation.

The disease may last for an indefinite time, but when the parts return to their natural state, which never takes place spontaneously, and is only the effect of a long and well-conducted treatment, a greater degree of vitality is established in them; the tumefaction gradually diminishes, a slow resolution occurs in the tubercles; the circulation becomes more active in the skin, which insensibly regains its natural texture and appearance, though it is never wholly restored to its former state.

There is a variety of this form of *Lupus* which is entirely different, in which the ulcerations, that have succeeded either to the livid spots, or to the tubercles, become covered with small, red, soft tumours, that are somewhat fungous, and very prominent, the effect of which on the face is very repulsive. This variety is generally very severe.

These different varieties of *Lupus* may simultaneously exist on the same individual, and the first form may attack a part of the face, whilst the nose is at the same moment destroyed by the second, and the other cheek be the seat of the third. There

are even cases where *Lupus* extends its ravages on the surface, and is also accompanied with a real state of hypertrophy. Under such circumstances, great destruction often occurs, a terrible, and, at the same time, not uncommon accident, is the destruction of the lower eyelid, by one or more tubercles appearing on it, succeeded by ulceration. The skin of the cheek then becomes continuous with the conjunctiva of the ball of the eye; and it may readily be conceived that this state is not only repulsive, but that it entails much misery on the patient. In fact, without speaking of the *epiphora*, which is inevitable in such cases, the eye being in a great measure unprotected, becomes the seat of a chronic inflammation, the conjunctiva thickens, the cornea is rendered opaque, and blindness ensues. In some cases, the whole of the eyelid is not destroyed, but the small ulcerations, of which it is the seat, cause *Ectropion* when they cicatrize. The eyes then appear to be twice their natural size, which, joined to the vivid redness of the everted lids, adds much to the already hideous aspect.

In other instances, the thick scabs, which have remained adherent to the nose for a long time, discover on their falling off, not only a greater or less degree of destruction of parts, but also a swelling, which would obliterate the nostrils, either from the tumefaction itself, or from the cicatrices that are formed, if great care be not taken to prevent it.

At other times the ulceration may destroy a great part of the angles of the mouth, and a considerable portion of the lips: these surfaces, when deprived of the scabs, become contracted, and solid scars are formed, diminishing the opening of the mouth in a considerable degree.

Erysipelas of the face is often complicated with this disease. In some cases it may occasion serious consequences; but generally, instead of adding to the danger, it may mitigate the severity of the *Lupus*. We have, in fact, seen more than once, particularly where this latter disease is attended with hypertrophy, the appearance of the exanthematous affection followed by the most advantageous results, the diseased surfaces changed their aspect, the vitality of the skin became

greater, the resolution more active, and the disease terminated in a manner as happy as it was unexpected.

Finally, in very severe cases, where the *Lupus* goes on increasing, and destroys not only the skin, but also the cartilages and bones, extending its ravages on all sides, the patients may likewise experience symptoms of a chronic gastroenteritis, and sink under the effects of a slow fever, accompanied by a colliquative diarrhœa. This fatal termination is extremely rare, and the *Lupus* may last for years, constantly extending its attacks to portions of sound skin, or again destroying the newly-cicatrized surfaces.

It may affect the cartilages of the nose, and yet not injure the bones; it appears, indeed, that this terrible disease appertains more particularly to the skin. We have seen a great number of patients in the Hospital of St. Louis, who had been suffering from *Lupus* for years, without their having been subjected to any energetic treatment, and yet we have rarely met with any destruction of the bones, except of those of the nose, which, on the contrary, are often so entirely destroyed, that nothing is to be seen but a triangular opening, divided into two parts by the remaining portion of the septum.

Causes.—*Lupus* particularly affects children and adults; it is very seldom developed after the age of forty; it indiscriminately attacks both sexes, and in about an equal proportion. It is more frequently met with in the country than in cities, without our being able to assign any reason for this singular predilection, except it may be in the badness of the food with which the inhabitants of the former are nourished, or in the unhealthiness of their places of abode. It very often occurs in young scrofulous children, and lasts till beyond the age of puberty. Sometimes those individuals who were attacked in infancy, may be again affected with it in after life. Nevertheless, if it is a fact that the occurrence of *Lupus* often coincides with a scrofulous constitution, it is also true that it may manifest itself in persons in the flower of their age, who are robust, and have always enjoyed the most perfect health. As to the anterior existence of diseases of the skin,

among others the *Porrigo larvalis*, they do not seem to have any effect on the appearance of *Lupus*.

The variety designated by M. Bielt, under the name of *Lupus* with hypertrophy, is more especially connected with a scrofulous diathesis. Finally, the causes under the influence of which the disease has appeared to have been developed in some cases, can only be regarded as exciting causes.

Diagnosis.—*Lupus* may be confounded with several eruptions which have their seat in the face, and from which it is very important to distinguish it.

The circumscribed indurations that succeed to the pustules of *Acne*, may in some instances be mistaken for the commencing tubercles of *Lupus*; if their red colour, the erythematous areola that surrounds them, and the pre-existence of pustules, which are still to be found in their vicinity, were not sufficient characters to distinguish them from the livid, indolent tubercles of *Lupus*, whose appearance is preceded by no other lesion than a light violet tint of the skin.

Certain cases of *Lupus*, and particularly that connected with hypertrophy, may be mistaken for *Elephantiasis Græcorum*; but the fawn colour of the skin, the form of the tubercles themselves, presenting, as they do, the appearance of small, deformed, unequal tumours, and the partial enlargement of certain portions of the face, distinguish *Elephantiasis* from this variety of *Lupus*, which is accompanied, it is true, by a kind of analogous swelling, but it is equal and uniform. The same characters will serve to aid the diagnosis in cases where the *Elephantiasis* is ulcerated in several points, and presents here and there blackish scabs. These ulcerations are always more superficial than those of *Lupus*, and have not the same tendency to extend to the sound parts. *Elephantiasis* may also exist, in a majority of cases, on many other portions of the body; besides which, when it has arrived at this stage, it is accompanied by a crowd of symptoms, local and general, which are widely different from those of *Lupus*.

The scabs that cover the ulcerations in *Lupus* might, on a superficial examination, be taken for those of *Impetigo*; but

besides that these latter, which are yellow, prominent, rough, and but little adherent, especially on the face, differ greatly from the brownish, thick, and adherent crusts in *Lupus*, there can remain but little doubt when attention is paid to the lesions which have preceded both the incrustations and the cicatrices in *Lupus*, and finally to the ulcerations themselves, which, in the latter disease, succeed the disengagement of the scabs.

In all these cases, a little attention will always obviate any error; but there are two diseases, from which it is often much more difficult to distinguish *Lupus*, and whose diagnosis is of the highest importance to verify; these are *Noli me tangere* and certain varieties of *Syphilis*.

Under the name of *Noli me tangere* have been confounded *Lupus* and the cancerous affections of the face; there exists, however, strong differences between these two diseases, and, as has been said by M. Bielt, (a long time since,) the term of *Noli me tangere* should be restricted to the cancerous affections alone.

The hard cancerous tumours, which, although indolent, are often painful, that appear in persons advanced in age, on the lips, cheeks or nose, where they remain for a long time without ulcerating, offer, it is true, much resemblance to those of *Lupus*; but this latter disease is scarcely ever developed in elderly persons, and, on the contrary, this is the most common period for the attacks of the *Noli me tangere*. This disease commences by a single tubercle, whilst there are in most cases, several in *Lupus*. In the latter, the tubercles are situated in the most superficial layers of the skin, and are always indolent; cancerous tubercles are surrounded by a hard and circumscribed base, and are generally the seat of very acute lancinating pains. Finally, the *Noli me tangere* is accompanied by an inflammatory swelling of the soft parts, it is usually exasperated by cauterizations, and when once ulcerated, it not only involves the skin and cartilages of the nose, but it also attacks the bones and injures them deeply, phenomena that are never observable in *Lupus*. Cancerous ulcers are prominent, humid, and painful; they present a fungous as-

pect, and do not become covered with dry, thick scabs, like *Lupus*.

Syphilis occurs on the face with symptoms so analogous to those of *Lupus*, that they may cause much embarrassment at first. When these two affections are only characterized by tubercles, whose apex is not ulcerated, it is sometimes very difficult to discriminate them; nevertheless, the syphilitic tubercles are larger, rounded, and of a copper-red colour; they are not the seat of exfoliation, and even have less tendency to ulceration than those of *Lupus*, which are smaller, softer, more flattened, accompanied with a slight tumefaction of the skin, and almost always covered with a small epidermic scale. Finally, syphilitic tubercles on the face, which are consecutive symptoms of a venereal affection, are seldom seen, except in persons of a certain age, whilst *Lupus*, on the contrary, most generally occurs in young subjects. We shall not give as a diagnostic character, one that may be found in a recent work, where it is laid down, that one of the distinctive signs of *Lupus*, is its frequent occurrence on the cheeks and alæ of the nose; examples of the contrary are too common, and the author must have observed but few cases of this affection, not to know that the presence of tubercles on the alæ of the nose, is, on the contrary, in a great number of instances, an almost pathognomonic symptom of *Syphilis*.

As to the syphilitic ulcerations which succeed these tubercles, they also differ in a marked manner from those of *Lupus*; they are deep, their edges are swelled, of a copper-red colour, and regular; those which follow the tubercles of *Lupus* present a dull red colour, and only appear to occupy the superficies of the skin. As to those which characterize that variety of *Lupus* which attacks the subjacent parts, and which approaches still nearer in appearance to syphilitic ulcers, particularly in the cases where the nose is entirely destroyed, it differs from them in the manner in which this destruction takes place. Thus, in *Lupus*, the skin is usually first affected, the cartilages and bones are consecutively attacked, and in general not till after the disease has lasted for a long time. In *Syphilis*, on the

contrary, at least in such circumstances, the disease begins by attacking the bones; it is not till after they have been affected with caries and necrosis, that it extends to the skin; added to which, the work of destruction, in all these tissues, goes on in a much more rapid manner. Finally, whether it appears in the form of tubercles, or is characterized by the presence of ulcerations of different extent or depth, *Syphilis* is almost always accompanied by well-marked concomitant symptoms; among which may be mentioned, pains in the bones, exostosis, iritis, and ulcerations of the pharynx or soft palate.

Prognosis.—The prognosis of *Lupus* is always unfavourable; not because this disease endangers life, but from its being so obstinate in a majority of cases, as not to yield until it has caused a destruction of parts to a greater or less degree, and from its cure being attended with numerous, deformed, and indelible scars. It becomes much worse, when a cure is not attempted before it has already made considerable progress, or when it is accompanied by much hypertrophy, or when ulcerations succeed on the recently healed parts, and the cicatrices are destroyed. Besides, when these cicatrices remain soft, and of a bluish colour, and give a sensation of fluctuation on being touched, or when they are circumscribed by tubercles, a return of the disease is to be expected; and we have several times seen M. Bielt predict a renewal of the ulceration from the above characters. The establishment of the process of menstruation does not produce effects of sufficient importance, to permit us to base any prognosis on it.

Treatment.—The treatment of *Lupus* is both general and local. The general treatment is, in most cases, very simple; it consists merely of bitter ptisans, the administration of baths, and careful attention to the diet, &c.; hence, it will seldom be sufficient of itself to overcome this severe and obstinate disorder. Nevertheless, in some cases, general treatment appears to be important. Thus, when *Lupus* attacks persons who are evidently scrofulous, it is proper to place the patient on an appropriate course of treatment; and advantage will be derived from a solution of the hydro-chlorate of lime, in the

proportion of a drachm to a pint of water, which has been proposed as a substitute for the hydro-chlorate of barytes, whose effects are often pernicious: the patient is to take a spoonful every morning, increasing it in the same ratio every four or five days, till it is raised to twelve spoonfuls a day, or even more. For the same purpose, recourse may be had to ferruginous preparations, the sulphuret of iron for example; the patient should also be put on a generous diet, and reside where the air is free and pure.

Under other circumstances, to hasten the resolution of the tubercles, active means may be resorted to, which employed in conjunction with a well-directed local treatment, have sometimes powerfully contributed to the cure of this disease; such as the animal oil of Dippel, which is to be given in the dose of five or six drops, and gradually increased to twenty or twenty-five drops; Feltz's decoction, the Asiatic bills, Pearson's solution in the dose of a scruple, and afterwards increased to a drachm; that of Fowler, beginning with three or four drops, and augmenting the dose every eight days in the same proportion, until it has reached twenty to twenty-five drops a-day; but the utility of these different remedies are very doubtful, if they be not aided by local applications.

As to other general means, they consist in well-directed hygienic means; it is important that the patients should not expose themselves to too great a degree of heat or cold; for under such circumstances the cicatrices are very apt to open, especially in women. It is advantageous to re-establish the menstrual evacuation, if it has ceased, and to endeavour to keep up its periodical return.

The local treatment consists, 1st. In resolving applications, which are to be somewhat irritating; in order to restore the vitality of the skin, and hasten the resolution of the tubercles. 2d. In caustics, for the purpose of changing the state of the diseased surfaces, to restrain the ravages of the ulcerations, and to obtain persistent cicatrices.

The resolving applications should be resorted to, when the tubercles are not ulcerated, and when they exist around the

cicatrices. They are the only remedies that are effectual in *Lupus* with hypertrophy. Those preparations which best fulfil this end, are the proto-ioduret of mercury mixed with axunge, in the dose of ℥i. to ℥ss. in axunge ℥i. The deuto-ioduret of mercury in the proportion of from twelve to fifteen grains to a scruple, for the same quantity of axunge. Slight frictions with these ointments are to be made on all the parts that are covered with tubercles. But the remedy which succeeds best and appears to have the greatest effect in hastening resolution is the ioduret of sulphur in the proportion of gr. xii. or ℥i. to axunge ℥i. We have several times seen it employed by M. Bielt; and among others, in two very severe cases of *Lupus* with hypertrophy; frictions with this ointment modified the disease in a very advantageous manner.

A modern author appears to fear that after the use of these frictions, that *Erythema* or even *Erysipelas* may be developed, but such an objection is puerile; these inflammations cannot occasion any ill consequences, and they may even be salutary.

Sometimes these means are not sufficiently powerful; or there may be some inconveniences in persisting in their use, particularly where they have not occasioned any melioration, or where the tubercles have ulcerated at their summit. In the latter case, it has sometimes appeared that they only increased the ulcerations. We are therefore obliged to resort to caustics; these are the animal oil of Dippel, the nitrate of silver, caustic potash, butter of antimony, Dupuytren's powder, the arsenical paste of Frere Come, and the acid nitrate of mercury.

Whatever may be the caustic employed, there are certain rules which must be attended to. In the first place, it may readily be conceived that when the disease is extensive, cauterization should only be practised on a small spot at a time, and the diseased surface successively attacked. On the other hand, the state of these surfaces must be considered, before these preparations are applied. Thus, when the surface is ulcerated, humid, and clean, they may be used at once; if, on the contrary, it is covered with scabs, these must be removed

by means of emollient cataplasms; and finally, if the points it is wished to cauterize are the seat of indolent tumours, which are not ulcerated; if they present livid, dry patches, accompanied with a considerable tumefaction of the skin, or if it is a case of *Lupus* with hypertrophy, the surface should be removed by the application of a blister.

The *animal oil of Dippel* acts rather as a stimulant than as a caustic, but it often modifies in an advantageous manner, the parts to which it is applied. It is particularly serviceable in cases where the nose is the seat of an indolent and chronic swelling, presents a livid colour, and is constantly subject to an epidemic exfoliation. It is applied by dipping a camel's hair pencil in the liquid, and drawing it lightly over the diseased spot; this is to be repeated several times. We have often seen it produce a marked melioration, but never a complete cure.

Cauterizations with the *nitrate of silver*, *caustic potash*, and *butter of antimony*, are followed by very variable results, and they are never as efficacious as the following remedies.

Powder of Dupuytren, which is a mixture of the protochloride of mercury, and arsenious acid, in the proportion of one or two hundredths of the latter, and is a caustic which is at once mild and efficacious; it is particularly serviceable in *Lupus* when of little extent, occurring in children, women, and persons of irritable habits. To apply it, the surface is to be lightly sprinkled with it, by means of a powder-puff, so as to cover it about half a line or more. Although the use of this caustic seldom causes any pain, and is unaccompanied with any swelling of the surrounding parts, it is always well to apply it to small surfaces at a time. These should not exceed a quarter of a dollar in size; it forms a grayish, adherent incrustation, which remains attached for a long time, without it is removed by means of emollient applications.

Arsenical paste of Frere Come is a still more valuable and energetic remedy, and requires to be used with caution. It is particularly applicable to cases of *Lupus* of long standing and

obstinate character, whose ravages cannot be checked by milder means. It is also very useful in that severe variety of this disease, which destroys the tissues to some depth. It is applied by mixing a small quantity on some hard body, as a slate or saucer, with a little water; and by means of a spatula this liquid paste is to be spread on a surface not exceeding half an inch in diameter. We have seen it used a great number of times in the Hospital of St. Louis, and we have never met with a single instance in which its application was followed by those general symptoms of a severe and dangerous character, which are usually supposed to be its usual concomitants; but in almost all the cases, this cauterization, occasions local effects, constituting a series of symptoms, which, though apparently alarming, yield with great facility and promptness to the proper remedies. Thus, the application of this substance is generally followed by *Erysipelas*, which, though sometimes light, may be very severe; the whole face becomes enormously swelled; the patient complains of violent head-ache, but at the end of a few days, by means of irritating pediluviums, and a few leeches behind the ears, by diet, emollient and laxative injections, without, in most cases, being obliged to resort to general blood-letting, all the symptoms disappear, the face returns to its natural colour, and the only remaining mark of the caustic is a blackish, thick, very adherent scab, which remains attached for a very long time.

Finally, the *acid nitrate of mercury* is also a very energetic caustic, and has also been employed with good success at the Hospital of St. Louis. It, like the former, causes an erysipelatous inflammation, but of less violence, and more easily subdued. It may be applied, not only to the ulcers, but also to the tubercles, and on the cicatrices, if they are soft, bluish and fluctuating, menacing a fresh ulceration. It is used by passing a small dossil of lint, dipped in the solution, over the diseased surface to the extent of a dollar, or lint may be applied to the part, and then moistened with the caustic. The surfaces immediately assume a white colour, and in a short time a yellowish scab is formed, having but little adhe-

rence, which becomes disengaged in from eight to fifteen days. This cauterization is very painful; it, however, lasts but for a few instants.

As to the actual cautery, it is seldom followed with advantageous results, and often indeed aggravates the disease; the cartilages swell, and become the seat of a chronic inflammation, which only adds to the violence of the original disease.

Whatever may be the caustic employed, when the scabs are detached, they leave a healthy ulcer, and cicatrization soon takes place; but in a majority of cases, one application is not sufficient; they must be repeated again and again, perhaps for years, if the disease is of any great extent. In such cases, the greatest patience is necessary, as well on the part of the physician, as of the patient: perseverance will generally effect a cure. We have seen among others, in the Hospital of St. Louis, a case of very severe *Lupus* in a young girl, that had involved the whole face, and which only yielded, after a treatment of several years, during which more than fifty successive cauterizations were used.

There are some indispensable precautions to be used in the treatment of *Lupus*; for example, it is of the highest importance to watch very closely the formation of the cicatrices, to prevent their occasioning great deformities, or closing up natural openings. Thus, among others, great care must be taken to prevent the closure of the nostrils; this may be obviated by the introduction of small pieces of prepared sponge. This means should be continued for a long time, for it should be recollected that the tendency in these openings to become united, not only exists during the period of ulceration, but also for a long time after the formation of the cicatrices.

Finally, the local and general treatment of *Lupus* is sometimes advantageously assisted by simple or vapour baths, but the most useful of these means are *douches* of vapour, particularly in *Lupus* with hypertrophy.

ORDER X.

PELLAGRA.

WE have never seen this affection, which is peculiar to certain parts of Italy; the description we are about to give, is principally drawn from the clinical lectures of M. Biett, and from an article by Dr. Holland, in the eighth volume of the Medico-Chirurgical Transactions.

M. Biett, who has seen the *Pellagra* in Italy, considers it as symptomatic of lesions of the internal organs, and particularly of the digestive canal. This opinion is also maintained with great talent by Dr. Giovanni Strambio, in a work which he has recently published.

Pellagra occurs epidemically in the plains of Lombardy, and the name of *Pellagrosi* has been given by the Italians to the unhappy sufferers from it. The cutaneous affection only exists during the spring and summer, and disappears towards the middle of autumn, but the other symptoms are constant. Hence it is during the spring, that physicians who visit Italy to study this disease, should go to that country—at Milan, they will find numerous opportunities of observing it.

The march of *Pellagra* is always chronic, and its duration is generally several years. A state of both moral and physical depression, loss of appetite, pains in the epigastrium, diarrhoea, vague and dull pains in the limbs, great lassitude, cephalalgia and stupor are the usual symptoms that precede the occurrence of the cutaneous affection: this manifests itself on the back of the hands or feet, on the limbs, neck, and but rarely on the face, in the form of small, red spots, which gradually extend, and are accompanied by a slight tumefaction of the skin, as well as a feeling of tension and itching. The redness of the spots is deeper than that of *Erysipelas*; and their surface, which is at first shining, soon becomes covered with scales

resembling those of *Psoriasis*. After a certain time, the spots unite, and thus form large patches. The skin in these places is thickened, and presents rents and fissures of different depths. The scales gradually fall off, and discover a red and shining surface; fresh scales are rarely formed again that year. Towards the end of the summer, or the commencement of autumn, the skin regains its natural state, but the general health is rarely completely re-established.

The general symptoms which accompany the eruption we have just described, are almost always those of gastro-intestinal irritation, and among them, diarrhœa is the most remarkable; fever is rarely observed, and the menses occur at their accustomed periods.

The following year, the disease reappears with still more severe symptoms; the languor and depression are more strongly marked; the diarrhœa is often very troublesome, the patient can no longer undertake his accustomed work; there are cramps in the limbs, and other spasmodic symptoms. The cutaneous affection also appears, and is of greater extent; the fissures are deeper, particularly about the joints of the fingers, as takes place in *Psoriasis inveterata*, when it occurs on these parts. Towards the middle or end of the autumn, these symptoms begin to disappear, but their remission is less perfect than that of the preceding year.

In the third year, the disease returns with additional violence; the febleness is extreme; the limbs, weakened by pain, can scarcely support the patient; the diarrhœa continues, and there is sometimes a dysentery; anasarca of the inferior extremities frequently occurs; at other times, ascites may take place, or even effusions into the thoracic cavities. Symptoms of some affection of the encephalic organs sometimes supervene, as vertigo, noise in the ears, epileptic paroxysms, and a state of idiocy or mania; it appears that when the latter occur, the progress of the eruption is somewhat retarded.

This affection continues to aggravate from year to year, until the constitution of the patient is entirely destroyed; when a colliquative diarrhœa, and a state of emaciation with

cerebral symptoms of greater or less intensity terminate the sufferings of the patient. The duration of *Pellagra* is always several years; it may be prolonged from six to twelve, or even beyond that. It may terminate by a restoration to health, provided the proper means are used; at other times the disease may end in idiocy or madness, and even in death.

Dissection.—The examination of the bodies of persons who have died from this disease, almost always discovers organic lesions to a greater or less extent, and particularly in the digestive canal. Nevertheless, (here as in many other cases,) the majority of authors who have treated of *Pellagra*, have regarded these lesions, not as the cause of the disease, but as the consequences of it.

M. Biett does not coincide in this opinion; on the contrary, he considers the cutaneous affection as one of the numerous symptoms of a disease in which one or more of the internal organs are constantly affected.

Two cases of dissection of *Pellagrosi* made at the Hospital at Milan, by Dr. Carswell, of Glasgow, who has had the kindness to communicate them to us, confirms this opinion, which is also held by this gentleman. In these individuals, who had presented evident symptoms of chronic irritation of the digestive canal, there was a large perforation of the stomach resulting from a softening of the coats of that viscus; other points of the mucous membrane also offered unequivocal traces of chronic inflammation.

Causes.—Both sexes are equally subject to this affection, it is confined to adults; some authors regard it as hereditary. It is almost exclusively observed in the lowest class of persons, particularly among the peasants and those who follow agricultural pursuits. The immediate cause of its development appears to be a peculiar and unknown condition of the atmosphere, or rather of the soil. The humidity and miasmata that arises from the marshes where rice is grown, and which is cultivated in great abundance in the plains of Lombardy, joined to the great heat, are perhaps, the principal causes of this singular disease

Treatment.—The treatment consists, above all, in leaving the places, and the employment, which are evidently the causes of the development of *Pellagra*; but it is necessary that this removal, to be efficacious, should take place at the commencement of the disease, at a later period it will not effect the desired end. In the advanced stage of the affection, the treatment should be conformable to the nature of the predominant symptoms, which are those of irritation of the digestive organs.

ORDER XI.

SYPHILITIC ERUPTIONS.

VENEREAL eruptions date from the origin of *Syphilis* itself, or at least they were the first symptoms by which this disease manifested itself in Europe. In fact, the first authors, who wrote on *Syphilis*, towards the end of the fifteenth century only speak of pustules having their seat on the skin, and their names of scabby, humid, or ulcerous pustules, seem to indicate that they were aware of the different species. Confounded among the multitude of forms with which *Syphilis* appears, they were for several centuries without attracting particular attention, or were at most, but slightly noticed by authors. At the commencement of the nineteenth century, Alibert constituted a distinct family of them, which he termed *Syphilides*; but by this denomination he meant all the alterations of the skin produced by the venereal virus; and in grouping the species from their form, and often indeed, from their different states, without paying attention to the primitive lesions, he has united varieties which are essentially distinct, and admitted species, (*Syphilide ulcereuse*,) on characters that are merely secondary, (ulcerations,) and which may also succeed to wholly different alterations.

For some years past, M. Bielt, in attending particularly to these diseases, has studied their course and development with great care; and by selecting their primary characters, he has grouped them from their elementary lesions, and has succeeded in establishing distinct varieties, exempt from all confusion. We shall treat of these diseases according to his plan. We attach the denomination of *Syphilitic eruptions*, (*Syphilides*,) to the venereal affections, which having the skin for their special seat, constitute real eruptions, both from the ex-

tent of the surfaces they occupy, from the primary alterations which may all be referred to the elementary lesions of eruptions of another nature, but rejecting all those prominent productions, all those symptoms which appear to us to have been erroneously confounded with the venereal eruptions, only admitting among them those ulcerations which succeed to scabs, or occur on the summit of a tubercle.

Thus, the venereal chancre, (which takes place without being preceded by any elevation of the epidermis, or vesicle, as was a long time since observed, and has recently been again insisted on,) the ulcers, warts, excrescences, &c. cannot be admitted in this class. They constitute essential and wholly different symptoms.

We mean by *Syphilitic eruptions*, any true eruption appearing on the skin under the influence of the venereal virus. They may be *exanthematous*, *vesicular*, *pustular*, *tubercular*, *papular*, and *scaly*. They are sometimes *primary*, that is to say, that they accompany the other symptoms, and are developed with them a short time after the infection; in some cases, they may be the only symptoms by which the *Syphilis* manifests itself. But in general, they are *consecutive*, that is to say, they are developed either immediately after the disappearance of the primary symptoms, or not for weeks, months, or years.

Their march is usually chronic; when they are primary, however, they may pursue an acute course, particularly when they are exanthematous.

All ages are subject to them, from the infant who punished for the faults of those who gave it birth, brings into the world an affection which soon manifests itself on all its body, and generally hurries it to an untimely grave; to the old man, who is astonished to find, that he is then to pay for a pleasure he had forgotten.

The symptoms occasioned by these eruptions, may be divided into three classes: to the first belong those which are common to the whole order; to the second belong the peculiar features of each species. Thus the papular variety presents

different appearances from the pustular, &c. Finally, in the third, we shall speak of that assemblage of general symptoms, the melancholy and constant attendant on these eruptions.

Common symptoms.—These diseases generally present a *copper colour*; in some cases, where they are acute, this hue may be less strongly marked, but still they never appear with the true inflammatory red tint. They usually assume a circular form, whether the eruption appears in small isolated patches, or to such an extent as almost to cover the extremities. Sometimes the circle is not complete, particularly in the cases last alluded to, but it is always easy to fill up the space in idea, as the part that is wanting is seldom more than a small segment of the ring, of which there may be seen from a half to a greater proportion.

The *scales* are always thin, dry, and grayish; the *scabs*, thick, greenish, sometimes black, and always hard and furrowed. The eruption may affect all parts of the skin, but the face and particularly the forehead and alæ of the nose, the back and shoulders, are its usual seats. It has been said that the hands and wrists are often attacked, but among the numerous cases we have had an opportunity of observing, this form very seldom occurred. The skin in the intervals between the eruption, is most generally dry, and the patient exhales an infectious and peculiar odour. Cold favours their development, whilst heat represses it.

Particular symptoms.—We have said that these eruptions may assume the exanthematous, vesicular, pustular, &c. form; we shall examine these in succession, or at least point out the symptoms which characterize each.

Exanthematous form.—This presents two varieties, the one primary and acute, the other secondary and chronic.

The first, (*Roseole syphilitique; Syphilide pustuleuse ortiee*, Al.) occurs in the form of small, irregular, grayish spots, of a copper-red colour, slightly confluent, and disappearing, though slowly, under the pressure of the finger. This variety principally manifests itself on the body and limbs; it always accompanies the primary symptoms, particularly *Blennorrhæa*

gia. These small spots appear without any general symptoms, sometimes in the course of one night; they are accompanied by a slight itching, and are usually of a transient nature; they gradually disappear, and only leave a slight grayish tint, which lasts for months. This eruption is usually transient, ephemeral, and vanishes in a few days.

In other instances, this eruption is consecutive on a former infection, (*Macula syphilitica; Ephelides syphilitiques.*) It also appears on the body and limbs, but may also occur on the face, and especially on the forehead. This variety presents itself in the form of spots, which, though sometimes irregular, are generally circular, of a dark copper colour, never confluent, and disappearing very imperfectly on pressure. Their size in the majority of cases, is about that of half a dollar; they become covered, in some rare instances, with a slight exfoliation, accompanied with a little itching. These spots may exist alone, but in general they attend on syphilitic symptoms, having their seat either in the skin or in other tissues.

This affection terminates by resolution, or by a slight desquamation; but its patches, notwithstanding the assertions of some pathologists, never become ulcerated, and if in some rare cases they have been covered with scabs, these have been occasioned by some accidental pustules.

Vesicular form.—This variety is one of the rarest forms of *Syphilis*. M. Biett, who has seen such a multitude of venereal eruptions, has only met with it, three or four times. We ourselves, have been fortunate enough to observe it in one patient in the Hospital; an account of the symptoms presented by this young girl, will serve for a description of it.

J—, aged sixteen, of a strong constitution, sanguine temperament, &c. suffered for some days from an affection of the throat; she felt at the back part of her mouth an unusual heat and smarting, and had some difficulty in swallowing her saliva; she soon perceived some small pimples on different parts of the surface of her body. She also had some slight general symptoms, consisting of anorexia and feverishness. In this state, she presented herself at the Hospital of St. Louis, during

the month of July, 1827. The presence of vesicles, (for they were, in fact, small elevations of the cuticle, formed by the effusion of a transparent fluid,) the appearance of which had been preceded by *Angina*, and some fever, led to the belief that it was *Varicella*. It was the sixth day of the disease, the eruption covered nearly the whole body, and the vesicles, which left in some places large intervals of sound skin, were in different stages of development; some were just beginning, whilst others were already shrivelled. There was no other concomitant symptom, except the *Angina*.

M. Biett having examined this patient with attention, discovered great analogy between the eruption with which she was attacked, and the other cases of the vesicular form of *Syphilis* he had before seen. A close examination, and the ulterior modifications that the disease underwent, confirmed this opinion. In fact, the vesicles were small; their base was surrounded by red and copper-coloured areola; they were not purely inflammatory; their progress was extremely slow, and they occasioned no local symptom, no itching, and scarcely any heat. They gradually shrivelled, and the fluid was absorbed. In some, it became opaque, concreted, and gave rise to small scales, which fell off at different times; but in whatever manner they terminated, they all left behind them a coppery hue, presenting all the characters of syphilitic spots.

But what added to these singular phenomena, and contributed in a great measure to elucidate the real nature of the disease, was the situation of the throat, at the entrance of the patient into the hospital. On the mucous membrane of the pharynx was a round ulceration, with a grayish bottom, and regular sides, &c. The patient was put on the use of diluents alone, in order to see if any characters of a more marked character would develop themselves; but at the end of fifteen days, she became discontented that the disease was not cured. There could be nothing learnt from her to confirm the diagnosis, which was, however, sufficiently confirmed by all the symptoms that could be observed.

Persuaded that the disease would become better developed

one of us visited her about a month after she had left the hospital, and found that her whole body was covered with syphilitic spots. She was then under the care of an empiric, and would not re-enter the hospital.

Pustular form.—This variety is characterized by the presence of small tumours, filled with an ichorous or purulent matter. These pustules, the contained fluid of which usually concretes and forms scabs, leave a grayish tint, a cicatrix, or even an ulceration, on their disappearance. This appears to have been the first form in which *Syphilis* occurred in Europe.

In some cases, these pustules, (*psudracious*,) are small, and aggregated in groups, (*Syphilide pustuleuse miliaire*.) They are exceedingly numerous, and are usually elongated or conical; their base is hard, and surrounded by a copper-coloured areola; they themselves are of a dull red; they are developed in a successive manner, and may be seen in all their stages on the same individual. Their progress is slow, and the inflammation rather slight; nevertheless, it sometimes is of sufficient violence to extend to, and destroy the dermoid tissue, leaving a small, whitish, circular cicatrix, depressed in the centre, and about the size of the head of a pin. It is, without doubt, from these elementary lesions having been confounded with papulæ, that these cicatrices, which, at least in a majority of cases, are the result of pustules, have been described as belonging to the papular affections.

This variety may occur on all parts of the surface of the body, but is most generally observed on the face and forehead, where, at the first glance, it greatly resembles *Acne rosacca*; the pustules dry, and form a small scab of a grayish-yellow colour. This scab becomes detached, falls off, and sometimes leaves a cicatrix, but usually, there is nothing to be seen except a slight injection of the vascular tissue. These psudracious pustules rarely ulcerate; this only takes place when they have become confluent.

We have seen some instances, and among others, one in the hospital, where these pustules were situated on the legs,

and had been preceded by violet and almost black spots; these united, became confluent, and the skin presented true sanguine engorgements of the size of a dollar. In the intervals, it offered a peculiar corpse-like appearance. These cutaneous ecchymoses occurred on the internal part of the leg. Under such circumstances, a multitude of the small pustules may become confluent, and occasion ulcerations.

Pustular *Syphilis*, however, often presents very different characters. (*Syphilide pustuleuse lenticulaire*, Al. *Ecthyma syphilitica*.) It appears in the form of large pustules, (*phlysiacious*,) which are flattened, isolated, and not prominent; appearing on the contrary, to be depressed at their centre.

These pustules are sometimes of the size of a small bean, (*S. pustuleuse lenticulaire*,) occurring in great numbers, and very little elevated. Their base is hard, and they contain only a small quantity of a purulent fluid, the colour of which being of a yellowish-white, forms a strong contrast with the surrounding copper hue. They particularly occur on the breast and face, and are very rarely followed by ulcerations; a small scab is formed, which falls off, and leaves a cicatrix, though in some cases, only a livid injection, or a small chronic induration. Nevertheless, it may happen, that the pustules of this variety may inflame to a greater degree, the purulent fluid be more abundant, several of the pustules become united and open, the liquid they contain concretes and forms thick, greenish scabs, surrounded by a large violet areola; they are very adherent, and appear to penetrate into the very substance of the dermoid tissue; deep ulcerations always succeed to this state of things.

At other times, the pustles are still larger, (*Ecthyma syphilitica*,) and are analogous in many respects to those of *Ecthyma*, differing, however, in some of their characters. They are generally distinct, and few in number; they occur on the limbs, and especially on the legs, in the form of a livid spot, of the size of a shilling, or even larger. The epidermis becomes elevated to some extent, and is distended by a grayish, sero-purulent fluid; the tumour slowly increases, and is

surrounded by a large copper-coloured areola, very different from that of *Ecthyma vulgare*, which is of a reddish-purple. At the end of some days, it breaks, and effuses a liquid which concretes and forms a blackish and very hard scab; this gradually becomes very thick, is furrowed circularly, and is oftentimes perfectly round. This development takes place without any local inflammatory symptoms; there is little heat, the surrounding parts are not painful, and the patient only experiences a little smarting. The scabs are very adherent, and may remain for a long time before they become detached. When they are disengaged, either naturally, or from the effects of emollient applications, they leave round ulcerations, which are generally deep, and have regular edges, which are constituted of a hard tissue of a violet colour; the bottom is grayish and of an unhealthy appearance. These ulcerations have no tendency to enlarge. In a short time a scab is again formed, and falls off; this continues till from a proper treatment the incrustations become thinner, the ulcerated surface in a cleaner state, and is gradually replaced by a round and indelible scar. This is the most common form of pustular *Syphilis*, and is the variety that most usually affects new-born children. In such case, the pustules are tolerably superficial, flattened, oval, and very numerous; they become covered with blackish scabs, which are rather thin, and followed by small ulcers. There is at the same time a certain characteristic appearance in the expression and features, which it is difficult to describe; the skin is dry and harsh, the infants are thin and attenuated, their features are wrinkled, so as to give them the aspect of little old men; they also exhale an infectious odour.

Sometimes the skin which surrounds the nails becomes the seat of syphilitic pustules, or they may even form under these parts. The pustules are succeeded by ulcerations, from which flows a sanious pus that excoriates the surrounding parts; at last the nails fall off. They are renewed very slowly, and in a diseased state, becoming small, narrow, rough, thin, and friable. The ulcerations cicatrize; the skin is of a vivid red on these parts, bleeds on the slightest violence done to it, and

is sometimes the seat of very acute pain. This variety of *Syphilis* is very often secondary and consecutive.

Tubercular form.—(*Syphilide pustuleuse en grappe. Syphilide pustuleuse merisee, Al.*) This is one of the most common forms of *Syphilis*. In this variety, the venereal eruption manifests itself by tubercles of various sizes, which are of a red or copper-colour, rounded, flattened, or conical, sometimes scattered and distinct, but in the greatest number of cases, assembled in groups, or even disposed so as to form circles. These circumscribed indurations may remain indolent for an indefinite time, continuing smooth and polished, or else they may be followed by ulcerations which become covered with thick scabs, and confined to a small surface, may extend in depth; or, in other cases, they may attack the skin to a considerable distance around.

It may be developed on all parts of the surface, but it usually affects the face; the nose and angles of the lips are so frequent a seat of it, that the presence of a tubercle in these spots is almost a pathognomonic sign of a venereal affection. It sometimes occurs in the eyebrows or scalp, and causes the loss of the hair by the ulcerations, which are its almost invariable results. We have seen it occupying the whole body.

It may present a multitude of different states; we shall only indicate those which occur the most frequently. Thus, it sometimes appears in the form of small tubercles, the size of which varies from that of a head of a pin to that of a pea: they are round, of a coppery hue, generally arranged so as to form perfect circles of different diameters. Each tubercle becomes covered with a small, scaly, dry, grayish disk, which does not entirely hide its apex; the centre of these circles is healthy. This variety is very rarely followed by ulceration; when it begins to heal, the tubercles gradually diminish, and become less prominent. After some time, nothing is perceptible, except a livid red tint, which also disappears. This variety is more especially to be met with on the forehead and neck; it is never primary. At other times, the tubercles may be larger and aggregated in irregular groups; they are oval or

pyriform, and very prominent; in some instances they are as large as a small olive. They are smooth, shining, and polished at their summits, never desquamate, occasion no pain, and may remain stationary for years. They seldom or ever become ulcerated. This variety is generally to be seen on the face, and particularly on the cheeks or extremity of the nose. It is always consecutive.

In many cases, the tubercles, though few in number, are large, distinct, rounded, of a violet-red colour, and surrounded by a copper-coloured areola, and are especially developed on the face, and more particularly on the upper lip and nose. They remain stationary for a variable period, but finally become painful and tense; an erythematous patch appears around them, which presents some peculiarities in its colour; as it is not of the usual tint of red, but rather borders on a violet. The summit of these tubercles soon ulcerates, the ulceration extends in depth, and becomes covered with a thick scab; new tubercles are developed whose march is more rapid, the ulcerations become confluent, and a large surface is to be seen, presenting a hard blackish, and very adherent crust. When this is removed, it discovers beneath an irregular ulcer, having, however, regular edges, constituted of a firm violet-coloured tissue. The centre is generally deep. New scabs form, and on their disengagement show that the work of destruction is going on, particularly when seated in parts where the cellular tissue is thick. Thus, one of the *alæ* of the nose, or a considerable portion of the lip may be destroyed. The remaining surfaces are of a livid red, and present regularly rounded forms, as the quarter or half of a circle. In those cases where the ulceration has entirely destroyed the nose, so as to leave the opening of the nasal fossæ on a level with the cheeks, of which we have seen numerous examples in the Hospital of St. Louis, the disease has always, (or at least in a majority of instances,) commenced by an alteration in the bones and internal tissues; necrosis, caries, as well as ulcerations of the mucous membrane took place, and the disease gradually extended from within outwards; the skin soon participated in the mor-

bid changes of the subjacent parts, becoming thin and ulcerated; after this, all obstacles being overcome, the ravages of the disease were very rapid. This variety is always secondary.

Under other circumstances, there are large, red, hard, rounded tubercles, scattered over different parts of the body, but principally on the back, sometimes equalling a small hazelnut in size. They never become covered with scabs, and may remain stationary for a long time; but at the end of a certain period, ulceration commences at their summits, gradually extending to the surrounding parts, assuming a spiral form in its progress, and oftentimes destroying the skin to a great extent, healing at one extremity, whilst the other is constantly increasing, (*Syphilide pustuleuse serpigneuse*, Al.) These ulcerations, which describe circumvolutions of various forms, as segments of circles, circles, zigzags, and spirals, or even may appear in the form of ciphers or letters, &c. are very superficial, and seldom exceed a few lines in breadth. They become covered with thick, hard, black, very adherent scabs, and leave indelible and deformed scars. In most cases new tubercles are incessantly forming, which, not all ulcerating at the same time, the different stages of the eruption may be simultaneously perceptible. We have seen in the Hospital of St. Louis, a patient who was entirely covered with this variety of syphilitic eruption. His face, scalp, arms, and especially his back were seamed by long, mishapen scars, here and there interrupted by large, prominent, red tubercles, and from time to time the serpentine ulcerations occurred in large numbers. This variety is always consecutive.

Finally, the *tubercular syphilitic* eruption may appear in another form, which sometimes constitutes a primary symptom. Here, there are round, thick, flat tubercles, the summits of which become the seat of small linear ulcerations, (*pustules plates*, Cullerier.) Sometimes these tubercles are not larger than a small bean, as for instance, when they occur at the point of junction of the alæ of the nose with the cheek; or at the angles of the lips. At other times, on the contrary, they acquire a diameter of half an inch, and are several lines

in thickness; their colour is a very clear livid red; they occur more particularly on the scrotum, penis, pubis, thighs, and around the anus. Their summit is soon attacked with a small linear ulceration, and appears chapped, exuding a sanious fluid, which exhales a peculiarly nauseous odour. Sometimes all the scrotum is covered; they are distinct, round, and remarkably prominent. In some cases, especially around the anus, they become confluent, and present large, but always superficial ulcers. This variety may be primary, but it generally constitutes a consecutive symptom.

Papular form, (Lichen syphilitique.)—This consists in an eruption of small, slightly prominent, hard, solid elevations, containing no fluid, never followed by true ulcers or cicatrices, and terminating by resolution and desquamation. It may present two different states; one being acute and usually primary; the other chronic and always secondary. In the first variety, (*Lichen syphilitique; Scabies venerea*, of some authors,) the papulæ are very small, numerous, slightly conical, sometimes innumerable; they present a copper colour, and in some places violet areolæ, which are confluent and give to the skin an appearance of large coppery patches, studded with a multitude of small prominent points of a lighter colour. They often accompany a gonorrhœa, or are developed a short time after the disappearance of the discharge; this is also the opinion of Carmichael. These papulæ generally manifest themselves on all parts of the body, but especially on the face; their appearance, far from taking place in a successive manner, as has been stated in a recent work, is on the contrary almost simultaneous, and the eruption is developed in twenty-four or forty-eight hours. It is seldom attended with any general symptoms. We have, nevertheless, sometimes seen it preceded by cephalalgia, general uneasiness, some fever and great itching. Among other cases, we have observed these phenomena in a remarkable degree in a patient at the Hospital of St. Louis. This was a young man of about twenty years of age, who had been sent to the Hospital de la Pitié, as suffering under small-pox,

but the eruption evidently presented the characters of papular syphilis; it accompanies a gonorrhœa. It is one of the mildest forms of the syphilitic eruptions. Bateman has said that the papulæ sometimes ulcerate, and in a recent work, they are described as always terminating in ulceration, when left to themselves, and being replaced by violet-coloured cicatrices. This is a manifest error. Even when left to themselves they may speedily disappear by resolution. It is possible that their summit may ulcerate in some cases, as is observed in *Lichen agrius*; when this is the case, they exude a fluid which concretes and forms extremely light scabs; but these examples are exceedingly rare, and besides the ulcerations in *Lichen* never leaves scars. It may be said, that they never occur after this form of syphilitic eruption. In almost all cases, the eruption fades in a few days, and a slight and nearly insensible desquamation takes place, the papulæ disappear, and leave small spots which gradually vanish.

In the second variety, this eruption follows a chronic course; it manifests itself by larger papulæ, which are flat, of the size of small beans, and of a copper colour. They are slightly prominent and rounded. They are developed in a slow and successive manner, and at first present small yellow spots, which gradually become elevated and constitute indolent papulæ, having no areola at their base, generally occurring in large groups, and separated by intervals in which the skin is dry and withered; they excite no itching. They occupy the limbs, particularly on their surfaces of extension; but the forehead and scalp are also their seat in many instances. They are always consecutive, and accompany other syphilitic affections, especially pustules. It is very rare that this variety terminates by retrocession. It is generally of long continuance, and the apex of each papula becomes covered with a dry, grayish pellicle. These fall off, and are renewed until the small elevations on which they are situated are reduced to a level with the skin, which now only presents spots of a grayish-white colour, that are very long before they disappear. We have sometimes seen these papulæ cover almost the whole

body, having but few intervals between them; the skin was withered, wrinkled and dry, offering a general copper hue; the papulæ were the seat of so strongly marked a desquamation, that when they were reduced to a level with the skin, the intervals were hidden by small pellicles, and the disease at the first glance, resembled some of the scaly affections.

Scaly form.—*Syphilitic* eruptions sometimes manifest themselves by dry, grayish scales, situated on small elevations of a copper-colour, &c. and may appear in the form of almost all the scaly diseases. Thus they may present themselves under the appearance of *Lepra* or of *Psoriasis*. This form is always consecutive, it is chronic and generally of long continuance. It terminates by resolution or desquamation, never by ulceration, and does not leave scars.

One of its most remarkable forms is when it not only presents the patches of *Lepra*, but these also offer a deep grayish colour almost black, which has been described as a simple variety of that disease, (*Lepra nigricans*.) This eruption is very rare. We have had occasion to see one very remarkable case, in the Hospital of St. Louis; in this patient the eruption having disappeared under the influence of an abdominal irritation, again made its appearance, with all its original characters.

This variety presented the form of round patches, the diameter of which varied from two or three lines to half an inch or more, elevated at the edges, and depressed in the centre, offering a very remarkable blackish tint, which was deeper in the centre of the patch than on the elevated points that formed the circumference. The scales which covered them were thin, dry, friable, and having but little adherence; on their disengagement they discovered smooth and polished elevations. This eruption having gradually disappeared under the influence of an internal inflammation, the scales, which even at first were but slowly formed, now ceased to be produced; the edges became less and less elevated, and in a short time nothing remained but a round, blackish spot, the colour of which diminished somewhat, but did not entirely disappear.

At the end of six weeks, the internal disease having been cured, the eruption again appeared, and patches were formed towards the centre of the former spots, which in a short time presented every character of the original affection. The elevated points gradually assumed the appearance of a prominent ring, but were not at first of the same colour as the spots themselves, presenting a copper-red colour. Some disks manifested themselves on parts which had previously been sound; their development was not preceded by a small spot of vivid red, as in *Leprosy*, but by a grayish injection without heat, smarting, or itching. The skin which was not the seat of the eruption, was of a dry, unhealthy appearance, and the patient exhaled a peculiar smell. This eruption may occur on all parts of the body. In the case of which we have spoken, it was general, and the numerous, black patches, separated by intervals in which the sound skin presented a yellowish colour, gave a most remarkable appearance to the patient.

Former symptoms, and some analogous examples observed by M. Bielt, with the positive characters this variety now presented, left no doubt as to its venereal nature.

In the greatest number of cases, this scaly form occurs with characters which belong more specially to *Psoriasis*, and particularly to *P. guttata*. The patches may be confined to a single region, but they are most generally to be met with at the same time, on the neck, back, breast, anterior part of the abdomen, limbs, and face; above all, on the forehead, and sometimes even on the scalp. Their size varies from that of a centime to that of a thirty sous piece. They are ordinarily isolated, distinct, and irregularly rounded; they are slightly elevated, and covered with thin, hard, whitish scales, which are but little adherent, and discover, when they fall off, elevations which are not red and chapped, as in *Psoriasis*, but smooth, shining, and of a copper colour. When they resemble those of *P. guttata*, they present a character which M. Bielt has long regarded as a pathognomonic sign; this is a small, white band, precisely similar to those which indicate the remains of

a vesicle, in the vesicular affections, and which encircles the base of each disk, at the point where it rises above the level of the skin. Sometimes, but more rarely, several of the patches unite and form a large copper-coloured surface, presenting here and there, portions of scales which are detached and slowly restored. This eruption usually commences on the arm, whence it extends to the breast, back, and finally to the face: it manifests itself at first by small, copper-coloured points, sometimes accompanied with much itching; these gradually extend, become elevated, and covered with scales, &c.

Finally, this form may occur in some very rare cases, in the palm of the hands and soles of the feet, in a very remarkable form. It is constituted of a mass of dry, friable scales, which may all be removed by the slightest effort, and which discover, on their disengagement, not elevated surfaces but a livid colour, and a considerable hardening of the subjacent tissue. This rarely exists alone, it most generally accompanies other syphilitic eruptions, and especially those of a scaly character.

These different forms may often be seen on the same person at the same time. Thus, papulæ may frequently be found occurring with pustules and tubercles. In general, the scaly form occurs unattended with any other venereal eruption, but, like all the others, it is constantly accompanied with syphilitic affections of other tissues.

Concomitant Symptoms.—These different eruptions may be complicated with all the symptoms appertaining to *Syphilis*, which, as is well known, spares no tissue, or no organ, and we have several times seen individuals at the Hospital of St. Louis, who fell victims to a union of the dreadful symptoms with which this disease may be attended. Happily, such cases are rare; but, at the same time, there are but few of the syphilitic eruptions which are not accompanied with one or more symptoms of the general affection. We shall not attempt to describe all the alterations that *Syphilis* can cause in the system, but we think it right to briefly notice some of its symptoms which form almost constant attendants on the venereal eruptions.

Among those that are met with most commonly, ulcerations of the throat, and especially those observable on the tonsils, and the mucous membrane lining the posterior part of the pharynx, hold the first rank: these consist, as has been observed by Hunter, in a real loss of substance, as if a portion of the tonsil or mucous membrane had been removed; the edges of the ulcer are regular, and the centre, which is deep, is covered with a very adherent, grayish matter.

Next we may mention pains in the bones, periostitis, and exostosis; these have their seat in most instances in those parts where the bones are near the surface, as those of the cranium, the tibia, and ulna, and always begin in the most superficial layers. Hunter thought that the vicinity of these parts to the skin, and their greater exposure to the effects of cold, might explain why they were more obnoxious to the effects of *Syphilis* than those which are deeper seated. Of late years, these lesions have been attributed to the administration of mercury, but as there exists a multitude of examples of patients who have presented these symptoms, without ever having taken any mercurial preparation, this opinion cannot be considered as valid.

One symptom that frequently accompanies venereal eruptions, and which is of great importance from its severity, is *Iritis*, so well described by Beer, and to the syphilitic nature of which attention has been drawn by Saunders and Wardrop: we shall say but a few words on it. *Iritis* commences with violent pains in the head, and dull, deep-seated pain in the eye, which are augmented by the action of the light; the pupil at first contracts in a uniform manner, and the movements of the iris gradually diminish; the circles of this membrane experience a change in their colour; they assume a deeper tint, which is sometimes red; the free edge no longer is regular; this deformity increases till the opening may be angular; the iris swells, and approaches the cornea; small abscesses are formed, which discharge their contents into the anterior chamber, &c. Finally, if its progress is not speedily checked, the disease makes rapid progress; whilst on the one hand, the

inflammation gains the capsule of the crystalline, which loses its transparency, the cornea, on the other, becomes opaque, and the iris appears to be hidden by a cloudiness. Finally, a thin layer of coagulable lymph is thrown out, which can generally be seen with a magnifying glass, and the iris contracts indestructible adhesions.

Such are the general syphilitic symptoms that accompany most cases of venereal eruptions, which may also, however, be complicated with a multitude of other affections, either of a syphilitic character, or of a wholly different nature. Thus, after a certain time, ulcerations may occur in the intestinal canal, and the patient sink under a chronic diarrhœa, often attended with very violent abdominal pains; at other times, various symptoms of a local or general nature may ensue. *Erysipelas* of the face, for example, often accompanies a syphilitic eruption of that part, in which case the latter may disappear for a short time; in all instances, it should be rather considered as a happy omen, than as adding to the violence of the disease. Finally, these affections may be attended with *Ozena*, caries of the cartilages of the nose, and scirrhus indurations of the testicles; their progress is often interrupted by the appearance of an internal inflammation, under the influence of which the eruption gradually diminishes, and again appears as the inflamed organ regains its normal state. These eruptions often occasion baldness.

They may be complicated with diseases of the skin, of an entirely different nature; we have several times seen *Eczema*, *Herpes*, and especially *scabies*, accompany syphilitic eruptions of a pustular, papular, &c. character. The primary lesions of these affections may also become combined; thus it is not unfrequent to meet syphilitic papulæ, with pustules or tubercles. The scaly form usually appears alone.

Dissection.—It is rare that death takes place from the syphilitic eruptions, but it is much less so to meet with patients who die from the effects of a long-continued venereal eruption, to which are superadded the violent symptoms of constitutional syphilis. In several dissections made by M. Biett,

he pointed to us a multitude of different alterations; *Necrosis*, soft *Exostosis*, in which latter case the osseous tissue presents the appearance of the spongy bones, or of those which are partly destroyed by caries, with this difference, however, that the matter that fills the cells is in a semi-fluid state, and of a yellowish-white colour, *caries*, particularly of the foot, and fistulas. In a patient who presented all the symptoms of laryngeal phthisis, there were ulcerations of the mucous membrane of this organ, caries of its cartilages, and a fistulous opening at its anterior part. In other cases, M. Bielt has found ulcerations of a peculiar character in the intestinal canal, and especially in the ileo-cæcal region. In almost all instances, we have observed a greater or less degree of effusion in the splanchnic cavities, or even in the whole of them; finally, the majority of the bodies of individuals who have fallen victims to this union of symptoms, present a livid tint, they exhale a peculiar and fetid odour, and putrify with great rapidity.

Causes.—Syphilitic eruptions may manifest themselves from a multitude of occasional causes, as debaucheries, severe exercise, violent mental affections, &c. Sometimes, on the contrary, these affections may occur without their appearance being provoked by any appreciable proximate cause; but in all cases they recognise a primary exciting source, which is one and identical, and which we shall continue to call *virus*, till this denomination is replaced by another that is more exact, especially as the term *venereal virus* appears peculiarly applicable to a class of affections which always appear under the same forms, the same circumstances, and which present characters only appertaining to themselves. We prefer, excepting that we may pass for empirics, to admit the existence of this virus, than to be obliged to explain the consecutive symptoms by a sympathy whose effects may only appear at the end of ten, twenty, or thirty years; added to which, in adopting such a theory, the nature of the primary affection which can induce such consequences, would still remain to be proved.

As to the theory which attributes the secondary symptoms, and particularly those of the cutaneous system, to the mercury

administered for the cure of *Syphilis*, it is not better founded; and a person can see but few of these eruptions, not to meet, (we do not say sometimes, but often,) patients covered with them, and who have never taken a grain of mercury.

Finally, can they be, as has been asserted, simple inflammations of the skin, determined in most instances by a direct agent, or by the inflammation of some internal organ? If it were so, these eruptions would be met with in persons who have never had the venereal disease, as often as in those who were affected by it; how is it then, that such is never the case?

We shall, therefore, continue to believe that the syphilitic eruptions, whatever may be their occasional cause; whether they are developed at the same time as the primary symptoms, or appear months or years after the infection, are always induced by the influence of a single cause, or that of a *virus sui generis*.

In certain states they are evidently contagious; they may be hereditary, and it is not rare to see infants at birth covered with syphilitic pustules, whilst in others, again, this eruption may occur a short time after birth. In other instances, numbers of infants may be covered with an analogous eruption, which they have contracted whilst sucking; they may also communicate the disease to the nurse, and Alibert cites the case of a woman of thirty years of age, who, having suckled an infant which was at first apparently healthy, but born of a diseased mother, was four months afterwards covered with venereal pustules.

In the greatest number of cases, the syphilitic eruptions appear at uncertain times, without being dependant on any appreciable exciting cause, and whilst the patients are seemingly enjoying the most perfect health. As to the relation that exists between them and the primary symptoms, experience has demonstrated that they may arise as well after a blennorrhagia, as after chancres, buboes, &c.

Diagnosis.—The syphilitic eruptions, although presenting strongly marked characters in a majority of instances, are, nevertheless, more often mistaken than any of the others, and by

a singular anomaly, they are those which are the most commonly believed to exist. This depends, without doubt, on the fact, that they may assume the form of every other eruption; nevertheless, they manifest themselves with well-marked symptoms, and moreover a certain general character is always present, which strikes the practised eye even before it has had time to recur to the details; these appearances, which it would be impossible to describe, exist more particularly in the colour, in the manner in which the eruption occurs, and in the general state of the patient.

As to the value which some pathologists have accorded to the success or failure of the mercurial preparations in the cure, as a diagnostic mark, it is evidently worse than useless, for although mercury is the most valuable remedy we possess for *Syphilis*, its results are liable to so many modifications, that it would be erroneous to base an opinion of the nature of the disease on its effects; besides these eruptions present, (at least in a majority of cases,) characters of sufficient distinctness, to distinguish them from other affections of the skin, without there being a necessity of resorting to an uncertain and often inconvenient mode of discrimination.

Syphilitic eruptions may be confounded with certain affections, according to their form or state. Those which may be mistaken for the *Exanthematous form*, are *Roseola* and *Urticaria* for the acute varieties, and *Ephelis* for the chronic.

Roseola.—This eruption differs from the grayish patches of the syphilitic eruption, by its rosaceous colour and the general symptoms that accompany it.

Urticaria.—The patches of *Urticaria*, being small, developed spontaneously, and accompanied with itching, resemble to a certain degree those of the acute exanthematous form of the syphilitic eruptions; but the colour is not the same: in *Urticaria*, they are either redder or whiter than the surrounding skin, but never grayish, as in the syphilitic eruption; in the former, also, they are more prominent, the itching is far more violent; finally, they suddenly disappear, and again occur after a certain lapse of time; characters which are not to

be found in the latter, which moreover usually attends the primary symptoms, and especially blennorrhagia, or at least manifests itself immediately after their disappearance.

Ephelis.—This differs from syphilitic spots in many particulars. The patches of the former are irregular and larger, occupying a greater extent of surface, and most frequently occurring on the abdomen and anterior part of the breast. The syphilitic spots, on the contrary, are usually round, rarely larger than half a dollar, and not very numerous; they are most generally seen on the face, and especially on the forehead and eyebrows. Those of *Ephelis* are yellow, accompanied with itching, which in some cases is very severe, and covered with a furfuraceous exfoliation. Those of *Syphilis* are of a copper-red colour, sometimes even blackish; they occasion a very slight pruritus, and desquamate but rarely. Finally, they never form, like the former, confluent patches with irregular edges, covering large surfaces.

The syphilitic spots are almost always accompanied with some symptoms of the general infection, and more particularly with *Iritis*.

The *Vesicular form* has presented itself too seldom to our observation, to enable us to trace its distinctive characters in a positive manner. Nevertheless, the copper-coloured areola surrounding the base of the vesicles, their seat, number, and disposition, the slow progress of the inflammation, the precursory and concomitant symptoms, are all marks on which a diagnosis may be established. Among the few examples that we have seen, there has been an ulceration of the tonsils.

The *Pustular form* may be confounded with *Acne* and *Ecthyma*.

Acne.—The pustules of *Acne*, especially those which occur on the face or forehead, may be mistaken for the psudracious pustules of the venereal affection, particularly as they may both present a small purulent point; but they are more prominent in *Acne*, are red, and sometimes surrounded by a well-marked erythematous areola, whilst in the syphilitic eruption they present a livid hue, and their base is of a copper-colour.

The intervening skin in *Acne* is red, shining, unctuous, and studded with small, black points, whereas in the other disease it is corpse-like and withered. Finally, the syphilitic psydracious pustules often occasion small cicatrices, which are seldom induced by *Acne*, with the exception of *A. indurata*, but this again presents characters which are too peculiar to be mistaken.

Ecthyma.—The phlysiacious pustules of the syphilitic eruption are very analogous, in certain cases, to those of *Ecthyma*, and it is sometimes difficult to discriminate between them. Nevertheless, the areola that surrounds the base of the ecthymoid pustules is of a purplish red, whilst it is copper-coloured in the syphilitic. The scabs in the latter are thicker, more adherent, sometimes almost black, and circularly furrowed. The ulcerations which succeed them are rounded and deep, with regular edges, and are always followed by a depressed and indelible scar. Finally, it is very rare that the patient does not also present other venereal symptoms.

Tubercular form.—The eruptions that may be confounded with this form, are *Lepra*, some varieties of *Psoriasis*, *Acne indurata* and *Lupus*.

Lepra.—We have seen that syphilitic tubercles may sometimes form perfect circles, resembling those of *Lepra*, but these are not continuous rings, as in the scaly affection, but are made up of isolated, smooth, prominent tubercles of a cupreous or livid colour, covered with thin, hard laminæ, always smaller than the induration they surmount; whilst those in *Lepra* are larger, covering not only the edges, but even in some cases masking the whole patch.

Psoriasis gyrata.—Syphilitic tubercles, when in the healing stage, and when the circles only exist in part, have often been mistaken for *Psoriasis gyrata*, or even *Lepra*. The characters we have given above, as distinguishing them from the latter disease, are also applicable in these cases.

Psoriasis guttata.—It is well known that syphilitic tubercles, when situated on the scrotum, have often been taken for this scaly affection; the former occur in this situation very commonly, while the latter are but seldom to be met with. But

it will always be easy to distinguish these round, flat, thick tubercles, (*Pustules plates*, Cullerier,) ulcerating at their apex, and effusing a sanious fluid of a nauseous odour, from the papular elevations of *P. guttata*, which are always dry, covered with scales, and never become the seat of ulcerations.

Acne indurata.—This disease may, as we have formerly observed, leave on the back, which is its usual seat, circumscribed indurations, sometimes of a considerable size, which may the more readily be taken for syphilitic tubercles from their being intermingled with a multitude of cicatrices, but in most cases the latter, when occupying this part, are hard, of a cupreous red, and rounded; they are often as large as a small hazlenut; they have not, like the circumscribed tumours of *Acne*, succeeded to pustules; they usually become the seat of ulcerations, which extend to the surrounding parts, attacking the skin in various directions, and are at last covered with thick scabs, which leave, not small, round scars, about the size of a pea, but a kind of deformed cicatrix of a zigzag or spiral form.

Lupus.—It is sometimes difficult to distinguish the forming tubercles of *Lupus* from those of *Syphilis*. But in *Lupus* they are reddish, soft, and small; their summit is chapped and withered; the adjacent skin is the seat of a slight œdematous swelling: those of the venereal affection are of a cupreous hue, more prominent, hard, smooth, and shining. *Lupus* usually commences on the cheeks, whilst the syphilitic tubercles manifest themselves on the forehead or alæ of the nose. Finally, *Lupus* particularly attacks scrofulous individuals of a weak constitution, and is most generally met with in young subjects. Tubercular *Syphilis*, which, in a majority of cases, is a consecutive symptom, on the contrary, ordinarily attacks individuals of a certain age; it is also constantly accompanied with other eruptions of the same nature, and especially by symptoms of the general constitutional affection.

Papular form.—The cutaneous diseases that may be mistaken for this form, are *Scabies* and *Lichen*.

Scabies.—In some cases, the syphilitic papulæ are very small, and slightly conical, and they may the more readily be

confounded with *Scabies*, as they have been often described as presenting small, transparent, serous vesicles, analogous to those constituting the elementary lesions of that disease; but independently of other and better marked characters, it will require but little attention to perceive that they are solid, firm pimples, which will always discriminate them from *Scabies*, which is a vesicular affection.

Lichen.—*Syphilitic lichen* may be distinguished from *L. simplex*, from the circumstance that in the venereal eruption, the papulæ are very small, slightly conical, very numerous, and of a deeper colour; that in some points their livid areola become confluent, and give the skin the appearance of a large copper-coloured surface, studded with small, slightly prominent points of a more vivid tint.

In *L. simplex*, the eruption is generally confined to a single region, and above all, to the limbs. The papular syphilitic eruption covers all the body, and more especially the face; whilst the appearance of the papulæ is almost simultaneous.

It would be superfluous to lay down the characters that distinguish the papular syphilitic affections from *Variola*, for we could not have believed that these diseases could ever be confounded, had we not met with an example; but even in admitting that the differences we have already mentioned in speaking of these diseases, were not sufficient to discriminate them at their commencement, still the ulterior progress of the eruption cannot leave a doubt.

Finally, in some cases, the syphilitic papulæ are large, flat numerous, and covered with small scales, which hide the intervals between them, and impress on the eruption the aspect of the *scaly form*; but this can only exist at a certain period of the disease, for at the commencement, the papulæ are very distinct, and at a later epoch, they again become evident from the disengagement of the scales.

Scaly form.—This may be mistaken, as we have before said, for several of the scaly eruptions; but those with which it is most likely to be confounded, are *Lepra* and *Psoriasis*.

Lepra.—There is one form of the syphilitic affection in

which the edges are prominent, and the centre depressed, which may be taken for *Lepra*, (*Dartre furfuracee arrondie*, Al.) as it has been described as a variety of this affection under the name of *Lepra nigricans*; but the patches are almost black, as the denomination that has been given it testifies: this character alone is sufficient to distinguish it.

Psoriasis.—Sometimes the scaly form of *Syphilis* presents the appearance of *Psoriasis*, and especially of *P. guttata*; but in the venereal affection, the patches have a marked coppery hue: they are covered with small, thin, grayish scales, much thinner than those of *Psoriasis*, and do not, like this complaint, occasion deep and painful fissures. Besides which, they are accompanied with a pathognomonic sign; this is a small, white band around the base of each spot, exactly similar to that which occurs in the vesicular affections.

Such are the different eruptions, which may occasion some difficulty in drawing a diagnosis of the syphilitic cutaneous affections; this is, however, much aided by concomitant symptoms, as ulcerations of the throat, pains in the bones, &c.

Finally, there are also two states of disease, which may correspond to some species of the venereal eruptions, and in which these latter may be confounded with cutaneous affections of an entirely different nature; these are where there are thick scabs, or extensive ulcerations.

1st. The scabs, which sometimes succeed to pustules, but more generally to venereal tubercles, may, as we have said, be taken for those of *Impetigo*, but in the impetiginous affection they are yellow, and easily removed; they only appear, as it were, placed on the surface of the skin; in the venereal eruption they are greenish, or almost black; sometimes circularly furrowed, hard, and very adherent, penetrating to some distance into the thickness of the dermoid tissue.

2d. Syphilitic ulcerations may sometimes be confounded with those of *Lupus*, but the former present a union of characters never offered by *Lupus*: they are deep and excavated; their edges are hard, callous, regular, and surrounded by a copper-coloured areola. Those of *Lupus* are more superficial;

sometimes the surfaces which are exposed on the fall of the scabs, are in a state of hypertrophy; their edges are soft and livid, and the adjacent skin is usually the seat of a soft, chronic œdematous engorgement. When they have a tendency to extend to the neighbouring parts, the ulcerations in *Lupus* do not present the circular, spiral, &c. forms which characterize the serpiginous syphilitic ulcers.

But it is more especially when these two diseases are fixed on some small region of the body—the nose for instance, and destroy the parts, that it is difficult to discriminate between them. Nevertheless, independent of the characters we have already enumerated, it should be recollected that the ravages of *Lupus* almost always commence with the skin, whilst those of *Syphilis*, on the contrary, generally begin on the internal parts, and particularly the bones; that the skin does not ulcerate for some time afterwards; the work of destruction is much more rapid in the latter, and it is attended in most cases with other venereal symptoms.

Prognosis.—These eruptions are not very serious of themselves alone, and little is to be dreaded, without there are alarming symptoms of a general infection. The tubercular form is certainly the most severe; the scaly is very obstinate. As to the other varieties, they seldom last any great length of time. In general, the prognosis is bad, if the disease has lasted for some time; if the patient has had several relapses, or if it is complicated with venereal symptoms; finally, as we have observed, patients may perish from a union of horrible symptoms, which cause excruciating tortures that nothing can appease; the pulse becomes feeble, the face pale and discoloured, the body of a dirty and corpse-like appearance, diarrhœa, epistaxis, and fœtid sweats supervene, and death soon takes place.

Treatment.—There are few diseases in which remedies have been at one moment more extolled, and the next abandoned, than in secondary *Syphilis*, and especially in the venereal eruptions. We shall not attempt to mention all that have been proposed, but shall content ourselves with indicating those whose use has been most generally successful.

As to the antiphlogistic method and emollients, which have of late years been vaunted as sufficient in most cases, we are of opinion, from a certain number of facts, that it may be advanced; 1st. That they are often useful, and sometimes even indispensable as auxiliary means; 2d. That sometimes, but very rarely, the venereal eruptions have appeared to yield to their influence; 3d. That in a majority of cases they are insufficient, except in the acute exanthematous and papular forms, which are usually only ephemeral affections, accompanying primary symptoms, and disappearing with them.

The treatment of these eruptions consists in the use of both internal and external remedies.

Those of the first, which have given the most advantageous results in the experiments made by M. Biett, at the Hospital of St. Louis, are—

1. *Mercury*.—The mercurial preparations are yet, without doubt, the most useful means of the whole materia medica, in treating *Syphilis*: if there are cases in which they evidently fail, they generally succeed in a most admirable manner, and we cannot help thinking, that a majority of the cases of failure have arisen from the manner in which they have been administered.

Thus, they should never be employed during the continuance of the acute symptoms; the doses cannot be fixed; they must depend on the severity of the attacks, the strength of the patient, the action of the remedy itself, &c. Recourse may be had to *Van Swieten's liquor*, or pills of the *deuto-chloride* and opium, (deuto-chloride of mercury, gr. xii.—opium, ℥i. ft. pill No. xxxvi.) one of which is to be taken every day.

When the patients are feeble, irritable, and there is fear of exciting the susceptibility of the mucous membranes, resort may advantageously be had to the *soluble mercury of Hahneman*; this is peculiarly applicable in mild cases; the dose is a grain per day. (Soluble mercury of Hahneman, ℥i.—Pulv. Malvæ, ℥i. ft. pill. xxiv.)

But of all preparations of this kind, we have seen the most advantageous results from the *Sirup de Larrey*, given in the dose of one ounce, before breakfast.

The mercurial preparations, given with judgment, and small doses, rarely occasion accidents. During their administration, the state of the digestive organs should be closely attended to, and if symptoms of gastric or abdominal irritation should arise, their use must be suspended, and not recommenced till all these symptoms have disappeared. As to the time during which they should be used, it cannot be specified, as it depends on their effects, and the obstinacy of the disease. But we do not think that they need, (as has been recommended,) to be continued for a month after a cure is obtained, for fear of a relapse.

Sudorifics.—These remedies have often been useful, whether employed alone, or what is better, combined with other means. For this purpose, a decoction of *guaiacum*, of *rad. chinae*, or *sarsaparilla*, made with half an ounce of either of these articles to a pint and a half of water, boiled down to a pint, to which may be added a scruple of *Daphne mezereon*, or *cnidium*; the patient may also take an ounce of the sudorific syrup in the first glass of the decoction each morning, fasting.

Ptisan of Feltz.—This preparation has often succeeded very well, especially in cases where mercury had failed; the patient should take two or three glasses every day. This sometimes will produce a marked melioration; in other cases it is wholly inefficacious.

Muriate of gold.—This salt has been highly praised as an excellent succedaneum for the mercurial preparations, but it is far from having produced the advantageous results that have been attributed to it, having failed in a majority of cases. It is to be administered by making frictions twice a day on the tongue of the patient, with a tenth of a grain at a time.

Subcarbonate of ammonia.—Very rapid cures have sometimes been obtained by means of the subcarbonate of ammonia, according to the plan of Professor Perylhe, particularly where the mercurial preparations had failed. M. Biett has often been successful with this remedy; he gives it at first in the dose of a drachm in some mucilaginous drink, and gradually increases the dose to two or three drachms.

Independently of internal remedies, there are certain forms, certain states of the syphilitic eruptions, which require the use of external applications. Thus, it is sometimes useful to hasten the resolution of the tubercles; to attain this purpose, great advantage has been derived from the use of several ointments, as that of the *proto-nitrate* of mercury, ℥i. to ℥ss.; the *proto-ioduret* or *deuto-ioduret* of mercury, ℥i. of the first, and gr. xii. of the latter to axunge, ℥i.

The patient is to be lightly anointed with these preparations on the larger tubercles. But of all remedies of this kind, the most useful, and that which is followed by the most speedy effects, is the ointment of *ioduret of sulphur*, made by mixing gr. xx. to xxx. with an ounce of axunge: we have seen this remedy produce very beneficial results in a patient, the whole of whose back, and in fact, nearly the whole of whose body, was seamed with cicatrices and large tubercles.

As to lotions made with mercurial preparations, with solutions of sulphate of zinc or copper, spirituous washes, and muriatic liniments, they are generally useless, and may even be prejudicial.

Finally, the syphilitic ulcers also require particular treatment; in some cases it is necessary to change the state of the surfaces, or to check their ravages, either by the application of stimulating ointments, as those of the *deuto-oxide*, the *deuto-ioduret*, or *cyanuret of mercury*. Sometimes they must be attacked more energetically, and slight cauterizations by means of the acid nitrate of mercury have proved useful; finally, we have several times seen M. Bielt calm the violent pain these ulcerations often occasion, by applying small dossils of lint, spread with the *hydrocyanic cerate*, (hydrocyanic acid, gtt. xx. —Cerat. simp. ℥ij.

Such are the means which must be employed in a majority of cases of the syphilitic eruptions; they may all be powerfully aided by the use of baths; thus, *douches* of vapour used for twelve or fifteen minutes on the affected parts are very effectual in hastening the resolution of the tubercles; alkaline baths are proper in almost all cases of syphilitic pustules. Va-

pour baths greatly contribute to the cure of the scaly form. Finally, the employment of baths, in some instances, will suffice to cure some of these eruptions; fumigations of cinnabar, specially when administered locally with M. Biett's apparatus, often induce the resolution, and even the complete removal of tubercles which so frequently occur on the scrotum and verge of the anus.

As to the baths of solution of corrosive sublimate, with which experiments have been made of late years, the results have not, as yet, been entirely satisfactory, and we think that at best they can be but uncertain in their effects. In most cases, this salt is dissolved in solutions of the alkalies, and hence modifications have arisen which have not been sufficiently examined; the solution is certainly not complete, and hence how are we to judge of its effects *a priori*? But in supposing that the *deuto-chloride* can be completely dissolved, still its action is very variable, not only on different individuals, but also on the same person. It is well known how much the energy of the absorbents depends on the physiological and pathological state of the skin. In certain cases, this poisonous salt may be absorbed in considerable quantities, and hence exercise a fatal action on the economy. At other times, no absorption may take place, and not a single atom enter the system. We must therefore wait for more exact experiments, before deciding on this plan of treatment.

In many cases, these eruptions resist all the means we have pointed out, and become complicated with alarming symptoms of a general affection. In these instances, we have seen, (a plan which has long been praised, and whose good effects every day's experience confirms,) opium given, at first in the dose of half a grain a day, and augmenting it every three or four days, in the same proportion, produce the most beneficial effects. It may be carried, (the aqueous extract of opium,) to four grains, or even more; it is not rare, under the use of this invaluable medicine, to see really alarming symptoms, which had resisted a multitude of other preparations, entirely disappear.

Finally, it may happen that when the best directed plans of treatment have entirely failed, to see these eruptions cured by empirical preparations; thus, M. Biett has often obtained remarkable success with the decoction of Arnoult and that of Zittmann. Full details on the use of this latter preparation, may be seen in the last edition of Lagneau's excellent treatise. Sometimes, however, after the employment of it, a profuse diarrhœa may arise, which forces us to abandon or suspend its use; but in the generality of cases we have observed, this preparation agrees with the patients, and has often been followed by unlooked for success.

By the aid of these various means, we are usually enabled to successfully combat the venereal eruptions and their concomitant symptoms; some of these latter, however, require particular treatment.

In *ulcerations of the throat and soft palate, &c.* it is often very advantageous to have recourse to mild solutions of corrosive sublimate, as gargles; a few drops of laudanum should always be added.

In *Iritis*, which is so frequent a complication of the syphilitic diseases, general bleedings are sometimes requisite, or leeches behind the ears; but the plan so highly spoken of by the English practitioners, and which we have so often seen employed with success, of calomel in large doses, eight, ten, or twelve grains, for instance, is certainly the best in these circumstances.

When these eruptions occur in a child that is not yet weaned, the mother or nurse must be put under medical treatment, as, for instance, giving her the liquor of Van Swieten, or, what is better, causing her to make frictions on her legs and thighs, alternately, with ung. Neapol. and camphor, (ung. Neapol. ℥ij. camphor ℥ss.: this is for twenty-four applications.)

Finally, if the mother or nurse are too feeble to follow this treatment, the infant must use the milk of a goat, on whom these applications are to be made.

We have seen these different methods used at the Hospital of St. Louis, with the most complete success.

ORDER XII.

PURPURA.

By this term is meant an eruption characterized by patches, sometimes of a vivid red, sometimes of a livid hue, the extent of which is sometimes only a line, and at others of several inches, preserving their colour under pressure, usually to be found on the skin only, but also existing in some cases on the mucous membranes, in which case there are often hæmorrhagies.

The name of *Purpura*, used by some authors of the seventeenth century to designate some forms of exanthematous eruptions, has been applied by Willan exclusively to the malady whose characters we have just enumerated. The denominations of *Hæmorrhæa petechialis*, *Ecchymome*, *Hæmacelinose*, &c. proposed by Adair, Franck, and Perquin, may be more exact and harmonious to the ear; but we think that names adopted by pathologists who have devoted themselves to a subject, and who have thence acquired a certain authority, should always be preferred. We have not thought it right to follow the example of Willan, in arranging this disease with the *Exanthemata*; it has appeared to us that if it did agree with this order in some points, still that it differed in many important characters, and especially in the absence of all fever. In the *Exanthemata* the patches are numerous, red, and produced by inflammation and engorgement of the cutaneous capillaries; in *Purpura* there is no inflammation nor injection of the vessels, it is constituted of an effusion of blood in the superficial layers of the dermoid tissue. We have therefore placed it among those diseases which cannot be arranged in any of the regular orders.

The red patches which form one of the characters of this genus, are frequently termed *Petechiæ* by some authors. They

have generally been considered by pathologists as fatal symptoms, and as accompanying fevers of a malignant character. Thus they are often mentioned by writers on the *Plague*, and latterly by those who have treated of *Typhus*. They have been seen as complications of some of the eruptive diseases, and in a majority of instances may be deemed a fatal symptom, and indicating great disorder of the system. The name of *Petechiæ* thus carrying with it the idea of a severe symptom, we shall not use it except as designating those cases where the spots are symptomatic of a more serious and general disease.

Willan has divided the genus *Purpura* into the following species: 1st. *Purpura simplex*; 2d. *Purpura hæmorrhagica*; 3d. *Purpura urticans*; 4th. *Purpura senilis*; 5th. *Purpura contagiosa*.

Purpura simplex.—In this species, designated by some authors under the name of *Petechiæ sine febre*, the patches are of a clear red colour, and of no great extent. The eruption manifests itself in a few hours, generally during the night, and in a successive manner; so that, although not numerous at first the patches augment in a marked manner in a short time. The parts principally affected are the limbs, particularly the thighs and legs, the arms and shoulders become implicated at a later period, but almost always with less intensity.

The eruptions generally succeed each other in rapid succession, so that whilst some spots are fading and disappearing, others again are commencing and increasing. At other times these successive eruptions are not continuous; thus, M. Bielt has seen in a nurse in one of his wards, aged about thirty-eight to forty, and of a robust constitution, these eruptions succeed each other at short intervals for more than two years, without her general health suffering in any great degree. She is, however, subject to dysmenorrhœa, which always occasions a great degree of plethora. The duration of *P. simplex* may vary from three or four weeks to eighteen months or two years; that of the individual patches is about six or eight days, but may sometimes be prolonged to two weeks.

In most cases this variety is preceded by a little uneasiness,

anorexia, some headach and lassitude, but without any appreciable trouble in the circulatory functions. In other individuals again there are no precursory symptoms.

During the first days the spots are of a vivid red, especially in young persons, but are of a deeper colour in elderly persons; they are distinct and irregularly rounded. After some days they acquire a deeper, more livid hue, then become yellowish, and gradually disappear.

Causes.—*P. simplex* may occur at every period of life, but shows itself most frequently in youth and adolescence, rarely in middle-aged persons, and very seldom in the elderly. Sometimes it attacks vigorous, sanguine individuals, whose arterial system possesses great energy, and whose tissues have a remarkable firmness; at other times it manifests itself in feeble persons, whose constitutions have been debilitated by a variety of causes. In general, those having white, soft, moist skins are more subject to it than those in whom this membrane is brown, dry, and bilious.

It appears most frequently in the summer, in dry days, than in winter or autumn. We have sometimes seen, during the heats of July and August, many persons affected with different degrees of eruption, present themselves at the Hospital of St. Louis. Food and the mental affections may also influence its development, but it is difficult to appreciate their action in a definite manner.

Diagnosis.—If the patches of *P. simplex* be examined with attention, they can never be confounded with either of the other varieties of this affection, or the various forms of the *Exanthemata*. The fundamental character is the persistence of the colour under the strongest pressure; a character which never exists in the *Exanthemata*, or only appears in the complications we have noticed; it is therefore useless to dwell on the marked differences of these diseases. Is it necessary to mention that it is sometimes possible to confound the dark red spots of *P. simplex* with the bites of insects, and particularly with those of fleas? But it is always easy to distinguish a central spot of deeper colour, when the puncture has taken place; the rest of the spot is a lighter tint.

Prognosis.—*P. simplex* can never be considered as a fatal disease, even where it exists in feeble and shattered constitutions; it almost always yields to hygienic means or appropriate remedies.

Treatment.—It may be readily supposed that the treatment of a disease which may occur under such different circumstances, must require numerous modifications.

If the eruption occurs in a vigorous, young, and sanguine individual, induced by hard labour or the abuse of stimulants, blood-letting is the best remedy, aided by the use of a few cool baths, rest and a low diet.

If, on the contrary, it takes place in feeble, enervated persons, whose tissues are relaxed, or who are debilitated by excesses, privations, &c., blood-letting, instead of being useful, only adds to the general debility: in these cases recourse must be had to a strengthening diet, generous wine, bitters, ferruginous preparations, stimulating frictions, alcoholic fumigations with Darcet's apparatus, taking care never to raise the temperature beyond 40° to 44° , Reaumur; (122° to 131° Fahr.) M. Biett has used this plan with great advantage in several cases.

Purpura hemorrhagica, (*Morbus maculosus hemorrhagicus*, Werlhof.)—This species is characterized by more numerous spots of a deeper colour, among which may be seen large, irregular, livid patches, and also some resembling recent bruises. They first manifest themselves on the lower extremities, then on the arms and body; the hands are rarely attacked; the same may be said as regards the face, though we have several times seen small spots of it around the eyelids. The parts on which they appear do not become elevated. Nevertheless, as has been observed by Bateman, to whom we owe an excellent description of this disease, the cuticle has been seen raised into a sort of vesicles or bullæ filled with blood. M. Biett has seen a case of this kind at the Hospital of St. Louis, and several cases of it are recorded by Reil and Willan. Spots of the same kind may occur on the mucous membranes, especially on the gastro-pulmonary; these tissues

being thin and delicate are easily torn, causing hæmorrhagies to a greater or less extent from the mouth, nostrils, urethra, rectum, or vagina.

These effusions of blood, according to Bateman, may be very copious, and speedily become fatal; but in general they are moderate, return at intervals, and cease spontaneously. Sometimes they are periodical, whilst in other cases they return at irregular intervals. Finally, the flow of blood may be almost continual, but in small quantities. These hæmorrhages are usually occasioned by large ecchymoses on the gums, internal part of the cheeks, tongue, and even in the bronchia, stomach, intestines, uterus and bladder. These effusions may also take place in the other tissues. We have seen a case where the blood had accumulated under the arachnoid.

The *P. hæmorrhagica* is often preceded by lassitude of the limbs, vague pains, a general uneasiness, with inability for exertion; at other times it may be developed without any precursory symptoms, or apparent change in the state of the patient's health. In a case related by M. Bielt in his lectures, a robust young man went to bed in perfect health after his accustomed labour, and on the succeeding day his skin was covered with ecchymoses, and the blood issued in quantities from his mouth and nostrils. In general, *P. hæmorrhagica* is accompanied with a state of depression and languor, the pulse is sometimes feeble and easily compressible, and at others is firm and resisting. In some cases it is attended with slight febrile symptoms, having exacerbations. In some patients the appearance of the spots is preceded by uneasiness at the præcordia, pains in the loins and abdomen, whilst in others it is announced by a dry and frequent cough. The state of the digestive organs also presents numerous variations; some individuals experience a feeling of tension at the hypochondrium or epigastrium, and are alternately troubled with constipation or looseness. In most cases, however, the digestive organs remain in a normal state. If the symptoms are aggravated or prolonged, the patients become emaciated, and the skin presents a tumid appearance, particularly in the lower extremities and the face, if a

horizontal position has been maintained for any length of time.

What we have said as to the duration of *P. simplex*, also applies to *P. hæmorrhagica*; that is, it presents great variations. Sometimes the disease terminates in a few days; at other times it may be prolonged several months, or, according to Bateman, several years.

When the eruption terminates fatally, it is almost always by a considerable hæmorrhage taking place in some important organ. Thus, we have seen patients suddenly expire from a copious hæmoptysis; in others, again, hæmatemesis or intestinal hæmorrhage has supervened with great violence: in some rare cases, death has arisen from uterine hæmorrhagies, either following labour, or at the critical period. In a case published by our colleague, M. Gustave Monod, death was occasioned by an effusion taking place over the glottis, and thus interrupting respiration.

Causes.—The causes of *P. hæmorrhagica* are like those of many other diseases, enveloped in much obscurity. It often occurs under diametrically opposite circumstances. Thus, it may appear in persons who enjoy all the advantages of fortune and luxury, and it may also attack those who are exposed to all kind of privations, or are subjected to violent and depressing mental affections.

In some cases, this disease supervenes on another, particularly on the exanthematous affections; it may also occur in women after delivery. This diversity in the etiology of *Purpura*, as is judiciously remarked by Bateman, involves the true nature of the affection in some degree of obscurity.

In general, *P. hæmorrhagica* takes place most frequently in women, or children before the age of puberty. At the Hospital of St. Louis, however, the numbers of both sexes affected with the disease, were about equal. Some persons appear to be strongly predisposed to it; such was the case of a young man related by Bateman, in whom a very slight pressure on the skin would occasion ecchymoses, without his

health appearing to suffer in the slightest degree. He was suddenly carried off by a pulmonary hæmorrhage.

The immediate cause of this disease has been attributed to a want of tone in the extremities of the vessels, thus permitting the blood to escape on the cutaneous surface or mucous system. This feebleness of the vascular system may be admitted as likely to occur in persons who are debilitated from any cause; but it is difficult, if not impossible, to explain how it can take place in a few hours in strong and vigorous individuals, and who are apparently enjoying the most perfect health. Besides, it should be recollected that if this want of resistance in the solids really exists, there is also, in a majority of cases, a peculiar alteration of the blood, which favours its passage through the relaxed coats of the vascular extremities. In many persons who were examined after death, at the Hospital of St. Louis, the blood was found in a state of remarkable fluidity, even in the tissues where it had been effused in considerable quantities.

Some English pathologists have thought that the purpurine spots must necessarily be preceded by a congestion in the venous system; this opinion may perhaps be correct. M. Biett observed in a patient in whom this disease had suddenly developed itself, the tongue of double its natural size, and having a deep blue colour, evidently depending on a congestion of venous blood. The lips presented the same hue, as did also several parts of the face.

Dissection.—On the bodies of individuals who have died from *P. hæmorrhagica*, there are generally to be seen purple spots and ecchymoses, formed by effusions of blood in the cutaneous and subcutaneous tissues; the first are superficial, and only appear to occupy the surface; the others are more deeply situated. The blood was easily removed on washing the parts, but we could not discover vascular ramifications communicating with these effusions, and the researches made by M. Fourneaux, have had the same result.

The mucous membranes of the mouth and pharynx sometimes presented purpurine spots. That of the stomach and in-

testines was often studded with them. Similar patches were also discoverable, but less frequently, on the peritoneum and pleura; they were even seen on the pericardium, the surface of the heart, and in the ventricles there was also in some instances an aneurismal state.

The lungs were sometimes sound, but generally sanguine congestions of different degrees constituting true pulmonary apoplexies were to be seen. Finally, in some cases, partial effusions were met with in the muscles, in the viscera, and in the sub-serous tissue, &c.

In some cases, every organ of the body appeared to be the seat of these bloody discharges.

In the case related by Monod, already alluded to, and which we ourselves saw at the Hospital of St. Louis, the brain, the lungs, the liver, the kidneys, spleen, and in fact, all the organs whether parenchymatous or membranous, offered different degrees of sanguineous effusion. Such cases are rare, but an analogous one, perhaps still more remarkable by the number of parts affected, has been published by M. Robert.

Diagnosis.—There are certain cases of syphilitic *Ecthyma* of the lower extremities, in which the confluent pustules leave large patches of a reddish-purple colour, or even small spots, which resemble, and at the first glance, may be mistaken for *Purpura hæmorrhagica*; but the pre-existence of pustules, and the course of the disease, will dissipate all kind of doubt.

As to ecchymoses from external violence, nothing but the very fact of the injury having been received, can distinguish them from those which have arisen spontaneously. But in these cases, the absence of hæmorrhage is a characteristic mark. *P. hæmorrhagica*, characterized by the presence of purple spots and ecchymoses, accompanied with different degrees of hæmorrhage from the mucous surfaces, can scarcely be confounded with any other disease. In epistaxis, hæmoptysis, &c. there are never any spots on the skin. But this disease may be mistaken in cases where all its characters are evident. In a

girl of twelve years of age, to whom M. Biett was called, this malady had been taken for a gangrene, which it was supposed would be promptly fatal. Yet her skin was covered with spots and ecchymoses, and the hæmorrhagies were frequent. She was restored to health in a few weeks under the care of this practitioner. The surgeon who committed the error, has since published an account of the case, and has attributed to himself all the honour, when he had been grossly mistaken in his diagnosis, and had nothing to do with the cure.

Scurvy, when accompanied with spontaneous ecchymoses and hæmorrhagies, appears to be identical with the disease under consideration. The differences laid down by authors are—1st. That the *Scurvy* is only developed under the influence of a debilitating diet, fatigue, exposure to cold and damp, &c. whilst the *Purpura* may manifest itself in individuals who are not subjected to any of these causes. 2d. That *Scurvy* yields to the employment of tonics and fresh vegetables, whilst *P. hæmorrhagica* often resists these means. But in advancing that *Scurvy* and *P. hæmorrhagica* are two distinct diseases, the diagnosis must be based on better marked differences than those just cited. In fact, the causes to which the appearance of *Scurvy* has been attributed, are those which often occasion *Purpura*, and if the tonic treatment does not always succeed in the latter, it is well known that it is not always followed by success in the former. But in admitting the complete identity between these two diseases, it is at the same time very difficult to explain why the latter should manifest itself in persons placed in opposite conditions to those in whom the *Scurvy* is developed. Perhaps in these individuals, too succulent a diet, and want of exercise, produces a disorder in the circulation and other functions, somewhat analogous to that resulting from direct debilitating causes; or they may be referred to a peculiar idiosyncrasy. But in assimilating these two diseases, we only intend to include those scorbutic affections accompanied with ecchymoses and spontaneous hæmorrhage, for, as has been observed with much justice in the thesis of our former colleague, Dr. Fourneaux,

of Caen, the name of *Scurvy* has been given to diseases of wholly different natures, of which the following words of Willis are a proof: "Si accidens quoddam inusitatum nec prius auditum in corpore humano eveniat, cum ad aliud certum morbi genus referri nequit, sine dubio statim illud scorbuticum pronuntiamus." (Willis, De Scorbuto. Cap. 1. p. 14.)

The diagnosis of the concomitant affections often presents difficulties and demands much attention. Epigastric and abdominal pains, with nausea, may often lead to the belief of the existence of gastro-intestinal inflammation, if the slowness of the pulse, and the want of heat in the skin, did not indicate that it was rather to a congestion than to an inflammation that we must attribute these symptoms.

Prognosis.—The prognosis of *P. hæmorrhagica* should always be established with great caution; for this affection, though oftentimes very slight at the commencement, may rapidly become severe or even mortal. There is, in fact, nothing on which the physician can certainly draw a conclusion as to its termination. Nevertheless, the age, constitution of the patient, duration of the disease, and frequency of the hæmorrhage, must always influence our judgment; this also applies to the concomitant affections. The quantity of blood lost by the patient should always be taken into account. But this disease is generally serious, and often mortal.

Treatment.—The treatment is environed with many difficulties, and the most opposite plans of cure have been proposed. The general debility with which it is accompanied, and its asthenic state, have appeared to exclusively indicate the use of active tonics, nourishing diet, wine, and of all means capable of restoring and strengthening the constitution; but in many cases their employment, far from producing the expected melioration, has, on the contrary, augmented the evil. This plan of cure employed with caution, conjointly with the proper hygienic measures, is only useful in children, elderly persons, and in those who have been enfeebled by privations, &c. The tonics to be employed, are decoction of cinchona, extract of rhatany, in the dose of a scruple to a drachm per day, generous

wine, the mineral acids, and a nourishing diet suited to the age and habits of the patient. When, on the contrary, the disease is developed in adults, in young persons of good constitutions, whose habits are not sedentary, who live well, and inhabit healthy situations, this treatment is never successful. It should never be employed in robust or plethoric persons. Finally, whatever may be the state of the patient, his age, constitution, existence of certain symptoms; as epigastric pains with tension of this part and of the abdomen, constipation, cholera, pain at the præcordia, hardness of the pulse, either with or without acceleration, all contraindicate the use of tonics.

It is not on mere theory or reasoning that many authors, as Bateman, Harty, Duncan, Buxton, and Plumbe, have passed their opinion as to the inutility and even danger of tonic remedies, but on positive facts, and it consequently merits strict attention; it also agrees with the physiological doctrines at present so prevalent. The observations of M. Bielt all tend to the same conclusion.

Can the same be said of the use of *purgatives*, as affording advantageous results? According to the above-cited pathologists, the epigastric pains, and those felt in the hypochondria, or any other region of the abdomen, either with or without tension of these parts; the derangements observed in the digestive functions, and the complete absence of all fever, all prove that much reliance ought to be placed on them. Dissection confirms this opinion. There is found, in fact, evident traces of congestion and effusion, but not of inflammation, in the intestines. Those purgatives which have been the most highly praised are jalap, castor oil, calomel, and spirit of turpentine in large doses.

Bleeding is a means which has often been employed in the treatment of *P. Hamorrhagica*, and its use appears in fact to be often indicated, if not by the existence of inflammation in the viscera, at least from the congestion; besides which its employment diminishes any difficulty in the respiration. Nevertheless, it must be stated, from positive facts, that blood-letting,

either general or local, should always be employed with caution, as well from the additional feebleness it occasions, as from the difficulty of arresting the flow of blood. The only cases in which it should be used is where the disease is developed in strong and robust adults, in whom evident signs of inflammation are present, such as violent local pains, acceleration of the pulse, heat of skin, &c. and when the morbid hæmorrhagies are slight.

M. Bielt has found that the most advantageous treatment consisted in the use of acidulated drinks and laxatives; in some cases he has used with advantage the extract of rhatany mixed with ice. This method is also praised by a skilful practitioner of Lyons, Dr. Brachet, to whom we are indebted for an excellent memoir on the *Morbus maculosus*.

The hæmorrhagies that take place by the natural passages, require the use of lotions or injections of iced water, either acidulated or rendered styptic, and, if they should continue, the use of the *tampon*. In these circumstances, the latter should be used with great caution, as the blood has not a tendency to coagulate.

Ablutions with cold water, over the whole body, have sometimes appeared useful, and perhaps cold shower-baths might be attended with advantageous results.

Compresses moistened with cold vinegar, or the solution of the chloride of lime, or even weak alcohol, may be applied to good effect on the spots and ecchymoses.

As to the pains that exist in different parts of the body, they are to be combated by opiates, emollient lotions, cataplasms, or bladders of warm milk. If there should be inflammation in the ecchymosed spots, recourse must be had to soothing applications.

The hygienic means consist in a free circulation of air, living in a high and dry situation, following a regulated diet composed of animal jellies, a small quantity of roasted white meats, and generous wine, always taken well iced. Finally, during the convalescence, tonics may be employed, as the ferruginous preparations.

Of the other species admitted by Willan, one, the *P. urticans*, is founded on the fact that in some cases the round spots, instead of remaining on a level with the surrounding skin, slowly swell; but this slight tumefaction disappears in the course of one or two days, and the surfaces become level, whilst at the same time, the violet-red colour becomes deeper. It is only an occasional occurrence, and cannot prevent this variety from being included as a *P. simplex* or *P. hæmorrhagica*. The other, *P. senilis*, presents no other peculiarity, except its having been observed in individuals advanced in age; and its symptoms, its march, and the curative means it demands, are all indicated in our former descriptions. The third, *P. contagiosa*, is apparently the petechial eruption which sometimes accompanies typhoid fevers, and upon which we have said all that is requisite.

ORDER XIII.

ELEPHANTIASIS OF THE ARABS.

Lepre tuberculeuse Elephantine, Al. Barbadoes Leg.

As we have already said, two different diseases have been known under the name of *Elephantiasis*, between which there is no resemblance except their name. The one, *Elephantiasis Græcorum*, is characterized by tubercles of greater or less prominence, and of different sizes, accompanied with a yellow tint of skin, loss of hair, diminution of sensibility, &c.; the other, which was described at a later period by the Arabian physicians, and of which we shall now treat, is constituted of a hard swelling of some extent of the subcutaneous cellular tissue, with a greater or less deformity of the diseased parts.

Elephantiasis of the Arabs, a long time since indicated by Rhazes, and more particularly described in the eighteenth century by Town, Hillary, and Hendy, under the name of the *Barbadoes leg*, is detailed in all its forms and conditions in an excellent monograph published on this subject in 1806, by Alard, who has there grouped a multitude of diseases known under different appellations, and which he considers as having a complete analogy with this affection; as for instance, the *Hydrocele* and *Pedartrocace* of Kæmpfer, the *Senky*, or *colic* of Japan, the fleshy *Hernias* of Prosper Albinus, the *Egyptian sarcocoele* of Larrey, and the *Erysipelatous fever* of Sennert and Hoffman. As this disease is not common, and has only presented itself a few times to our observation, and finally, as the work of Alard gives a complete history of it, we shall make use of his descriptions in several places.

Elephantiasis of the Arabs is characterized by a tumefaction of the skin and subjacent cellular and adipose tissues; this

is hard, permanent, and accompanied by deformity of the parts on which it is situated, sometimes to such a degree as fully to justify its name of *Elephantiasis*.

It may appear on all parts of the body; it has been seen on the face, neck, breast, parietes of the abdomen, scrotum, penis, verge of the anus, and labia pudendi, but its usual seat is on the limbs, particularly the lower extremities; it sometimes gives them so extraordinary an appearance and increase of bulk as is repulsive in the extreme. *Elephantiasis* rarely attacks both legs at the same time.

It is generally of long continuance, or may even last during the lifetime of the patient; sometimes it disappears, and returns after a lapse of time on the same spot; at other times it may entirely leave its original seat and appear in another. Although it is somewhat active at its commencement, it follows a chronic march, and even under the most favourable circumstances usually lasts for several months.

Symptoms.—Under the name of *Elephantiasis of the Arabs*, several diseases have been described which Alard does not consider as such, or at least in which the commencement is not always characterized by acute inflammation of the lymphatic vessels; and the phenomena of which, although very analogous, are constituted by a hard swelling of the subcutaneous cellular tissue, as if hypertrophy had supervened on a chronic inflammation, or from some other cause, in which, perhaps, the lymphatic system might be somewhat implicated; we saw two cases of this kind in the Hospital of St. Louis, who were both suffering under a swelling of the legs which presented all the characters of *Elephantiasis*. In one, the subcutaneous cellular tissue had become the seat of a chronic inflammation, with swelling and hardness of the limb; in the other, a seaman, and habituated to having his legs constantly wet, there was observed, after the cicatrization of a varicose ulcer, hypertrophy and hardening of the skin and subjacent cellular tissue, which arose to such a height, that the leg and almost all the thigh were doubled in size, hard, tense and shining, though little, if at all painful. In the last case the dis-

ease was accompanied with a swelling of the inguinal glands, but this was entirely consecutive, and the lymphatic system presented no symptoms of acute inflammation at the commencement. This was also the case, in a patient observed by Dr. Bouillaud; this was a woman in whom the lower extremities were engorged from the obliteration of the crural veins, and even of the vena cava itself; they became extremely hard, very much swelled, and resembled the legs of an elephant.

In a majority of instances, however, this disease presents the symptoms so well described by Alard, and perhaps such are the only true cases of it.

In general this affection manifests itself in a sudden and unexpected manner, without having been preceded by any premonitory symptoms; the patient experiences a violent pain, which gradually extends itself along the course of the lymphatic vessels; in a short time a kind of hard, tense chord, here and there interrupted by nodosities may be felt. This chord is often exceedingly painful when touched, and usually terminates at some of the large glands, as those of the groin or axilla, which become enlarged.

When the disease, (as is commonly the case,) attacks the limbs, the affected part becomes the seat of an erysipelatous inflammation, the cellular tissue itself inflames, and considerable swelling ensues. These symptoms are attended with general phenomena; fever takes place; there is much thirst, nausea, and vomiting, accompanying a prolonged chill, to which a violent heat of the skin or even copious sweats succeed; sometimes the brain is sympathetically affected, and the patient is seized with delirium. All these symptoms, with the exception of a slight swelling, entirely cease, and again return at uncertain intervals. At the end of every exacerbation the erysipelatous redness which occurs on the course of the lymphatic vessels disappears; but each time the swelling increases and lasts after all the other symptoms have ceased, so that at the end of a certain period, of some months for instance, the affected parts present an engorgement, which, although it is at first soft, gradually becomes so hard as to resist the impres-

sion of the finger. The disease thus goes on for some time; at last it stops, and may remain stationary during several years. It now manifests all those characters which constitute it, and gives to the parts in which it is situated, a deformed and frightful appearance. Sometimes there is a uniform swelling of the arm or leg, which not only disguises all the prominences of the limb, but may even cover part of the hand or foot, falling over them in folds; these parts seem as if they were in a state of atrophy; at other times the tumour is unequal, the swellings are deformed, and separated from each other by deep fissures, giving an extraordinary and hideous aspect to the limb. Again, the disease has a tendency to attack fresh surfaces, and although at first developed on the forearm or leg, it gradually extends over the whole limb. The cellular tissue continues to alter, and is at last converted into a misshapen, fungous mass. Under other circumstances, however, the disease is confined to one seat, and may even be but little developed; in all cases, the palms of the hands, and soles of the feet are free from the swelling, whilst the remainder of these parts is much tumefied; this arises from the cellular tissue being of a closer and firmer texture in these spots.

The skin, which, as we have stated, is not at first affected, may now assume different appearances; thus, it may remain entirely sound, and only present a whiter colour, and great firmness; at other times, the subcutaneous veins, much distended and enlarged, traverse it in all directions, causing a multitude of varicose tumours, which give it a violet colour; but this membrane may also undergo real alterations. It often becomes the seat of an erysipelatous, or even vesicular inflammation; in the latter, a slight effusion of lymph occurs, followed by small, thin, soft, yellow scales; it may, on other occasions, gradually increase in roughness, and present scales similar to those of *Ichthyosis*, or even become studded with small, soft, fungous vegetations; and finally, under some circumstances, it is divided by fissures, cracks, and ulcerations, which are afterwards covered by thick, yellow scabs.

The lymphatic glands, after having remained hard and scir-

rhous, may sometimes suppurate, or be struck with gangrene. Indolent abscesses, which give rise to deep, fetid, copious suppurations, occur at this time throughout the enormously distended limb.

We do not know, precisely, whether the swellings of the neck, breast, abdomen, &c. admitted by Alard, are really true cases of *Elephantiasis*: these instances are exceedingly rare, and as we should be obliged to point out all the distinctions that exist between the different diseases which have been described as *Elephantiasis*, we think it better to refer our readers to Alard's work, and to confine ourselves to the most common form of the disease, that which attacks the limbs. Nevertheless, the penis is a very frequent seat of this affection; this part sometimes acquires an enormous size, and assumes extraordinary and unnatural forms. M. Biett saw a case in which it was quadrupled in its volume. Under such circumstances, the scrotum is generally implicated. Finally, the breasts also appear to be liable to the attacks of *Elephantiasis*, in which case they become so much augmented in size that they are obliged to be supported by bandages passed around the neck. According to some authors, they also become the seat of small, isolated scirrhus tumours, which may ulcerate and remain incurable.

Sensibility is seldom destroyed in the diseased parts, but the adjoining articulations become in many cases the seat of chronic inflammation. Adhesions take place, and the action of the joints being prevented, the limb is only an inert body, very troublesome to the patient, from its weight.

Causes.—*Elephantiasis of the Arabs* is neither contagious nor hereditary; it attacks both men and women indifferently, and although most usually met with in adults, it may occur in young persons and children; in fact, the hardened state of the cellular tissue in some newly-born children, appears to appertain to this affection. It may occur in all ranks of life. It is endemic in the torrid zone, near the equator, and has been attributed to the action of the cool winds, which, in these burning climates, arise with the sun, and form a strong con-

trast with the general temperature of the day, exercising a great influence on the health of the inhabitants. It is rare in Europe.

Elephantiasis appears, as we have said, capable of occurring without presenting any symptoms of acute inflammation in the lymphatic system, in which case it may arise from a multitude of causes, some of which are inappreciable; at other times, it may be induced by the obliteration of the veins, and it has been provoked by the cicatrization of an old ulcer.

Dissection.—The skin is most generally hardened, sometimes covered with yellowish scales or thick scabs, or it may be chapped, and present small, hard scales analogous to those of *Ichthyosis*. 1st. The epidermis is very thick, chapped, and adherent. 2d. The mucous tissue is very distinct, and according to the observations of Andral, he was able to recognise the different layers described by Gaulthier, and afterwards by Dutrochet, between the epidermis and true skin. 3d. The papillary tissue is very much developed, and distinct from the dermis; the papillæ are elongated, enlarged, and prominent, according to Andral and Chevalier. 4th. The dermis is of considerable volume, and is sometimes in such a state of hypertrophy, as to exceed half an inch in thickness. 5th. The cellular tissue is much developed, and sometimes contains a semi-fluid, gelatinous matter in its cells; but it is most generally hardened, slightly scirrhus, and is denser in proportion as it is nearer to the dermis. The muscles are usually pale, discoloured, softened and much diminished in size. Sometimes the veins are obliterated, and in the case reported by M. Bouillaud, even the vena cava itself was wanting.

As to the general state of the rest of the system, we know of no other alterations that can be referred to this disease exclusively, except that glandular engorgements may be found in different parts of the body.

Diagnosis.—When the disease commences by inflammation of the lymphatic vessels, its seat may be readily determined; but it would be difficult to decide whether it is, or is not a precursory symptom of *Elephantiasis*, for inflammation

of this system is often met with, without its terminating in a hardening of the cellular tissue, or considerable swelling of the parts.

But when *Elephantiasis of the Arabs*, whatever may be its real cause, whatever may be the original seat of the disease, presents itself with all its characters, that is, with a greater or less degree of a deformed and indolent swelling, accompanied with so great an induration that the skin does not, in some cases, yield to the pressure of the finger, it may be confounded with anasarca and œdema, and it is very probable that in certain cases this latter affection has been taken for *Elephantiasis*; but on the one hand, the presence of certain general symptoms, or the state of some of the internal organs, the softness of the tumour, the manner in which it is developed, the general state of the patient, &c. and on the other, the course of the disease, which is entirely local, the integrity of the rest of the organ, the form, resistance and hardness of the tumefied parts, are all characters which will serve as discriminating marks between the two diseases.

Prognosis.—*Elephantiasis of the Arabs* is generally a serious disease, and is less curable where it has existed for any length of time, has attacked large surfaces, or where the skin and cellular tissue are much altered; it is also more particularly to be dreaded when it has occasioned morbid alterations of important parts; thus, when it supervenes on obliteration of the blood-vessels, it is usually a fatal affection.

Treatment.—At the commencement, the inflammation of the lymphatic vessels should be combated by antiphlogistics and emollients; if it is very extensive, recourse must be had to venesection; the application of leeches along the course of the inflamed vessels, will often be very successful; these are not to be placed immediately over the seat of the inflammation, but a little on each side of it; large emollient cataplasms may also be used.

When the disease is in a chronic state, (the usual form in which it is seen,) it presents many more obstacles to a cure; blood-letting has been highly praised, but it is far from fulfil-

ling the high character that has been attributed to it; general bleedings are of no service, and may even in some cases be detrimental; as to topical depletion, and especially scarifications, so highly praised by some authors, they appear to have induced very different results, and we have seen patients labouring under this affection, whose limbs were seamed with scars from scarifications that had been practised without producing any melioration in the disease.

Blisters and caustics have also failed in a majority of cases; the same may be said of the mercurial preparations, which have been employed by some physicians; frictions, with the Neapolitan ointment, may be useful as a resolvent. From several facts we have observed in the Hospital of St. Louis, and from the experience of many practitioners, it appears that the best mode of treatment consists in compression, resolving ointments, and *douches* of vapour.

Compression is one of the best remedies in this complaint. It should be made with a bandage of two or three fingers in breadth, and drawn tolerably tight. It generally reduces the tumefaction very rapidly, and even if it does not entirely restore the affected parts to their natural condition, it facilitates the use of other means.

Resolving ointments may be employed with some chance of success; iodine appears to be the best of these preparations. The tumour may be rubbed with an ointment composed of a scruple to half a drachm of hydriodate of potash and one ounce of axunge. Its use is to be suspended, if the diseased parts should become inflamed, a frequent occurrence in this affection.

Douches of vapour are very useful, they develop a greater vitality, hasten resolution, and greatly contribute to the cure; they should be employed for about a quarter of an hour at a time, and during their administration, the patient should press or knead the swelled parts several times.

As to internal treatment, it is in most cases entirely nugatory, though in some cases the administration of purgatives has produced advantageous effects. Finally, the state of the skin itself may induce a multitude of modifications in the

choice of remedies. Thus it is often the seat of *Erythema*, or it may be covered with vesicles, which occasion considerable inflammation. In such cases recourse must be had to emollient applications and simple baths. At a later period, on the contrary, sulphurous baths are most useful. In fact, the plan of treatment cannot be laid down in advance, it must arise from the changes and forms of the disease; which, unfortunately, in a majority of cases, resist all curative means.

As to amputation, which has sometimes been practised, we think that the cases where it would be proper are extremely rare, and we have even seen a patient who had been admitted into the hospital, for this disease, who had previously submitted to amputation, in the hopes of cure.

ORDER XIV.

DISEASES OF THE SEBACEOUS FOLLICLES.

IF the secretions of the skin offer a vast field of inquiry to the physiologist, they are also a most interesting study for the pathologist; but our knowledge is as yet very limited on this subject, and we must wait for new facts and observations to elucidate many obscure points, before we can attempt to consider these secretions in a general manner; in the mean time, we wish to dedicate a few lines to the history of a disease which appears to us to be seated in the sebaceous follicles, the most apparent symptom of which consists in a secretion which is far more copious than is natural.

This disease, which has been several times observed by M. Bielt, has appeared to him to consist in inflammation of these follicles: it presents all shades, from a simple irritation inducing an augmentation of their secretion, to a violent inflammation, giving rise to a marked alteration both in the nature and quantity of the secreted product.

The follicles on the face seem to be more especially subject to be affected, but in many cases the disease has been more general, extending to the whole follicular system. When they are affected to a small extent, there is at first a slight irritation, which does not give rise to any change of colour in the skin, except that it becomes unctuous at the diseased spot; this irritation soon increases, as well as the secretion of the sebaceous matter; the fluid effused over the surface remains there, becomes somewhat consistent, and by a successive accumulation at last forms a kind of scaly covering of greater or less extent. During, the first few days, this layer is soft, but little adherent, and easily removable, but it soon acquires greater tenacity, when it cannot be detached without occasioning some pain. Under this accidental covering, the skin is of a redder

colour than natural, the openings of the follicular canals, when examined by a magnifying glass, are found dilated and sometimes obstructed by a solid sebaceous matter. Sometimes this layer is spontaneously detached, particularly during the summer, when the dermoid system is bathed with copious sweats; at other times it remains for months, especially when the disease is seated on the nose; when these coverings have lasted for some time, they assume a blackish appearance, giving a most singular aspect to the face; this may explain the mistakes that have been made by inattentive observers.

This inflammation of the follicles rarely extends to the dermoid tissues; that is to say, the elementary lesions already spoken of, are seldom seen to occur with it; nevertheless, this inflammation may acquire such a height as to occasion such an alteration in the secreted fluid, as to cause a strong analogy between it and the sero-purulent fluid furnished by the vesicles of *Eczema*. During the time we are writing this, there is in the hospital an individual whose forehead is covered with a sebaceous crust, which participates in a certain degree in the characters of the scaly scabs of *Eczema impetiginodes*. The skin presents the same appearances as in simple inflammation of the follicles. The duration of this disease is uncertain; we have seen it get well in a few weeks, and at other times last for years.

Causes.—It is almost peculiar to youth and adult age, never occurring in infancy or old age; individuals of a sanguine or lymphatic temperament appear to be the most disposed to it, at least it has as yet never been seen except in those whose skin was white, fine, and naturally unctuous. It has often manifested itself in young and lymphatic females after delivery. M. Biett has had for a long time under his care a woman from the country of about twenty-eight years of age, in whom the follicles over the whole extent of the skin, were in a state of inflammation, and had given rise to a thick permanent crust; this person also experienced a rheumatic affection of the joints. In some cases, certain atmospheric changes may contribute to the development of inflammation in the follicles. In a mer-

chant of Nantes, lately attended by M. Biett, all the follicles of the face had suddenly inflamed from the effect of a violent north wind to which he had been exposed for some hours. This part was in a state of tension for two days, after which the skin became covered with an abundant unctuous secretion, which was soon transformed into a thick, adherent, brownish crust, which masked all the upper part of the face. We are not as yet acquainted with the effects that excesses in eating or drinking may have on the development of inflammation in these follicles.

Diagnosis.—From the circumstance of this disease being so rare, and from its not having been observed with sufficient care, it becomes necessary to indicate the characters that are peculiar to it, and by which it may be distinguished from any other affection.

If the follicles of the face only are affected, it will be always easy to distinguish their inflammation from the pustules of *Acne*, although these usually arise from an inflammation of the same organs. Must it be said, that inattentive practitioners have sometimes taken a thick, adherent, sebaceous crust, covering part of the nose, for *Noli me tangere*, and have gravely proposed cauterizations, and even excision? M. Biett has seen two cases of this kind which caused the greatest inquietude to the patients, and which, nevertheless, were cured in a few weeks by very simple treatment. If the inflamed follicles are numerous, and extend over a large surface, if the crust that results is very consistent, thick, blackish, and so divided as to present the appearance of imbricated scales, it may be possible to confound this disease with some forms of *Ichthyosis*, but this mistake can scarcely occur, if it be recollected, that in *Ichthyosis* the scales are firmly attached to the dermis by one of their edges, that they are dry, very adherent, and that it requires some force to detach them, all which never occurs in the sebaceous crust. We think it right to mention these differences, as such mistakes have occurred.

Prognosis.—In the greatest number of cases of this disease, it presents no other inconvenience than that which results

from its duration; nevertheless, when all the follicles are simultaneously affected, it may readily be conceived that the disease is not without danger.

Treatment.—When the diseased follicles are but few in number, and occupy but a small surface, a cure may be more readily and promptly expected than when the contrary is the case. M. Biett has several times seen follicular irritations yield in a few weeks to the application of vapour *douches* to the affected part for fifteen or twenty minutes at a time. Under the influence of this efficacious remedy, the sebaceous crust softens and is detached with great ease; that which succeeds is generally less consistent, and is often spontaneously disengaged. Lotions with narcotic infusions in the first instance, and afterwards rendered styptic by the addition of sulphate of alumine or some of the vegetable acids, also contribute to restore these parts to their natural condition. In some cases it is useful to aid the action of these local means by some mild revulsants used internally, but great caution must be employed when the disease is general; in such case the gastro-intestinal mucous membrane often presents traces of irritation, or at least, according to the observations of M. Biett, the use of tonics and purgatives is generally followed by a sense of heat at the epigastrium or other parts of the intestinal canal. In these severe cases, gelatinous or mucilaginous baths, slight frictions repeated every day, will suffice to detach the sebaceous crust, and at a more advanced stage, alkaline baths, slightly stimulating frictions, or vapour baths, if the state of the patient does not contraindicate their use. These means are to be aided by a regulated regimen proportioned to the condition of the system, a milk diet, and by all those hygienic plans of treatment which will concur in restoring the general health.

ORDER XV.

*KELOIDE.**Cancroide.*

THE forms of diseases of the skin are so numerous and diversified, that almost every pathologist who has specially attended to them has described some new varieties. The *Keloide* was noticed first by Alibert, under the name of *Cancroide*, which he afterwards changed to its present denomination.

This disease appears to be rather rare, since it has not been seen by many of the late authors on cutaneous affections: Bateman even doubts its existence, and instead of confessing with candour that he had never seen it, he seems to infer that the French author of the magnificent work on diseases of the skin has made some mistake. But *Keloide* really does occur, although it has as yet been observed but in a few individuals; its characters are so well marked that it may not only be instantly recognised, but it would be almost impossible to confound it with other diseases.

It manifests itself by a slight tumefaction of the skin, which soon extends in size and prominence, and forms small, flat tumours, which although often irregular, are generally of an oval shape with a central depression. At other times they may be elongated, angular and shining; the epidermis which covers them is thin and slightly wrinkled, so as to give it the appearance of the cicatrix of a burn; they are hard and resisting to the touch; their colour is sometimes of a deep red, and at others of a pale rose colour. This colouring, however, differs according to the temperature and state of the patient. These flat tumours are about one or two lines in height; this is greater at their circumference than at their centre.

In the greatest number of cases the disease forms but one patch, whilst in some instances there are many; M. Biett has seen a young lady, whose case he communicated to Alibert, who presented eight small, flat tumours on the neck and lateral part of the breast. Very lately the same pathologist has observed two of these tumours on another patient from the environs of Caen.

The *Keloide* may acquire an extent of one and a half to two inches in its greatest diameter; it may also occur of only a few lines in breadth, particularly where it is multiplied.

In some patients it occasions great pain and throbbing, which are more apparent during atmospherical changes, and painful tinglings after meals; at the same time it must be allowed that in some patients, none of these symptoms manifest themselves; the small tumours arising and increasing without being accompanied with any pain.

When *Keloide* is left to itself, it makes very slow progress; it rarely terminates by ulceration, and the cases in which this has been said to have taken place, are not sufficiently verified. In some cases, as has been remarked by Alibert, it may diminish and disappear, leaving a white and firm cicatrix. The most common seat of *Keloide* is on the anterior part of the breast. At the same time, it often appears on the neck or arms.

Causes.—*Keloide* has been too rarely observed for any very exact knowledge to have been acquired as to its etiology. In some persons who were attacked with it, the disease had commenced without any kind of disorder, either local or general, except a slight smarting. In some cases, it appeared to have arisen from some external cause. In a lady, whose case is detailed by Alibert, the *Keloide* manifested itself after a deep scratch she had received on the breast.

As yet, this disease has never been seen in infancy; it has almost always occurred in young persons approaching adult age. Alibert believes that the *Keloide* is more common among females than males; but in comparing the observations made by Biett, and those given by Alibert, in his great work, it will be

found that in nine patients affected with this disease, that there were four men and five women; hence it is apparent that it cannot be said to be more frequent in one sex than in the other.

Diagnosis.—*Keloide* ought to be sedulously distinguished from the *cancerous affections*, with which, however, it has but little analogy. In a majority of cases, cancers of the skin form round, prominent, livid tubercles, ulcerating at their summit, and environed with dilated veins distributed over a hard and withered skin. The neighbouring glands are engorged, and sometimes acquire an enormous size. The *Keloide*, especially when it is seated on the anterior part of the breast, consists, in the greatest number of cases, of a prominent, flattened spot, elevated at its edges, resisting to the touch, and in most cases, occurring on healthy skin, which retains its natural colour, &c.

The *Keloide* can never be confounded with syphilitic tubercles. These are always in great numbers, and assembled in groups; they are rounded at their summits, of a coppery or livid colour, and intermingled in a plurality of instances with cicatrices, besides which, they are generally accompanied with general symptoms of the constitutional affection.

When the *Keloide* consists of numerous small tumours, they are separated by intervals of sound skin; they are of a rose colour, are sometimes square, and at others of a triangular form, but never assume the rounded form peculiar to the syphilitic eruptions.

This disease can scarcely be mistaken for sanguineous tumours. In fact, these latter form vascular vegetations; they are scattered or disposed in groups, and are at first on a level with the skin, but gradually enlarge and assume the form of true fungous tumours. Neither have the *erectile tumours* of Dupuytren any analogy with the *Keloide*; they are brownish, and generally granulated at their surface; their base is large, and sometimes profoundly implanted in the dermoid tissue; they are soft to the touch, whilst the *Keloide* is firm. They often present movements isochronous to those of the arterial pulsations. Nothing like this takes place in *Keloide*

Prognosis.—The *Keloide* is never a serious disease; that is to say, it never is attended with danger, and if in the case reported by Alibert, the tumour eventually assumed a threatening appearance, it was rather owing to the remedies employed than to its natural progress. In the majority of individuals in whom this eruption has been observed, the state of health was never affected.

Treatment.—The therapeutic means to be used, are the same as have been indicated by Alibert. Surgical treatment, as extirpation and cauterization, are never advantageous. Applications of a different nature have also failed in most cases. Sulphurous *douches* have sometimes appeared to have diminished the hardness of these small tumours. Frictions with the hydriodate of potash may be used with some chance of success. If any favourable opportunity should present itself, M. Bielt intends to give it a fair trial.

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