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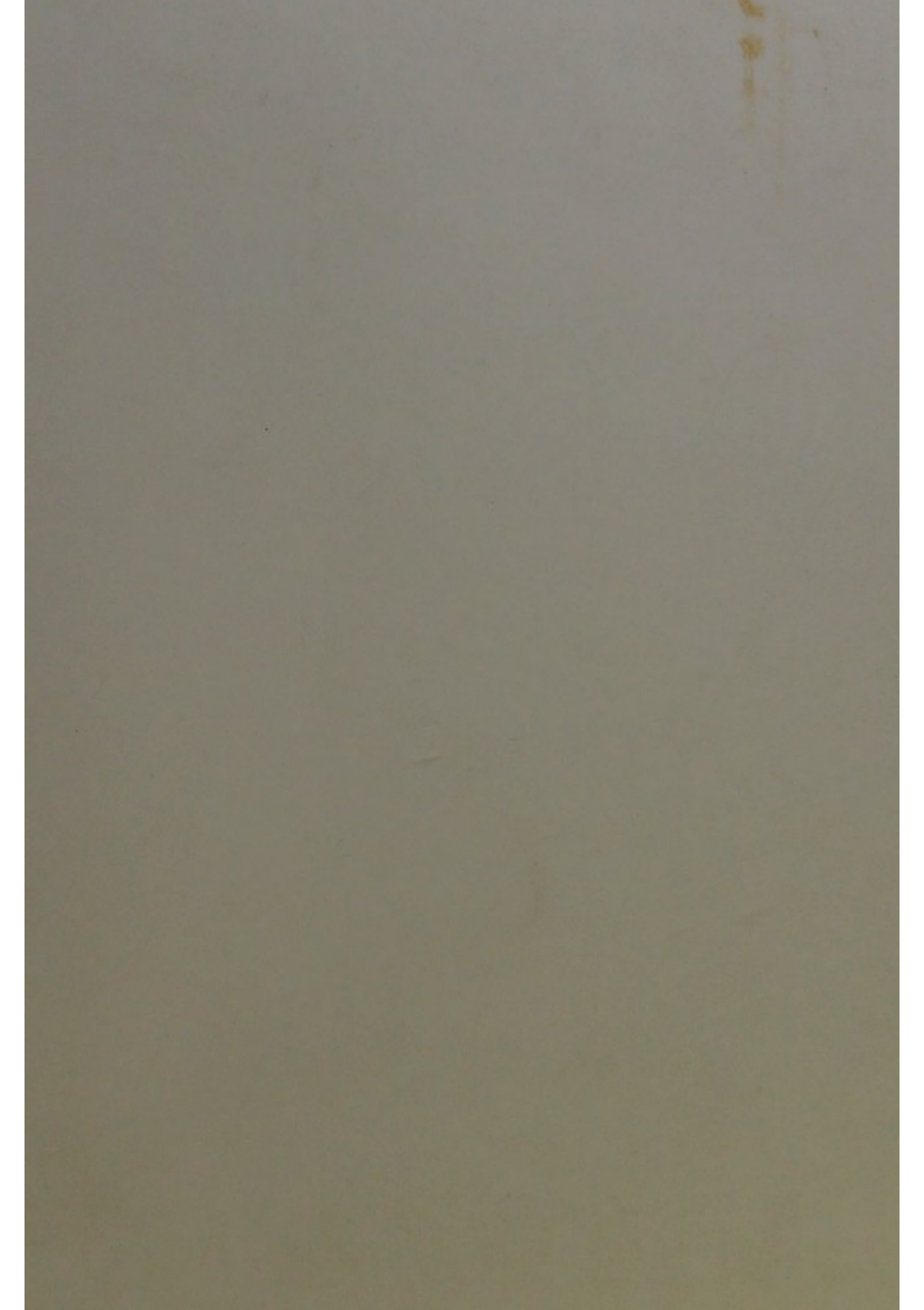
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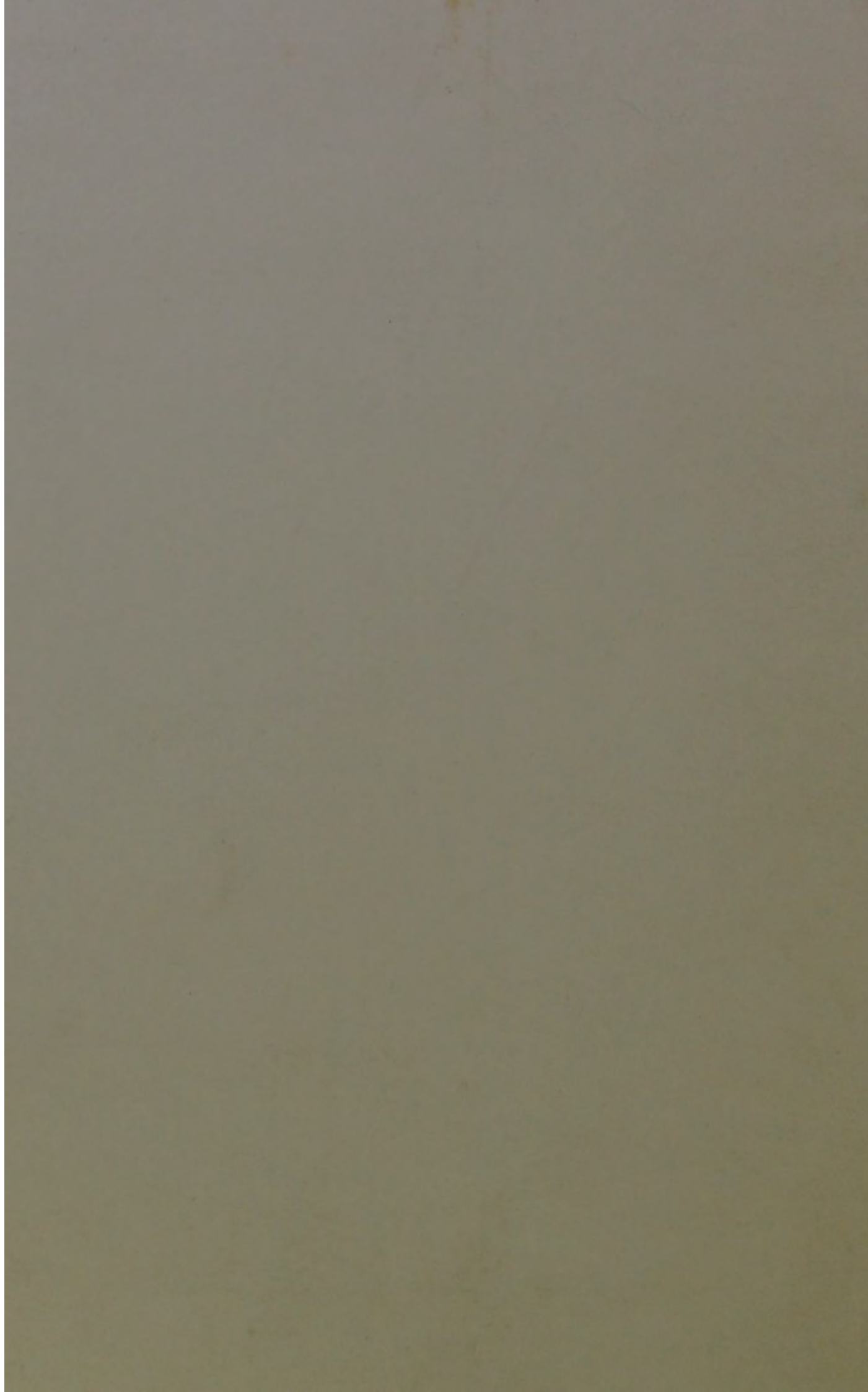
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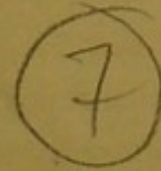


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THE



THEORY AND CLASSIFICATION

OF

INFLAMMATIONS OF THE SKIN.

BY

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## INFLAMMATIONS OF THE SKIN.

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I HAVE long been of opinion that unnecessary difficulties are introduced into the study of many diseases of the skin, by a tendency to contemplate them as individual unities, while losing sight of their mutual relations. It does not do to fix too exactly the limits of particular diseases; to force nature into accord with our ideas, instead of endeavouring truly to interpret her phenomena. It is, no doubt, very desirable that a clinical physician, or a student, should be able to say decidedly, "this is such or such a disease;" and most of our books seem to have been written by men rather keenly alive to the advantages of rigorous definition. But all deviations on our part from the interpretation of actual phenomena, though they may assist the beginner or the practical physician in some few cases, are just as sure to lead to worse confusion in others. It is far from rare for a study of seeming complications to result in simplifying, to an unexpected extent, subjects which they seemed at first only to embarrass; and nothing can better illustrate this truth than the simplification which results from the study of cutaneous affections, both in their typical forms and in their forms of transition from one well-marked variety to another. Few things, for example, can be more confusing than to open the elaborate work of Devergie, and to read of the endless new species and compound affections enumerated by the learned author, as the result of his unwearied assiduity in one of the widest fields for observation in the world. One would imagine, at first sight, that the complexity of the study was increased in proportion to the number of novelties and compounds introduced by him into its nomenclature. On the contrary, more careful research into the nature of such compounds proves them to be often mere stages of transition from what was previously considered one distinct disease to another, and shows that these new names, instead of encumbering the science by increasing the number of its manifestations, ought to be regarded as conducing to its simplicity by doing away with distinctions which had hitherto been accepted as essential. Thus, *eczema* is placed in one group of Devergie's; in a second, *impetigo*; and in a third, *lichen* and



*prurigo*; while these four separate diseases are subdivided altogether into somewhere between thirty and forty distinct varieties. Many are what are called "composite forms," and it only requires some study of these, and some attention to the true nature of the affections, to show that the whole of the diseases thus carefully distinguished, with all their subdivisions, are not only members of one natural family, but mere varieties of the same disease; stages, with a few slight modifications, of a single pathological process.

The inflammations of the skin, towards which I wish ultimately to direct attention, form a perfectly natural class of skin diseases. I mean to examine this class in detail,—to define its limits,—and also to point out some of the highly interesting relations which its members bear to one another. It will be absolutely necessary, therefore, to make a few preliminary remarks on the subject of classification, in order to determine the position of the class inflammations.

Of the different systems of classification which dermatologists have contrived for the purpose of grouping together and distinguishing skin diseases, I shall briefly allude to five, pointing out, in passing, some of their respective excellencies and defects. I shall then suggest and point out the principles of a somewhat different arrangement, which I look upon, at the present moment, as not altogether uncalled for, but which I mean here to sketch in its most general features only, that I may return the sooner to the subject of the inflammations. The five classifications which I shall first advert to are,—the classification of Willan; that of Alibert; that of M. Hardy, of the St Louis Hospital in Paris; the classification of Hebra, and that of Mr Erasmus Wilson.

The classification of Willan, and the same as modified by Bateman, is one so much respected by old physicians in this country, as being the system studied by themselves in their youth, that it is almost necessary, for this reason alone, to have some acquaintance with it. It is, except in the case of the order *Exanthemata*, a purely anatomical classification,—an imperfect enumeration of the lesions affecting the skin, which throws no light whatever on the pathological processes concerned in the production of the various diseases; or, in other words, on the essential nature of these diseases. It is a classification of symptoms, or symptomatic lesions; and, accordingly, under it the most dissimilar diseases are sometimes grouped together; and sometimes one disease is dissected into three or four different affections, each of which belongs to a distinct principal order of the system. In the order *pustulæ*, for example, we encounter impetigo side by side with porrigo, with variola, and with scabies. Lichen occurs in one order, impetigo in a second, eczema in a third. Erythema ranks next purpura in one order, pityriasis next psoriasis in another, while strophulus is transferred to a third, so that the natural relations of numerous diseases are altogether disregarded. Willan's arrangement is based on a



classification on similar principles, given out twenty-two years before (in 1776), by Plenck, who enumerates *fourteen* classes of skin diseases; or, more properly, of cutaneous lesions. The orders enumerated by Willan are only *eight* in number, he having omitted from Plenck's system various lesions which he rightly regarded as of secondary formation. They are as follows: *papulae, squamæ, exanthemata, bullæ, pustulae, vesiculæ, tubercula, and maculae*. Now, of course, an observer like Willan could not deny that, in many diseases, a great number of these lesions are to be found side by side; but he made an attempt to group skin diseases according to the lesion which he considered to be the *primary lesion* in each affection, or to be, on the whole, *most typical* of it. However excellent for the time this attempt may have been, its results cannot now be regarded as either natural or fortunate. Of this, the heterogeneous affections that are still brought together in almost every English work on dermatology bear too ample witness.

The great French dermatologist, Alibert, conceived the idea of arranging skin diseases on a completely different principle, namely, into groups the several members of which should present obvious points of analogy among themselves. He conceived the idea of arranging skin diseases, or *dermatoses*, as he calls them, into *natural families*. Of these families he enumerates *twelve*, of which I shall mention one or two only, to show how really natural some of them are. His first family, for example, is that of *eczematous dermatoses*; and, although I cannot acquiesce in his division of the family, there is nothing more natural than a group of diseases of the skin related to eczema. Then he groups together *exanthematous dermatoses*, or febrile eruptions, cancerous diseases, strumous diseases, hæmorrhages of the skin, diseases of the pigment of the skin, and several others, all of them being collections more or less founded in nature, and showing a great advance, in principle at least, beyond the mere classification of anatomical lesions as enunciated by Plenck and Willan.

Following in the footsteps of Alibert rather than of Willan, M. Hardy, of the Hôpital St Louis, has given us a classification which is, perhaps, taking it as a whole, the best which has yet been published. He calls it a classification of skin diseases *according to their nature*; and although we may be obliged to regard some of his divisions as of more than questionable propriety, still we cannot but accord the highest credit to the accomplished author for this valuable contribution to dermatological science. He divides skin diseases into *ten* natural families, or classes, in the following manner:—1. *Macules and Deformities*; 2. *Local Inflammations*; 3. *Parasitic Diseases*; 4. *Eruptive Fevers*; 5. *Symptomatic Eruptions*; 6. *Dartres, or Tetters*; 7. *Scrofulides*, strumous eruptions; 8. *Syphilides*, syphilitic eruptions; 9. *Cancers*; 10. *Exotic Diseases*.

A number of these groups are excellent. The diseases composing them have a natural relation to one another, and both on



theoretical and practical grounds ought to be considered together. The *first*, *third*, *fourth*, and *eighth* groups may thus be especially commended. The propriety of the remaining six is, however, more doubtful; and the two worst of all seem to me to be the *sixth* and *tenth*. The class of "Exotic Diseases" comprises simply those which do not occur in France, and with which, therefore, M. Hardy has had no opportunity of making himself personally acquainted. The sixth class, that of *dartres* or *tetters*, comprehends four diseases: eczema, psoriasis, lichen, and pityriasis. These, Hardy, Bazin, and other French dermatologists conceive, although, so far as I can see without any reasonable ground, to be expressions of a hypothetical constitutional tendency, invented for the special purpose of grouping a number of obstinate affections together, under the title of the "dartrous diathesis" (*Herpetismus*).

A classification has recently been enunciated, or rather adopted from Rokitsansky, by perhaps the greatest dermatologist of the present day, Professor Hebra of Vienna. Willan classified skin diseases according to their symptomatic lesions; Hebra attempts to classify them according to the preceding pathological processes. Thus, he enumerates *hyperæmias*, *anæmias*, *hypertrophies*, *atrophies*, *exudations*, *hæmorrhages*, and so on; in all, *twelve* classes. These need not be mentioned in detail; because, though an admirable catalogue of the pathological processes occurring in the skin, they cannot be regarded as a successful classification of the *diseases* of the skin.

It would lead me too far to state at length the last classification of Mr Erasmus Wilson, at which the student will do well to look, as it is a step in the right direction; but it does not seem to me to be a successful step. Mr Wilson is, in the first place, too much of a Willanist to make a good classification; he seems afraid to interfere too much with these "holy orders" of exanthemata, vesiculæ, etc., to which we have so long been accustomed. He sacrifices, also, a great deal to the fatal error of attempting to introduce uniformity of principle in classification. *Ætiology* is surely misapplied as a principle when nothing more can be made of it than such mere verbiage as "general causes," "special external causes," and "special internal causes." I cannot tell what these phrases mean, any more, probably, than Mr Wilson himself; but I see that they result in putting scabies side by side with burns and chilblains, while psoriasis is encountered in the same group as lupus and elephantiasis. I can scarcely believe that Mr Wilson would *now* refuse to recognise a group of vegetable parasites; but the want of it is certainly a grave objection to his system as it stands, more especially as it is the very group to which the *ætiological* principle of division applies with the greatest pertinency.

Any classification, *resting on one principle of division only*, runs the risk of being, to a greater or less extent, artificial and untrue, in nosology as well as in botany. To secure a *natural system*, several



principles must be taken into account, though greater importance may be attached to some of these than to others. However imperfect the arrangement may be of which I shall now give an outline, it has yet been constructed on principles to the soundness of which I have no hesitation in committing myself.

Pathology is the science of disease. Skin diseases, like all others, ought to be classified according to their *nature*; in other words, according to their *pathology*, in the widest sense of the term. Every disease has, whether we know it or not, a *cause*, which cause determines certain *pathological processes* in the system, and these give rise to symptomatic *structural lesions*, and occasionally even to obscurer symptoms, the connexion of which with a definite lesion may not be apparent. Now, a classification according to the nature of the structural lesions accompanying different diseases would correspond in principle with that of Dr Willan; and a classification according to the pathological processes determining such lesions would correspond with Professor Hebra's. In both these systems, however, the *cause*, as an element of distinction, is overlooked: a defect which is remedied in the system of Hardy. A knowledge of the cause of the disease gives generally a far more accurate indication of its true nature, and, as a consequence, of the best means of getting rid of it, than can be bestowed by any knowledge of the processes, lesions, and symptoms which are the mere *effects* of that cause. Therefore we ought to classify skin diseases according to their causes, *if we can*; and if we cannot classify them all in this way, owing to their causes being multiple or unknown, we ought, at least, to group as many as possible together on this principle, which I propose to do under the head of "Diseases defined by uniform causes." Such causes must be *definite*; they must really have an existence in nature; and must not be merely hypothetical, as is the case with the *dartrous diathesis* of Hardy, which cannot be proved to exist at all. The *strumous diathesis*, the *cancerous diathesis*, the *tubercular* and *rheumatic diatheses*, and so on, express conditions which *may* result from special causes, but the existence of these has never been fully demonstrated. So far as we know at present, the groups of skin diseases defined by uniform causes are *three* in number: the *parasitic diseases*, and the *syphilitic* and *febrile eruptions*. There is nothing hypothetical about the existence of a parasite, since the animal or vegetable can be seen with the eye, or with the aid of a microscope. There is nothing hypothetical about the poison of syphilis, since it can be transferred from person to person on the point of a lancet. And, lastly, there is nothing hypothetical about the existence of some subtle agent, capable of transmitting from one person to another such diseases as measles and typhus fever. Sometimes we know of the existence of a cause, can isolate it and recognise it; as in the case of a parasite. Or we know of the existence of a cause, can isolate it, but cannot recognise it; as in the case of syphilis or



small-pox. Or, again, we know of the existence of a cause, but can neither isolate it nor recognise it; as in the case of the majority of contagious fevers. Still, in none of these cases is the actual existence of the cause in the slightest degree doubtful or hypothetical.

With regard to the diseases which are not defined by uniformity of cause, we do not know the cause of them, and so we must arrange them into groups according to another principle, and, if possible, according to that which is of next greatest importance in determining their real nature and affinities. Now, a disease is best determined, if we do not know its cause, by the process immediately induced by the action of that cause on the body. The pathological processes determining lesions in the skin enable us, when we consider them, to separate three groups: the *inflammations*, the *new formations*, and the *hæmorrhages*. I do not mean to say that there are not other pathological processes besides these. We have, for example, hyperæmia or congestion; anæmia or inanition; but these do not lead to results which are fairly to be considered as *diseases* of themselves. Thus, unless hyperæmia be sufficiently intense to pass into inflammation, or unless it be *secondary*, from the influence of another distinct lesion, as in acne rosacea, it is merely a transient symptom, which does not rise to the rank of a skin disease.

What is *inflammation* of the skin? A disease of the local circulation, say some; and, no doubt, when a part is inflamed there is generally a rush of blood towards it, which, however, does not make it necessary that the rush of blood should be the cause of the part inflaming. It affects the "pars papillaris" of the corium as well as the "pars reticularis" and the subjacent cellular tissue; and it occurs, according to Virchow, in the papillæ in which there are no bloodvessels in exactly the same way as in the papillæ in which these are present. It occurs also in the papillæ in which there are no nerves just as much, and in the same fashion, as in those in which there are. But, more than this, it occurs in the epidermis, where there are neither vessels nor nerves; and there we see that it is an affection of the cells, which, in consequence of some irritation, become morbidly active; imbibe a greater quantity of plasma from the blood for their nutrition; enlarge, by which they cause swelling of the parts; and even, when the process is sufficiently intense, pour out an exudation from their walls, giving rise to what is called *infiltration*. How much of this infiltration is, in a given case, due to exudation from the cells, and how much to direct transudation from the vessels, is, in the present state of our knowledge, not easy to determine. Suffice it to bear in mind, that an exudation probably proceeds in part from the walls of the capillaries, and in part from the inflamed cells which enter into the composition of the infiltrated tissues.

When the elementary cells of a part, in place of merely demanding more nutriment, swelling up, and pouring out exudations from



their walls—in place, in other words, of simply inflaming—undergo alterations of a more permanent character, and which do not, as a rule, disappear when the inflammatory process has come to an end, we give to these results the name of *new* or *morbid formations*. The expression in great measure explains itself. The results are produced in two different ways: (1) by excitement of the *nutritive energy* of the cells, so that they are stimulated to accumulate in their interior substances, such as pigment, which were not there before; and then (2), by excitement of the *reproductive energy* of the cells, so that they are stimulated to divide and multiply, till new parts are formed which were not there before. These new parts are either made up of cells similar to those from the irritation of which they originally sprung, or the cells composing them have become more or less modified in the process of repeated division. If the parts be still similar in elementary structure to the surrounding tissues, or at all events not much modified, so as to be easily traced back to their origin in these tissues, then we call them *homologous* or *benignant* new formations. If quite dissimilar to these tissues, we call them *heterologous* or *malignant* new formations. Finally, the heterologous new formations may be conveniently subdivided into *pseudoplasms* and *neoplasms*; the former, as *lupus*, being incapable of independent growth, but extending by the implication of surrounding tissues; the latter, as *cancer*, containing fertile elements within themselves.

The *hæmorrhages* of the skin arise from the escape of blood in small quantities, owing to the rupture of capillary vessels, or to the escape of colouring matter from the blood along with exudations. They are affections peculiar to the cutis; for, although, blood may be effused *among* the epidermic cells, hæmorrhage cannot of course originally constitute an epidermic affection.

If the skin were a simple organ, having established our group of diseases according to cause, and our three groups according to the nature of the process directly called into action, and finding that this division, to all practical intents, exhausts the category of skin diseases, we might consider our classification as accomplished. But the skin is complex; it contains a number of accessory organs—glands, hairs, nails, vessels, etc.—whose affections it is much more natural to consider together than among the inflammations and new formations of the skin. We have, therefore, added to our enumeration a fifth class, founded this time on anatomical considerations, the *Diseases of Accessory Organs*.

In the foregoing classification, uniformity of principle having been deliberately rejected, it will sometimes happen that a disease *apparently* belongs to more classes than one. In such a case, however, it belongs *in reality* to the class established on the most important principle of distinction. And it will be found expedient, not as an absolute rule, but specially with reference to diseases of the skin, to consider the “diseases of accessory organs” as inter-



mediate in importance between diseases defined by uniformity of cause, and diseases defined by the nature of the pathological process. Thus, favus of the nail would belong, not to the diseases of accessory organs, but to the group of parasitic affections. Acne, on the other hand, would belong, not to inflammations, but to the diseases of accessory organs. In classifying the diseases of every great system of the human body, the introduction of some special arrangement of this kind, not always the same, but determined, as it is necessitated, by anatomical peculiarities, will be found expedient as conducing to the formation of *natural families*. The *system* (cutaneous, or nervous, or whatever it may be) must be taken as a whole; but the anatomical peculiarities of that system must be allowed to have a chief influence, second only to the great principle of uniform causation, in determining the distribution of its parts. With these observations the following tabular view of the foregoing classification may be given; the classes arranged in the order that appears *for the diseases of the skin*, to be the most natural and expedient. Diseases belonging to Class 5 are excluded from 4, 3, 2, and 1; those belonging to 4, from 3, 2, and 1, and so on. Thus a syphilitic eruption may be an *inflammation*, but it belongs not to Class I. but to Class V.

*Diseases of the Skin.*

Class I. Inflammations, .....	{	1. Erythematous.
		2. Eczematous.
		3. Phlegmonous.
„ II. New Formations,—		
A. Homologous, .....	{	1. Epidermic.
		2. Pigmentary.
		3. Dermic.
B. Heterologous, .....	{	1. Pseudoplasms.
		2. Neoplasms.
„ III. Hæmorrhages.		
„ IV. Diseases of Accessory Organs.		
„ V. Diseases Defined by Uniform Causes,—		
A. Parasitic Diseases.		
B. Syphilitic Eruptions.		
C. Febrile Eruptions.		

With regard to *inflammations* of the skin, while the greater number affect principally, and in the first instance, the superficial layers of the corium, others, the *phlegmonous inflammations*, are more especially subcutaneous, or they implicate the skin in its entire thickness. Some of these affections are diffuse, as cutaneous cellulitis (dermatitis diffusa phlegmonodes); while others, as furunculus and anthrax, have been appropriately grouped together by Hebra under the title of “*dermatitis circumscripta*.” The remaining inflammations, with which we have now to deal, are more superficial. The division of these according to the nature of the anatomical lesion, according to the presence of macules, papules, vesicles, pustules, and so on, is obviously artificial and untrue. On



the other hand it seems to me that the pathology of the inflammatory process—a much more important principle to regard than the mere resulting anatomical lesion—supplies us with a distinction founded in nature; in consideration of which the superficial inflammations of the skin may be divided into the *erythematous* or *diffusive*, when the individual lesions are diffuse, or in patches, and the *eczematous* or *selective*, when the lesions are concentrated at points. Such points I believe to be determined either by the presence of cutaneous glands, or by the peculiar arrangement of the capillaries; and these different points of selection—the glands representing the most vascular situations on the surface of the skin—are in reality nearly coincident. A vesicle does not form at the mouth of a gland, sebaceous or sudoriparous, because a gland is there, but simply because such a point is more vascular and becomes, therefore, more readily a centre of exudation.

An important distinction of this kind unquestionably exists in nature, though dermatologists have hitherto made no use of it for purposes of classification. Some modes of irritation of the skin have a tendency to produce one of these inflammatory types, and other modes, with equal certainty, produce the other. If we irritate the skin with cantharides, mustard, ammonia, or corrosive sublimate; or if we produce irritation by rubbing a surface again and again severely; or if the skin be scalded, or burned, or irritated by urine; in all these cases we generally look in vain—I do not say *always*, but *generally*—for the production of papules, vesicles, or pustules upon the affected surfaces. The skin does not get thickened from the exudation of a plastic material at particular points, but both corium and cellular tissue get generally infiltrated with serous fluid. I think it highly probable that this fluid may filter directly through the walls of the bloodvessels, and that the more plastic secretion of the selective inflammations may be, on the other hand, elaborated in the cells of the affected parts. The epidermis, owing to this tendency to diffuse watery exudation, is not raised from the skin in minute vesicles, but the skin is blistered, *vesicated*; the accumulation of large quantities of serous fluid elevates the epidermis in the form of *bullæ*. On the other hand, if we irritate the skin with croton oil, tartar emetic, and several similar agents, the inflammation does not lead to the formation of bullæ, but to that of papules, vesicles, and pustules; in a word, to a series of lesions corresponding to those witnessed in the course of an eczema. Of course, *any* irritant may produce effects such as these last *exceptionally*; as on the skin of a person constitutionally predisposed to eczema, although not on that of a healthy person. We are able to call forth both types at will upon healthy skins by the use of different agents; and therefore I am disposed to recognise in these two types, expressions of actual phenomena, the principles determining which may be naturally referred to in classifying inflammations of the skin.

The threefold division of inflammations into erythematous,



eczematous, and phlegmonous, has been already partially applied to an inflammatory group by v. Baerensprung.<sup>1</sup> To Dr Albert Reder, however, so far as I know, belongs the credit of having first suggested its more general use, in a manner nearly in accordance with my own views of its significance.<sup>2</sup> He distinguishes diseases of the erythematous group chiefly by their acute course, and by the absence or fluid nature of the exudation. Diseases of the eczematous group on the other hand, run a course mostly chronic; and the exudation is accompanied with copious new formation of cells, giving rise to crusts or to adherent squamæ. Still, neither Reder nor Baerensprung seem to have perceived the confirmation of an arrangement obviously founded in nature, by the applicability to it of a tendency to diffusion or selection on the part of the elementary lesions; the lesions of the one group for the most part occurring in patches, those of the other usually at special anatomical centres. Baerensprung, who divides inflammations in the first instance into diffuse, exanthematous, and furuncular, is much encumbered by the necessity of including in his enumeration the anomalous forms of eruption brought out under the influence of syphilis and fever. He puts eczema among his diffuse eruptions, impetigo among his exanthemata. Side by side with this last occur variola and psoriasis; showing, once more, that all attempts at classifying diseases on the application of a single principle must necessarily fail in producing natural results.

I shall first give a general view of the erythematous inflammations of the skin, with explanatory remarks; and then treat in the same manner the group of eczematous inflammations. I merely premise that, in subdividing *genera* (if one may so speak) into *species* and *varieties*, more than one principle of division is, here also, admissible in each case; otherwise, the *natural character* of the classification would often be sacrificed.

*Erythematous Inflammations (Diffusive).*

- |                    |  |   |
|--------------------|--|---|
| 1. Erythema.....   | { simplex.<br>papulatum.<br>squamosum .....<br>nodosum.<br>strophulus. | { Pityriasis furfuracea; membranacea.<br>" " rubra. |
| 2. Herpes .....    | { simplex.<br>zoster.  |   |
| 3. Urticaria.....  | idiopathica; ab ingestis; uterina; diutina.                            |   |
| 4. Dermatitis..... | { idiopathica.<br>symptomata = Erysipelas.                             |   |
| 5. Pemphigus ....  | { vulgaris.....<br>foliaceus.  | { benignus.<br>diutinus.                            |

All the foregoing eruptions are *diffuse*; by which I mean, that their elements have no tendency to occupy particular centres, such

<sup>1</sup> Die Hautkrankheiten, von Prof. Dr F. v. Baerensprung. Erlangen, 1859.

<sup>2</sup> Allg. Wien. Med. Zeitung, 1860. Nos. 32, etc.



as the orifices of hair follicles and glands, determined by the anatomical peculiarities of the skin. This is very obvious in most erythemata; in dermatitis or erysipelas; in pemphigus, where bullæ rise at once over considerable surfaces; and in urticaria, the lesion of which, or *pomphus*, has been well described by Hebra as a circumscribed œdema, limited to the domain of clusters of capillary loops which spring from a common stem, and are under the influence of a common nervous twig. The first three varieties of erythema enumerated represent so many stages of a *typical erythema*, which may, however, exist in any of the forms indicated, from the very commencement of the affection. When the erythematous inflammation is severe enough, the principle of *selection* is sometimes exceptionally brought into play; and we may then have a few exudations, or papules, concentrated at particular anatomical points of the cutaneous surface, just as in the outbreak of an eczema, only as a superadded, or secondary, and not always constant phenomenon. The form of erythema in which this sometimes occurs is more chronic than *erythema simplex*, but still it runs its course in from two to six weeks, and is designated *erythema papulatum*. It is further distinguished from erythema simplex by its site, and other peculiarities which it would here be out of place to enumerate. Finally, the last stage of an erythema is a desquamation: *erythema squamosum*. Such a form may exist as a desquamation from the first, apparently as a mere inflammation of the epidermis, without the corium being more than congested, if, indeed, it be affected at all. To this form of erythema only is the title of *pityriasis* applicable; and it is also the only form which has any tendency to become *chronic*, the first stage of the disease invariably running a course more or less acute. It includes furfuraceous and membranaceous desquamations of the surface of the skin; as well as the peculiar and rare disease described by Devergie as *pityriasis rubra*.<sup>1</sup>

*Erythema strophulus* is a transitional form connecting erythema with the eczematous group. The papules which characterize it may be formed secondarily on congested patches; but they are still more frequently formed independently at particular points of selection. Instead, however, of assigning it on this ground a place side by side with *lichen*, the affinities of strophulus to erythema, as established by the course they both run, and by their frequent coincidence as symptomatic of the same derangement of system, are so well marked as to leave no doubt as to the natural position of this affection.

The *phlyctænae*, characteristic of herpes zoster, have been described as large vesicles. They should rather be called, however, *small bullæ*; inasmuch as they frequently cover, even without confluence, considerable areas, and their ordinary size obviously precludes the idea of their originating in connexion with special anatomical

<sup>1</sup> *Traité Pratique des Maladies de la Peau*: Paris 1857: p. 442. See also Glasgow Medical Journal, for January 1858.



centres. *Herpes zoster* naturally takes a position intermediate between erythema, which it resembles in its course, and urticaria, which it resembles in its manifest connexion with the nervous apparatus of the skin, and, as a consequence of this, in the general plan according to which its vesicles are disposed on a given patch. Let a patch of urticaria be compared, *in respect only of the form of the eruption*, with a patch of herpes zoster, and the difference will appear to depend on the same pathological process being carried a little further in one case than in the other; the circumscribed œdema of urticaria being carried, in herpes, to a circumscribed serous exudation. One is not, therefore, surprised to find Hebra describing a case of urticaria in which many of the pomphi passed into the form of bullæ.<sup>1</sup> Of course, however, in spite of such accidental resemblances, no one could possibly confound two diseases in other respects so radically different as herpes zoster and urticaria. *Herpes simplex* is sometimes merely a herpes zoster in which the peculiar distribution of that eruption, in correspondence with the course of particular nerves, fails to be perceived. In other cases it is nosologically identical with erythema, as proved by their occasional coincidence in the same individual from the same cause, both diseases running the same course. Erythema and herpes facialis are thus encountered indifferently as symptomatic of coryza, and after debilitating fevers, etc.; while the non-parasitic circinate form of the one eruption is well-known to be the same thing as, and often to coexist with, the circinate form of the other.

*Dermatitis* differs from erythema in being an inflammation extending to the deeper parts of the corium, and even, it may be, to the cellular tissue beneath it. The inflammation is not primarily subcutaneous (as in dermatitis phlegmonodes), but it is not necessarily limited to the surface of the corium, as in true erythema. To take Hebra's division,—it is either *idiopathic*, comprehending burns (Derm. ambustionis), the effects of cold (Derm. congelationis), of irritants applied to the skin (Intertrigo; Derm. ab acribus, etc.); or it is *symptomatic*, when it corresponds with erysipelas.

The erythematous, or diffusive inflammations, thus appear to possess sufficient affinities among themselves to entitle them to recognition as a natural family. As a rule, with the single and not always constant exceptions of erythema strophulus, and herpes, each anatomical element of the eruption breaks out from the first over a surface more or less extensive. Though some forms of affection may be chronic, all of them have a tendency to be *acute*, to exhaust themselves after running a course, varying in the different diseases, but the length of which can still be approximatively predicted. To this tendency even pemphigus offers no exception, at least in its occasional form of pemphigus benignus. Again, in erythematous inflammations, the exudation, when there is any, is purely serous, in place of being plastic or purulent. Squamæ separate from the

<sup>1</sup> Allg. Wien. Med. Zeitung, 1858, No. 2.



surface of the skin, often agglutinated by a viscid secretion, but these are never well-formed *crusts*, nor is there ever any chronic thickening of the corium due to epidermic infiltration. A further test of the *naturalness* of the group is furnished by the tendency of many of its genera to pass, in particular forms, into particular forms of collateral genera. Thus we see the connexion between erythema and herpes simplex, between herpes zoster and urticaria, between erythema and dermatitis, between erysipelas and pemphigus vulgaris, and between pityriasis rubra and pemphigus foliaceus. At the same time, there are also transitional forms tending to connect erythema with eczema, as seen in erythema strophulus and in herpes simplex. In like manner, dermatitis is closely related to the phlegmonous inflammations, so that Hebra puts them into one class, distinguishing the one as *dermatitis erythematosa*, and the other as *dermatitis phlegmonosa*. Reder also enumerates, and perhaps with justice, *erythema nodosum* (dermatitis contusiformis) among the phlegmonous inflammations.

*Eczematous Inflammations (Selective).*

1. Eczema.	1st Grade, Dry..	{	erythematodes.	{	<i>Lichen simplex</i> <i>Prurigo</i> .	
			papulatum .....			
	2d Grade ( <i>Ec. humidum</i> ).	{	vesiculare.	{	<i>sparsa</i> . <i>figurata</i> . <i>pilaris</i> .	
			rubrum.			
			pustulosum = <i>Impetigo</i> ...			
			rimosum			
	3d Grade, Dry..	{	Lichen.....	{	<i>exudativus</i> . <i>ruber</i> .	
			<i>Ec. squamosum</i> .			
	2. Acne.					
	3. Ecthyma.					
4. Psoriasis ( <i>punctata, guttata, nummularis, circinata</i> [ <i>Lepra</i> ], <i>gyrata, confluens</i> ).						

I would first observe that I have marked the position which *acne* ought to occupy, if it should seem to any one more natural to take it up in connexion with the inflammations of the skin, rather than as one of the diseases of its glandular apparatus. It seems to me that eczema, acne, and ecthyma form so many genera of an extremely natural group. Psoriasis, on the other hand, is a disease *per se*, spreading according to laws of its own, affecting, almost always, robust and otherwise healthy persons, and quite unlike any other cutaneous disease.

The common characters of the group of eczematous inflammations are these. The eruptive lesions are concentrated at special anatomical centres: the orifices of hair follicles, the mouths of glands, or at any rate, at particular points probably determined by extra vascularity. The deeper epidermic layers are liable to become thickened by a process of infiltration with plastic liquids. When fluid effusion takes place, it is not merely serous, but plastic or purulent; and contributes to a true *crust formation* on the surface of the skin. I



have already said that I regard it as *cellular* in its origin, rather than as filtering, like the fluid of a blister, directly through the walls of the capillaries. Lastly, the course of all these affections is chronic and indeterminate. Even if exceptionally acute, this happy result cannot be predicted with any certainty beforehand.

The varieties of eczema—in enumerating which I have taken no more liberties than have seemed to me absolutely indispensable—are, as in the previous example of erythema, expressive of the stages that would occur, one after another, in an ideal case. Thus, the lesion of eczema at the commencement is a *localized macule* (Ec. erythematodes); the macule passes into a *papule* (Ec. papulatum); the papule into a *vesicle* (eczema of the Willanists); the vesicle, on giving way, into an *excoriation* (Ec. rubrum); or into a *pustule* (impetigo). In the next place the skin becomes infiltrated, while the secretion, if there has been any, dries up (Lichen *proper*); and the whole process terminates with a *desquamation* (Ec. squamosum). Now, most of these forms may be assumed from the beginning; or they may follow one another with a regularity more or less complete. They represent *ideal stages*; but at any of these stages the disease may be arrested and may persist; so that they come to express not stages only, but *varieties*. The first two stages (grade 1) are dry eruptions: *eczema siccum*. The next four (grade 2) are moist: *eczema humidum*. The last two (grade 3) are again dry, with the exception of lichen agrius, which is a hybrid or transitional form.

*Eczema erythematodes* indicates, in the first place, a disease to which some authors would give the name of *erythema chronicum*. It is usually circumscribed; beginning at a point, slowly extending peripherically into a patch, which lasts, with symptoms of redness, itching, and slight desquamation on the surface, for months or even years. It differs, therefore, from an erythema, both in its punctuated commencement and in its long persistence; while it generally occurs in debilitated subjects, and in those who have previously been the victims of eczema in other forms. The expression is also applicable to irregular erythemata supervening during the course of an eczema, and obviously manifestations of the same morbid cause as the eczema itself.

*Eczema papulatum*, usually the lichen simplex of dermatologists, is a chronic, dry, papular eruption more or less diffused over the surface of the body. It has been called “strophulus in the adult;” and chiefly differs, indeed, from *erythema strophulus* in not running the general acute course of the erythemata. Lichen simplex is mostly attended with itching; and when the papules happen to be of nearly the same colour with the adjoining cuticle (Bateman) it forms one variety of the indefinite disease which has been described by dermatologists under the name of *prurigo*; an affection, however, often merely symptomatic of phthiriasis, or which is traceable ultimately to an *urticaria nocturna* which has eluded observation. But



in other cases, prurigo, when evoked by heat, and often when constitutionally recurrent, is clearly neither more nor less than a peculiar form of eczema papulatum.

When eczema passes into its moist stages, it occurs as *eczema vesiculare*; and, on the rupture of the vesicles belonging to this, as *eczema rubrum* or *madidans*. The lesion in the one case is a vesicle, formed in connexion with some local peculiarity in the anatomy of the cutis; in the other it is an excoriation. Finally, in *eczema humidum*, the epidermis is scarcely less liable to become infiltrated than in *eczema siccum*. In this case the epidermis may become *fissured*, and from the fissure exudes the peculiar secretion of eczema. It is then the *eczéma fendillé* of Devergie and Hardy,<sup>1</sup> which is described in no work in the English language. Nevertheless, this is one of the commonest forms of eczema; and as my colleague Dr M'Call Anderson and myself have long been alive to the necessity of having a name for it, we propose to translate the one bestowed by Devergie, and to call it *eczema rimosum*.

I hate new names, and I like to preserve established nomenclature when that is possible; but, first of all, I must interpret nature as I find it. *Lichen exudativus* is really a necessary expression, and one the use of which is sanctioned by the example of Hebra. *Lichen simplex* has already been discussed, and I let the name remain; it is an *eczema papulatum*, a lichen as defined by Willan. *Lichen exudativus*, on the other hand, is something very different from a mere diffuse outbreak of papules on healthy skin; it constitutes the more advanced stage either of a lichen simplex or of an *eczema humidum*, in which the skin, altered by infiltration, is rough, thickened, and fissured. This corresponds closely with the old definition of lichen by both Hippocrates and Galen: "summæ cutis asperitas, cum multâ prurigine, squamis et furfuribus."<sup>2</sup> *Lichen exudativus* may originate in two ways: (1) from a lichen simplex, the papules forming by their confluence a more or less uniform infiltration of the skin; and (2) from any form of *eczema humidum*, attended by infiltration, in which the secretion becomes secondarily dried up. (*Vid.* Baerensprung, l. c., p. 73.) *Eczema rimosum* thus passes very readily into lichen exudativus; and *lichen agrius*, a variety which it is useless to distinguish, represents the transition form between *eczema vesiculare* and *rubrum* on the one hand, and lichen exudativus on the other. *Lichen ruber* is a rare and peculiar affection; for a description of which, as I have never seen it, I must refer the reader to Hebra (l. c., p. 315). Finally, *eczema squamosum* is the last stage of an eczema, whatever its form may have been, dry or moist; and at this stage the disease may persist for long periods. It differs from pityriasis in its

<sup>1</sup> Devergie, l. c., p. 238; Hardy, *Leçons sur les Maladies de la Peau*: Paris, 1858: p. 46.

<sup>2</sup> Hebra, *Hautkrankheiten*, p. 310; in Virchow's *Handbuch der spec. Pathologie u. Therapie*.



antecedents; and also very generally, in being a desquamation on the surface of an epidermis more or less thickened by infiltration.

The pustules characteristic of *ecthyma* form, like those of impetigo, at special anatomical centres; but they thereafter spread peripherically till they gain a far greater size. The same mode of advance is shown by *psoriasis*, the lesion of which is a papule extending peripherically, with an accumulation of squamæ on its surface. A *patch* of psoriasis is thus formed, which extends further by confluence with adjacent patches. Lichen and psoriasis, however unlike in nature, are anatomically very similar; and, the true distinction between them is, unfortunately, not much attended to by our dermatologists. It consists in this; that, in lichen, the papules do not extend peripherically so as to form infiltrated patches; on the contrary, successive outbreaks of papules take place, filling up the interspaces between those already present, till a uniformly infiltrated surface is at length produced.

However my own experience may have led me to different opinions on certain points, I cannot conclude this paper without expressing my sense of obligation to Hebra and Hardy, whose instructions first made the subject of Skin Diseases intelligible to my own mind. If my remarks succeed in stimulating some reflective readers to use their own judgments, and to cease to regard papules and vesicles and pustules as the sole, or even the principal means by which skin diseases are to be recognised, they will have answered, in part at least, the end I have had in view.







