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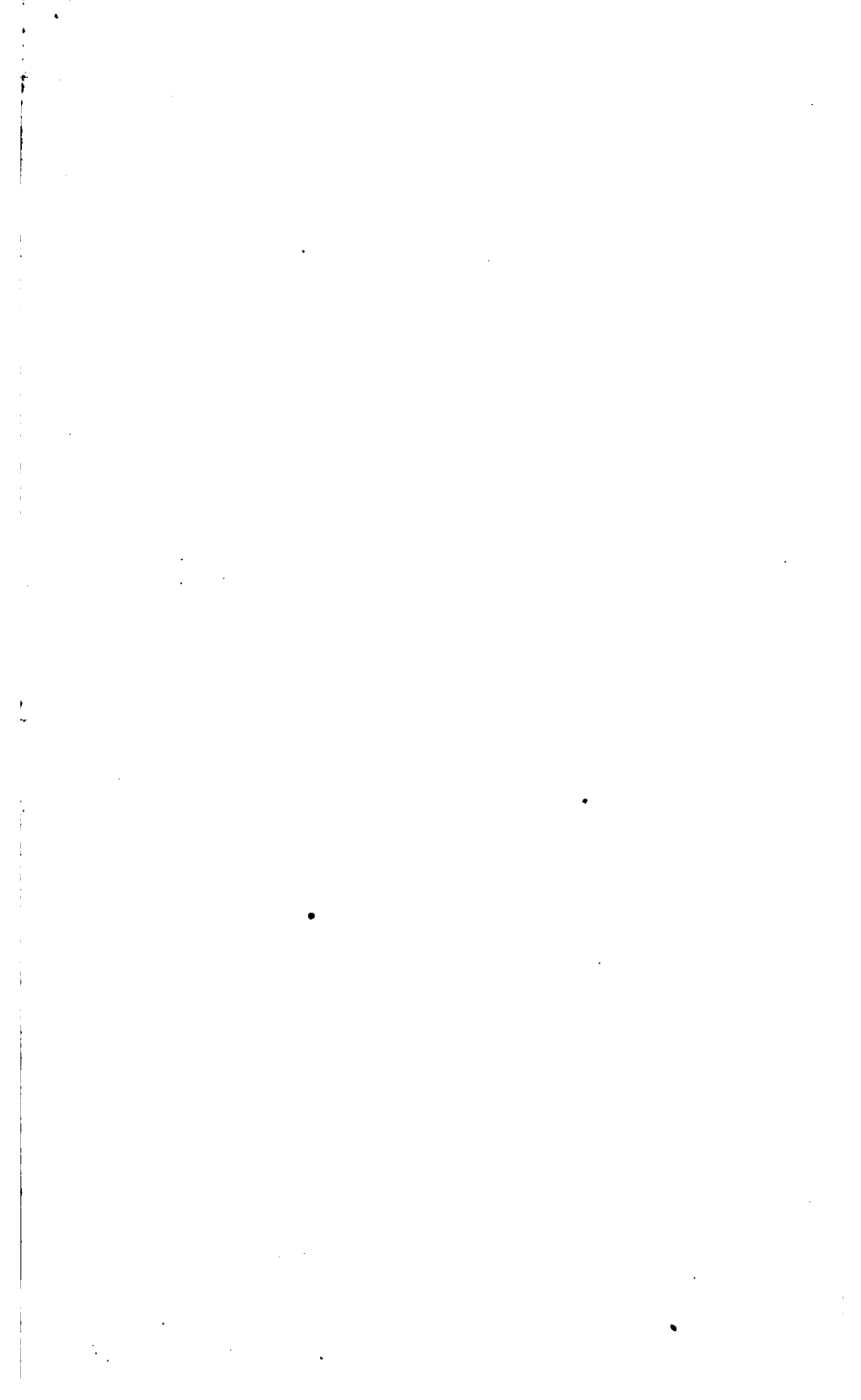
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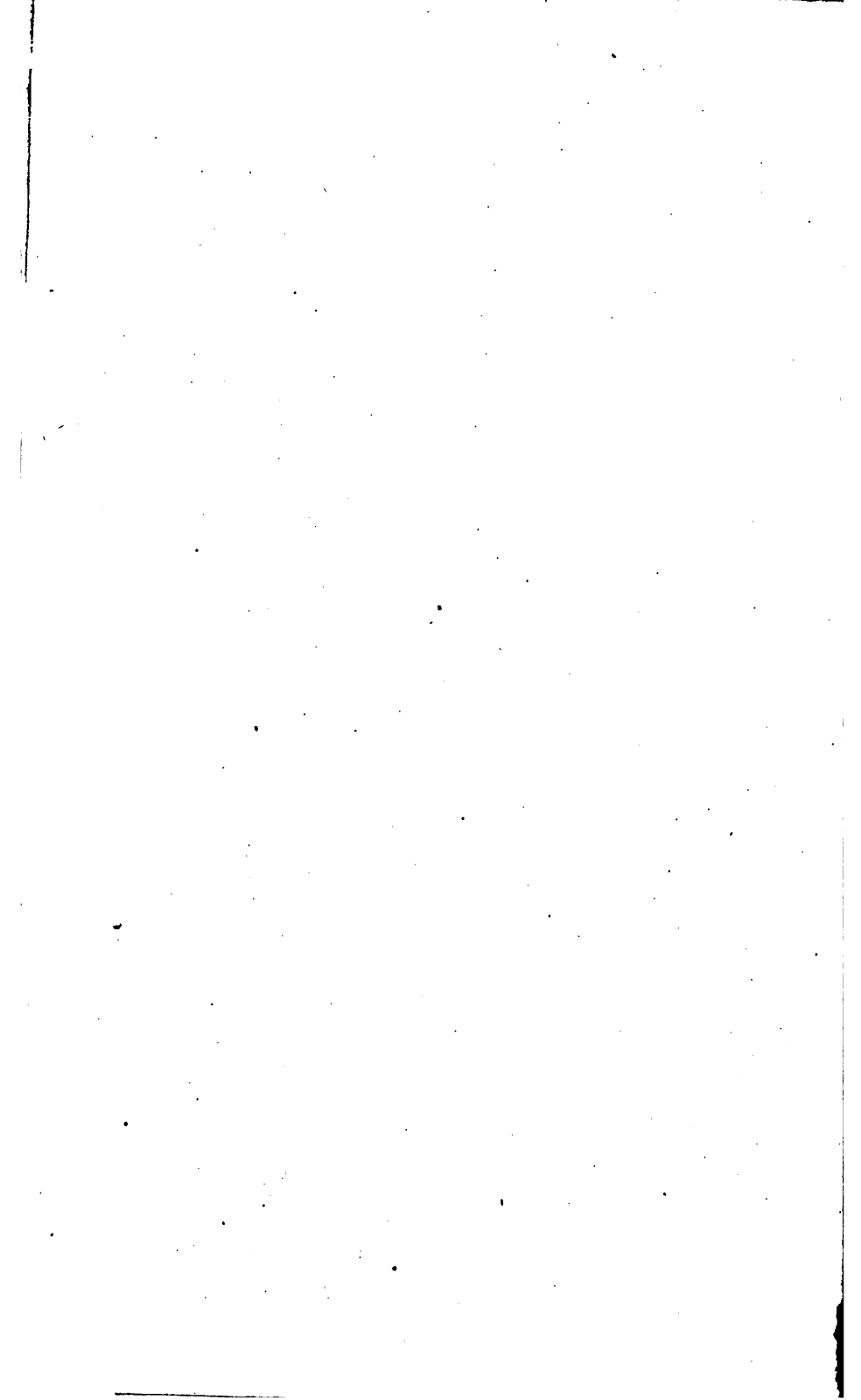
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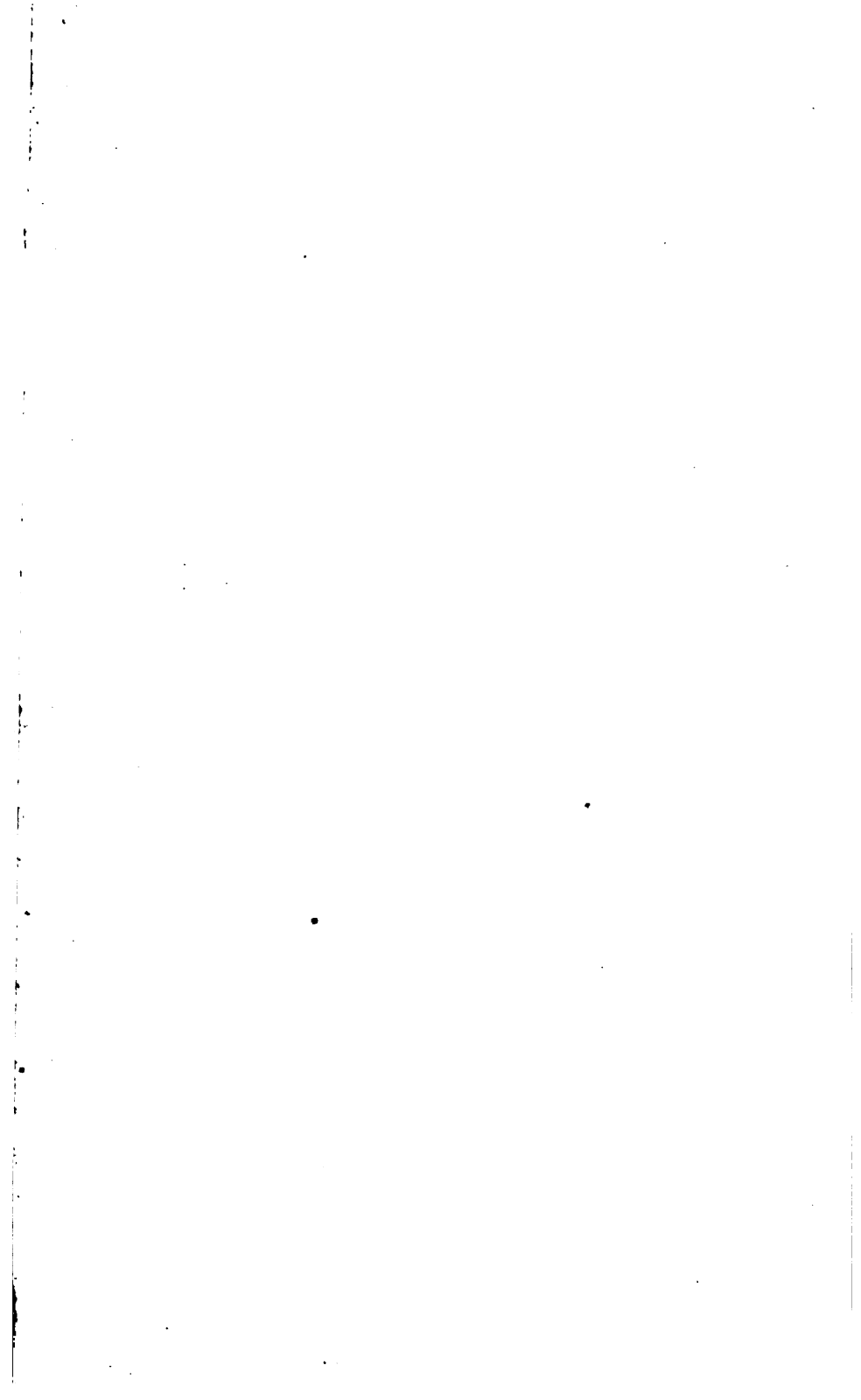
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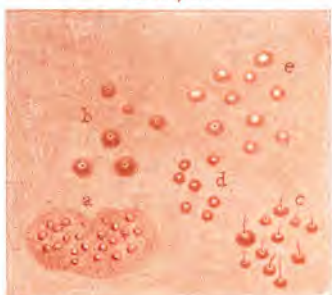








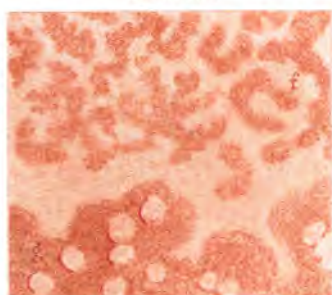
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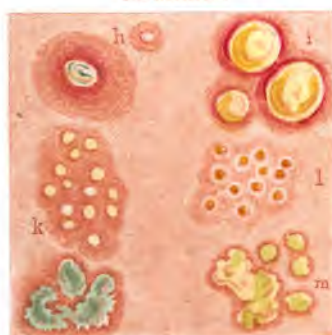
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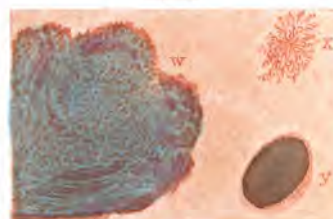
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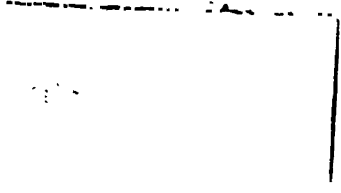


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A
PRACTICAL SYNOPSIS
OF
CUTANEOUS DISEASES,

ACCORDING TO THE ARRANGEMENT OF
DR. WILLAN;

EXHIBITING A CONCISE VIEW OF THE DIAGNOSTIC
SYMPTOMS AND THE METHOD OF TREATMENT.

BY THOMAS BATEMAN, M.D. F.L.S.
PHYSICIAN TO THE PUBLIC DISPENSARY, AND CONSULTING PHYSICIAN
TO THE FEVER INSTITUTION.

The Eighth Edition.

EDITED BY
ANTHONY TODD THOMSON, M.D. F.L.S.

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS;
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS, OF MEDICAL
JURISPRUDENCE, AND OF CLINICAL MEDICINE IN THE UNIVERSITY OF LONDON;
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ETC. ETC.

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ADVERTISEMENT.

IN putting forth a new edition of this work the Editor, as in the last edition, has purposely refrained from altering the arrangement of the diseases of which it treats, except in three instances, which it will be readily seen are necessary; from a desire that the work should still retain the stamp and impression given to it by its excellent Author. In stating his conviction that no arrangement is free from imperfections, the Editor does not mean to enlist himself with those who affect to despise nosological arrangements: on the contrary, he accords with every sentiment of the Author on this subject*; and he believes that it is not by the loose manner of imparting information, which has of late years prevailed in medical writings, that a correct knowledge of the healing art can be communicated to the uninitiated, and the boundaries of the science of medicine extended.

The chief object of the Editor has been to render the work as useful to the student as possible: with this view he has added the synonyms of each genus and species; and, by giving the definitions in a dis-

* See the Preface.

tinct form, he has endeavoured to impress on the whole a more definite character. The opportunities which have been afforded to him, from his connection with two extensive medical charitable institutions, have enabled him to add considerably to the practical part of the work; and he trusts that, in this respect, the present edition will be found not unworthy of the confidence of the practitioner. It is the wish of the Editor still to improve the volume; and he shall anxiously embrace every opportunity which his brethren may afford him of doing so, conscious that much may be done in advancing the treatment of a class of diseases, which have hitherto been regarded more as affording opportunities for empirical experiments, than for the application of those principles which are founded upon an accurate knowledge of physiology and pathology. He has augmented greatly, at the close of each genus, the lists of the works which may be consulted on the diseases that constitute the genera. Much of the difficulty, indeed, which a young man has to encounter in the early pursuit of his profession, arises from his ignorance of the sources whence he can derive information; the Editor, therefore, is assured that this part of his labours will be justly appreciated.

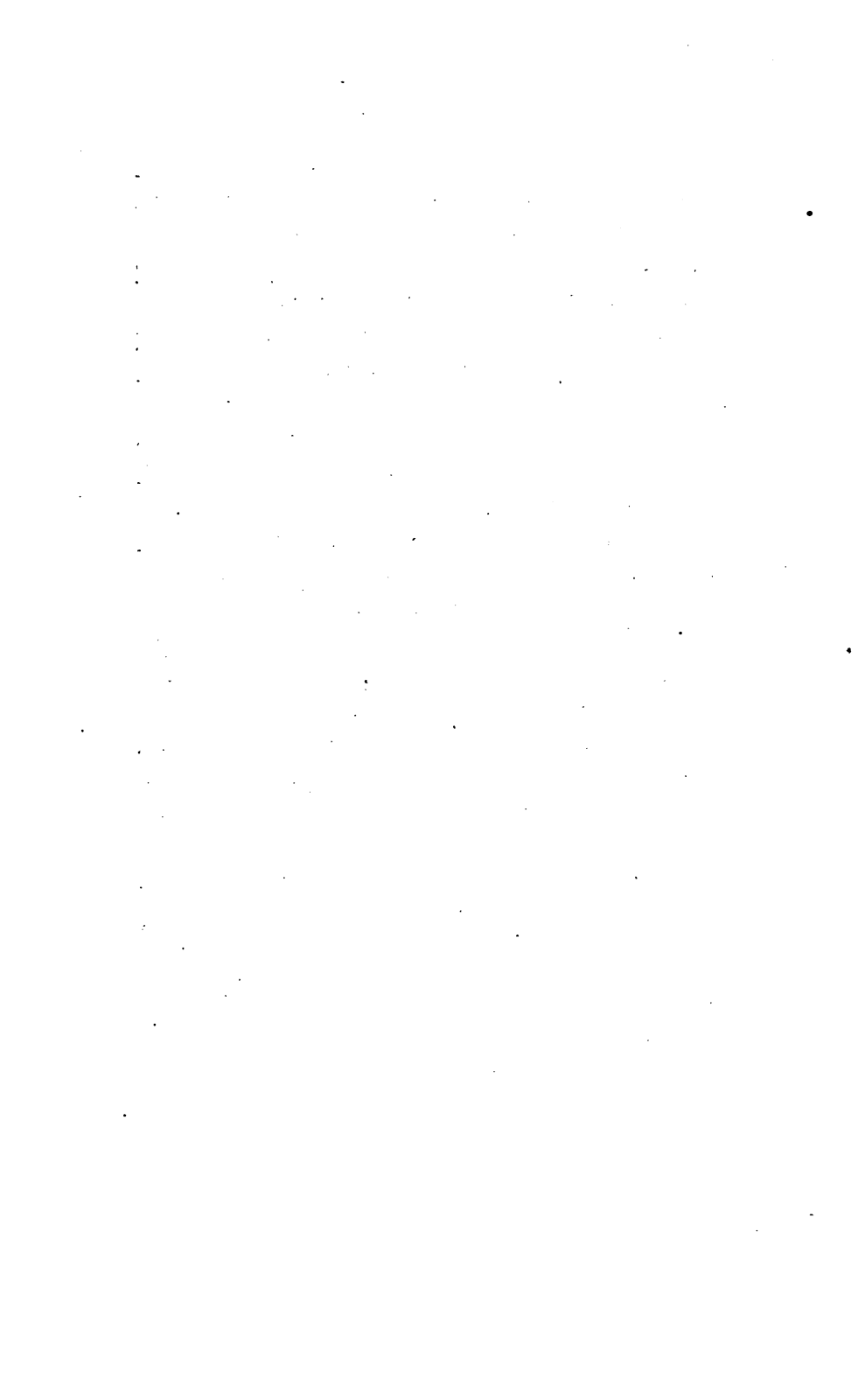
The advantage of plates to aid the descriptions of cutaneous eruptions is undeniable; for without such an appeal to the eye it is almost impossible for the student to form a correct idea of the most accurate description. The delineations of the Author of the Synopsis are admirably calculated to fulfil such an object; but they are executed on a scale of expense

which places them far beyond the reach of the student. To supply a remedy for this obstacle in the path of the student, the Atlas of Plates of the Editor has been constructed. It contains almost all that really relates to the diseases delineated in Dr. Bateman's plates, with the addition of several original representations. To give them the character of demonstrations, the different stages of the eruptions, and other peculiarities necessary to be pointed out, are marked upon the plates. By this plan the troublesome method of examining plates by means of letters and figures of reference is avoided; and without lessening in any degree the beauty of the representations, the utility of the plates is greatly enhanced.

The Editor is perfectly sensible that his part of the volume is not free from defects: he trusts, however, notwithstanding these, that the merit of having endeavoured to improve a most useful work will not be denied to him. He is responsible for all the parts, in the text, contained within inverted commas, and for those notes marked with his initial. Such as this edition is, he commits it to the Public and to the Profession; and is willing to abide by their award, whether it be favourable or adverse.

A. T. T.

3. Hinde-street, Manchester-square,
2d February, 1836.



THE AUTHOR'S PREFACE.

TO prevent any misapprehension in regard to the nature and object of this volume, it may be necessary to state, that it is not brought forward with any pretensions to supply the deficiencies which have been left in the valuable treatise of Dr. Willan, or to be considered as the completion of that original work. Its sole purpose is to present an abstract of the classification proposed by that respected author, together with a concise view of all the genera and species, which he intended that it should comprehend. The materials for the description of the first four Orders have been obtained principally from Dr. Willan's publication, of which the first part of this Synopsis may be regarded as an abridgment; some additional facts, however, have been supplied from subsequent observation. The remainder of the matter has been derived partly from personal experience and research, but principally from a constant intercourse with Dr. Willan, upon the subject of these diseases, during a period of ten years, while his colleague at the Public Dispensary, and from his own communications in his last illness, before he departed for Madeira, when he

kindly undertook a cursory perusal of his unfinished MSS. for my information, during which I made notes relative to those points with which I was least acquainted. For it was, in fact, his wish, that the Profession should possess a sketch of the whole of his arrangement, even when the completion of his own treatise, though distant, was not without hope. Were I capable of following my learned preceptor through the literary and historical researches which enriched his publication, it would be altogether incompatible with my plan. I have, however, deemed it advisable to introduce into notes some brief illustrations and references, which, without interrupting the practical details, may satisfy the reader that the principles of the classification and nomenclature were not adopted without the sanction of reason and authority.

I am far from maintaining that this arrangement of cutaneous diseases is altogether free from material imperfections; (for what artificial arrangement of natural objects has yet been devised, to which imperfections may not be imputed?) but I apprehend it will be impossible to study it carefully and practically, without deriving benefit from the exercise. I am aware, indeed, that there are many individuals professing themselves to be practical men, who affect a contempt for all nosological disquisitions, and deem the discussions relating to nomenclature, in particular, very idle and frivolous, or, at the best, a sort of literary amusement, which is not conducive, in the smallest degree, to the improvement of the medical art. But this I conceive to be a mistaken view of the subject, originating, perhaps, from indolence, or from a want of habitual precision in the use of language. The in-

ferences of slight and superficial observation may, indeed, be detailed without recourse to a very definite vocabulary; for, where little discrimination is exercised, very little nicety can be requisite in regard to the import of the language employed. But it is not by such means that the boundaries of science are extended.

Among the manifest advantages of a copious and definite nomenclature, may be mentioned, in the first place, the necessity, which it demands, of an accurate investigation of phenomena, or, in other words, the habitual analytic turn which it tends to give to our inquiries, and therefore the general improvement of the talent of observation, which it must ultimately produce. Secendly, it contributes to facilitate the means of discrimination, by multiplying, as it were, the instruments of distinct conception; for from a deficiency of terms we are apt to think and even to observe indistinctly. But, above all, a definite nomenclature supplies us with the means of communicating, with precision, the information which we acquire, and therefore contributes directly to the advancement of knowledge, or, at least, removes an otherwise insurmountable impediment to its progress.

In this view, such a nomenclature, as far as regards the diseases of the skin, is obviously a great desideratum. For, while the language taught us by the fathers of medicine, relative to all other classes of disease, is clear and intelligible, the names of cutaneous disorders have been used in various acceptations, and without much discrimination, from the days of Hippocrates, and still more vaguely since the revival of learning in modern times. From that period, indeed, the diseases of the skin have been generally

designated by some few terms of universal import, which therefore carried no import at all. Hence the words Leprosy, Scurvy, Herpes, Scabies, Dartres, and some other appellations, have become so indefinite, as to be merely synonyms of *cutaneous disease*. Even the more scientific inquirers, whose knowledge of diseases was not always equal to their learning, or whose learning fell short of their pathological skill, have interpreted the generic and specific appellations of the ancients in various senses. They have not only differed, for instance, in their acceptance of general terms, such as of the words, *pustule*, *phlyctæna*, *exanthema*, *erythema*, *phyma*, *phlyzadium*, &c.; but the particular appellations *Lichen*, *Psora*, *Herpes*, *Impetigo*, *Porrigo*, *Scabies*, and many others, have been arbitrarily appropriated to very different genera of disease. The practical errors, which must necessarily have resulted from such a confusion in the use of terms, are very numerous, as every one must be satisfied, who has attempted to study the subject in books. It may be sufficient to allude to the gross misapplication of the remedies of the petechial or sea-scurvy, which have been prescribed for the cure of inflammatory, scaly, and pustular diseases, merely because the epithet *scorbutic* has been vaguely assigned to them all; and to specify the single instance of the administration of tincture of cantharides in the scaly *Lepra*, on the recommendation of Dr. Mead, who, however, seems to have spoken of the tubercular Elephantiasis, or the non-squamous Leuce; although it would be very difficult to ascertain his meaning.

Most of the writers, who have composed express treatises on cutaneous diseases, in modern times,

have implicitly adopted the nomenclature of the ancients, without attempting to render it more definite, or to improve upon the diagnosis which they had pointed out. The essays of Mercurialis, Hafenerffer, Bonacursius, and Turner, were written after this manner; and even Lorry, in his able and elegant work, does not step far out of the ancient path. About the year 1780, however, an elaborate classification of the diseases of the skin was published by Prof. Plenck, of the university of Buda; and subsequently to the commencement of Dr. Willan's publication, a sort of arrangement has been proposed, in the splendid and pompous performance of M. Alibert, which, however, is altogether destitute of method.

The arrangement of Plenck is founded upon the same principles as that of Dr. Willan, namely, upon the external appearances of the eruptions: but, in filling up the scheme, he has deviated widely from the strict laws of classification which naturalists have established. Nine of his fourteen classes very nearly correspond with the eight orders of Dr. Willan.* These are, 1. *Maculæ*; 2. *Pustulæ*; 3. *Vesiculæ*; 4. *Bullæ*; 5. *Papulæ*; 6. *Crustæ*; 7. *Squamæ*; 8. *Callositates*; and 9. *Excrescentiæ*. But the five remaining classes comprise, 10. *Ulcera*; 11. *Vulnera*; 12. *Insecta cutanea*; 13. *Morbi Unguium*; and 14. *Morbi Capillorum*, which are less judiciously devised. But such a classification must fail to answer its end, because it requires the different stages

* It seems probable, indeed, that Dr. Willan was indebted to this work of Professor Plenck for the groundwork of his classification; since his definitions, as well as his terms, accord accurately with those of the Hungarian nosologist.

of the same disease to be considered as so many distinct maladies, and to be arranged in several classes. For example, the *Crustæ* and the *Ulceræ cutanea* are equally the result of *Pustules*, *Vesicles*, and *Bullæ*, and sometimes even of *Scales*: hence, while *Small-pox* and *Scabies* are arranged among the *Pustules*, and *Lepra* (by which he understands *Elephantiasis*) among the *Papulæ*, the *Crusts*, which succeed them, are all brought together as species of one genus, in the class of *Crustæ*. In like manner, particular symptoms are classed as distinct genera: thus the "*Rugositas*" and the "*Rhagades*" of the same *Elephantiasis* are found in the classes of *Squamæ* and *Ulceræ* respectively. In short, this *Elephantiasis* is divided into no less than four genera, and its parts arranged under four different classes—an error, which renders the purposes of the classification almost nugatory.

M. Alibert, with loud pretensions to superior skill, and much vaunting of the services which he has rendered in this department of medicine, has, in fact, contributed nothing to the elucidation of the obscurity in which it is veiled. The merit of his publication belongs principally to the artists, whom he has had the good fortune to employ: for he has adopted the ancient confusion of terms, without a single definition to fix their acceptation; and he has not scrupled to borrow the nomenclature of the vulgar, in its most vague and indeterminate sense. He has, moreover, thrown together his genera, without any attention to their affinity or dissimilarity, making an arbitrary whole of disjointed parts. Thus his arrangement commences with "*Les Teignes*" (*Porrigio*), which are followed by "*Les Pliques*" (*Plica*

or Trichiasis), and by "Les Dartres" (which seems to be equivalent to our vulgar and indefinite term *Scurvy*); and he then passes to the discolorations, called "Ephélides,"—to some eruptions, which he chooses to call "Cancroides," but which are not intelligibly described,—to the comprehensive *Lepra*—to *Framboesia*,—and to *Ichthyosis*.

But the total defect of discrimination and of method is still more obvious in M. Alibert's distribution of the species. The Dartres, for instance, are said to be of seven kinds,—furfuraceous, scaly, crustaceous, phagedenic, pustular, vesicular, and erythemoid; so that, in fact, the appellation has an universal fitness to almost every form of cutaneous disease; it includes, at least, the Pityriasis, Psoriasis, *Lepra*, Impetigo, Ecthyma, Herpes, Acne, Sycosis, Lupus, and Erythema of this classification. In like manner, the *Lepra* includes some forms of the scaly disease properly so called, together with Leuce or Vilitigo, the tubercular Elephantiasis, and the Barbadoes leg. Thus he unites, under the same generic name, diseases which have no affinity with each other.

From these gross errors the classification of Dr. Willan appears to be entirely free; and the imperfections, which confessedly belong to it, are probably inseparable from the nature of the subject. The truth is, that the various genera of cutaneous disease, as characterised by their external appearances, do not differ in the same essential degree in which the diseases of organs of various structure differ from each other. The same exciting cause will produce different kinds of cutaneous disorder in different individuals: thus, certain substances, which suddenly

derange the organs of digestion, sometimes produce Urticaria, sometimes Erythema and Roseola, and sometimes even Lepra and Psoriasis; yet each of these shall retain its specific character, and follow its peculiar course: thus also certain external irritants will, in one case, excite the pustules of Impetigo, and in another the vesicles of Eczema. Again, the diseases which commence with one generic character are liable occasionally to assume another, in the course of their progress:—thus, some of the papular eruptions become scaly, and still more frequently pustular, if their duration be long protracted; the Lichen simplex and circumscriptus, for instance, sometimes pass into Psoriasis; the Lichen agrius and Prurigo formicans are occasionally converted into Impetigo; and the Prurigo mitis is changed to Scabies. Moreover, it frequently happens, that the characteristic forms of eruptive diseases are not pure and unmixed, but with the more predominant appearance there is combined a partial eruption of another character; thus, with the papular Strophulus, with the rashes of Measles and Scarlet Fever, and with the pustular Impetigo and Scabies, there is occasionally an intermixture of lymphatic vesicles. And, lastly, the natural progress of many eruptions is to assume a considerable variety of aspect; so that it is only at some particular period of their course that their character is to be unequivocally decided. Thus in the commencement of Scabies papuliformis and lymphatica, the eruption is of a vesicular character, although its final tendency is to the pustular form: and, on the contrary, in all the varieties of Herpes, the general character of the eruption is purely vesicular: yet, as it advances in

its progress, the enclosed lymph of the vesicles acquires a considerable degree of opacity, and might be deemed purulent by cursory observers. In like manner, the original pustular character of some of the forms of *Porrigo* is frequently lost in the accumulating crusts, the confluent ulcerations, and the furfuraceous exfoliations, which ensue, and which conceal its true nature from those who have not seen, and are unacquainted with, the whole course of its advancement.

These circumstances constitute a series of natural impediments to every attempt at a methodical arrangement of cutaneous diseases. But it is more philosophical, as well as practically useful, to compromise these difficulties, by retaining in the same station the different appearances of a disease, in its different stages and circumstances, when our knowledge of the causes and remedies, as well as of the natural progress and termination of it, is sufficient to establish its identity,—than to separate the varying symptoms of the same disorder, and to distribute the *disjecta membra*, not only under different genera, but into different classes of the system, after the manner of Prof. Plenck. Such was the method adopted by Dr. Willan; and although it may sometimes diminish the facility of referring individual appearances to their place in the nosological system, yet it greatly simplifies the classification, as well as the practical indications to which it conducts us.

If, then, the adoption of the arrangement and nomenclature, of which a Synopsis is here given, should lead to more clear and definite views of the various forms of cutaneous disease, and should enable practitioners to write and converse respecting them

with perspicuity, by fixing the meaning of the terms which they employ, we may consider this as an important object gained : and it will at length, perhaps, be found, that, for the successful treatment of these diseases, the discovery of new medicines is less necessary than a discriminate appropriation of those which we already possess.

I am fully aware that it is very difficult to convey by words, used in an acceptation that is not familiar, distinct notions of many of the minute changes of appearance in the skin ; and that one great deficiency, which Dr. Willan's large work was calculated to supply, by means of the engravings which accompanied it, will be left unprovided for by this Synopsis. Perhaps, however, this defect will be partially obviated by the plate prefixed to this volume, in which I have endeavoured to convey an idea of the fundamental principles of the classification, as well as to designate the characters of some of the more remarkable genera of cutaneous disease.

T. B.

Arrangement of the Diseases of the Skin, altered from that by
DR. WILLAN.

ORDER I.		VI.	
PAPULÆ.		VESICULÆ.	
	Page		Page
STROPHULUS	- - 3	VARICELLA	- - 257
LICHEN	- - 9	VACCINIA	- - 266
PRURIGO	- - 20	HERPES	- - 276
II.		RUPIA	- - 296
SQUAMÆ.		MILIARIA	- - 305
LEPRA	- - 34	ECZEMA	- - 305
PSORIASIS	- - 50	APHTHA	- - 316
PITYRIASIS	- - 64	VII.	
III.		TUBERCULA.	
EXANTHEMATA.		PHYMA	- - 325
RUBEOLA	- - 72	MOLLUSCUM	- - 326
SCARLATINA	- - 87	VITILIGO	- - 328
URTICARIA	- - 106	ACNE	- - 330
ROSEOLA	- - 114	SYCOSIS	- - 345
PURPURA	- - 123	LUPUS	- - 350
ERYTHEMA	- - 138	ELEPHANTIASIS	- - 352
ERYSIPELAS	- 145	FRAMBŒSIA	- - 370
IV.		ICHTHYOSIS	- - 377
BULLÆ.		VIII.	
PEMPHIGUS	- - 163	MACULÆ.	
POMPHOLYX	- 166	EPHELIS	- - 386
V.		NŒVUS, SPILUS, &c.	389
PUSTULÆ.		IX.	
IMPETIGO	- - 174	DERMAL EXCRESCENCES.	
PORRIGO	- - 202	VERRUCA	- - 396
ECTHYMA	- - 219	CLAVUS	- - 397
VARIOLA	- - 230	CALLUS	- - 398
SCABIES	- - 240		

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EXPLANATION OF THE PLATE.

THE eight compartments of the plate exhibit the eight forms of cutaneous eruptions.

Fig. 1. represents five varieties of *Papulæ*, as they are seen in (a) *Strophulus confertus*, (b) *Lichen simplex*, (c) *Lichen pilaris*, (d) *Lichen lividus*, and (e) *Prurigo mitis*.

Fig. 2. shows the *Scales* and circular patches of *Lepra vulgaris*.

Fig. 3. exhibits two forms of *Exanthemata* or *Rashes*, viz. (f) the Measles, and (g) the febrile Nettle-rash.

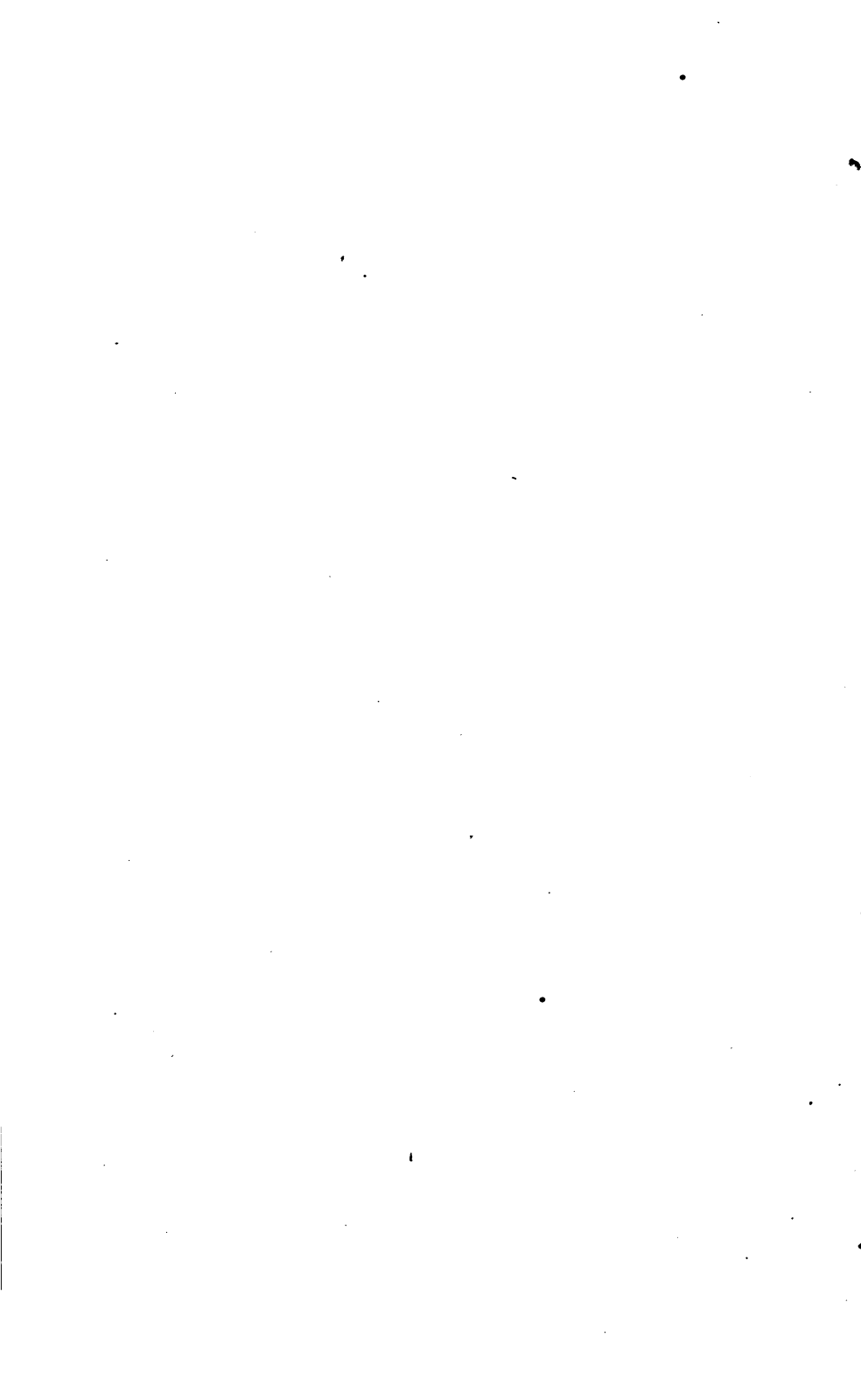
Fig. 4. shows the *Bullæ* of *Pompholyx diutinus*, in different stages of their progress.

Fig 5. illustrates the four forms of *Pustules*; namely, the *Phlyzacia*, as they appear in (h) *Ecthyma vulgare*, and in (i) *Scabies purulenta* upon the hands; — the *Psydracia*, as they arise in (k) *Impetigo*, and afterwards form a scab; — the *Achores* (l) of *Porrigo scutulata*, on the scalp; — and the *Favi* (m) as they appear on the scalp and other parts.

Fig. 6. contains three genera of *Vesicles*; namely, patches of (n) *Herpes zoster*, and (o) *Herpes phlyctænodes*; (p) *Miliary vesicles*; and (q) the *Vaccine vesicle*.

Fig. 7. exhibits different forms of *Tubercles*; as in (r) *Acne punctata*, and (s) *Acne indurata*; in (t) *Sycosis*; and (v) *Molluscum*.

Fig. 8. contains specimens of *Maculæ*; viz. (w) a *Nævus* compared to the stain of red wine; (x) a spider *Nævus*; and (y) a mole.



PRACTICAL SYNOPSIS

OR

CUTANEOUS DISEASES.

Order I.

P A P U L Æ.

SYN. Ἐξόρμα (G.): Exormia (Good): Papula (Sauv. Lin.): Bouton, Elevure, Papule (F.): die Finne, Knoten (Ger.): Sheri (Arab.): Pimples.

Def. PAPULA (*Pimple*): A SMALL AND ACUMINATED ELEVATION OF THE CUTICLE, WITH AN INFLAMED BASE, VERY SELDOM CONTAINING A FLUID, OR SUPPURATING, AND COMMONLY TERMINATING IN SCURF.*

PAPULÆ, or Pimples, are generally supposed to originate in an inflammation of the papillæ of the

* The term Papula has been used in various acceptations by the older writers, but the nosologists have nearly agreed in restricting it to the sense here adopted. Sauvages defines it, "Phyma parvulum, desquamari solitum." (Nosol. Meth. class i. Synops. ord. ii. 6.) The definition of Linnæus is "Tuberculum faretum, coloratum, inflammatum, vix suppurandum." (Linnæi Gen. Morbor. class xi. ord. 4.) In this sense also Celsus seems to have understood the term, although he uses it generally: for when he calls it a disease, in which "the skin is made rough and red by very minute pustules," he means obviously dry papulæ; as by the word pustula he understands every elevation of the skin, even wheals. (De Med. lib. v. cap. 28. §§ 15. and 18.)

Dr. Mason Good derives the term Papulæ from παππος, the sprouting of down or buds; and regards the radical sense to be "production, or putting forth." He derives the terminating diminutive from the Greek ἕλη, "materia, materies," thus, Papulæ, "of the matter or nature of Pappus." (Nosology, p. 460.) T.

skin, by which these are enlarged, elevated, and indurated, and made to assume more or less of a red colour. It is, however, equally probable that the minute elevation which constitutes a pimple, is the consequence of inflammation in a capillary vessel; and, as Mr. Plumbe has suggested, "a minute escapement of lymph" from it.* We even perceive, sometimes, that a slight effusion of lymph has taken place, which gives a vesicular appearance to several of the papulæ; but the fluid is re-absorbed without breaking the cuticle; and papulæ terminate for the most part in scurf.

"Papular diseases are generally more or less of long continuance, one crop of pimples succeeding another for months, and even years, if allowed to run their course. They are not always attended by constitutional disturbance, nor are they dangerous diseases, although some of them resist every plan of treatment, and render the life of the patients truly wretched."

"The whole cuticular surface is liable to be affected by papulæ; but they appear usually more on the extremities and the posterior part of the trunk, than on the face. These are preceded by a sensation of itching; and then display themselves as small prominent points, not always to be detected by the eye, but generally palpable to the finger: their common termination is resolution, but occasionally ulceration supervenes, which alters the character of the disease; but even when this does not occur, the parts of the skin occupied by the papulæ are stained of a brownish colour, which remains for a long time, sometimes for years."

"The causes of papular diseases are not very evident; a few of them seem to depend on a low state of vitality connected with age, privations, and the neglect of personal cleanliness."

* *Prac. Treatise on Diseases of the Skin*, 1st ed. p. 187.

“They may be confounded with some pustular and vesicular diseases; as, for example, some forms of ecthyma, scabies, and eczema, in their early stages; but as these diseases proceed they are readily distinguished, and in general the diagnosis of the papulæ is not difficult.”

The varieties of papulous eruptions are comprehended in this arrangement under three genera; namely,

1. STROPHULUS,
2. LICHEN *,
3. PRURIGO.

GENUS I. STROPHULUS.

Syn. Licheniasis Strophulus (*Young*): Exanthema Strophulus (*Parr*): Lichen Strophulus (*Bielt*): Bouton, Efflorescence cutanée, Ebullition, Feux de Dents, Strophulus (*F.*): Carpang (*Tamool*): *Gum Rash*.

Def. AN ERUPTION OF PIMPLES IN EARLY INFANCY, CHIEFLY ON THE FACE, NECK, ARMS, AND LOINS; GENERALLY IN CLUSTERS, SURROUNDED WITH A REDDISH HALO.

This genus comprises several popular affections, peculiar to infants, which are known by the common appellations of *red gum*, *tooth eruption*, &c. They arise, in consequence of the extreme vascularity and irritability of the skin at that period of life, when the constitution is accidentally disturbed by irritations, either in the alimentary canal or other parts of the habit; or in the gums. Much of the irritation in the alimentary canal is connected with

* Rayer regards Strophulus merely as a modification of Lichen in young infants; and there is much probability in his remark. See *Traité Théorique et Pratique des Maladies de la Peau*, 8vo. Paris, 1826. vol. i. p. 567. Bielt has altogether rejected *Strophulus* as a generic term, and classes the five species of this synopsis under one species of Lichen, which he has named *Lichen Strophulus*. See *Abrégé Pratique des Maladies de la Peau*, &c. pour A. Cazanave, et H. E. Schledel, 8vo. Paris, 1828, p. 270. T.

irregularities in the diet of the mother ; and from overfeeding the infant, even when it is nourished entirely upon the breast ; “and seem to be critical when they appear, as the functional disorder ceases. Their duration varies as the influence of the causes that produce them are transitory, intermittent, or permanent.” As these eruptions are not, however, very important objects of medical practice, but interesting only from their occasional resemblance to some of the exanthemata, I shall not dwell upon them at any length. “It is necessary, however, to guard the infant from sudden exposure to cold during the continuance of these eruptions ; for, when repelled, the system generally suffers, and sometimes convulsions supervene.”

“Strophulus can only be confounded with Lichen, but the age of the patient may usually determine the point ; the latter seldom occurring in young infants.”

There are five species of Strophulus :

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|----------------------------|-------------------------|
| 1. <i>S. intertinctus.</i> | 4. <i>S. volaticus.</i> |
| 2. <i>S. albidus.</i> | 5. <i>S. candidus.</i> |
| 3. <i>S. confertus.</i> | |

SPECIES 1. STROPHULUS *intertinctus*, RED GUM or GOWN.

Syn. Taches de Lait, Efflorescence benigne (*F.*) : Rothe (*Ger.*) : Cheng Carapang (*Tamool*) : Kurpān (*Duk.*) : Cārāpānie (*Tel.*) : Rooshitum (*Sans.*) : *Red Gum.*

This species of Strophulus (Plate I. of BATEMAN ; Pl. 1. of THOMSON'S ATLAS,) is characterized by papulæ of a vivid red colour, situated most commonly on the cheeks, fore-arms, and back of the hands, but sometimes universally diffused. They are usually distinct from one another ; but are intermixed with red dots, or stigmata, and often with large red erythematic patches, which have no elevation. Occasionally a few small vesicles appear on the hands and feet ; but these soon desiccate, without breaking. “It

continues from three to four weeks, and generally terminates in scurf."

This eruption is often obviously connected in young infants with a weak, irritable state of the alimentary canal, and consequent indigestion*; whence it is frequently preceded by sickness of stomach, and sometimes by diarrhœa. But in its ordinary mild form it is not inconsistent with good health, and requires little medical treatment. Daily ablutions with tepid water, which remove sordes, and promote an equal perspiration, are beneficial; and a proper attention should be enforced both to the kind and quantity of the aliment, and to the regularity of exercise afforded to the child. The cold bath, or even exposure to a stream of cold air, should be avoided during the occurrence of this eruption; and if, in consequence of want of caution in this respect, the eruption shall have disappeared, and sickness, purging, or any other internal disorder have ensued, a warm bath affords the most speedy relief:—"mild aperients, as Rhubarb and Magnesia, combined with a few drops of the Spiritus Ammoniæ compositus internally, or some other slight cordial, and the stimulus of a blister externally, have been found beneficial under these circumstances."†

SPECIES 2. STROPHULUS *albidus*, WHITE GUM.

This species (Plate II. of BATEMAN; Pl. 1. of THOMSON'S ATLAS,) is rather a variety of the preceding than a distinct species; and is occasionally intermixed with it; the papulæ consisting of minute,

* Dr. Underwood, with much truth, remarks that every species of Strophulus is the effect of a predominant acid. Treat. on the Diseases of Children, 8vo. 8th edition, p. 167. T.

† See Underwood on the Diseases of Children, vol. i. p. 79. 5th edit., and Armstrong on the same subject, p. 84. These alternations of internal and superficial disorder, though not so frequently seen under modern management as under that of the older physicians, take place occasionally in Strophulus, as well as in the measles, and some other exanthemata. In such cases, diarrhœa, tormina, sickness, and sometimes a tendency to syncope or convulsions, ensue.

hard, whitish specks, a little elevated, and sometimes surrounded by a slight redness, and appearing chiefly on the face, neck, and breast.

SPECIES 3. *STROPHULUS confertus*, RANK RED GUM, the TOOTH-RASH.

Strophulus confertus (Plate III. fig. 1. of BATEMAN ; Pl. 1. of THOMSON'S ATLAS,) is distinguished principally by the more extensive crop of "confluent" papulæ which appears, "and the degree of feverish excitement with which it is generally attended." The patches of papulæ are chiefly seated on the cheeks and forehead, when they occur about the fourth or fifth month, and are smaller, more crowded, and less vivid in their colour, than in the first species. But in children seven or eight months old, they appear in large irregular patches, on the outside of the hands, arms, shoulders, and loins, and are hard and close set, so as to give to the whole surface a high red colour. In about a fortnight they begin to fade and exfoliate, and gradually disappear.

Sometimes, though rarely, a variety of the *S. confertus* appears on the legs, spreading upwards even to the loins and navel, producing a general redness of the cuticle (not unlike Intertrigo*), which cracks and separates in large pieces, occasioning much distress to the child. "The patches on the lower extremities are always accompanied with troublesome itching." This form of the disease is liable to recur at short intervals, for the space of two or three months.

The *S. confertus* requires no specific medical treatment, as it appears to be one of the numerous symptoms of irritation arising from dentition, and recedes soon after the cutting of the first teeth.† It can

* In Intertrigo the surface is free from papulæ ; is shining and uniformly red ; and is generally confined to the nates and thighs. T.

† Dr. Bisset, a physician of the old school, but a man of observation, notices a circumstance respecting children affected with these eruptions, which I think I have seen confirmed in a few cases. After stating that

only be alleviated “by scarifying the gums, so as to assist the protrusion of the teeth; by the administration of mild aperients, such as Hydrargyrus cum creta;” and by the general treatment proper for the state of teething, with great attention to cleanliness, and frequent tepid ablu-tion with milk and water. In India, the native physicians touch the excoriated parts with a little pure castor oil. “The application of vinegar largely diluted with water generally allays the itching.”

SPECIES 4. STROPHULUS volaticus. WILDFIRE RASH.

Syn. Erythema volaticum (*Sawv.*): Feu volage (*F.*): Collie Carpang (*Tamool*).

This species (Plate III. fig. 2. of BATEMAN; Pl. 1. of THOMSON'S ATLAS,) is not a frequent complaint. It is characterized by small circular patches, or clusters of papulæ, grouped together, arising and exfoliating successively on different parts of the body, of a high red colour, and sometimes attended with slight feverishness. Each patch turns brown in about four days, and begins to exfoliate; and the whole series terminates in three or four weeks.

This eruption is usually connected with a disordered state of the stomach and bowels, and is alleviated by gentle laxatives; after which the decoction of Cinchona, “or infusion of Calumba with Subcarbonate of Soda,” or a slight chalybeate*,

“some children are more or less affected with it till they have got all their first teeth, in spite of every endeavour to repress it, and after that period it recedes spontaneously;” he adds, “but in that case they are apt to have carious teeth after the eruption disappears.” See his *Med. Essays and Obs.* § xix. p. 274.

* I shall take this opportunity of recommending to the attention of practitioners a chalybeate medicine, particularly adapted, from its tasteless quality, to the palates of children, and possessed of more efficacy than the vinum ferri; I mean a watery solution of the tartrate of iron, lately introduced by an able and intelligent chemist, Mr. R. Phillips. See his *Experimental Examination of the Pharm. Londinensis*, 1811. Its qualities have been well stated by Dr. Birkbeck, in the *London Medical Review*, No. xix. July, 1812.

namely, from five to ten minims of the solution of Hydriodate of Iron * prove serviceable. No external application is necessary, " unless the itching is distressing to the infant ; in which case, the patches may be sponged with vinegar diluted with two parts of water ; or they may be touched with saliva."

SPECIES 5. STROPHULUS candidus, PALLID GUM RASH.

This species (Plate III. fig. 3. of BATEMAN; Pl. 1. of THOMSON'S ATLAS,) is distinguished by papulæ of a larger size than those of the foregoing species, having no inflammation round their base, and a smooth and shining surface ; whence they appear to be of a lighter colour than the adjoining cuticle. They are most frequently seen on the loins, shoulders, and upper part of the arms ; but I have observed them also on the face and neck, when the *S. confertus* occupied the fore-arms : after continuing hard and elevated for about a week, they gradually disappear. This variety of *Strophulus* commonly succeeds some of the acute diseases, to which infants about a year old are liable. It has occurred also on the arms, when the face was occupied with *Porrigio larvalis* ; and, in one case, it appeared on the arms, thighs, and neck, at the age of three years and a half, during the cutting of the double teeth. It requires no particular treatment, except to regulate the bowels with some mild aperient.

Works which may be consulted on this genus of Papulæ :—

- BISSET'S Medical Essays and Observations, 8vo. 1766.
 PLUMBE On Diseases of the Skin, 8vo. 2d edit. 1827.
 Rayer, *Traité des Maladies de la Peau*, 8vo. 1826.
Abregé Pratique des Maladies de la Peau, par A. Cazenave et H. C. Schedel. 8vo. 1828.
 WILLAN On Cutaneous Diseases, 4to. 1808.
 UNDERWOOD On the Diseases of Children, edited by Dr. Merriman, 8vo. 1827.

* This solution contains gr. iij. of the solid salt in fʒj. of the fluid.

GENUS II. LICHEN.

Syn. Λειχήνη (*G.*): *Exormia lichen* (Good): Lichen, Dartre farineuse, poussée, Dartre pustuleuse miliaire, Papules (*F.*): der Zitterich, Flechte (*German*): *Lichenous Rash*.

Def. A DIFFUSE ERUPTION OF RED PAPULÆ, SOMETIMES DISTINCT, SOMETIMES IN CLUSTERS; ACCOMPANIED WITH A TROUBLESOME SENSATION OF TINGLING OR PRICKING, AND USUALLY TERMINATING IN SCURF, OCCASIONALLY IN EXCORIATIONS; RECURRENT, NOT CONTAGIOUS.*

The original acceptation of the term LICHEN is not distinctly ascertained from the writings of Hippocrates, and therefore it has been variously interpreted by succeeding writers.† The majority have deemed it synonymous with the Impetigo of the Latins: but, as Foës, De Gorter, and other able commentators have remarked, the Impetigo described by the highest Roman authority, Celsus, is a very different disease; while the Papula of the same author seems to accord more accurately with the Lichen of Hippocrates.‡ Whence Dr. Willan decided on affixing the appellation to a papular affection.

* I have ventured to alter the definition of Dr. Willan, for the same reason which induced Dr. Good to take a similar step. In Willan's definition, which was adopted by Dr. Bateman, in the former editions of this work, the expressions "affecting adults," and "connected with internal disorder," are at variance with some of the species of the genus. T.

† Hippocrates classes the Λειχήνες with Prurigo, Psora, Lepra, and Alphas, without particularizing their characteristic forms. See his *Προρρητικόν*, lib. ii. and his book *Περί Παιθῶν*, where he considers them as blemishes rather than diseases. It would seem, indeed, that the Greek writers after him looked upon the Prurigo, Lichen, Psora, and Lepra, as progressive degrees of the same affection; the first being a simple itching,—the second, itching combined with roughness of the skin—the third, itching with branny exfoliations,—and the last, itching with actual scales.

‡ See Foës. *Œconom. Hippocr.* — De Gorter, *Medicina Hippocrat.* aph. xx. lib. iii. The latter observes, respecting this aphorism, "In hoc loco, Hippocr. per Leichenas intelligit talem cutis sœdationem, in qua summa cutis pustulis siccis admodum prurientibus exasperatur—sed

“ It is sometimes an acute, but more commonly a chronic affection : and it is developed, occasionally, on all parts of the surface, although, most frequently, the hands, the fore-arms, the neck or the face are the places affected. The eruption appears in successive crops, some shewing themselves, whilst others are on the decline, and consequently it runs no determinate course. These attacks are not necessarily preceded by fever.

“ The chief existing *causes* of Lichen are, 1. the application of sudden excessive heat, either natural or artificial, to the surface ; 2. improper diet, either in quantity or quality ; and the abuse of alcoholic fluids.

“ The *Prognosis* in Lichen may be always favourable, except in respect to duration and difficulty of removal. In the severer forms, it sometimes resists every form of treatment.”

There are seven species of this eruption :

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| 1. <i>L. simplex.</i> | 5. <i>L. lividus.</i> |
| 2. <i>L. pilaris.</i> | 6. <i>L. tropicus.</i> |
| 3. <i>L. circumscriptus.</i> | 7. <i>L. urticatus.</i> |
| 4. <i>L. agrius.</i> | |

SPECIES 1. LICHEN *simplex*, SIMPLE LICHEN.

This species (Plate IV. fig. 1. of BATEMAN ; Pl. 2. of THOMSON'S ATLAS,) is an eruption of red inflamed opaque papulæ, containing no fluid, first appearing on the face or on the arms, and extending, in the course of three or four days, to the trunk and lower limbs. It is sometimes preceded for a few days by

quia humor totus fere volatilis est, non relinquit squamas ut Lepra neque furfures ut Psora, sed siccam et asperam pustulosam cutim.” It is to be recollected that *pustula*, among the ancients, signified any elevation of the cuticle ; and therefore *pustulæ siccæ* are papulæ. If the Lichen, then, be viewed in its concluding stage, when it exhibits a slight furfuraceous roughness, it may be said to have some affinity with the scaly diseases mentioned above ; and, in fact, it sometimes terminates in Psoriasis. See Aëtius, tetrab. ii. serm. iv. cap. 16. — Actuar. lib. ii. cap. 11. — Celsus de Medicina, lib. v. cap. 28.

slight febrile irritation, which commonly ceases when the eruption appears: "but this does not always happen, and the disease occasionally occurs after great exercise in the best state of health." The eruption is accompanied with an unpleasant sensation of tingling, especially in the night, or when the habit is heated by exercise: it continues nearly stationary about a week, when its colour begins to fade, and the skin soon exhibits numerous scurfy exfoliations, which remain longest about the flexures of the joints. The duration of the complaint varies considerably, however, from ten days to three weeks.

The disorder is "either acute or chronic. In the *Acute* form the papulæ appear mostly on the face and trunk, are red, heated, and itch considerably: they, however, disappear in a furfureous scurf in a few days, and are succeeded by others; and, after five or six successive eruptions, the attack generally subsides. In the *Chronic* form the papulæ appear on the limbs, and are less inflamed and itchy than in the acute: sometimes they display no redness, and require to be discovered by the touch; but the same furfureous scurf is firm as in the acute form. This form is apt to recur in changes of weather, or on the least irregularity of diet." It is subject to variety also in other respects. The papulæ on the face, for instance, are large and rounded, and some of them form into small tubercles, resembling those of Acne: on the breast and extremities they are more acuminated; and on the hands they are sometimes obscurely vesicular. In some cases of the acute form, the eruption is partial, affecting the face, neck, or arms only; in some, it appears and disappears repeatedly, without leaving any scurf: in others, it is general; and successive eruptions and exfoliations prolong the complaint for two or three months, and even longer.

The *L. simplex* is liable to return every spring or summer in some individuals of irritable constitution.

It appears occasionally in those who are subject to severe head-ach, and pains in the stomach, as a sort of crisis to these complaints, which are immediately relieved. It is also, sometimes, a sequela of acute fevers.*

This species of Lichen is often mistaken for Measles, Scarlatina, and other exanthemata. But a strict attention to the Definitions, and to the course of the symptoms, will enable the observer to avoid such errors. It is sometimes also mistaken for Scabies (itch), "Eczema," and Prurigo, from which it is not always so easily distinguished.† "The vesicular or pustular forms of Scabies, and its locality between the fingers, on the wrists, and flexures of the joints, independent of its contagious nature, are obvious points of distinction between Lichen and that disease. In Prurigo the papulæ are not acuminate, and rarely abraded; they are also paler, larger, and more distinct, and infinitely more itchy than those of Lichen. The diagnosis is more difficult with respect to Eczema, especially when the simple Lichen is accompanied with vesicles, which occasionally occur, and form soft crusts: but the primary papular form of the eruption marks its distinction from that of Eczema. From syphilitic Lichen it is distinguished by displaying no copper colour, and the papulæ being less indolent in their nature."

SPECIES 2. LICHEN *pilaris*, HAIR LICHEN.

This form of Lichen (Plate V. fig. 1. of BATEMAN; Pl. 2. of THOMSON'S ATLAS,) is rather a modification of the preceding than a distinct species,

* See Lorry de Morbis Cutaneis, cap. iii. p. 215.

† See Scabies.—Prof. Lorry has stated the principal points of diagnosis with accuracy. Speaking of Lichen, under the appellation of "Papulæ," he says, "Primo a Scabie differunt, quod papulæ illæ vulgo magis confertæ sint et elatiores; 2do, quod rubicundæ magis et minus aridæ sint; 3tio, quod: sæpe sanatis febribus superveniant; 4to, quod latiores sint, et sæpius recidivam patiantur quam vera et legitima Scabies; 5to, quod in furfur abeant notabile; 6to, demum quod remediis sanentur a Scabiei curatione alienis."—Loc. cit.

the papulæ appearing only at the roots of the hairs of the skin. Like the former, it often alternates with complaints of the head or stomach, in irritable habits. It is not unfrequently connected with that derangement of these organs, which is induced by intemperance in the use of spirits. The great irritability of the skin is manifest, from the facility with which the papulæ are enlarged into temporary wheals by strong friction, which the itching and tingling compel the patient to resort to. It often assumes a chronic character, and continues for years.

“ The treatment of the foregoing species and this variety is simple, and consists in keeping the bowels lax ; in confining the diet to the lightest kinds of fresh animal food, limited as to quantity, vegetables, and ripe ascendent fruits, and table beer for drink, instead of wine, or spirituous liquors ; to the taking moderate exercise in the open air, but not in the sun ; and to an occasional use of the *tepid* bath. Infusion of Cinchona Bark, acidulated with any of the mineral acids ; or the solution of Sulphate of Quinia in the infusion of Conserve of Roses, largely acidulated with diluted Sulphuric Acid, prove useful when the habit is languid. As a local application for allaying itching, the Bitter Almond emulsion, with a grain of Corrosive Sublimate in six fluid ounces, answers every purpose. I have scarcely ever seen a necessity for general bloodletting, when the bowels are freely opened. In obstinate chronic cases, much benefit has resulted from an alterative course of biniodide of Mercury, in doses of one eighth of a grain at bed-time, and the Decoction of Cetraria Islandica with diluted Nitric Acid, administered twice or three times a day.”

SPECIES 3. LICHEN *circumscriptus*, CLUSTERED LICHEN.

This species (Plate V. fig. 8. of BATEMAN ; Pl. 2. of THOMSON'S ATLAS,) is characterized by clusters

or patches of papulæ which have a well defined "red" margin, and are of an irregularly circular form.* Some of them are stationary for a week or two, and disappear; but others extend gradually, by new papulated "inflamed" borders, into large figured forms, which coalesce. As the borders extend, the central aræ become even, but continue slightly red and scurfy. "The patches seldom exceed an inch in circumference." Sometimes, before the scurf is removed, a new crop of papulæ arises, terminating like the former in exfoliations; and by these new eruptions the complaint is prolonged for several weeks. It "is most common in boyhood;" and may be excited either by internal or external causes of irritation.† In adults it is occasionally produced by vaccination, and may be deemed a proof of the full affection of the constitution by the virus.

"This form of the disease is readily distinguished from *Lepra vulgaris*, with which it has been confounded, by its distinct papular form, and the nature of the scurf in areas of the patches, that in *Lepra* being composed of accumulated dry scales; and from *Psoriasis guttata*, by the smallness of the patches of this species of *Psoriasis*, and the flattened form of the pimples."

Little medicinal treatment is necessary for this species of Lichen. It is sufficient that patients avoid heating themselves by much exercise or by stimulants, and take a light diet, "avoiding all spices,

* This variety of Lichen was not noticed in the first edition of the Order of Papulæ, published by Dr. Willan. It is the first of the two species of Papulæ described by Celsus:—"medium habet pauxillum levius: tarde serpit; idque vitium maxime rotundum incipit, eaque ratione in orbem procedit." *De Medicina*, lib. v. cap. 28. See also *Ingrassias de Tumor. præc. Naturam*, tract. 1. cap. 1.

† Dr. Good, in his "Study of Medicine," under *Practica Spasmodica*, remarks, "Opium could not be had recourse to; for in every proportion, whether large or small, it threw out a lichenous rash over the surface of the body, but more especially over the extremities, possessing a heat, itching, and pricking, more intolerable than the prickly heat of the West Indies, and which was almost sufficient to produce madness. Vol. i. p. 535.—Was this Lichen or Eczema? T.

wine, and alcoholic liquors;" and adhering to diluent drinks, regulating the bowels with gentle laxatives. "Reasoning from a knowledge of the great irritability of the skin which attends this disease, we would be led to conclude, what experience has proved to be true, that all diaphoretics and medicines determining the blood to the surface are injurious in Lichen." The diluted Sulphuric Acid is a grateful tonic to the stomach during the period of exfoliation; or a light chalybeate may be taken with advantage at the same period. All strong external applications are improper, especially preparations of Mercury and of Sulphur, which produce severe irritation. The ancients recommended that the parts should be besmeared every morning with saliva: as a substitute for this uncleanly expedient, a lotion prepared with the white of egg, or the emulsion of Bitter Almonds, "with a small addition of Liquor Potassæ," will relieve the painful sensations of the patient. Lotions of lime water, or of liquor Ammoniaë Acetatis, much diluted, occasionally also afford relief. "The sudden repulsion of this form of Lichen from the surface, by imprudent exposure to cold, even in the milder forms of the disease, is productive of febrile excitement, head-ach, and other symptoms of constitutional disorder. In this case, the use of the warm bath is useful; but, occasionally, the fever subsides without the re-appearance of the eruption."

SPECIES 4. LICHEN *agrius*, WILD LICHEN.

Syn. ἀγριος (G.): Papula agria (Celsus): Lichen ferus (Good).

This severe form of Lichen (Plate IV. fig. 2. of BATEMAN; Pl. 2. of THOMSON'S ATLAS,) is ushered in by febrile symptoms, which are commonly relieved on the appearance of the papulous eruption. The papulæ occur in large patches, are of a high red colour, and have a degree of inflammation diffused around them to a considerable extent. They are ac-

accompanied by itching, heat, and a painful tingling, which are augmented to a sensation of smarting and scalding by the heat of the bed, washing with soap, drinking wine, or using violent exercise. The symptoms undergo a daily increase and remission; for they are all greatly diminished in the morning, and recur after dinner. Some small vesicles, filled with a straw-coloured fluid, are occasionally intermixed with the papulæ; but they are not permanent.

The duration of the *L. agrius* is various: sometimes it continues for several weeks; and in most instances, the eruption appears and disappears repeatedly before the disease is removed. In both these cases, the cuticle of the parts affected becomes harsh, thickened, chappy, and exquisitely painful on being rubbed or handled. After repeated attacks, indeed, it is liable to terminate in a chronic pustular disease, the Impetigo.* This tendency, and the diffuse redness connecting the papulæ, distinguish the *L. agrius* from the preceding species, which occasionally pass into Psoriasis, as observed by the ancients.

The *L. agrius* is sometimes repelled by exposure to cold, upon which an acute febrile disorder ensues, with vomiting, head-ach, and pains in the bowels, and continues for several days. Women are more liable to this species of Lichen than men, particularly after suffering long-continued fatigue, with watching and anxiety: it sometimes occurs in spirit-drinkers.

The treatment of this form of Lichen consists in administering, at first, moderate laxatives, mercurial or saline, and afterwards, for some time, the diluted

* Celsus describes his second species of Papula under the appellation of *αγρια* or *fera*; and has also pointed out its tendency to pass into Impetigo:—"Difficilius sanescit; nisi sublata est, in Impetiginem vertitur." (loc. cit.) His successors, the Greek writers, have also applied the same epithet to the severe form of Lichen. Galen speaks of Lichen simplex et ferus, *απλῆς καὶ ἀγριός*: (Isagoge, cap. 15. See also Paul. Ægin. de Re Med. lib. iv. cap. 3.; and Oribas. ad Eunap. lib. iii. c. 57.) and Aëtius of rough and of inflamed Lichens, *τρηχίς καὶ φλεγμαινοντες*, (tetrab. iv. serm. i. cap. 134.) which appear to express the same varieties.

Sulphuric acid, three times a day, in the infusion of Roses, "containing in solution a few grains of sulphate of Quinia," or combined with decoction of Cinchona, "which seems to exert a specific influence in this disease; allaying the tingling and itching, and diminishing the tendency to vesication. If there be any febrile excitement or headach, a few ounces of blood should be taken; and this is necessary in plethoric patients when no fever is present. The bleeding should be followed by a course of saline purgatives. In obstinately-protracted cases, after all excitement is removed, I have seen much benefit result from the solution of Arsenic." A simple cooling unguent, as the rose pomatum, or litharge plaster softened with oil of almonds*, allays the troublesome heat or itching. "Lotions with the chloride of Soda, often answer better than any other topical application. In obstinate cases, an ointment formed with a scruple of the protioduret of Mercury and an ounce of lard has been found serviceable." All stimulating applications are, still more than in the preceding species, both painful and injurious: "and sulphureous baths, which are undoubtedly useful in several cutaneous affections, invariably increase this form of Lichen; unless the disease have become chronic, and is disposed to pass into Impetigo. I am aware that this is contrary to the opinion of Mr. Plumbe, who remarks, that after 'the bowels have been some time kept open,' and the habit reduced, 'the itching and tingling during the operation of the sulphur bath is rather severe, but it is followed by a much more tranquil state of the circulation in the cutaneous vessels, and the cure is altogether expedited by it.'"† Dr. Green says, that the hot air and sulphur fume baths are always better borne, and

* Mr. Pearson recommended the following mild ointment in these cases:—℞. Emplast. Plumbi ℥ij, Cerae flavæ ℥ss, Olei Amygdal. dulc. ℥iss. Emplastro cum cera liquefacto adde oleum, dein agita misturam donec penitus refrixerit.

† Practical Treatise on Diseases of the Skin, p. 196.

produce more decidedly beneficial effects, when the parts affected are excoriated and moist from discharge.*

SPECIES 5. LICHEN *lividus*, LIVID LICHEN.

This species (Plate V. fig. 2. of BATEMAN ; Pl. 2. of THOMSON'S ATLAS,) is distinguished by the dark-red or livid hue of its papulæ, which appear chiefly on the extremities, and without any accompanying symptoms of fever. The papulæ are more permanent, however, than in the foregoing species ; and, after their desiccation, the disorder is liable to be prolonged for many weeks by a fresh eruption.

The affinity of this species with Purpura is evinced by the intermixture of petechiæ with the papulæ ; and by the similarity of the origin and requisite treatment of the two diseases.† The nature of this species points out, that the treatment must necessarily be tonic and cordial.

SPECIES 6. LICHEN *tropicus*, "PRICKLY HEAT."

Syn. Eczema (*Auct. Græc.*) : Sudamina (*Auct. Lat.*) : Essera (*Plouquet*) : Chaleur piquante (*F.*) : Root vout (*Belg.*) : Flacherothe flecke (*Ger.*) : Eshera (*Arab.*) : *Prickly Heat*,—*Summer Rash*.

This is a hot and painful form of Lichen peculiar to tropical climates, and has been described at great length by most of the writers on the diseases of those regions ; to whose publications I shall therefore refer the reader.‡ "Dr. James Johnson, who suffered from this eruption in India, says, 'prickly heat, being merely a symptom, not a cause of good health, its disappearance has been erroneously accused of pro-

* Green's Practical Compendium of Diseases of the Skin. 8vo. 1835. p. 181.

† See below, Order iii. Gen. 5.

‡ See Hillary on the Climate and Diseases of Barbadoes, p. 3, Introd.; Moseley on the Diseases of Tropical Climates, p. 20.; Cleghorn on the Diseases of Minorca, chap. 4.; Clark on the Diseases of Seamen in Long Voyages, vol. i. p. 34.; Bontius de Medicinâ Indorum, cap. 18.

ducing much mischief.' He ridicules the idea of its repulsion proving injurious, and remarks, 'It certainly disappears suddenly sometimes on the accession of other diseases, but I never had any reason to suppose that its disappearance occasioned them.' No external applications are useful ; but some alleviation is afforded by light clothing, temperance, open bowels, and avoiding exercise in the heat of the day until the habit become assimilated to the climate."

SPECIES 7. LICHEN *urticatus*, NETTLE LICHEN.

Syn. Lichen urticosus (*Good*).

The first appearance of this species is in irregular, inflamed wheals, so closely resembling the spots excited by the bites of bugs or gnats, as almost to deceive the observer. The inflammation, however, subsides in a day or two, leaving small, elevated, itching papulæ, "which are spread over the upper part of the trunk of the body, and the extremities." While the first wheals are thus terminating, new ones continue to appear in succession, until the whole body and limbs are spotted with papulæ, which become here and there confluent, in small patches ; "and increase both in elevation and in irritation the moment any stimulant food or exercise is taken. It often subsides for a few days, and then reappears more violent than ever." This eruption is peculiar to children : it commences, in some cases, soon after birth, and sometimes later, and continues with great obstinacy for many months. It occurs during dentition also, "recurring," says Underwood, "uniformly a little before a tooth has been cut."* Both the wheals and the papulæ are accompanied with intense itching, pricking, and tingling, which are exceedingly severe in the night, occasioning an almost total interruption of sleep, and considerable loss of flesh.

Frequent tepid bathing, particularly sea-bathing, light covering, especially in bed, with the use of small

* Diseases of Children, 8th edit. p. 175.

doses of sulphur, or the hydrargyrus sulphuratus niger, internally, appear to relieve the symptoms. "Dr. Good says, that opium increases the irritability, and no other narcotic is of avail.* No benefit results from the use of sarsaparilla, nor of elm bark ; nor any of the mercurial preparations." The skin will not bear stimulation, and is irritated even by a bath of too high temperature. When it has occurred in feeble and emaciated children, I have seen it effectually relieved by chalybeate medicines, as the vinum ferri, or the solution of the tartrate before mentioned. This combination of inflamed papulæ with intense itching, unites the characters of the Lichen and Prurigo ; an union, which, it must be allowed, is likewise not unfrequent in young adult persons.

Works which may be consulted on Lichen.

- BONTIUS de Medicinâ Indorum, 8vo. cap. 18.
 CAZENAVE and SCHEDEL, Abrégé Pratique des Maladies de la Peau, 8vo. 1828.
 CLARK on the Diseases of Seamen, vol. i. p. 34.
 CLEGHORN on the Diseases of Minorca, chap. 4. 8vo.
 Cyclopædia of Practical Medicine, art. LICHEN.
 GOOD, Study of Medicine, vol. iv. p. 530. 8vo. 1822.
 GREEN'S Practical Compendium, p. 175. 8vo. 1835.
 HILLARY on the Climate and Diseases of Barbadoes, 8vo.
 JOHNSON on the Influence of Tropical Climates, 2d edit. 8vo. 1818.
 LOBBY, Tractatus de Morbis Cutaneis, 4to. 1777.
 PLUMBE on Diseases of the Skin, 8vo. 2d edit. 1827.
 RAYER, Traité Théorique et Pratique des Maladies de la Peau, 8vo. 1826.
 WILLAN on Cutaneous Diseases, 4to. 1808. T.

GENUS III. PRURIGO.

Syn. κνησμός (G.) Pruritu (*Mercurialis*): Scabies papuliformis (*Auct. Vet.*): Intertrigo (*Lorry*): Exormia prurigo (*Good*): Prurit (*F.*): Das juckten (*Ger.*): Kejik (*Turc.*): *Pruriginous rash.*

* Study of Med. vol. iv. p. 559.

Def. SEVERE ITCHING, INCREASED BY SUDDEN EXPOSURE TO HEAT, AFFECTING EITHER THE WHOLE SURFACE OF THE SKIN, OR A PART ONLY : IN SOME INSTANCES WITHOUT ANY APPARENT ERUPTION ; IN OTHERS ACCOMPANIED WITH AN ERUPTION OF PAPULÆ NEARLY OF THE SAME COLOUR WITH THE ADJOINING CUTICLE.

“ Prurigo is uninfectious, and generally a chronic disease : it is both general and local. The constant itching which it produces, has sometimes an injurious effect on the general health, depressing the spirits, and, in a few instances, has produced a degree of fatuity.*

“ The only disease with which Prurigo is likely to be confounded, is Lichen ; but, independent of the extreme itching, the former is readily distinguished by the papulæ being broader, and their colour not differing from that of the skin.”

There are four species of Prurigo : —

- | | |
|-------------------------|------------------------------|
| 1. <i>P. mitis.</i> | 3. <i>P. senilis.</i> |
| 2. <i>P. formicans.</i> | 4. <i>P. sine papulis.</i> † |

SPECIES 1. PRURIGO *mitis*, MILD PRURIGO.

This form of Prurigo (Plate VI. fig. 1. of BATEMAN ; Pl. 3. of THOMSON'S ATLAS,) is accompanied by soft and smooth papulæ, somewhat larger and less acuminate than those of Lichen, and seldom appearing red or inflamed, except from violent friction. Hence an inattentive observer may overlook the

* Dr. Elliotson mentions two cases of this kind that had come under his notice. See Med. Gaz. vol. ix. p. 34. T.

† In the former editions of this work, three species only of Prurigo are enumerated, and those which I have thrown together to form the fourth species, are described by Dr. Bateman under the term “ local pruriginous affections.” If we were to regard the eruption of papulæ as the chief symptom of Prurigo, these local pruriginous affections should be separated from the genus ; but, as the chief characteristic is evidently the *itching*, these, in truth, may be regarded as constituting the only real species of Prurigo, whilst the three former species might, with much propriety, be transferred to Lichen. T.

papulæ altogether* : more especially as a number of small, thin, black scabs are here and there conspicuous, and arrest his attention. These originate from the concretion of a little watery humour, mixed with blood, which oozes out when the tops of the papulæ are removed by the violent rubbing or scratching which the severe itching demands. This constant friction sometimes also produces inflamed pustules, which are merely incidental, however, when they occur at an early period of the complaint. "They appear chiefly upon the shoulders, the breast, the loins, and the thighs." The itching is much aggravated both by sudden exposure to the air, by violent exercise, and by heat ; whence it is particularly distressing when the patient undresses himself, and often prevents sleep for several hours after he gets into bed.

This eruption mostly affects young persons, "usually in a good state of general health ;" and it commonly occurs in the spring or the beginning of summer. It is relieved after a little time by a steady perseverance in the use of the tepid bath, or of regular ablution with warm water and mild soap, although at first this stimulus slightly aggravates the eruption.† "Or, what is more decidedly and rapidly useful, the daily use of the artificial Barrège bath."‡ The internal use of Sulphur, alone, or combined with Soda or a little Nitre, continued for a short time, "after bleeding and active purgation," contributes to lessen the cutaneous irritation, and may be followed by the exhibition of the mineral acids : "fully more benefit, however, is derived from a course of

* Pruritus enormes non semper densæ confertæque papulæ afferunt ; paucæ vix aspectu notandæ occurrunt, quæ hominem convellant. — Lorry de Morb. Cutan. cap. iii. art. i. par. 2.

† After recommending a bath of moderate temperature, Lorry observes, "Nec mirandum, si inter balneorum usum plures papulæ prodeant. Etenim laxatis vasis, ad cutem omnia deferri æquum est. Sed nulla inde ratio est, cur minus balneis fidamus."—Loc. cit.

‡ This bath is made by dissolving a pound of sulphuret of potassa in thirty gallons of water. *Green.*

cooling purgatives, particularly in young and otherwise healthy people. Our own experience has taught us to place much confidence in the following formula: —

R. Magnesiæ Sulphatis ʒiij,
 Infusi Confectionis Rosæ ℥xiij,
 Acidi Sulphurici diluti ℥ix;

Misce ut fiat haustus bis die sumendus."

A restricted diet is an essential part of the treatment.

Under these remedies, the disorder gradually disappears; but if the washing be neglected, and a system of uncleanness in the apparel be pursued, it will continue during several months, and may ultimately terminate in the contagious Scabies.*

SPECIES 2. PRURIGO *formicans*, FORMICATIVE PRURIGO.

This affection (Plate VI. fig. 2. of BATEMAN, Pl. 3. of THOMSON'S ATLAS,) differs materially from the preceding, in the obstinacy and severity of its symptoms, although its appearances are not very dissimilar. The itching accompanying it is incessant, and is combined with various other painful sensations; as of ants or other insects creeping over and stinging the skin, or of hot needles piercing it. On undressing, or standing before a fire, but, above all, on becoming warm in bed, these sensations are greatly aggravated: and friction not only produces redness, but raises large wheals, which, however, presently subside. The little black scabs which form upon the abraded papulæ are seen spotting the whole surface, while the colourless papulæ are often so minute as to nearly to escape observation.

This Prurigo occurs in adults, and is not peculiar to any season. It affects the whole of the trunk

* It is probable that the cases which have thus terminated were not genuine Prurigo. T.

and limbs, except the feet and palms of the hands ; but is most copious in those parts over which the dress is tightest. Its duration is generally considerable, " seldom terminating sooner than two or three months ;" sometimes, " when it attacks old and debilitated people," extending, with short intermissions, to two years or more. " In such subjects, when the disease is severe, the feet and ankles swell and become cedematous ; whilst the skin is thickened, and even, in some instances, has been hypertrophied to a considerable extent." It is never, however, converted, like the preceding species, into the itch, for which, however, it may be readily mistaken, nor does it become contagious ; but it occasionally ends in Impetigo.

The causes of the *P. formicans* are not always obvious. In some instances the disease is distinctly connected with disorder in the stomach ; being preceded by sickness, gastrodynia, and headach ; " and these are again produced, in an augmented degree, by the sudden suppression of the eruption." In other instances, *P. formicans* appears to be the result of particular modes of diet, especially of the use of shell-fish and much stimulant animal food, in hot weather, with a free potation of wine, spirits, and fermented liquors, and excess in the use of condiments, pickles, and vinegar.* On the other hand, it is often observed in persons of lean habit, and sallow complexion, and in those who are affected with visceral obstructions, or reduced in strength by fatigue, watching, and low diet.

* I have known several instances of the immediate influence of the acetous acid upon the skin, especially in summer, exciting heat and tingling very soon after it was swallowed ; and, in persons of peculiar cutaneous irritability, leaving more permanent effects. Dr. Withering asks, " Who has not observed the full scarlet flush upon the face after eating herrings or vinegar, after drinking acetous beer or cider ?" — Treatise on Scarlet Fever, p. 62. The universal recommendation of vegetable acids and crude herbs, indeed, in these states of cutaneous irritation, in consequence of a misapplication of the term *scorbutic*, is in opposition to the dictates of sound observation.

The treatment of *P. formicans* must necessarily be varied according to the circumstances just stated; but it is not readily alleviated either by internal or external medicines. Where it appears to be connected with a state of general debility, or with some disorder of the abdominal viscera, the first object will be to remove these conditions by proper diet and exercise, together with medicines adapted to the nature of the case. Where the stomach is obviously disordered, the regulation of the diet is of material importance, especially as to the omission of those prejudicial articles above mentioned, and the substitution of a light digestible food, and of whey, milk, ass's milk, butter-milk, &c. as beverage. This regulation of the diet, indeed, is in all cases of the disease to be recommended, though there may be no apparent internal complaint from which it originates. For, in these cases, medicine alone is often extremely inert. "The use of the lancet is rarely required, but occasionally the influence of other remedies is little felt until the vascular system has been relieved."

Combined with proper diet, the use of washed Sulphur with the carbonate of Soda, internally, has much alleviated the painful state of sensation, and shortened the duration of the disorder: and where the habit was enfeebled, the decoctions of Sarsaparilla, Cinchona, Serpentaria, and other tonic vegetables, have proved essentially serviceable. I have seen considerable benefit derived from the internal use of the Oxygenated (Nitro-) Muriatic acid, in this and the former species of Prurigo, both the eruption and the itching yielding during its exhibition. It may be taken in doses of a fluid drachm, and increased gradually to three times this quantity, in water or any agreeable vehicle. Strong purgatives, or a course of purgation, appear to be injurious; "nevertheless, much benefit is often derived from the employment of Colchicum as a purgative:" anti-

monials and mercurials are useless; and active sudorifics aggravate the complaint.

In respect to external remedies, frequent ablution with warm water, by removing the irritation of sordes, and softening the skin, contributes most materially to the patient's relief. A partial bath of the native or artificial sulphureous waters* is still more efficacious in relieving the itching: "the hot air and sulphur fume bath has proved highly useful, especially when the patient has been previously bled, and has used the vapour bath for a few days. It is sometimes necessary to repeat the bleeding; and to intermit the use of the bath for a couple of days:" sea-bathing has also occasionally removed the disorder. In general, the application of ointments, or of lotions, containing Sulphur, Hellebore, Mercury, Zinc, Lime-water, &c. is productive of little benefit: I have sometimes, however, found a speedy alleviation produced by a diluted wash of the Liquor ammoniæ acetatis, or of spirit, or by a combination of these, varied in strength according to the irritability of the skin. "Lotions of Calomel and Lime-water are also frequently beneficial; and I have seen much relief obtained from the use of the following lotion:—

R. Hydrargyri Oxymuriatis gr. iij,
Acidi Hydrocyanici fʒj,
Misturæ Amygdalæ amaræ fʒviij. M.

"Dr. Elliotson recommends a lotion with chloride of Soda.

"Comfort is also sometimes procured from lotions of cold spring water. Much benefit is also said to result from touching the prominent papulæ, previously rubbed till they bleed, with undiluted Aromatic Vinegar; and afterwards applying the following

* This may be prepared in the following manner:—Dissolve two drachms of sulphate of Magnesia, ten grains of super-tartrate of Potassa, and half a drachm of sulphuret of Potassa in twenty-four fluid ounces of warm water. It should be used at 95° of Fahrenheit. T.

ointment liberally to the whole eruption, giving, at the same time, four or five grains of Plummer's pill every night, and five drops of the Arsenical Solution three times a day : —

R. Sulph. Sublimati,
Picis Liquidi,
Adipis, \bar{a} . \bar{a} . lbss.
Cretæ ζ iv,
Hydrosulph. Ammoniaë ζ ij. M.
ut fiat unguentum."

SPECIES 3. PRURIGO *senilis*, INVETERATE PRURIGO.

The frequent occurrence of this species of Prurigo (Plate VI. fig. 3. of BATEMAN; Pl. 8. of THOMSON'S ATLAS,) in old age, and the difficulty of curing it, have been the subject of universal observation.* The sensation of itching, in the Prurigo of that period of life, is as intolerable and more permanent than in the P. formicans; and the appearances which it exhibits are very similar, except that the papulæ are for the most part larger. The comfort of the remainder of life is sometimes entirely destroyed by the occurrence of this disease.

A warm bath affords the most effectual alleviation of the patient's distress, but its influence is temporary. "The itching is said to be relieved by the sulphureous fumigating bath, when used at a temperature so low as will merely disengage the sulphurous gas." The disorder seems to be connected with a languid state of the constitution in general, and of the cutaneous circulation in particular: hence the sulphureous waters of Harrowgate, employed both internally and externally at the same

* See Hippoc. Aph. lib. iii. § iii. 31. where, among other diseases of old age, he mentions *ξυσμοὶ τοῦ σώματος ὄλου*.—Its obstinacy has been particularly noticed by the later Greeks. "Pruritus in senectute contingente perfecte sanare non datur, verum subscriptis mitigare potes." Paul. Ægin. de Re Med. lib. iv. cap. 4. Actuar. Meth. Med. lib. ii. cap. 11.—See also Sennert. Pract. lib. v. p. iii. § i. cap. 8.—Mercurialis de Morb. curand. cap. 3. Heberden, Comment. cap. 76.

time, afford on the whole the most decided benefit. A warm sea-water bath has also been found serviceable. Sometimes stimulant lotions, containing the oxymuriate of mercury, or the liquor ammoniæ acetatis, or alcohol, "chloride of Soda," are productive of great relief, and occasionally render the condition of the patient comparatively comfortable, or even remove the disease.* When the surface is not much abraded, the oxymuriate will be borne to the extent of two grains to the ounce of an aqueous or weak spirituous vehicle; but it is generally necessary to begin with a much smaller proportion.

This mineral salt is likewise useful in destroying the pediculi, which are not unfrequently generated, when the Prurigo senilis runs into a state of ulceration.† Where the skin is not abraded by scratching, the oil of turpentine, much diluted with oil of almonds, may be applied with more decided effect, for the destruction of these insects.‡ "Bielt recom-

* Dr. Heberden lays it down as an axiom, that stimulants are commonly beneficial in diseases of the skin accompanied by itching. — "Quod attinet ad remedia extrinsecus admovenda, illud sedulo tenendum est, acriora plerumque convenire, ubi pruritus est; sin dolor fuerit, lenia esse adhibenda," &c. (Comment, cap. 25.) This is true, perhaps, as far as it regards the unbroken or papulated skin: but itching often accompanies chaps, and rhagades, vesicular and even pustular diseases in a state of excoriation, and the irritable state of the surface left by the exfoliations of some of the scaly eruptions; under all which circumstances, this is an erroneous rule of practice, as I have had many opportunities of witnessing.

† The same languid state of skin, which is a predisposing cause of this species of Prurigo, is also favourable to the generation of pediculi; for, as Alibert justly remarks, "la génération de ces dégoûtans animalcules tient à une foiblesse radicale et constitutionnelle de la peau, comme le développement des vers, dans le conduit intestinal, tient également à un défaut d'énergie dans les propriétés vitales de cet organe." *Descript. des Mal. de la Peau, Discours préliminaire*, p. xi. T.

‡ The pertinacity with which these loathsome insects often continue to infest the skin, in spite of every application that is resorted to, is surprising: but, as Dr. Willan has justly observed, the marvellous histories of fatality occasioned by lice, in the persons of Pherecydes, Antiochus, Herod, &c., are probably ascribable to mistake; the writers having confounded other insects, or their larvæ, with pediculi. Numerous instances are recorded of the generation of maggots, *i. e.* the larvæ of different species of fly (*Musca*), and even of other winged insects, not only in the internal cavities of the human body, but in ex-

mends fumigations with Cinnabar in preference to any other topical application, as acting rapidly and commodiously in destroying them."

SPECIES 4. PRURIGO *sine Papulis*, LOCAL PRURIGO.

The local pruriginous affections are accurately described in the first part of the general definition: they have scarcely any affinity with the species of Prurigo already described, except in the itching which accompanies them, not being in general papular diseases; a character in which all the varieties agree.

Var. a. P. *præputii* is occasioned by an altered or augmented secretion about the corona glandis, and is cured by frequent simple ablution of the parts with hot water, or with a weak saturnine lotion.

Var. b. P. *pubis* arises solely from the presence of morpiones, or pediculi pubis, which are readily destroyed by the white precipitated Mercury in powder, or by mercurial ointment rubbed into the parts affected.*

ternal sores and excoriations. (For several examples of this kind I beg leave to refer to a paper of my own in the Edin. Med. and Surg. Journal for Jan. 1811, p. 41., and in the new Cyclopædia of Dr. Rees, Art. INSECTS.) In warm climates, indeed, these insects are so abundant about the persons of the sick, that the utmost care is requisite to prevent the generation of larvæ from the ova, which they deposit, not only in superficial wounds, but in the nostrils, mouth, gums, &c. Dr. Lempriere has recorded the case of an officer's lady, who had gone through an acute fever, but in whom these maggots were produced, which burrowed and found their way by the nose through the *os cribriforme*, into the cavity of the cranium, and afterwards into the brain itself, to which she owed her death. (Obs. on the Diseases of the Army in Jamaica, vol. ii. p. 182.) The worms which were generated in the patches of Lepra, observed by Prof. Murray, proved to be larvæ of the common house-fly. "Incredibile fere est," he says, "quanta muscarum domesticarum copia continuo ad lectum advolarent, ægrumque suctu suo torquerent, ut in clamorem usque nonnunquam erumperet." (De Vermibus in Lepra obviis Obs. Auct. J. A. Murray, Gött. 1769. p. 25.) In all such cases, the disease appears to have afforded only a nidus for the ova of these domestic insects, and to have been in no other way connected with their existence, either as cause or effect. See Scabies.

* Mr. Plumbe recommends the following ointment for this purpose:

℞. Unguenti Hydrargyri,
 ————— Sulphuris, ā. ā, partes æquales. M.

Var. c. P. urethralis is commonly sympathetic of some disease about the neck of the bladder, or of calculi in that organ; in women, however, it sometimes occurs without any manifest cause, and is removable by the use of bougies, as recommended by Dr. Hunter.

The three next forms of local Prurigo, namely, *P. podicis*, and *pudendi muliebris*, are more frequently the objects of medical treatment.

Var. d. P. podicis. Independently of ascarides, or hæmorrhoids, which sometimes occasion a troublesome itching about the sphincter ani, the *P. podicis* occurs in sedentary persons, and those of advanced age, in connection with an altered, highly irritating secretion from the part, and sometimes with constitutional debility. This complaint, especially in old men, is apt to extend to the scrotum, which becomes of a brown colour, and sometimes thick and scaly. The itching, in these cases, is extremely severe, especially at night, and often deprives the patient of a considerable portion of his sleep.

Var. e. P. scroti. This variety of local Prurigo is occasionally produced by friction, from violent exercise in hot weather, and sometimes it originates from the irritation of ascarides in the rectum.

Lotions, whether warm or cold, with preparations of Lead, Zinc, Lime-water, &c., have little efficacy in these affections. Those made with Vinegar, or the acetate of Ammonia, are productive of a temporary relief; but the most useful are those made with a scruple of Calomel, or twelve grains of oxy-muriate of Mercury, and six fluid ounces of Lime-water, and used without being filtered. "Much of the advantage of any lotion depends on the mode of using it; even cold water applied with a soft rag to the part, and the whole covered with a piece of oiled silk, affords great comfort: but the relief is more permanent if the water be mixed with hydrocyanic acid, in the proportion of f3j to f3viij of the water."

The mercurial ointments, especially the *Unguentum Hydrargyri Nitratis*, diluted, are often successful applications.—Internally small doses of Calomel, with an antimonial, such as the *Pilula Hydrargyri Submuriatis* of the London Pharmacopœia, seem to be advantageous in correcting the morbid secretion: and the vegetable or mineral tonics should be administered in enfeebled habits. In *P. podicis*, much benefit is derived from the application of leeches to the verge of the anus; and in this variety, even more than in the others, great temperance should be inculcated, since stimulant diet invariably aggravates the complaint.

Var. f. P. pudendi muliebris is somewhat analogous to the preceding, but is occasionally a much more severe complaint. It is sometimes connected with ascarides in the rectum, and sometimes with leucorrhœa; but is most violent when it occurs soon after the cessation of the catamenia. The itching about the labia and os vaginae is constant and almost intolerable, demanding incessantly the relief of friction and of cooling applications, so as to compel the patients to shun society; and even sometimes to excite at the same time a degree of nymphomania.* This condition is generally accompanied by some fulness and redness of the parts.

“While inflammation is present, nothing is so serviceable as the application of leeches to the affected parts. The itching is moderated by the abstraction of the blood, and the other remedies act more efficaciously after the bleeding.” Saturnine and saline lotions, Lime-water, Lime-water with Calomel, Vinegar and oily liniments prepared with Soda or Potassa, are beneficial, especially in the milder cases: but the most active remedy is a solution of the

* M. Bielt mentions a case of it in a woman of sixty years of age. He examined the parts, but could discover nothing. This woman had syncope whenever she saw a young man. *Abrégé Pratique des Maladies de la Peau*, p. 235. T.

Oxymuriate of Mercury in Lime-water, in the proportion of two grains, or a little more, to the ounce. "I have seen much relief procured by a lotion composed of equal parts of the Chloro-sodaic Solution of Labarague and water. As in the cases before mentioned, however, the presence of rhagades or excoriations will require palliation before it can be employed. I have also observed great benefit to follow the use of a lotion composed of two fluid drachms of liquor Potassæ, one fluid drachm of Hydrocyanic acid, and eight fluid ounces of emulsion of Bitter Almonds. M. Rayer* details a severe case of a disease of this description, which was cured by Gelatino-sulphureous Douches, recommended by M. Dupuytren. It is of importance to avoid wine, spirits, tea, coffee, pepper, and all aromatics, when the disease is severe."

Books which may be consulted on Prurigo.

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PLUMBE, on *Diseases of the Skin*, 2d edit. 1827.

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A. T. THOMSON, *Cyclopædia of Practical Medicine*, vol. iv. p. 627.

— WILLAN, on *Cutaneous Diseases*, 4to. 1798.

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* *Traité des Maladies de la Peau*, tome i. p. 620.

Order II.

S Q U A M Æ.

SCALY DISEASES.

SYN. λεπος (*G.*): Lepidosis (*Young. Good*): Inflammations Squameuses (*Rayer*): Squammes (*Bielt*): Kuba or Kouba (*Arab.*): Perjun (*Persic*): *Scaly eruptions.*

Def. AN ERUPTION OF SCALES, CONSISTING OF LAMINÆ OF MORBID CUTICLE, HARD, THICKENED, WHITISH, AND OPAQUE, DETACHING ITSELF FROM THE SKIN. SCALES, WHEN THEY INCREASE INTO IRREGULAR LAYERS, ARE DENOMINATED CRUSTS.

Those opaque "whitish, glistening, friable," and thickened laminæ of the cuticle, which are called Scales, commonly "proceed from an altered action of the vessels that secrete the cuticle, approaching to subacute inflammation;" but the degree of inflammation may be such as to affect the true skin, over which they are formed, and prove destructive to it: in the slighter forms, as for example Pityriasis, the cuticle alone, or with the rete mucosum, appears to be in a morbid condition. "These eruptions generally display themselves in minute red points, that enlarge and form circular patches that run into one another, and at the same time are covered with scales. When the scales fall off, they leave either a healthy surface, or a red, smooth, and glistening state of the skin, which does not soon regain its natural appearance." If the definition be carefully attended to, scales will not be confounded with the scabs succeeding confluent pustules and vesicles, and superficial ulcerations.

"A peculiar predisposition of habit is necessary for the appearance of scaly eruptions, and this in

many instances appears to be hereditary. Women in general are more liable to them than men, adults than children. The scales appear in patches, are accompanied by slight itching or tingling; and owing to the diminished perspiration which they induce, the pulmonary exhalation and the secretion of urine are augmented. Scaly diseases are not contagious, but they are always chronic: they are accompanied or preceded by little constitutional disease; thence are devoid of danger. They occur in all ranks of life, and at all seasons, but they are more frequent in spring and autumn than in summer or winter."

"The distinct nature of the scales renders the diagnosis of this class of eruptive diseases very clear: the flakes succeeding *Eczema*, and the scurf of Lichen have no affinity to them."

The three genera of scaly diseases are,

1. LEPRA.
2. PSORIASIS.
3. PITYRIASIS.*

GENUS I. LEPRA.†

SYN. λεπρα (*G.*): Vitiligo (*Celsus*): Lepra Græcorum (*Auct. var.*): Leprosis, Lepriasis (*Good*): Lèpre, Léproisie (*F.*): der Aussatz (*Ger.*): Berat (*Hebrew*): Beresa (*Arab.*): Kush'tu (*Hindos.*): Vullay Koostum (*Tam.*): Tella Koostum (*Tel.*): Sweta Koostum (*Sans.*): Suffaid khere (*Duk.*): Velussu (*Malayalie*): *Lepra*.

Def. CIRCULAR PATCHES OF SMOOTH, LAMINATED SCALES, SURROUNDED BY A REDDISH AND

* It is evident that Ichthyosis was improperly placed among the *Squamæ* by Willan and Bateman; I have therefore ventured to remove it to a new order, under the title *Cuticulares*.

† Græce λεπρα dicitur, cujus formatio ἀπω των λεπίδων (a squamis) unde τὸ λεπρυνεσθαι, quod significat scabrum fieri et simul albescere, originem trahit. *I. Gorræus*, Schol. in Nicand. Theriac. p. 77—82.

PROMINENT CIRCLE. THE PATCHES ARE OF DIFFERENT SIZES, AND DEPRESSED IN THE CENTRE.

The term LEPRA is here appropriated solely to the *Leprosy of the Greeks*, as described by the more accurate of those writers. It is characterized, as stated in the definition, by "scaly patches, of different sizes, but having always nearly a circular form, and raised in the circumference: several of these, however, may run together and form patches of a very irregular figure."* The parts which it chiefly attacks are below the patella, over the tibia, the elbows, the fore arms, and the surface in particular of the ulna. "Lepra is rarely dangerous, although extremely obstinate and difficult to cure: but, instances have occurred in which it has run on to a fatal termination: the symptoms are thus described by Richter. 'The local disease having reached its acmè, a remarkable constitutional change displays itself. The patient becomes languid; asthmatic, especially in the night; fits of suffocation seize him; he coughs violently and spasmodically; is wakeful and falls into excessive, colliquative, clammy

* The confusion which has every where prevailed in the use of the terms *Lepra* and *Leprosy*, seems to have originated principally with the translators of the Arabian writers after the revival of learning. The Greeks agreed in appropriating the appellation of *λεπρα* to a scaly eruption (as its etymology dictated); most of them deemed it the highest degree of *scaliness*, exceeding in this respect the Lichenes, Psora, and Alophos; and those, who were most minute in their description, stated that "it affects the skin deeply, in circular patches, at the same time throwing off scales like those of large fishes." (See Paul. Ægin. de Re Med. lib. iv. cap. 2.; — and Actuarius de Meth. Med. lib. ii. cap. 11.; — also Aëtius, tetrab. iv. serm. i. cap. 134.; and Galen Isagoge.) This was sufficiently clear; but those who translated the works of the Arabians into Latin, fell into the extraordinary mistake of applying the Greek term to a tubercular disease, which had been actually described by the Greeks under the appellation of Elephantiasis; and they applied the barbarous term *Morphæa*, together with Scabies and Impetigo, to the scaly diseases of the Greeks above enumerated. Whence their followers, who detected the error, spoke of the *Lepra Arabum* as well as the *Lepra Græcorum*; while the less accurate confounded every foul cutaneous disease under the term Leprosy. The Arabians themselves do not employ the word *Lepra*; but have described these different diseases under appropriate appellations. See Elephantiasis below.

sweats, that exhale an intolerably foetid odour; his voice becomes weaker and hoarser; the appetite for food and drink is preternaturally increased; and the temper becomes gloomy. At length, various nervous symptoms supervene, faintings, convulsions, partial paralysis, and at length exhaustion that terminates in death.' *"

There are three species of *Lepra* :

1. *L. vulgaris*.
2. *L. alphoides*.
3. *L. nigricans*.

SPECIES 1. *LEPRA vulgaris*, COMMON LEPROSY.

Syn. Herpes furfuraceus circinatus (*Alibert*): Dartre furfuracée arrondie — Lèpre (*F.*): Weisse aussatz (*G.*): Berat lebena (*Hebrew*): Beras bejas (*Arab.*)

This species of the disease, (Plate VII. of *BATEMAN*; Pl. 4. of *THOMSON'S ATLAS*), the most ordinary in this country, commences with small, round, reddish, and shining elevations of the skin, at first smooth, but within a day or two exhibiting thin white scales on their tops. These scaly patches gradually, sometimes rapidly, dilate to the size of half-a-crown, "are depressed in the centre," but still retain their oval or circular form, and are covered with shining scales, "not unlike mica or asbestos, but more opaque," and encircled by a dry, red, and slightly elevated border. "They always extend by the coalescing of distinct points of inflammation. The scales at first are thin, somewhat resembling those of a carp, but by degrees they become laminated and denser; they fall and are renewed many successive times;" and in some cases accumulate, so as to form thick prominent crusts. "In mild cases of the disease, it is probable that the morbid action is confined

* Richter, *Specielle Therapie*, vol. ii. p. 440., quoted by Dr. Houghton. *Encycl. of Prac. Med.* iii. p. 30.

to the scarf skin ; but when the disease is severe, the cutis vera is involved." If the scales or crusts are removed, the skin appears red and shining, being very smooth, and free from the cuticular lines in the beginning, but marked, in the advanced stages, with long deep lines and reticulations, not always coinciding with those of the adjoining surface, " but with the under surface of the desquamated layers. If the first scale which forms be forcibly detached, a small speck of blood is found in the little hollow of the scale and of the slight elevation on the skin which occupied it."

The Lepra most commonly commences on the extremities, where the bones lie nearest to the surface ; especially below the elbow and the knee, and usually on both arms, or both legs, at the same time. From these points it gradually extends, by the formation of new and distinct patches, along the arms or thighs, to the breast and shoulders, and to the loins and sides of the abdomen. In several cases, I have observed the eruption most copious and most permanent round the whole lower belly. The hands also become affected, and the roots of the nails ; and in many cases the hairy scalp suffers ; but the face is seldom the seat of large patches, although some scaliness occasionally appears about the outer angles of the eyes, and on the forehead and temples, extending from the roots of the hair. In the more severe cases, the nails of the fingers and toes are often much thickened, and become opaque and of a dirty yellowish hue, and are incurvated at the extremities ; their surface is also irregular, from deep longitudinal furrows, or elevated ridges.

When the eruption of Lepra is moderate in degree and extent, it is not attended with any uneasy sensations, except a slight degree of itching after a full or an indigestible meal, or when the patient is heated by exercise, or becomes warm in bed ; and a little occasional tingling in certain states of the atmo-

sphere.* “ Mr. Plumbe has remarked that a sensation of pricking always accompanies the separation of the first scales, before they have attained the size of spangles. This he attributes ‘ to the raising up of the edge of the scale, produced by the tumefaction and elevation of the inflamed margin, and fresh growth of the scale detaching the centre forcibly from the cutis :’ but is more likely to depend on the altered condition of the cuticular secretion affecting the sensitive extremities of the nerves.”† When the patches are generally diffused, however, and there is a considerable degree of inflammation in the skin, the disease is accompanied with extreme soreness, pain, and stiffness ; which I have sometimes seen so great as to render the motions of the joints impracticable, and to confine the patient to bed. Yet even under these circumstances, there is little constitutional disturbance ; and if no medicine be employed, the disease of the skin may continue for months, or even years, without any material derangement of the system.

“ Lepra is easily distinguished from most other eruptions : from Psoriasis by the regular circular form of the patches, which, in the latter disease, are always irregular ; and in which, also, the borders are neither elevated nor inflamed. With one species, however, of Psoriasis, the *guttata*, Lepra may be readily confounded : but the patches are generally smaller and less regular in their figure than those of Lepra. There are no rhagades and ulcerations in Lepra. It has been said that Lepra, when it attacks the scalp, may be confounded with what has been named *Porrigo scutulata* ; but, independent of the latter disease being contagious, in the former the scab of Lepra is readily distinguished from the laminar scab of this *Porrigo*. From those syphilitic

* Hippocrates remarks that some *Lepræ* itch before rain : lib. Περὶ Χυμῶν.

† Plumbe on Diseases of the Skin, 2d edit. 1827.

eruptions that assume its form, Lepra is distinguished by the absence of the dark coppery hue which characterizes all true venereal eruptions.

It is not easy to point out the causes of this disease, which appear, indeed, to be very various; for it is one of the most common affections of the skin, at least in this metropolis, and occurs at all periods, and under every circumstance of life.* It is undoubtedly an inflammatory disease: it is as certainly not communicable by contagion; nor does it appear to originate from confinement to certain kinds of diet, such as fish, dried or salted meats, &c. since it is not endemic in districts where these are habitually used, and occurs frequently where they are almost unknown. But, like some other cutaneous affections of a more transient character, it is certainly produced occasionally by the influence of particular articles of food and drink, which operate through the idiosyncrasy of individuals.† I have met with one gentleman, in whom spices or alcohol speedily produce it. The original attack in him occurred after eating some hot soup, containing spice, the first spoonful of which excited a violent tingling over the whole head, followed by the leprous eruption, which soon extended to the limbs. In another case, in a young gentleman of nineteen, the disease commenced after taking copious draughts of cream. Vinegar, oatmeal, and other species of food, to which it has been ascribed,

* It is difficult, therefore, to account for the opinion expressed by the late Dr. Heberden, respecting the extreme rarity of Lepra in this country. "De vero scorbuto et Lepra, nihil habeo quod dicam, cum alter rarissimus est in urbibus, altera in Anglia pene ignota; unde factum est ut hos morbos nunquam curaverim." (Comment. cap. 23.) And still more difficult to explain the statement of Dr. Cullen, whose definition of Lepra will include both the dry and humid tetter (Psoriasis and Impetigo) with the proper scaly Lepra; but who nevertheless affirms that he had never seen the disease. Nosol. Meth. class iii. gen. 88. note.

† Larrey ascribes the attacks of Lepra, which the French suffered in Egypt, to the unwholesome character of the pork in that country; for all those who lived upon pork for some time were attacked by a leprous eruption. *Relation Chirurgicale de l' Armée d' Orient*, 8vo. Paris, 1804. T.

have probably given rise to it occasionally : but these are all anomalies, and are only referable to peculiar idiosyncrasy.* In some cases it has commenced after violent and continued exercise, by which the body had been much heated and fatigued: "and occasionally it has followed violent mental emotions, namely, anger, sudden grief, or fright."

Dr. Willan has imputed the origin of *Lepra* to cold and moisture †, and to certain dry sordes on the skin. It has seldom occurred to me, however, to witness the disease in bakers, laboratory-men, and others who work among dry powdery substances; while I have observed a considerable number of cases in young ladies, and in persons of both sexes in respectable ranks of life, by whom every attention to cleanliness was scrupulously paid. Where cold and moisture have excited the eruption of *Lepra*, the predisposition to it must have been peculiarly great. "Dr. Duffin has remarked, that the greater number of persons afflicted with *Lepra* are of a ruddy, fair complexion. The following is his opinion of the proximate cause of the disease: 'I imagine that the primary evil lies in the secretions of the true skin, which, becoming vitiated by their local irritation, induce chronic or subacute inflammation of the vessels, that either nourish or produce the cuticle; and that they produce a superabundant supply of morbid cuticle.' ‡ This theory is ingenious, but not altogether free from objection;" and, on the whole, it must still be admitted, that the causes of this dis-

* Some poisonous substances taken into the stomach have produced an eruption of *Lepra*. The poison of copper is stated to have speedily excited it in several persons at the same time, in one of whom it continued for a month, but disappeared in the others in about ten days. See *Med. Facts and Obs.* vol. iii. p. 61.

† The effects of cold and moisture on some quadrupeds tend, in some degree, to confirm this opinion. Thus Dr. Baron, having kept rabbits in a cold damp place, and fed them on green food, perceived that they became low in flesh; the abdomen became tumid, and the whole skin scaly and unhealthy. Vide *Delineations of the Origin and Progress of the Changes of Structure in Man*, 8vo. 1828.

‡ *Edin. Med. and Surg. Journ.* Jan. 1826.

ease are involved in much obscurity. There is obviously an hereditary predisposition to it in some individuals.

SPECIES 2. LEPRA *alphoides**, WHITE LEPRA.

Syn. Ἀλφός, (*Auc. Gr.*): *Alphos* (*Celsus*): *Lepriasis albida* (*Good*): *Lèpre Alrhoide* (*F.*): *der Weisgeflecke aussatz* (*German*): *Boak* (*Heb.*): *Albohak* (*Arab.*)

This is a less severe form of the disease (Plate VIII. fig. 1. of BATEMAN; Pl. 4. of THOMSON'S ATLAS,) than the preceding, for it is merely a variety of it. It differs chiefly in the small size of the patches, which seldom extend beyond the diameter of a few lines, or become confluent, — in the minuteness and greater whiteness of the scales, — and in its limitation to the extremities. “It gives the parts affected a speckled appearance, formed of red patches and silvery scales irregularly dispersed.”

* The Greeks have described the *Alphos* as a milder disease, being more superficial, and less rough, than the *Lepra* (see Galen, de Sympt. Caus. lib. iii. — Aët. tetrab. iv. serm. i. cap. 134.): and the description of it given by Celsus accords with the appearances of the *L. alphoides* above stated. “Ἀλφός vocatur, ubi color albus est, fere subasper, et non continuus, ut quædam quasi guttæ dispersæ videantur. Interdum etiam latius, et cum quibusdam intermissionibus, serpit.” (De Medicina, lib. v. cap. 18.) Celsus nowhere employs the term *Lepra*.

This scaly *Alphos*, which was deemed by Hippocrates a blemish, rather than a disease (Περὶ Παθῶν, sect. 15.), was distinguished from another white affection of the skin, the *Leuce*, which was not scaly, but consisted of smooth, shining patches, on which the hairs turned white and silky, and the skin itself, and even the muscular flesh underneath, lost its sensibility. The *Leuce* was a disease of an incurable nature. (Hipp. Προφῆτης, lib. ii.) Celsus, although pointing out this distinction, includes the *Leuce* and the *Alphos* under the same generic title, *Vitiligo*. (loc. cit.)

It may be remarked, that the Arabians distinguished these two affections by different generic appellations; calling the *Alphos*, *Albohak*, and the *Leuce*, *Albaras*, with the epithet *white*. Their translators have called the former *Morphæa*, and included the *Leuce* and *Elephantiasis* under the appellation of *Lepra*. By retaining these distinctions in recollection, the accounts of the older writers may be read, while the confusion arising from their misapplication of names may be avoided.

It appears probable that the *Leuce* was the Leprosy of the Jews, described in Leviticus, chap. xiii. See Greg. Horsii Obs. Med. lib. vii. p. 330. — Leon. Fuchsii Paradox, lib. ii. cap. 16. — Th. Campanellæ Ord. Medic. lib. vi. cap. 23. — Hensler, Von Abendländischen Aussatz, p. 541.

This variety of *Lepra* is most common in children, "and girls under the age of fourteen, or old persons, or those of debilitated habits. When it affects adults, the site of the scaly patches is considerably redder than the surrounding parts; and the exfoliating scales leave a smooth, red, glistening surface; which, in old cases, is intersected with fissures." It is tedious and difficult of cure, like the former, and requires similar treatment.

SPECIES 3. *LEPRA nigricans*, BLACK LEPROA.

Syn. μέλας (*G.*): *Melas* (*Cels.*): Swarze Aussatz (*Ger.*): Berat cecha (*Heb.*): Beras asved (*Arab.*): *Black Lepra.*

This species (Plate VIII. fig. 2. of BATEMAN; Pl. 4. of THOMSON'S ATLAS,) is a more rare form of the disease, differing externally from the *L. vulgaris* chiefly in the dark and livid hues of its patches, which is most obvious in the margin, but even appears through the thin scales in the area of each patch.* The scales are thinner and more easily detached in this form of *Lepra*, and the surface remains longer tender, and is often excoriated, discharging bloody serum, till a new, hard, and irregular incrustation is formed. There is much probability in Dr. Duffin's opinion, that this form of the disease is merely the *vulgaris* in a cachectic habit. "M. Biett regards it as invariably of syphilitic origin."

It occurs chiefly in persons whose occupations expose them to the vicissitudes of the weather, and to a precarious diet, with fatigue and watching. It is cured by nutritive food, with moderate exercise,

* The *Melas* of the ancients was deemed a superficial affection, resembling the *Alphos*, except in its colour. "μέλας colore ab hoc differt, quia niger est, et umbræ similis: cætera eadem sunt." (*Celsus loc. cit.*) Possibly it included the *Pityriasis versicolor*. See below, Genus iii. of this Order, Spec. iii.

"I cannot understand the reference to *Pityriasis* in this note; for, if *Celsus* is to be followed, it is evident, from the expression 'cætera eadem sunt,' that he intends to describe the *Melas* as a species of the same genus as the *Alphos*, that is, as a *Lepra*." T.

followed by the use of the Cinchona bark, mineral acids, and sea-bathing; and, as a local application, the Unguentum Hydrargyri Nitratis, diluted with two parts of lard.

It would be superfluous to enumerate the catalogue of useless medicines, which have been recommended from ancient times for the cure of Lepra; I shall, therefore, confine my attention to those, of the beneficial agency of which I can speak from experience. It is necessary to premise, however, that there is no one remedy, nor any invariable plan of treatment, which will succeed in Lepra, under all the circumstances of its appearance in different instances; and that great errors are committed by prescribing for the name of the disease. The circumstances to which I allude more particularly, are the different degrees of cutaneous excitement, or inflammatory action, which accompany the disease in different habits; and which, if carefully attended to, afford an important guide to the most successful application of remedies.

“There are few cases of any of the varieties (for they can scarcely be regarded as species) of Lepra in which more than one moderate bleeding is not requisite, even where a tonic plan is indicated. The circumstances usually regarded as indicating blood-letting, are an active irritable state of the patches, with feverishness: but, even when these symptoms are not present, it aids the action of other remedies in a remarkable degree. In general our practice has been too exclusively depleting or stimulant.”

In the less irritable conditions of the leprous eruption, in which no inflammatory tendency appears, such as the *L. alphoides* frequently, and the *L. vulgaris* occasionally, exhibit, “after the abstraction of eight or ten ounces of blood,” a gently stimulant mode of treatment, at least externally, is requisite; though in all cases of Lepra, the diet should be light and moderate, and heating liquors should be avoided,

especially malt liquors and spirits : for every indulgence in these points will be felt in the aggravation of the symptoms. " When the eruption is limited in extent, has existed for some time, and is unattended with much itching, pain, or irritation, little more than local remedies are required." A frequent use of the warm bath, at 89° to 95° Faht., with which a moderate degree of friction may be combined, contributes to remove the scales, and to soften the skin. " If the scales be forcibly removed before the exfoliating process is complete, the skin will bleed, which is not the case when the exfoliation is complete." If the eruption be confined to the extremities, local ablution may be sufficient, " and this is best performed by immersing the part in warm artificial Harrowgate water, as recommended by Dr. Duffin.* The following is the method of preparing this water : Dissolve ʒij of Sulphate of Magnesia, gr. x. of Bitartrate of Potassa, and ʒss of Sal Polychrest in f̄ʒxxiv of hot water. The temperature of the solution when used should be 95° Fahrenheit : it should be used daily for 10 or 15 minutes each time." These cases are benefited by the use, both internally and externally, of the sulphur waters of Harrowgate, Lucan Spa, Leamington, Crofton, Mofat, and other well-known springs " in this country ; and those of Barèges, de Cauterets, de Bagnères, de Bagnoles, St. Gervaise, and d'Enghien on the Continent," and by the warm sea-water bath. In fact, these gently-stimulant ablutions are often sufficient, if persevered in during several weeks, to remove the modifications of Lepra of which I am now speaking. " The sulphureous vapour baths are still more useful, particularly when combined with moderate friction." — " All of these baths operate more beneficially when they are aided by moderate friction with the flesh-brush."

* Edin. Med. and Surg. Journ. Jan. 1826, p. 23.

But if the scales adhere tenaciously, or are accumulated into thick crusts, then some more active lotion must be conjoined with the warm ablution, or with the application of steam, in order to clear the surface. Lotions of diluted Alcohol, of sulphurated Potassa, or the decoction of Dulcamara, will aid the exfoliation; and the thick crusts may be softened and loosened by lotions containing a portion of the liquor Potassæ, or of the Muriatic acid. "Blisters have been advantageously employed for this purpose." When these are removed, the cuticle may be restored gradually to its healthy condition, by the Unguentum Picis, or the Unguentum Hydrargyri Nitratis diluted with Saturnine Cerate, or simple ointment, "or, which is better than any other, an ointment composed of equal parts of Unguentum Hydrargyri Nitratis and Unguentum Picis:" or lotions containing a small proportion of Oxymuriate of Mercury may be substituted. "M. Biett recommends an ointment composed of from twelve to fifteen grains of Ioduret of Sulphur * and an ounce of Lard." The ointments should be applied at night, and washed off in the morning with warm water, or a slight saponaceous lotion, "composed of fʒiij of Liquor Potassæ in fʒvj of water; after which the parts are to be brushed over with a solution of Oxymurias Hydrargyri gr. ij: Spiritus Vini fʒj. Dr. Duffin † ascribes much of the benefit derived from the alkaline solution to its being a perfect ablution to the part, and requiring the aid of considerable friction, two circumstances of great importance in Lepra." In a few cases, the continued application of the tar ointment has effectually cleared the skin of the patches, and restored its texture, even when internal remedies had little influence; but this advantage has not been permanent.

* Ioduret of Sulphur is readily prepared by melting together, in a flask, equal parts of Iodine and Sulphur. T.

† Loco citato.

The same inert cases will be accelerated in their progress towards a cure, by the use of those internal remedies which tend to support the strength and to stimulate the cutaneous vessels. Purging is injurious, but the bowels should be kept easy by a mild pill. The Arsenical Solution *, recommended by Dr. Fowler is the best tonic, and proves often extremely beneficial, in doses of four or five drops, which may be slowly increased to eighteen, and persevered in for a month or more.† “It may be given in the Decoction of Dulcamara, or of Sarsaparilla : and its efficacy is much augmented by employing for common beverage, water moderately acidulated with Nitric Acid, and sweetened. The sensible effects of the Arsenical Solution are quickening of the pulse, and an uneasy sense of stiffness in the eye-lids : but when these are accompanied with griping pains, a white tongue, with its tip and edges of a florid red, anxiety in the præcordia, and frequent sighing, the remedy should be discontinued ; and when it causes pains of the chest from the first, it should not be given at all. I have generally employed the Solution of Hydriodate of Iron, in doses of a fluid drachm, in a glass of water, three times a day, during the intervals between the bleedings. The Tincture of Cantharides, brought into notice by Dr. Mead, has been given in doses of $\mathfrak{m}v$ to $\mathfrak{m}vii$, in a basin of milk or barley water, three times a day, with evident benefit.” Pitch, “in doses of from six to twelve grains, and Turpentine, in doses of from ten to thirty grains,” administered in the form of pills, are

* Preparations of this mineral have a direct tendency to stimulate the cutaneous circulation, and to inflame the skin ; and are, therefore, altogether inadmissible in the irritative forms of Lepa.

† This active medicine being now not only sanctioned by the profession in general, but by the Pharmacopœia of the College, it will be enough to state, that in these smaller doses, which experience has proved to be sufficient, it may be taken without any inconvenience. Another preparation, introduced by the late Dr. De Valangin, is kept at Apothecaries’ Hall, under the name of Solutio Solventis Mineralis, and is equally efficacious.

productive of a similar good effect, where the cutaneous circulation is very inert; but these medicines are liable to aggravate the eruption, where it is connected with much irritability of the skin. The Solution of Oxymuriate of Mercury in Alcohol, or in doses of one-fourth of a grain in a fluid drachm of the Tincture of Cinchona, has appeared to have some efficacy in these inert states; and thin and delicate girls, of relaxed habit, affected with the *Lepra alphoides*, have taken the *Vinum Ferri*, or the tartrate before mentioned, with much advantage.* “Decoctions of Mezereon, Guaiacum, the Compound Decoction of Sarsaparilla, have, in many instances, proved useful.”

One of the most effectual remedies for *Lepra*, however, under all its varieties, is the decoction of the twigs of the *Solanum Dulcamara*, Bitter-sweet, which was introduced to the notice of British practitioners by Doctor, now Sir Alexander, Crichton.† This medicine is at first administered in doses of two or three ounces thrice every day, which are gradually augmented, until a pint is at length consumed daily. When there is a degree of torpor in the superficial vessels, the same decoction, made with a larger proportion of the shrub, is advantageously employed as a lotion; but if there is any inflammatory disposition, this and every other external stimulus must be prohibited. “In a case described by Turner, after the patient, a maiden, had been salivated without effect, a cure was effected by a gentle alterative containing Ethiops Mineral, washed down with a decoction of *Rumex Acutus*, Sarsaparilla, and some inert roots;

* If in any case the *Tinct. Lyttæ* prove useful in *Lepra*, it would probably be in these more inert instances. But it is to be observed, that Dr. Mead, who originally recommended this medicine, was probably speaking, not of the scaly *Lepra*, but of the *Leuce*, or of the *Elephantiasis*. See his *Medicina Sacra*, cap. ii.

† See his communication to Dr. Willan. (*Treatise on Cutaneous Diseases*, p. 145.) His formula has been adopted by the London College, and inserted into its *Pharmacopœia*.

with an ointment of the Hydrargyri Præcipitatus Albus, the bowels having been occasionally well purged. In all the cases I have seen, the mild alterative plan has proved the most effectual. The decoction of Dulcamara, with minute doses, *i. e.* $\frac{1}{2}$ of a grain of Oxymuriate of Mercury, or from gr. v to gr. x of Hydrargyrum c. Creta, night and morning, have seldom disappointed me : but it is difficult to say what share the Dulcamara has in the cure. Among other vegetable infusions, that of the Ledum *Palustre*, Marsh Rosemary, in the proportion of ζ iv to Oij of boiling water, has a high popular reputation in the north of Europe. It is taken to the extent of a pint daily.* Dr. Duffin is of opinion, that both the Arsenical Solution and the Alcoholic Solution of Corrosive Sublimate produce some specific alteration on the secretions of the skin, which does not result from the employment of other stimulants ; and thence their superiority in *Lepra*.”

Where an irritable state of the disease exists, indeed, (and it is the most frequent) nothing more stimulating than tepid water, or thin gruel, or an infusion of Digitalis, made with ζ j of the leaves to a quart of boiling water, can be used for the purposes of ablution ; and the Arseniates, Pitch, &c. above mentioned, must be excluded. The disease, under this condition, will be certainly aggravated by sea-bathing, by friction, by the external use of the strong sulphureous waters, or of any irritant, as I have frequently observed ; but it will be alleviated by blood-letting, either general or local, “ which requires to be repeated at short intervals ;” and followed by the use of the simple “tepid” or the vapour bath ; and by the internal employment of Sulphur, with Soda or Nitre, or the Hydrargyrum Sulphuratum Nigrum with an antimonial, especially when conjoined with the Decoction of Dulcamara or of the Ledum *Palustre*. The Caustic

* Linnæus, Dissert. de Ledo Palustre. Upsal. 1775.

Potassa, or *Liquor Potassæ* of the London Pharmacopœia, in the dose of twenty or thirty drops, alone, or in combination with the Precipitated Sulphur, is likewise beneficial : and the *Tinctura Veratri*, given in such doses as not to disorder the bowels, has occasionally removed this state of the disease. “ When the eruption has repeatedly returned, the Sulphur fume baths may be used in conjunction with the use of the Arsenical Solution, in moderate doses ; and in using these it should be recollected that they are apt to excite an itching of the skin, which must not be confounded with that of the disease. When it is severe, the baths should be omitted for a few days, and then resumed.”

When the skin is highly inflamed, thickened, and stiff, of a vivid red colour, intermixed with a yellowish hue (where the cuticle is separating in large flakes), the heat, pain, and itching are often extremely troublesome, and the motion of the limbs is almost impracticable. “ In this state of the habit, the irritability of the skin must be diminished by antimonial emetics, and mercurial purgatives ; and if the excitement be considerable, general bleeding should be resorted to before either Arsenic or any of the remedies already mentioned can be employed. If the local irritability be great, nauseating doses of Antimonials should be persisted in for a few days, with the use of the tepid bath.” The most effectual relief is obtained, in these cases, by gently besmearing the parts with cream, or a little fresh and well-washed lard or butter, or cold drawn castor oil, while the itching is relieved by a lotion of Prussic Acid in Rose-water. “ The progress of the cure, in all the species, is marked by the scales detaching themselves in the centre of the patches, and their edges becoming dry ; and the skin gradually ceasing to be scaly ; but, in every instance, this occurs first in the centre of the patch, and extends to the circumference.”

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GENUS II. PSORIASIS.

Syn. Impetigo (*Sennert, Plenck, et alia*): Scabies sicca (*Etmull. Hoffm. Plater*), Hasef (*Avicenna*), Lepidosis Psoriasis (*Good, Young*): Kleinaussatz (*G.*): Dartre squammeuse sèche (*F.*): Saphat (*Hebrew*): Sahafati (*Arabic*): *Dry Scall*.

Def. PATCHES OF DRY, AMORPHOUS SCALES; CONTINUOUS, OR OF INTERMEDIATE OUTLINE; SKIN OFTEN CHAPPY.

The PSORIASIS, or *scaly tetter**, occurs under a considerable variety of forms, exhibiting, in common with Lepra, more or less roughness and scaliness of the cuticle, with a redness underneath. It differs, however, from Lepra, in several respects. Sometimes the eruption is diffuse and continuous, and sometimes in separate patches, of various sizes; but these are of an irregular figure†, without the ele-

* The scaly tetter was denominated *Psora* by the Greeks, or sometimes rough and leprous *Psora*. (See Aetius, tetr. iv. 1. cap. 130, &c.) But the same generic term, with the epithet *ulcerating*, or *pustular*, *Ψωρα ἰκωδης*, was applied to the humid tetter (*Impetigo*), and perhaps also to Scabies. As the appellation *Psora* has been appropriated to Scabies by many of the modern writers. Dr. Willan adopted the term *Psoriasis* (which was chiefly used to denote a scaly affection of the eyelids and of the scrotum by the ancients) for the name of the genus.

† Paul of Ægina, who treats of Lepra and Psoriasis together, points out the irregular figure of the latter as a principal distinction, that of

vated border, the inflamed margin, and the oval or circular outline of the leprous patches: the surface under the scales is likewise much more tender and irritable in general than in *Lepra*; and the skin is often divided by rhagades or deep fissures. It is generally a chronic affection, and is accompanied by some constitutional disorder, and is liable to cease and return at certain seasons.* In *Psoriasis* the scales are less firmly attached than in *Lepra*, and do not accumulate over one another as in that disease: on the contrary, "when the second set of scales form, the first fall off:" they separate with facility, leaving, as has been already mentioned, a more tender surface than in *Lepra*.

The causes of *Psoriasis* are nearly as obscure as those of *Lepra*. "In almost all the cases which I have seen, except those of a purely local nature, the digestive organs have been in fault; and great acidity of stomach has prevailed. It is not improbable that the arthritic diathesis, mental anxiety, and the other exciting causes mentioned in the latter part of this paragraph, always produce this state of stomach previous to the appearance of *Psoriasis*: and it is probable that the irritable state of the stomach, which gives rise to the imperfectly-formed gastric juice in these cases, is accompanied by a corresponding irritable condition of the skin, which, inducing sub-acute inflammation of the superficial capillaries, causes the cuticle to be secreted in the diseased state, which characterises this eruption."— "Instances,

the former being orbicular. "*Λεπρα* per profunditatem corporem cutem depascitur orbiculatior modo, et squamus piscium squamis similes dimittit: *Ψωρα* autem magis in superficie hæret, et varie figurata est," &c. lib. iv. cap. 2. "De *Lepra* et *Psora*."

* Celsus seems to have had this tetter in view, when describing his second species of *Impetigo*, and comparing it with *Lichen*. "Alterum genus est pejus, et simile *Papulæ* fere, sed asperius rubicundiusque, figuras varias habens: squamulæ ex cute decidunt: rosio major est; celerius ac latius procedit, certioribusque, quam prior, temporibus, et fit, et desinit: *Rubra cognominatur*." (lib. v. cap. 28.)

however, have occurred in which it has disappeared at times when the digestive organs display the greatest irritability, namely, during pregnancy.”* The disease is not contagious; with the exception, perhaps, of the first species, which Dr. Willan had observed to occur among children in the same school or family, at the same time; a circumstance, however, which I never witnessed. An hereditary predisposition to it is manifest in some individuals. Dr. Falconer has frequently traced it to sudden chills, from drinking cold water after being violently heated by exercise, — a cause to which *Lepra* and other eruptive diseases are occasionally to be imputed.† Women, and especially those of a sanguineo-melancholic temperament, with a dry skin and languid circulation, are most liable to it: it affects them more particularly after lying-in, or during a state of chlorosis. And in children, it is not unfrequently produced by dentition and the many sources of irritation to which they are exposed. It is also sometimes observed, in both sexes, connected with arthritic complaints; and we have seen it occur under states of great mental anxiety, grief, or apprehension. In those who are predisposed to this eruption, slight occasional causes appear to excite it: such as, being overheated by exercise; the unseasonable employment of the cold bath; a copious use of acid fruits, vinegar, or crude vegetables; and some peculiar mixtures of food. The first two species of the eruption are sometimes the sequel of Lichen.

Dr. Willan has given names to eleven kinds of Psoriasis; “but as several of them are local, and may be regarded as varieties of one species, affecting

* Encyclopædia of Prac. Med. vol. iii. p. 545.

† See Memoirs of the Med. Society of London, vol. iii. — In fact, Dr. Falconer, and even the nosologists down to our own time, include the *Lepra*, Scaly Tetter, and Pustular Impetigo, in their description of *Lepra*. See Vogel, de Cogn. et Curand. Homin. Affect. class viii. § 699. — Sauvages, Nosol. Méth. class. x. ord. 5. — Linn. Gen. Morbor. class. x. ord. 4. — Cullen, Nosol. class. iii. ord. 3. gen. 88.

different parts of the body *, it is more correct to regard the genus as comprehending five species only :” viz. —

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| 1. <i>P. guttata.</i> | 4. <i>P. inveterata.</i> |
| 2. <i>P. diffusa.</i> | 5. <i>P. localis.</i> |
| 3. <i>P. gyrata.</i> | |

SPECIES 1. PSORIASIS *guttata* : MINUTE DRY SCALL.

Syn. Dartre squammeuse humide et orbiculaire : Herpes squamosus madidans et orbicularis (*Alibert*).

This species (Plate IX. fig. 1. of BATEMAN, Pl. 5. of THOMSON'S ATLAS,) is a sort of connecting link between the genus of Psoriasis and Lepra, the little patches being distinct, and small (seldom exceeding two or three lines in diameter), but with an irregular circumference, and the other peculiar characters just described. They “first appear in the form of small, solid, red elevations, resembling flat pimples, which are soon covered with small dry scales :” this occurs on almost every part of the body, and even on the face : but in the latter situation they exhibit only a redness and roughness, without scales. “The patches increase in size, but seldom exceed half an inch in diameter ; and these, in the decline of the disease, first become healthy in the centre, and on this account often assume the appearance of circles, or segments of circles.” The patches frequently coalesce. This eruption is most common in the spring and autumn, at which season it is liable to recur for several years. It is preceded by general pains and slight feverishness ; and in the night is often accompanied with itching. In children it often spreads rapidly over the body in two or three days ; but in adults its progress is gradual and slow.

* In this arrangement we have followed Dr. Good : see *Study of Medicine*, vol. iv. p. 595. T.

SPECIES 2. PSORIASIS *diffusa* : SPREADING DRY SCALL.*

Syn. Dartre squammeuse humide, — Dartre squammeuse orbiculaire (*Alibert*).

This species (Plate IX. fig. 2. ; X. 1. and 2. ; XI. XIII. 1. of BATEMAN ; Pl. 6. of THOMSON'S ATLAS) presents a considerable variety of appearances. In most cases it "commences like Psoriasis *guttata*, but soon coalesces" into large patches, which are irregularly circumscribed, and exhibit a rough, red, and chappy superficies, with very slight scaliness interspersed. This surface is exceedingly tender and irritable, and is affected with a sensation of burning and intense itching, both of which are much augmented on approaching a fire, on becoming warm in bed, or even on exposure to the direct rays of the sun ; "and in some cases which have come under my care, a humid state of the atmosphere has always augmented the irritation and itching ;" but they are relieved by the impression of cool air. Sometimes these extensive eruptions appear at once ; but, in other instances, they are the result of numerous minute elevations of the cuticle, upon which small distinct scales, adhering by a central point, are soon formed, and which become gradually united by the inflammation of the intervening cuticle. As the disorder proceeds, the redness increases, and the skin appears thickened and elevated, with deep intersecting lines or furrows, which contain a powdery substance, or very minute scurf. The heat and painful sensations are much aggravated by the least friction, which also produces excoriation, and multiplies the sore and painful rhagades. — This form of the disease is most frequent about the face and ears, and the back of the hands ; the fingers are sometimes nearly

* Correct representations of this affection are given in *Alibert's* 13th and 14th plates ; the former exhibiting it on the neck and ear ("Dartre squammeuse humide"), — the latter in a patch on the cheek ("Dartre squammeuse orbiculaire.") Liv. iii.

surrounded with a loose scaly incrustation, and the nails crack and exfoliate: but it occasionally occurs on other parts of the body, either at the same time, or in succession. “Rayer remarks, that it is not uncommon to see *P. guttata* in the trunk of the body, whilst the limbs are affected with the species under consideration.”* It commonly begins with some general indisposition; and a degree of erethism, with occasional sharp pains in the stomach, is sometimes kept up, during several weeks, by the constant irritation which it excites. Its duration is from one to four months, and sometimes much longer; and it is liable to return, in successive years, in the spring or autumn, and sometimes in both seasons.

“This species of Psoriasis occasionally occurs in a severe degree in children from two months to two years of age. It commences like the *P. guttata*; but the inflammation gradually extends around the patches, and these rapidly coalesce, resembling in some degree the Impetiginous Eczema, which is, however, a vesicular disease. The scales are rather whiter, and approach nearer to the character of Lepra than those of the common form of *P. diffusa* (see THOMSON’S ATLAS, Plate 6.). I cannot agree with Willan in regarding it as a distinct species. Dr. Underwood remarks, that he had ‘seen it chiefly during a cold season.’ It is certainly connected with dentition, often subsiding as this is perfected, or after the gums are lanced. ‘When it accompanies this infantile state, it is usually conjoined with an affection of the mucous membrane of the nostrils.’ Its appearance in infants is described in the following manner by Dr. Underwood:—‘It appears in some parts in very small eruptions, like the points of pins, with watery heads; and in other parts as large as peas, and sometimes in foul blotches, which, after breaking, form sores, and broad ugly scabs. These die away, and the like ap-

* *Traité Théorique et Pratique des Mal. de la Peau*, tome ii. p. 51.

pear successively, in other parts, sometimes for two or three months, leaving the skin of a dirty adust hue.' He considers that it is contagious. The practice he recommends is to wash the parts with a lotion composed of f3ij of Liquor Potassæ in a pint of water; and, at the same time, to administer Hydrargyrum cum Creta, or Hydrargyrum c. Sulphure and the juice of *Sium nodiflorum*. He says, 'an ointment consisting of the Unguentum Sulphuris and Unguentum Hydrargyri Nitratis, with a greater or less proportion of the latter, has hitherto never failed.'”*

In other cases, the *P. diffusa* commences in separate patches, of an uncertain size and form, which become confluent until they nearly cover the whole limb. Local instances apparently of this species also occur; but as they arise from local irritations, they will be described under *P. localis*.

SPECIES 3. *PSORIASIS gyrata*, GYRATED OR SERPENTINE DRY SCALL.

In this species (Plate XII. of BATEMAN; Pl. 5. of THOMSON'S ATLAS,) the patches are in stripes of a tortuous or serpentine form, resembling worms or leeches, or sometimes bending into rings, “which usually appear on the back or breast; these tortuous stripes are of a red colour; but this is partly obscured by light branny scales.” It is apt to be confounded with the vesicular and pustular ring-worm (*Herpes* and *Impetigo*). “Its perfect freedom, however, from vesicles, distinguishes it from *Herpes*; and to freedom from pustules, prevents it from being confounded with *Impetigo*. It is most intense in spring and autumn.”

SPECIES 4. *PSORIASIS inveterata*, INVETERATE DRY SCALL.

Syn. *Psoriasis agria* (*Auct. Vet.*): Dartre squam-

* Treatise on Diseases of Children, 8th edit. p. 184.

meuse lichenoide : Herpes squamosus lichenoides (*Alibert*).

This species (Plate XIII. fig. 2. of BATEMAN ; Pl. 5. of THOMSON'S ATLAS,) is the most severe modification of the complaint, beginning in separate irregular patches, which extend and become confluent until at length they cover the whole surface of the body, except a part of the face, or sometimes the palms of the hands and soles of the feet, with an universal scaliness, interspersed with deep transverse furrows, and a harsh, stiff, and thickened state of the skin. The production of scales is so rapid, that large quantities are found every morning in the patient's bed.* The nails become convex, thickened, and opaque, and are frequently renewed ; and, at an advanced period, especially in old people, extensive excoriations sometimes occur, frequently caused by the attrition of the clothes, chiefly on the thighs, nates, and scrotum ; and these are followed by a discharge of lymph, followed by a hard dry cuticle, which separates in large pieces. Sometimes small suppurating patches are interspersed, which occasionally are crowded in patches, intersected with deep fissures and excoriations. In this extreme degree, it approaches very closely to the inveterate cases of *Lepra vulgaris* in all respects ; the only difference being in the form of the patches before they coalesce. It is sometimes the ultimate state of the *Psoriasis diffusa* ; and occasionally a sequel of the *Prurigo senilis*. As the disease declines, the new cuticle is at first red, harsh, and sometimes shrivelled, and does not acquire its natural texture for several weeks.

SPECIES 5. PSORIASIS *localis* : LOCAL DRY SCALL.

This species comprehends several varieties, which exhibit appearances closely resembling some of the

* In a case detailed by Turner (*Treatise on Diseases of the Skin*), this was one of the symptoms ; yet many of the other symptoms of that case leads to the supposition that the disease was *Ichthyosis simplex*. T.

foregoing species, but which are seldom accompanied with constitutional affections.

Var. a. P. labialis. SCALL OF THE LIPS. This affects the prolabium, especially of the under lip, the tender cuticle of which is thickened, cracks and exfoliates, sometimes for a long period of time: the scales usually adhere more firmly than on other parts, and are only detached when the new cuticle under them is completed, which in its turn cracks and is thrown off in the same manner; and this occurs successively whilst the disease remains.

Var. b. P. lotorum. WASHERWOMEN'S SCALL. This variety (Plate X. fig. 2. of BATEMAN; Pl. 6. of THOMSON'S ATLAS,) appears on the wrists and forearms of washerwomen, from the irritation of soap. The inflammation is considerable, and the cuticle, which becomes brittle, separates in large irregular plates in rapid succession.

*Var. c. P. palmaria.** SCALL OF THE PALM.

Syn. Dartre squameuse centrifuge: Herpes squamosus centrifugus (*Alibert*).

This variety (Plate XIV. of BATEMAN; Pl. 6. of THOMSON'S ATLAS,) is an obstinate tetter, confined to the palm of the hand and inside of the wrist, which are rough, hot, and itchy, of a dirty hue, and cleft by deep furrows, that bleed when the fingers are stretched. "The nails, in protracted cases, become thickened and opaque, and unnaturally brittle." A variety of *P. diffusa* closely resembles *P. palmaria*; but it is not a local affection, and the disease in the commencement is accompanied with pustules or favi; and may be readily mistaken for Eczema. The itching is intolerable whenever the hands are exposed to heat; the palm is harsh and dry, and rhagades rapidly form. The soles of the feet are often the seat of this local Psoriasis: "but the disease is less

* Well represented in M. Alibert's 15th plate, under the title of "Dartre squameuse centrifuge."

severe, owing to the parts being more protected, and seldom exposed to the air while moist."

Var. d. P. ophthalmica, OPHTHALMIC SCALL. In this the scaliness occurs chiefly about the angles of the eyes, producing an itching, inflammation, and thickening of the eyelids, with a watery discharge.* In children this variety is often productive of the loss of the eyelids.

Var. e. P. pistoria, BAKER'S SCALL OR ITCH. This variety (Plate XI. of BATEMAN; Pl. 6. of THOMSON'S ATLAS,) chiefly attacks the back of the hands of bakers, and those who work with dry powder, "and also cooks." The hands tumefy, and are covered with rough, scaly patches, interspersed with rhagades. The nails sometimes thicken, become curved, and are cast off; but those which replace them are generally attacked by the disease, and run the same course.

Var. f. P. præputii, SCALL OF THE PREPUCE.

This variety often accompanies the *P. palmaria*, is characterised by painful fissures and thickening of the part, and is usually attended with phymosis.

Var. g. P. scrotalis, SCALL OF THE SCROTUM. In this variety the scaliness, heat, itching, and redness are followed by a hard, brittle texture of the skin, and by painful chaps and excoriations.

The same general plan of treatment is applicable to the different modifications of Psoriasis; the period of its duration, and the degree of irritability, being carefully attended to. The popular practice, which hinges upon the old humoral hypothesis, consists chiefly in attempts to expel imaginary humours by evacuations, or to correct them by what are called antiscorbutics. But bleeding and repeated purging

* Galen distinguished the Psoriasis from the Psorophthalmia. "Psoriasis autem exterius est; Psorophthalmia internam palpebram, superiorem præcipue afficit." Galen de Oculo, cap. 7.

are injurious ; and the vegetable juices, which an absurd notion of the *scorbutic* nature of Psoriasis suggested, appear to be totally inefficacious. “ Notwithstanding this objection of Dr. Bateman to bleeding, the Editor has had much experience of its salutary influence, even when repeated at short intervals, provided the quantity abstracted at one time be moderate.” A more recent empiricism, which resorts to mercury in all affections of a chronic nature and of some obscurity, is not more successful : in fact, all these varieties of scaly tetter are ultimately aggravated by perseverance in a course of mercurials. “ In Psoriasis *diffusa*, however, benefit is derived from Plummer’s pill, in doses of five grains every night ; whilst Cinchona and Soda, as we shall have to notice afterwards, are given during the day. We have, also, seen considerable benefit derived from Hydrargyrum cum Creta in Psoriasis *guttata*, carried to the point of slightly touching the gums.”

In the commencement of the eruption, when it appears suddenly, and the constitution is obviously disordered, a moderate antiphlogistic treatment must be pursued. A “ small bleeding,” followed by a gentle purgative, and the diet made light, by abstracting every thing stimulant. This regimen, indeed, is requisite throughout the course of the disease, which is immediately aggravated in sympathy with irritation of the stomach, whether by spices, fermented liquors, pickles, or vegetable acids ; whence the disuse of these articles contributes materially to its cure.

But if the constitutional disturbance has subsided, the use of the fixed alkali, combined with Sulphur Lotum, “ or the Sulphuret of Potassa, is useful : the Sulphuret, however, is apt to nauseate, and therefore is seldom continued long by the patients of private practitioners. The waters of Harrowgate, Barèges, &c. are beneficial when the skin is inert, but hurtful

in irritable states of the nervous system." These, in conjunction with an infusion of Cinchona, together with tepid washing with simple water, or milk and water, will gradually remove the complaint. If the scaly patches have extended over a considerable part of the body, and have assumed a more inert and chronic character, it must be viewed in a similar light with the Lepra, and the remedies recommended for the first and second species of that disease must be resorted to. "Alibert mentions that an inveterate case of Psoriasis diffusa, chiefly affecting the thighs, was much benefited by the use of a strong infusion of Saponaria *officinalis*, during the use of which he says, 'que les symptômes diminuaient d'intensité, que le prurit sur-tout s'éteignait entièrement.'"*

"In Psoriasis *inveterata*, the use of the Arsenical Solution has, in many instances, been found highly beneficial when the dose has been gradually carried to an extent, which would be dangerous in other states of the habit. Thus in a case successfully treated by Mr. Gaskoyne †, the dose was gradually increased to thirty-eight drops twice a day; and it was not until the desired change occurred in the eruption, that the colicky pains and other symptoms of an overdose of Arsenic presented themselves. Candour obliges me to acknowledge that, notwithstanding the powerful influence of Arsenic in Psoriasis *inveterata*, I have met with cases which resisted it, even when administered in the largest doses. In some instances Erysipelas has accompanied the use of the Arsenical Solution; in which case the administration of the remedy should be suspended until the Erysipelas be removed, and afterwards renewed in smaller doses. "In one form, however, I have lately seen it prove highly serviceable; namely, in that of the *Prot-iodide* administered in doses of gr. one tenth,

* Mal. de la Peau, p. 95.

† Plumbe's Practical Treatise, 2d edit. p. 170.

in combination with gr. iij. of Extract of Conium, every night at bed-time; whilst, at the same time, the sulphur fume bath is used every third day."

"From my own experience, I can confidently assert, that the medicine on which the greatest confidence may be placed, in Psoriasis *diffusa*, and in the milder cases of *P. inveterata*, is the Liquor Potassæ. I usually commence with thirty drops of the solution in two fluid ounces of the Bitter Almond Emulsion, twice a day; and gradually increase the dose of the solution to eighty or even one hundred and twenty drops. If the patient be delicate, the infusion of Yellow Cinchona Bark or of Cascarella may be substituted for the Almond Emulsion; or, what is preferable to either, the Solution of the Hydriodate of Iron may be given alternately with the Solution of Potassæ, twice or thrice a day.' I have frequently found the Hydrargyrum cum Creta, in doses of six or eight grains, given at bed-time, an useful adjunct to the Solution of Potassa."

The shooting and burning pain and itching, in the early and more inflammatory stages of Psoriasis, induce the patient to seek anxiously for relief from local external applications; but he is mortified to find that even the mildest substances prove irritants, and aggravate his distress. A decoction of bran, a little cream, or oil of almonds, sometimes produce ease; but any admixture, even of the Oxide of Zinc, or preparations of Lead, with these liniments, is commonly detrimental. "Dr. Morrison treated several cases of Psoriasis successfully by friction, at the same time excluding the atmospheric air. His plan is to dip a sponge in tepid water, and after squeezing it hard, to cover it with oatmeal. With this the affected parts are briskly rubbed for a considerable time, renewing the oatmeal on the sponge; and after this operation, when the parts have been well washed and dried, applying neatsfoot oil over them with a var-

nishing brush. This operation is to be repeated twice or thrice a day, according to the urgency of the case.* “Much depends on the exclusion of the air; and I have seen more comfort derived by applying a piece of lint moistened with cold water, and covered with a piece of oiled silk, than from any other local application. When the skin is less irritable, the solution of Subacetate of Lead, largely diluted, may be used in the same manner.” “Caution, however, is requisite in the use of external remedies, Alibert mentions the case of a lady affected with Psoriasis *inveterata* all over the abdomen; and who, to absorb the discharge, covered the eruption with hot flour. The eruption disappeared after eight days; but left behind it great irritability of stomach, and an unquenchable thirst; ‘sa salive est devenue épaisse, fétide, et comme platreuse. Pour comble d’infortune, ses yeux sont totalement perdus.’” †

“Much benefit often results from the use of the tepid bath; but in general it is not used long enough each time of employing it. Alibert mentions a case of Psoriasis *diffusa* cured by tepid baths alone, ‘pris tous les jours, et pendant l’espace de deux heures.’” ‡

But the more local, and less inflammatory, eruptions of Psoriasis are considerably alleviated by local expedients. “A bath, with the Sulphuret of Potassa, twice a week, has been found useful. In chronic cases the sulphur fume bath is extremely beneficial.” The *P. palmaria* is deprived of its dryness and itching by exposure to the vapour of hot water, and by the application of the Unguentum Hydrargyri Nitratis, diluted with the Unguentum Cetacei or Cerae, according to the degree of irritation in the skin; “or an ointment made with a scruple of the Iodide of Sulphur and one of Lard.” “It has yielded to blisters after resisting both internal and

* Edinburgh Med. and Surg. Journ. vol. xvi. p. 525.

† Mal. de la Peau, p. 84.

‡ Ibid. p. 97.

external remedies for upwards of a year.* The following ointment, recommended by M. Chevalier, has been found useful : —

Chloruret of Lime,	3 gros	
Turbith Mineral,	2 gros	
Oil of Almonds,	6 gros	
Lard,	2 ounces.	Mix. †

Sea-bathing, continued for many weeks, has been found an effectual remedy. The *P. scrotalis* and *P. ophthalmica* are also relieved by the same application, or the Unguentum Hydrargyri Præcipitati albi : but great care is requisite, in the former case, to keep the parts clean by frequent ablution, and to prevent attrition. In the Psoriasis of the lips, nothing acrid can be borne ; and much of the cure depends upon securing the parts from irritation, even from heat and cold, by a constant covering of some mild ointment or plaster. In all these cases some of the internal remedies above mentioned must be at the same time employed, according to the period and other circumstances of the disease.

Books which may be consulted on Psoriasis.

- ALIBERT, *Maladies de la Peau*, fol.
 BIETT, CAZENAVE, and SCHEDEL, *Abrégé Pratique des Maladies de la Peau*, 8vo. p. 308. 1828.
 DUFFIN, on Squamous Disorders, *Edin. Med. & Surg. Journ.* No. 86. *Edinburgh Med. and Surg. Journ.* vol. xvi. p. 526.
 Good's *Study of Medicine*, vol. iv. 2d edit. 1822.
 PLUMBE'S *Practical Treatise on Diseases of the Skin*, 2d edit. 1827.
 RAYER, *Traité Théorique et Pratique des Mal. de la Peau*, t. 2. p. 51.
 WILLAN on Cutaneous Diseases, 4to. 1808.

GENUS III. PITYRIASIS.

Syn. *πιτυρίασις* (*G. et Auct. Vet.*) : *Lepidosis Pityriasis* (*Young, Good*) : *Schuppen* (*Ger.*) : *Dandruff*.

Def. IRREGULAR PATCHES OF THIN BRAN-LIKE SCALES, WHICH REPEATEDLY EXFOLIATE AND RECUR,

* *Med. Repos.* vol. iii. *New Series*, p. 58.

† *Journ. de Chimie Méd.* Mars, 1826.

BUT WHICH NEVER FORM CRUSTS, NOR ARE ACCOMPANIED WITH EXCORIATIONS. IT IS NOT CONTAGIOUS.*

There are four species of Pityriasis : —

- | | |
|-----------------------|--------------------------|
| 1. <i>P. capitis.</i> | 3. <i>P. versicolor.</i> |
| 2. <i>P. rubra.</i> | 4. <i>P. nigra.</i> |

SPECIES 1. PITYRIASIS *capitis*, DANDRIF OF THE HEAD.

Syn. Dartre furfuracée volante.— Herpes furfuraceus volitans (*Alibert*) : Shoondoo (*Tam.*) : Buffa (*Duk.*) : Tsoondoo (*Tel.*) : Crusta capitis numatorum (*Plenck*) : der Kneis, Haufstschappen (*Ger.*)

This affection (Plate XV. fig. 1. of BATEMAN), which in infants is called simply *dandriff*, appears in a slight whitish scurf along the top of the forehead and temples, but in larger, flat, separate, semi-transparent scales on the occiput. A similar affection occurs on the scalp of aged persons. †

It is only necessary to enforce a regular ablution of the scalp with tepid soap and water, or with an alkaline or weak spirituous lotion ; for which purpose the hair must be removed, if it be not thin. If this be neglected, the affection may ultimately degenerate into *Porri*go.

* These negative characters distinguish this eruption, especially when it affects the scalp, from the furfuraceous *Porri*go ; a distinction which the last-mentioned circumstance rendered important and necessary. The ablest of the later Greek writers, Alexander and Paul, have described the disorder as consisting of "slight, scaly, and branny exfoliations, without ulceration." (See Alex. Trall. lib. i. cap. 4.— Paul. *Ægin.* lib. iii. cap. 3.) Yet all the translators have rendered Πυρρυσιας by the word *Porri*go ; which, according to Celsus, comprehended the ulcerating pustules, or achores, of the Greeks (de Med. lib. vi. cap. 2.). The use of the term Pityriasis, therefore, to designate a dry and furfuraceous eruption, as distinct from the ulcerating *Porri*go, is sanctioned by authority, as well as by etymology, and pathological observation.

† A good representation of Pityriasis on the occiput of an adult is given by Alibert, pl. 11., which he calls "Dartre furfuracée volante."

SPECIES 2. The *PITYRIASIS rubra*, RED DANDRIF.

This species occurs most frequently in advanced life, and is the result of a slight inflammation of the portions of the skin affected, somewhat resembling in this respect the *Psoriasis diffusa*. The cuticle is at first only red and rough, but soon becomes mealy or scurfy, and exfoliates, leaving a similar red cuticle underneath, which undergoes the like process; the scaliness becoming greater, as the exfoliation is repeated. This complaint is attended with a dry and unspiring surface, a troublesome itching*, and a feeling of stiffness.

There is also a general languor and restlessness. When the redness and scales disappear, the patches are left of a yellowish or sallow hue. But the whole process is liable to be repeated at short intervals, and the disease to be thus greatly prolonged.

The *P. rubra* is removed by a combination of antimonials with the decoction of woods, and the warm sea-water bath. I have also seen it materially relieved by small doses of the *Tinctura Veratri*. "The bowels should be kept lax with mild purgatives; a combination of Epsom Salts and Magnesia answers every indication." Where the irritability of the skin is not very great, a gentle restringent lotion or ointment, containing a portion of Borax or Alum, and Acetate of Lead, "to which a moderate quantity of Hydrocyanic Acid is added," may be applied to the parts affected with advantage.

SPECIES 3. The *PITYRIASIS versicolor*, VARIEGATED DANDRIF.

This species (Plate XV. fig. 2. of BATEMAN) is most remarkable for the chequered and variegated

* Alibert, nevertheless, remarks, "dans les Dartres furfuracées, le prurit est presque nul, parceque les papilles de la peau y sont très-peu intéressées." Vide *Mal. de la Peau*, p. 81. T.

discoloration of the cuticle which it exhibits. It appears mostly about the breast and epigastrium, and sometimes on the arms and shoulders, in brown patches of different shades, variously branching and coalescing, and interspersed with portions of the natural hue.* In a few instances, it has extended over the whole back and abdomen, even to the thighs, and slightly affected the face. There is generally a slight scurfy roughness on the discoloured parts; but this is in some cases scarcely perceptible, and there is no elevation or distinct border to the patches. Dr. Willan states, that the *P. versicolor* "is not merely a cuticular disease; for, when the cuticle is abraded from any of the patches, the sallow colour remains as before, in the skin, or rete mucosum." This, however, is not universal: for I have seen several instances of the eruption, in which the discoloured cuticle peeled off at intervals, in a thickened state, and a new cuticle was found underneath, of a red hue, as is usual under large exfoliations. "Mr. Plumbe mentions a variety of this species in which no sensible elevation is perceptible to the finger when it is rubbed over the discoloration; but when the part is forcibly rubbed with a dry cloth, large films of thin delicate cuticle are detached, and the cutis which is bared remains tender, and becomes more inflamed."† Dr. Cumins, with the view of deciding the question of the seat of the eruption, blistered the coloured surface, and found, on removing the blister, that the mottling still remained; and the patches, instead of being tawny, were changed to a deeper red than the rest of the excoriated surface.

* These patches scarcely ever appear, like Ephelides and freckles, on the face and hands, but chiefly on covered parts, as is remarked by Sennertus, who has given an accurate description of this eruption, under the appellation of "*Maculæ hepaticæ*," latinising the popular German term, *Leberflechte*. He considers it as the *Melas*, or dark variety of Vitiligo. See his *Pract. Med.* lib. v. part iii. § 1. cap. 7.

† Plumbe's *Practical Treatise*, 2d edit. p. 202.

The conclusion is, that the seat of the colour is in the true skin."*

The *P. versicolor* is usually of little moment ; for it is rarely accompanied by internal disorder, or by any troublesome sensations, if we except a slight itching on growing warm in bed, after strong exercise, or drinking warm or strong liquors. In those instances, however, where the eruption is very extensive, the itching and irritation connected with it are sometimes extremely distressing, depriving the patients of their natural rest. In these cases the digestive organs are also commonly disordered. But even when the eruption is not troublesome, great uneasiness is often occasioned by its appearance ; since its brown and almost coppery hue frequently suggests, even to medical practitioners, the idea of a syphilitic origin. But a little experience will soon enable the observer to recognise the eruption, independently of the total absence of any tendency to ulceration, however long its duration may be, and of every other concomitant symptom of syphilis.

The causes of this Pityriasis are not well ascertained. It occurs most frequently in those who have resided in hot climates, especially in its troublesome form. In one young gentleman it began after a year's residence in the Greek islands : it is also not uncommon in military and seafaring people. The most extensive eruption that I have seen, occurred in a custom-house officer, after drinking spirits freely during a day of fasting in a boat on the Thames. Fruit, mushrooms, sudden alternations of heat and cold, violent exercise with flannel next to the skin, have been mentioned as probable causes of this eruption.

Internal medicines have not appeared to have much influence on this eruption, as Dr. Willan has stated. The Oxygenated Muriatic Acid, however,

* Cyclopædia of Practical Medicine, vol. iii. p. 351.

I think, is possessed of some efficacy ; “ or, what is much better, a lotion of Chloride of Soda ;” and if the affection were of sufficient importance to induce the patient to persevere in swallowing medicine, the Pitch pills would probably be serviceable. By active external stimulants the disorder is often removed ; as by lotions of strong spirit, containing the Muriatic Acid, or the Caustic Potassa : one drachm of the former, or two or three of the Liquor Potassæ, may be added to half a pint of distilled water. Seabathing is likewise beneficial, both as a remedy and as a preventive of its recurrence. The more extensive and irritable eruptions of Pityriasis approximate somewhat in their character to the Psoriasis, and are alleviated by the same treatment.

SPECIES 4. PITYRIASIS *nigra*. BLACK DANDRIF.

Subsequent to the period of his publication, Dr. Willan had observed a variety of Pityriasis in children born in India, and brought to this country, which commenced in a partially papulated state of the skin, and terminated in a black discoloration, with slight furfuraceous exfoliations. It sometimes affected half a limb, as the arm or leg ; sometimes the fingers and toes.*

“ The disease termed PINTA, or *Blue stain*, which prevails in Mexico, appears to be a variety of Pityriasis *nigra*. It commences with slight febrile symptoms, which last a few days only ; and, on subsiding, leave the face, breast, and limbs covered with yellowish maculæ, which change to a blue, and, in advanced stages, to a black colour. The skin assumes a rough and scaly appearance, and exhales a very offensive perspiration : but the general health is not

* M. Alibert has figured an eruption on the hand, which seems referable to this species, and which he denominates a “ scorbutic Ephelis.” (See his plate 27, *bis*.) It appears to be the result of a degree of misery and filth, as little known in this country as the disease.

affected. It is said to be infectious. It is relieved by light cathartics and active diaphoretics."*

Books which may be consulted on Pityriasis.

ALBERT, Précis Théorique et Pratique sur les Mal. de la Peau, 3 tomes 8vo. 1822.

BIDOUX, Reflex. Pratiques sur les Mal. de la Peau, 8vo. 1826. Cyclopædia of Practical Medicine, vol. iii. p. 350.

GOOD, Study of Medicine, vol. iv.

PLUMBE, On Diseases of the Skin, 2d. edit. 1827.

RAYÉB, Traité des Maladies de la Peau.

SENNERTUS, Pract. Med. lib. v. part iii. 8vo.

WILLAN, On Cutaneous Diseases, 4to. 1805.

* American Med. Review, vol. ii,

Order III.

EXANTHEMATA.

SYN. εξανθηματα (G.): Exanthematica (Good): Exanthèmes, Exanthémateux (F.): Inflammations exanthémateuses (Rayer): Rashes.

Def. SUPERFICIAL RED PATCHES, VARIOUSLY FIGURED, AND DIFFUSED IRREGULARLY OVER THE BODY, LEAVING INTERSTICES OF A NATURAL COLOUR, AND TERMINATING IN CUTICULAR EXFOLIATIONS.

The term EXANTHEMATA, *efflorescence*, appears to have been used by the Greek writers in a very general sense, equivalent to that of our word *eruption* *; and it has been employed, in this acceptation, by many modern authors. The nosologists, however, have limited it to those eruptions which are accompanied with fever †, and which have their regular periods of efflorescence and decline. In this arrangement, it is appropriated solely to those appearances which are usually called RASHES; namely, to patches of superficial redness of the skin, of various extent and intensity, occasioned by an unusual determination of blood into the cutaneous vessels, sometimes with partial extravasation. It has no reference, therefore, to the existence of fever or contagion,

* Hippocrates applies the term to numerous eruptions, which he often classes together, as to Lichen, Lepra, Leuce (Prædict. lib. ii. ad finem); to miliary vesicles, and wheals (Epid. i. in the case of Silenus, some of which were prominent, like vari); and to eruptions resembling burns, flea-bites, bug-bites, &c. (Coac. Prænot. 441. 39. ed. Foës.—Epidem. lib. vii. p. 359. 28. &c.): he speaks also of τα αμυχώδεια εξανθισματα, or excoriations (Coac. Prænot. 444.); and applies the verb even to ulcers;—εξανθει έλκεια ες την κεφαλην (de Morbo Sacro, § iii. p. 88.) He has likewise εξανθησεις έλκώδεις (aph. 20. lib. iii.).

† Cullen confines the term to comprehend those eruptions only which arise from the application of a specific contagion, "which first produces fever, and afterwards an eruption upon the surface of the body." First Lines, § DLXXXV. T.

or to the duration and progress of the complaint. "In general, every part of the body is liable to the eruption, and this appears to be seated chiefly in the most superficial dermal layer; but occasionally the true skin is affected through its entire thickness. The redness is sometimes circumscribed, at other times diffused:" the heat and tumefaction of the affected parts vary, and pain is not always present; but instead of it there is itching. The genera are acute diseases, which run their course within a certain space of time; "each is distinguished by symptoms peculiar to itself; but in all, fever is the precursor of the eruption:" sometimes the accompanying fever assumes the intermittent character; at other times, the typhoid. The first and second and the last genus only of this order are contagious; and these, in general, occur once only in a lifetime.

The order comprehends seven genera: —

- | | |
|----------------|------------------|
| 1. RUBEOLA, | 5. PURPURA *, |
| 2. SCARLATINA, | 6. ERYTHEMA, |
| 3. URTICARIA, | 7. ERYSIPELAS. † |
| 4. ROSEOLA, | |

GENUS I. RUBEOLA. †

Syn. Morbilli; Blactiæ (*Auct. variæ*): Febris morbillosa (*Hoffman*): Phœnicismus (*Plouquet*): Typhus morbillosus (*Crichton*): Enanthesis rubeola (*Good*): Fièvre morbilleuse, Rougeole, Roseole (*F.*): die Kindsfecken (*German*): Hasbet (*Arab.*):

* Purpura is here misplaced by Bateman. T.

† I have ventured to remove Erysipelas from the Bullæ, and to place it here, for reasons which shall be afterwards stated. T.

‡ The Continental writers in general have designated this disease by the term *Morbilli*, the *minor plague*; an appellation borrowed from the Italians, among whom *il Morbo* (the disease) signified *the Plague* (see Sennert. Med. Pract. lib. iv. cap. 12.) The terms Rubeola, Rubeoli, Roseola, Rossalia, Rossania, &c. had been applied, with little discrimination, to Measles, Scarlet Fever, Eczema, &c. until Sauvages fixed the acceptance of the first of them.

Kyzamak (*Turkish*): Serukje (*Persian*): Chin ummay (*Tam.*): Chin umma (*Tel.*): Gobrie (*Duk.*): Khrusvāmasoorikāle (*Sans.*): Chumpak (*Malay*): *Measles*.

Def. AN ERUPTION OF CRIMSON STIGMATA, OR DOTS, GROUPED IN IRREGULAR CIRCLES OR CRESCENTS, CONTINUING FOR FOUR DAYS, AND TERMINATING IN MINUTE FURFURACEOUS SCALES; PRECEDED BY FEVER, SNEEZING, HOARSENESS, AND A SEROUS DISCHARGE FROM THE EYES AND NOSTRILS.

“ Measles is a contagious disease, rarely appearing more than once during life. It is infectious before the eruption appears; which is sometimes from five to ten days after the infection has been taken. It affects at the same time the skin and the gastro-pulmonary mucous membrane, and is preceded by catarrhal fever,” during which a rash appears usually on the fourth, but sometimes on the third, fifth, or sixth day, and, after a continuance of four days, gradually declines with the fever. The disease commences from ten to fourteen days after the contagion has been received. “ It attacks chiefly children and young people; but no period of life is exempt* ; and it is seen in all climates. It is frequently epidemic, appearing in spring and autumn. It rarely attacks more than once in a lifetime: nevertheless instances have occurred in which the disease has returned †; but we must not regard as such those eruptions, without the catarrhal symptoms, that not unfrequently occur in children that have had measles, when the disease prevails as an epidemic, although both Heberden and Willan hold a different opinion.” This genus comprehends three species ‡ :

* Instances have occurred of children having the disease before birth, in conjunction with the mothers. Guirsent (*Dict. de Med. t. xviii. p. 513.*) mentions having seen an infant born with the eruption on it. T.

† *Trans. of a Society for Improving Med. and Chirurg. Knowledge, vol. vii. pp. 258. 263. Dict. de Med. t. xviii. p. 512. T.*

‡ These are rather to be regarded as varieties than species. T.

1. *R. vulgaris.*
2. *R. sine catarrho, seu spuria.*
3. *R. nigra.*

SPECIES 1. *RUBEOLA vulgaris.* COMMON MEASLES.

Syn. Morbilli regulares (*Syden.*): Rougeole vulgaire (*F.*): *Measles.*

The precursory fever of the measles "is often extremely slight; but sometimes it is severe;" it is accompanied, especially on the third and fourth days, with a tenderness and some inflammation of the eyes, and a slight turgescence of the eyelids, "suffused eyes, with an intolerance of light," together with a serous discharge both from the eyes and nostrils, which excites frequent sneezing. There is likewise a teasing dry cough, with some degree of hoarseness and difficulty of breathing, "for some days before the eruption appears, sometimes seven or even fourteen," and often accompanied with sighing and a roughness or slight soreness of the throat. "There is occasionally great pain of the chest, the back, and sometimes of the epigastrium; with somnolency, although when the patient sleeps he is soon aroused by a start, as if he were alarmed. The pulse is quick and sharp." These symptoms are generally more severe in children than in adults, and are sometimes accompanied with slight delirium in the night: "and the more severe the preceding symptoms are, the worse is the disease. The surface of the tongue at this time is generally white, with the edges of a vivid red."

The rash (Plate XIX. of BATEMAN; Pl. 8. of THOMSON'S ATLAS), on the fourth day, begins to appear like the bites of fleas, gradually clustering into irregular crescent-shaped patches about the forehead, at the roots of the hair, and below the chin, then on the nose and over the rest of the face; and on the following morning it is visible on the neck and breast, spreading towards evening over the trunk of the body, and lastly over the extremities. "If the finger be

passed over the eruption, it is felt to be slightly prominent; especially on the face and the arms. At this time spots appear on the palate and velum palati, of a deep red hue; and hoarseness supervenes. The eruption is seldom vivid on the arms until the second or third day after its appearance; and it is not fully out until the third on the legs and feet." During the second day the fever is generally increased, as is also the restlessness; but the eyes are less impatient of light: the efflorescence in the face is most vivid: "on the following day (the fifth), the eruption is fading on the face, but increasing on the neck and chest:" on the sixth day it begins to fade and subside on the neck, while the patches on the body are highly red. The eruption is accompanied with itching and heat of the skin. The patches on the body and the extremities begin to fade on the seventh day; and the patches on the back of the hand, which usually appear last (sometimes on the sixth or even the seventh day of the fever), do not always decline till the eighth. On the ninth day, slight discolorations only remain, which vanish before the end of the tenth, leaving a slight pulverulent or brown desquamation.

"Although the progress of the disease is such as has been just detailed, yet occasionally deviations occur. The eruption may appear soon, or be delayed considerably beyond the ordinary time of its appearance. It has been known not to appear until the twenty-first day of the fever. Now and then vomiting ushers in the eruption; and Dr. Elliotson mentions that he has seen free salivation take place*: sometimes it is preceded by convulsions. The eruption has occasionally appeared first on the trunk of the body; and, in some instances, it has never appeared on the arms during the whole course of the disease. Sometimes, but very rarely, it has reappeared, immediately after its disappearance at the usual period."†

* Medical Gazette.

† Frank, tom. ii. p. 377.

It is important, with a view to diagnosis, to attend accurately to the form of the rash, that it may not be confounded with Scarlatina and Roseola. It first shows itself in distinct, red, and nearly circular spots, somewhat less than the ordinary areolæ of flea-bites.* As these increase in number, they coalesce, forming small patches, of an irregular figure, but approaching nearest to that of semicircles or crescents.† These patches, which give no sensation of roughness to the finger, are intermixed with the single circular dots, and with interstices of the natural colour of the skin: on the face, although they are slightly raised, so as to give the sensation of inequality of surface to the finger passed over the cuticle; yet no suppuration occurs. The whole face, indeed, is often sensibly swelled, at the height of the eruption; and occasionally the tumefaction of the eyelids is so great as to close the eyes for a day or two, as in the small-pox ‡: but on the other parts of the body the patches are not sensibly elevated. In many persons, however, as Dr. Willan has remarked, miliary vesicles appear (see THOMSON'S ATLAS, Pl. 8.) during the height of the efflorescence, on the neck, breast, and arms; and papulæ often occur on the wrists, hands, and fingers. The decline of the eruption is accompanied with more troublesome itching than is experienced during its rise.

Measles, before the eruption appears, may be mistaken for severe catarrh; but it is of little moment, as the treatment is the same. The catarrhal symptoms, and even the fever, are somewhat augmented on the appearance of the eruption; the latter usu-

* See the excellent history of measles detailed by Sydenham, *Obs. Med. sect. iv. cap. 5.*

† This observation, which is peculiar to Dr. Willan, is important; for, though entirely overlooked by ordinary observers, it is commonly very manifest, and therefore a valuable diagnostic guide.

‡ See Macbride, *Introd. to Med. part ii. chap. 14.* — Heberden, *Med. Trans. of the Coll. of Phys. vol. iii. art. xxvi.*, and *Comment. de Morb. cap. 63.*

ally ceases when the eruption declines, which is generally on the fourth or fifth day ; but, a day or two days before, the vivid redness changes to a brownish red. At this period a diarrhœa commonly supervenes, if it have not occurred earlier, and affords relief to the other symptoms. This, however, is the period when the danger, which is a consequence rather than a concomitant of measles, commences : for now the catarrh is occasionally aggravated to acute inflammation of the lungs, of more obstinacy than ordinary pneumonia, on which hectic sometimes supervenes, and ultimately hydrothorax, spitting of blood, or, in scrophulous habits, confirmed consumption.

Other inflammatory affections, indicative of a cachectic condition of the system, are liable to occur at the close of the disease, and prove tedious and troublesome. In some, severe attacks of ear-ache, with deafness ; in others, inflammation of the eyes and eyelids of a more unmanageable character than the common ophthalmia ; and in others, swellings of the lymphatic glands take place. Sometimes the mesenteric glands become diseased, and marasmus ensues : and sometimes chronic eruptions on the skin, especially Ecthymata, Rupia, Herpes, and porriginous pustules with tumid lip, discharges behind the ears, and tedious suppurations, are the sequelæ of the disease. “ Measles frequently occurs as an epidemic, sometimes benign, at other times proving very fatal. The disease, however, is seldom severe, unless in children at a very early age ; or during dentition. In adults predisposed to pulmonary affections, it is to be dreaded ; and it is also frequently severe in pregnant women. The intensity of the pulmonary inflammation, and symptoms of meningitis accompanying the eruption, always authorise a doubtful prognosis. The season of the year when measles is most commonly epidemic is early in spring.” The eruptive stage of measles in general is seldom attended with

danger, and, therefore, requires little medicinal treatment. It is chiefly necessary to open the bowels, to confine the patient to a light vegetable diet, with cold, sub-acid, aqueous drinks, and to maintain a cool regular temperature of the room, which should be moderately obscured. I have seen fatal effects result from the exposure of the patient to cold air during the eruption. An emetic is sometimes useful at the commencement of the disease. The usual diaphoretics and emulsions have little influence over the fever or catarrh; and the inhalation of steam, or the use of the pediluvium, is not more efficient*: but a steady refrigerant regimen, while it is grateful to the feelings of the patient, contributes to repress present fever, restlessness, and delirium, and to diminish the inflammatory tendency of the disease in the cerebral membranes, the lungs, eyes, &c. on the decline of the eruption. †

Almost all practitioners have concurred in the recommendation of blood-letting in measles; some employing it at the height of the eruption, which

* Dr. Macbride (loc. cit.) and Dr. Willan have recommended the two last as palliatives.

† I am indebted to Mr. Magrath of Plymouth, through the medium of my friend Dr. Lockyer, of the same place, for some important instruction, respecting the safety and efficacy of the *cold effusion* during the fever and eruption of measles. Mr. Magrath favoured me with a perusal of the official reports of the treatment of a great number of patients in the hospital of the Mill prison, in which the practice was highly successful. He affirms that he has never witnessed any of the untoward circumstances which are usually apprehended from cold, such as the retrocession of the eruption, increase of the catarrhal symptoms, &c.; but, on the contrary, he is persuaded that the inflammatory affections of the chest, which are apt to supervene, on the decline of the rash, are prevented by the suppression of the early excitement, to the violence of which they are chiefly to be attributed. This accords strictly with well-established experience of the operation of cold in scarlet fever and small-pox. See an interesting case in illustration of the safety and advantages of this practice in measles, communicated to me by Mr. Magrath, in the Edin. Med. and Surg. Journal, for April, 1814, p. 258.

“I have seen the most marked benefit result from the cold effusion in Scarlatina; but I should be extremely cautious of ordering it in measles, on account of the pneumonic symptoms. I have had occasion to witness a fatal result in a case of measles, from the imprudent exposure of the body to cold air.” T.

they deem the most inflammatory period, and some at the close of it, when pneumonic inflammation more commonly supervenes; while others consider it as safe and beneficial at any period in or after the disease, where the symptoms are very distressing.* Dr. Heberden, indeed, contends that "bleeding, together with such medicines as the occasional symptoms would require in any other fever, is the whole of the medical care requisite in the measles:" and he considers that this cannot be dispensed with even during the flow of the menses; he should have added, provided the cough is hard, and the breathing much oppressed. Dr. Willan has placed this matter in the most judicious point of view. The mere oppression of the respiration, with a labouring pulse, on the first or second day of the eruption, is common to other eruptive fevers, and usually disappears in the course of twenty-four hours. When, therefore, it is not accompanied by a hard cough, and pains in the chest, it may, even in adults, be safely left to the natural termination: "indeed, it is seldom requisite in any case during the continuance of the eruption." On the other hand, when the eruption has disappeared, and these symptoms, together with difficulty of breathing, have become severe, bleeding, either from the arm or by leeches, and cupping, may be repeatedly necessary, aided by blisters, and demulcents, with anodynes. "In applying leeches on very young and on delicate children, they should be placed on parts only which will admit of the application of pressure, should the bleeding not readily stop; for example, behind the ears, or on the back of the foot, or on the wrists:" much danger has often resulted from placing them on soft parts. "When blistering is indicated, it is of importance to recollect that, in children labouring under measles, vesication is often followed by severe sloughing sores; and, therefore, counter-irritation by

* See Morton de Morbillis. — Sydenham, loc. cit. — Heberden, loc. cit.

stimulant liniments is preferable to blistering." When the eruption retrocedes suddenly, and the pneumonic symptoms increase, the tepid bath must be employed; with sinapisms to the chest after bleeding, Opiates, although recommended by several authors*, do not allay the violence of the cough during the eruptive fever; and tend to augment the heat and restlessness."

A diarrhœa frequently occurs at the close of the measles, which appears to alleviate the pneumonic symptoms, and to prevent some of the troublesome sequelæ of the disease before noticed. Hence this evacuation should not be interrupted, at least for a few days; and laxatives should be administered, where it does not take place, as the most advantageous mode of allaying and preventing inflammatory symptoms. If the usual diarrhœa should be protracted, however, the patient will require the support of light but nutritious diet, and cordials.† "When the severity of the symptoms has required that the depleting plan be carried to a great extent, the patient is often left in such a state of debility as to require bark with a nourishing diet, and even the use of wine, provided there be no reason to dread a return of the inflammatory symptoms."

SPECIES 2. RUBEOLA *sine catarrho, seu spuria vel Incocta*. IMPERFECT MEASLES.

This is a peculiarity, scarcely amounting to a species, observed by Dr. Willan, in a few rare instances, during an epidemic Rubeola, which is only important as it leaves the susceptibility of receiving the febrile measles after its occurrence.‡ The course

* Riverius, Obs. Cent. 11. n. 45. Sydenham Opusc. p. 247. Young on Opium, sect. 36.

† Dr. F. Home attempted to communicate measles by inoculating with the blood of the parts on which the eruption appeared; but the results of his experiments were unsatisfactory. Vide Med. Facts and Experiments. Lond. 1758.

‡ Rayer denies its existence, and regards it as Roseola: but both Willan and Heberden regard the disease as measles. T.

and appearance of the eruption (Plate XX. of BATEMAN; Pl. 8. of THOMSON'S ATLAS,) are nearly the same as in the *R. vulgaris*; but no catarrh, ophthalmia, or fever accompanies it. An interval of many months, even two years, has been observed between this variety and the subsequent febrile Rubeola: but the latter more frequently takes place about three or four days after the non-febrile eruption.*

SPECIES 3. RUBEOLA *nigra*. BLACK MEASLES.

Dr. Willan applied this epithet to an unusual appearance of the measles about the seventh or eighth day, when the rash becomes suddenly livid, with a mixture of yellow (Plate XXI. of BATEMAN; Pl. 8. of THOMSON'S ATLAS,) "accompanied with languor and quickness of pulse. It is, in truth, a mere variety of common measles, occurring in persons of debilitated habits." It is generally devoid of inconvenience or danger, and is removed in a week or ten days by a light infusion of Cinchona bark with the mineral acids. "The symptoms, nevertheless, sometimes present the most alarming aspect: for example,

* The correctness of all the statements of writers before the close of the last century, in regard to the recurrence of febrile measles, is very questionable; since the eruption had been confounded with that of Scarlatina down to this period. — Tozzetti, a physician of Florence; — Schacht, (Inst. Med. lib. i. cap. 12.); — Meza, (Compend. Med. fascic. i. cap. 20.), — and de Haen (de Divis. Februm, cap. vi. § vi. p. 106.) affirm that they have seen the measles more than once in the same individual; while Rosenstein (on the Dis. of Children, chap. xiv.) affirms, that during forty years he had never seen such a recurrence, and Morton, that, in the same period of practice, he had witnessed it but once. But Morton himself deemed Scarlatina and Measles only varieties of the same disease! (De Morbillis et Scarlatina, cap. 4.)

It cannot now be doubted, however, that exceptions occasionally occur in respect to measles, as well as to small-pox and other contagious diseases which in general affect individuals but once during life. Since my first edition was printed, I have met with two papers by Dr. Baillie, in the 3d vol. of the Trans. of a Society for the Improv. of Med. and Chir. Knowledge (p. 258.), which prove decisively that measles may occur a second time in the same individual, accompanied by their peculiar febrile and catarrhal symptoms. His authority will not be questioned." The Editor has, within this month, May 1835, seen a case, in consultation with Mr. Squib, of Orchard Street, in which the second attack occurred six weeks after the first. T.

in a case which came under the care of the Editor in 1804, the relaxation was so great, that the cuticle rubbed off, like a moist cobweb, when the wrist was compressed in feeling the pulse. The Cinchona, with the diluted Sulphuric Acid, wine and cordials, were freely administered; and the patient, a child eight years of age, recovered, has since enjoyed good health, and is now (1828) alive."

"The sequelæ of measles are often of great importance, in patients of a strenuous or phthisical diathesis; chronic diarrhœa, discharge from the ear, ophthalmia, anasarca occasionally, and various other diseases harass and exhaust the patient. In such cases medicine is of little value, and every thing must be trusted to country air, sea-bathing, and, in adults, to travelling."

Works which may be consulted on Measles.

- CAZENAVE and SCHEDEL, *Abregé Pratique des Maladies de la Peau*, 8vo. 1828.
 DE BACHEB, de Morbillis. 1790.
 FABRICIUS, *Diss. de Variolis et Morbillis*. 1628.
 FRANK, *Historia de Cur. Hom. Morb. l. iii. p. 245*.
 GOOD's Study of Medicine, vol. ii.
 HEBERDEN, *Com. in Morb. Hist. et Cur.*
 HOME's Facts and Experiments.
 LEE, de Rubeolâ, 1779.
 LORRY, in *Mém. de la Société de Médecine*, 1776.
 MORTON, de Morbillis et Scarlatinâ.
Med. Trans. of the Col. of Physicians, vol. iii.
 PERCIVAL's Essays.
 RAYER, *Traité des Maladies de la Peau*, vol. i.
 ROBERDIERE, *Recherches sur la Rougeole*. 1776.
 ROUX, *Traité sur la Rougeole*. 1807.
 RUSH, *Medical Inquiries*, vol. ii. N. S.
 SIMS's Observations.
 SENNERTUS, *Diss. xiii. de Variolis, Morbillis, &c.* 1628.
 SYDENHAM, *Opera Univ.* 3d edit.
Trans. of a Society for the Improv. of Med. and Chirurg. Knowledge, vol. iii.
 WATSON, *Med. Obs. and Inquiries*, vol. iv. n. 22.
 WILSON on Febrile Diseases, vol. ii.
 WILLAN on Cutaneous Diseases.
 YOUNG on Opium, sect. 36.
 UNDERWOOD, on the Diseases of Children.

The limits of this Synopsis will not allow me to enter fully into the interesting inquiry, respecting

the existence of the contagious eruptive fevers in the time of the Greek and Roman physicians. The general inference in favour of the negative has arisen from the defect of such unequivocal descriptions of these formidable maladies, as might have been expected in the writings of those who have accurately delineated many other diseases of less moment, with which we are now familiar. But it appears to me, on the other hand, that this defect is perfectly explicable upon the ground of their absolute devotion to the humoral pathology, and of their systematic adoption of the dogmata of their predecessors; and, on the other, that there is a sufficient, though scattered, evidence in their works to sanction the opposite conclusion. I shall here therefore briefly state the reasons of my belief in the affirmative of this question.

It is almost superfluous to remark, that, from Galen, who adopted and extended the doctrine of the four humours mentioned by Hippocrates, through the whole series of Greek writers, down to Actuarius, the same opinions were received with the utmost servility. They supposed that they had reached the perfection of medical observation, when they had named the hypothetical humours which were believed to be in fault. They contented themselves, therefore, with classing together all the eruptive fevers as pestilential, and with referring the various eruptions, that accompanied them, to different combinations of the humours. Such eruptions were frequently mentioned by Hippocrates and Galen, under the appellation of erysipelata, herpetes, phlyctænæ, phlyzacia, ecthymata, erythemata, exanthemata, &c. as the concomitants of malignant and epidemic fevers. Hippocrates has generalized some of these observations, and has deduced especially the following prognostic, respecting the eruptions of inflamed pustules (phlyzacia), which seems referable only to the small-pox. “*Quibus per febres conti-*

nuas φλυζακια toto corpore nascuntur, lethale est nisi superveniat apostema, quod fiat præcipue circa aures."*

But omitting, for the sake of brevity, the detached passages relating to this subject, it will be sufficient, I think, to refer to a remarkable chapter of Herodotus, "On the treatment of eruptions (*εξανθηματα*) occurring in fevers," which has been preserved by Aëtius.† This Herodotus was an eminent physician of the pneumatic sect at Rome, in the reign of Trajan, more than half a century before Galen settled in that city. He describes first the herpetic eruptions "which appear about the mouth at the crisis of simple fevers," and subsequently the wheals of the febrile Urticaria, the miliary vesicles, and, I conceive, with considerable precision, the rashes of measles and scarlatina, and the pustules of smallpox. After mentioning the labial Herpes, which occurs at the termination of catarrhal and other slight fevers, he says, "But in the early stages of fevers, which are *not simple*, but the result of vicious humours, there arise *over the whole body* patches like flea-bites; and, in the *malignant* and *pestilential* fevers, these *ulcerate*, and some of them have an affinity with carbuncles: all these eruptions are signs of the redundancy of corrupt and corrosive humours in the habit; but those *which appear on the face* are the most malignant of all." He then proceeds to describe the prognostics to be derived from the different appearances of these eruptions, almost in the same terms which the Arabian writers on the smallpox and measles subsequently used; and he was obviously acquainted with the danger of the highly confluent, and red or livid forms of these eruptions. "They are worse if numerous, than if few," &c.—"Moreover," he remarks, "those which are extremely red are of the worst kind; but those

* See his *Coac. Prænot.* n. 114. ed. Foës. See also *Epidem. lib. iii.*

† See his *Tetrabib. ii. serm. i. cap. 129.*

which are livid, black, and tumid, like flesh that has been stained, are still more fatal ; and these are copious on the face and breast, abdomen, sides, and back." He considers these cases as so desperate, that he advises the practitioner not to hazard his reputation by any active interference, lest the blame of their fatality should be imputed to his attempts. "For those eruptions," he asks, "which arise from beneath, in a mortifying state, to the surface, what can they denote but that the life is passing from within?"

Now it seems unquestionable, that these, and much more ample details, delivered in the language of experience, are applicable exclusively to the contagious eruptive fevers ; *i. e.* to smallpox, measles, and scarlatina. For we are not acquainted with any other *continued fevers*, that are malignant and *pestilential*, in the early stages of which *eruptions* appear *all over the body*, beginning *like flea-bites*, and sometimes *ulcerating*, *i. e.* suppurating, *specially on the face*, except the diseases just mentioned.

But the difficulty and rarity of original observation, even under more favourable circumstances, will be sufficiently manifest, if we trace the history of medical opinions upon the subject of the same diseases in later times.

It might be supposed that, after the existence of these eruptive fevers had been so clearly pointed out by the Arabians, their distinctive characters would have been speedily ascertained, even by ordinary observers. But the fact was directly the reverse. Almost a thousand years elapsed, during which the smallpox, measles, and scarlet fever continued to commit their ravages, and physicians continued to record them ; while the individuals, who were spared by one of these maladies, were seen to suffer successively from attacks of the others : nevertheless, they were still viewed through the eyes of the Arabians, and were universally deemed varieties of one and

the same disease, until near the beginning of the eighteenth century : and it was not till towards the close of that age of enlightened observation, that the distinct character and independent origin of these three contagious disorders were universally perceived and acknowledged.

We not only find the able and learned Sennertus, in the middle of the seventeenth century, discussing the question, “ Why the disease in some constitutions assumes the form of smallpox, and in others that of measles?”* but in the posthumous work of Diemerbroeck, an intelligent Dutch professor, published in 1687, it is affirmed that smallpox and measles differ only in degree. “ Differunt (scil. morbilli) a variolis accidentaliter, vel quoad magis et minus.”† And still later, the same assertion was made by J. Christ. Lange, a learned professor at Leipsic. “ Præterea tam morbilli quam variolæ sunt eruptiones in eo duntaxat discrepantes, quod vel minus vel magis appareant,” &c.‡ But we must descend still nearer our own times, before we discover the complete unravelling of the subject, in the separation of scarlatina and measles, as distinct genera ; although, as varieties, they had been pointed out even by Haly Abbas. § Our countryman Morton maintained the identity of these two exanthemata, and considered their relative connexion the same as that of the distinct and confluent smallpox. || And so late as the year 1769, Sir William Watson did not distinguish the measles from the scarlet fever. ¶ The publication of Dr. Withering’s *Essay on Scarlet Fever*, in 1778, or rather of the second edition of that work in 1793, may be considered perhaps as the date of the correct diagnosis of this disease. So difficult is the

* *Medicin. Pract. lib. iv. cap. 12.*

† *Tractat. de Variolis et Morbillis, cap. 14.*

‡ *Miscell. Med. Curios. § xxxiv.*

§ *Theorice, lib. viii. cap. 14.*

|| *De Morbillis et Scarlatina, exercit. iii.*

¶ See his paper in the *Med. Obs. and Inquiries, vol. iv. p. 132.*

task of observation, — so tardy the development of truth. *

Surely, then, the imperfection of the knowledge of the ancients, respecting the nature of these eruptive fevers, affords no just inference against their existence: while, on the contrary, the brief but repeated notices, which they have transmitted to us, of eruptions resembling nothing that we are now acquainted with, except the contagious maladies in question, lead to the fair and legitimate conclusion, that the diseases of mankind, like their physical and moral constitution, have not undergone any great and unaccountable change; and that the eruptive fevers have prevailed from the earliest ages.

GENUS II. SCARLATINA. †

Syn. Purpura (*Schulz, Junck*): Rossalia (*Ingrass et auct. Neap.*): Rosalia (*Auct. Hisp.*): Febris Scarlatina (*Syden. Morton, et auct. Ang.*): Mal de la Rosa (*Thiery*): Febris rubra (*Heberd.*): Typhus Scarlatinus (*Cricht.*): Enathesis Rosalia (*Good*): Fièvre rouge, scarlatine (*F.*): der Scharlachaußschlag (*Ger.*): *Scarlet Fever.*

Def. A CONTAGIOUS FEVER, ACCOMPANIED WITH A SCARLET RASH, APPEARING THE SECOND DAY ON THE FACE AND NECK; SPREADING PROGRESSIVELY

* It is not the least curious circumstance in the history of medical discoveries, that the vulgar have, in many instances, led the way; and have actually given distinctive appellations to many varieties of disease, before medical philosophers had learned to distinguish them. This is strongly exemplified in the history of chicken-pox (see the 2d note on *Varicella* below); and also in Scabies, cow-pox, &c.

† This barbarous term, which appears to have been of British origin, having found admission into all the systems of nosology, Dr. Willan did not deem it expedient to reject it.

With regard to the origin of the term Scarlatina, Dr. Good says that Dr. Willan is mistaken, "for the term itself is Italian, and was long in use as a vernacular name, on the shores of the Levant, before it was imported into our own country." — *Study of Medicine*, vol. ii. T.

OVER THE BODY; AND TERMINATING ABOUT THE SEVENTH DAY, AFTER WHICH THE CUTICLE EXFOLIATES.

The *scarlet fever* is characterized by a close and diffuse efflorescence, of a high scarlet colour, which appears on the surface of the body, or within the mouth and fauces, usually on the second day of fever, and terminates in about five days.

Scarlatina sometimes appears as an epidemic; but, in general, it is propagated, like the smallpox, measles, and chicken-pox, by a specific contagion; and, like them, it affects individuals but once during life.* But it commences after a shorter interval from exposure to the contagion than the disorders just mentioned; namely, "sometimes in a few hours," sometimes on the third, fourth, or fifth day.† Adults, however,

* This fact is now fully ascertained. Dr. Withering, when he published the first edition of his tract, was of opinion, that the ulcerated sore-throat might occur in those who had undergone the *Scarlatina anginosa*: but, in the subsequent edition, he expresses his conviction that he was in error. Among two thousand cases, Dr. Willan never saw the recurrence of the disease, under any of its forms. (See also Rosenstein on the Dis. of Child. cap. xvi.) Dr. Binns, indeed, mentions two instances of such recurrence at distant periods: but, at all events, these can only be looked upon as exceptions to the general fact, such as occur both in small-pox and measles.

That such cases occur is undoubted. In the autumn of 1826, I attended a gentleman who was labouring under *Scarlatina anginosa*; and who informed me that this was the third time he had been attacked by the disease. Expressing some doubt regarding the correctness of his information, he gave me an accurate history of each attack, and stated that in both the prior cases he had suffered severely from the ulceration of the throat, and that in both there was extensive desquamation of the cuticle. The second attack was at the distance of three years after the first; the third five years after the second. T.

A further analogy is also observable between these diseases and *Scarlatina*; viz. the poison may operate locally, and even excite some secondary constitutional indisposition, in persons who have previously gone through the fever. Thus such persons, if much exposed to the contagion of *Scarlatina*, are liable to severe affections of the throat unaccompanied by the rash on the skin.

† See Withering on the Scarlet Fever and Sore-throat, p. 61.—Heberden, Comment. de Morb. cap. 7. De Angina et Febre rubra, p. 20.—Dr. Blackburne states the interval to be "from four to six days." (On Scarlet Fever, p. 34.) In one family Dr. Maton says the intervals varied from seventeen to twenty-six days; but Dr. Good correctly refers this to *idiosyncrasy*.

are not so susceptible of the contagion as children, and, in them, the disease does not always appear so soon : women also are less susceptible than men.* Many medical practitioners, who have attended great numbers of patients affected with every species of scarlatina, have never experienced any of its effects.

There are three species of Scarlatina :

1. *S. simplex*,
2. *S. anginosa*,
3. *S. maligna*.†

SPECIES 1. The SCARLATINA *simplex*, SIMPLE SCARLET FEVER.

Syn. Scarlatina febris (*Sydenham*): Scarlatina maligna (*Macbr.*): Rosalia simplex (*Good*): Roseole (*F.*).

This species (Plate XXII. of BATEMAN; Pl. 9. of THOMSON'S ATLAS,) consists merely of the rash, with a moderate degree of fever. The day after the slight febrile symptoms have appeared, the efflorescence begins to shew itself about the neck and face, in innumerable red points, which, within the space of twenty-four hours, are seen over the whole surface of the body. These, as they multiply, coalesce into small patches, but on the following day (the third) form a diffuse and continuous efflorescence over the limbs, especially round the fingers. On the trunk, however, the rash is seldom universal, but is distributed in diffuse irregular patches, the scarlet hue being most vivid about the flexures of the joints and

* Some practitioners maintain the directly opposite opinion: in a table kept in the London Fever Hospital, of two hundred cases, one hundred and thirty-eight are females. See Cyclopædia of Pract. Med. vol. iii. p. 627. T.

† Many authors regard *Cynanche maligna* as a species of Scarlatina, although no rash appears on the skin; and with this opinion Dr. Bateman, in the former editions of this work, accords; observing that the rash, which characterizes the three species above named, appears "in the fourth only in the mouth and throat, to which, therefore, the appellation of Scarlatina has never been applied." T.

the loins. On the breast and extremities, in consequence of the great determination of blood to the miliary glands and papillæ of the skin, the surface is somewhat rough, like the cutis anserina: several papulæ are scattered on these parts: "occasionally minute vesicles are visible, sometimes apparently filled with a pellucid serum, at other times empty*:" and, when these desquamate, a peculiar scaly state of skin remains. On the following (the fourth) day the eruption remains at its acmè; and on the fifth it begins to decline, disappearing by interstices, and leaving the small patches as at first.† On the sixth day it is indistinct, and is wholly gone before the end of the seventh. Between the fifth, eighth, and twelfth days a scurfy desquamation of the cuticle takes place.

The efflorescence spreads over the surface of the mouth and fauces, and even into the nostrils, and is occasionally visible over the tunica albuginea of the eye: the papillæ of the tongue, too, which are considerably elongated, extend their scarlet points through the white fur which covers it. The face is often considerably swelled. There is usually great restlessness, and sometimes slight delirium, which appear to be much connected with the great heat of the surface, and continue in various degrees of severity, together with the fever, from three to seven days. A few patients escape with very little fever, almost without indisposition.

* Sauvage considers this circumstance sufficient to constitute a distinct species, under the name *Scarlatina variolodes*. T.

† At this period, and on the evening of the second day, some attention is requisite to distinguish the scarlet rash from Rubeola: the observation of the crescent-like form of the patches of the latter, and the more diffuse and irregular shape of the former, will be a material guide. This re-appearance of the rash in patches is noticed by Sennertus. "In statu vero, universum corpus rubrum et quasi ignitum apparet, ac si universali erysipelate laboraret. In *declinatione*, rubor ille imminuit, et maculæ rubræ latæ, *ut in principio*, apparent," &c. (De Febris, lib. iv. cap. xii.) See also Etmuller. Opera. tom. ii. p. 416. where this circumstance is accurately stated.

“The disease with which Scarlatina is most likely to be confounded, is the Roseola: but it is readily detected by noticing the manner in which the eruption appears. In Scarlatina it first attacks the face, and then extends to the trunk of the body, passing off by the extremities, whereas in Roseola the extremities are first affected.”

“It has also been confounded with measles; but it may be readily distinguished: 1st, by the earlier appearance of the eruption after the commencement of the fever, generally on the second day, whereas in measles it does not shew itself until the fourth, at soonest: 2d, by the inflamed eyes, sneezing, and other catarrhal symptoms that precede measles, not appearing; 3d, by the eruption not assuming the horse-shoe or semilunar form which it displays in measles; and 4th, by the greater affection of the throat at the peculiar aspect of the tongue.”

It is scarcely necessary to speak of the treatment of a disease which has been pronounced, by great medical authority, fatal only “through the officiousness of the doctor.”* The principal business of the practitioner, therefore, is to prevent the useless and pernicious expedients of nurses; but, above all, to insist upon the coolness of the patient’s apartment, and the lightness of his bed-clothes; and to restrict him to the use of cool drinks and of light diet, without animal food. Moderate laxatives are also to be recommended.

“It is, nevertheless, requisite to watch every case of Scarlatina, however mild it may be in the commencement; and, should the febrile symptoms increase, and the temperature of the surface rise, to sponge the body with cold or tepid water, and to open the bowels more actively than otherwise would be necessary. An emetic sometimes immediately subdues these threatening symptoms.”

* “*Æger non rarò nulla alia de causâ, quam nimîâ medici diligentia ad plures migrat.*” (Sydenham, § vi. cap. 2.)

SPECIES 2. SCARLATINA *anginosa*, SCARLET FEVER WITH SORE THROAT.

Syn. Scarlatina cynanchica (*Cullen*): Rosalia paristhmítica (*Good*).

In this variety of Scarlatina (Plate XXIII. fig. 2. of BATEMAN; Pl. 9. of THOMSON'S ATLAS,) the precursory febrile symptoms are more violent, and an inflammation of the fauces appears, together with the cutaneous efflorescence, and goes through its progress of increase and decline with it. Occasionally, however, the affection of the throat commences with the fever, and sometimes not until the eruption is at its height.

With the first febrile symptoms, a sensation of stiffness and a dull pain on moving are felt in the muscles of the neck; and on the second day the throat is rough and straitened, the voice thick, and deglutition painful. On this and the two following days, the symptoms of fever are often severe; the breathing is oppressed; the heat of the skin is more intense than in any other fever of this climate, rising to 106°, 108°, or even 112° of Fahrenheit's thermometer*; there is sickness, with headach, great restlessness, and delirium; and the pulse is frequent, but feeble: there is also an extreme languor, faintness, "and general prostration of strength." The tongue, as well as the palate and the whole interior of the mouth and fauces, is of a high red colour, especially at the sides and extremity, and the papillæ protrude their elongated and inflamed points over its whole surface. (Plate XXIII. fig. 1. of BATEMAN; Pl. 9. of THOMSON'S ATLAS.)

The rash does not always appear on the second day, as in Scarlatina simplex, but not unfrequently on the third; nor does it so constantly extend over the whole surface, but comes out in scattered patches, which seldom fail to appear about the elbows "and

* See Dr. Currie's "Reports on the Effects of Water," &c. vol. ii. p. 428. Sennert observes, "Calor ferventissimus." Loc. cit.

the wrists." "On the third and fourth day, symptoms of Coryza frequently show themselves: but the matter is less acrid and foetid than that discharged in *Scarlatina maligna*." Sometimes too the eruption vanishes the day after its appearance, and re-appears partially at uncertain times, but without any corresponding changes in the general disorder: the whole duration of the complaint is thus lengthened, and the desquamation is less regular. When the rash is slight, indeed, or speedily disappears, no obvious desquamation often ensues; while, in other instances, exfoliations continue to separate to the end of the third week, or even later, and large pieces of the entire cuticle fall off, especially from the palms of the hands and the soles of the feet.

The tumour and inflammation of the throat often disappear, with the declining efflorescence of the skin, on the fifth and sixth day of the fever, without having exhibited any tendency to ulceration. Slight superficial ulcerations, however, not unfrequently form on the tonsils, velum pendulum, or at the back of the pharynx, sometimes early, and sometimes late; "but it has been observed that they never extend to the larynx or trachea." Little whitish sloughs are seen, intermixed with the mottled redness; and when they are numerous, the throat is much clogged up with a tough viscid phlegm, which is secreted among them. When these are removed, after the decline of the fever, some excoriations remain, which soon heal.

The *S. anginosa* is not unfrequently followed by a state of great debility, under which children are affected with various troublesome disorders, similar to those which more commonly supervene after the cessation of *Rubeola*.* "These are often of a gastro-enteritic character; displaying a clean, red-glazed tongue, and occasionally attended by harassing nausea and diarrhoea." There is one affection, also, peculiar

* See Heberden, Comment. cap. vii. p. 20.

to the decline of Scarlatina, which occurs especially when the eruption has been extensive; namely, anasarca of the face and extremities. This dropsical effusion is commonly confined to these parts, and, therefore, unattended with danger: it usually appears in the second week after the declension of the rash, and continues for a fortnight or longer. But in a small number of cases, when the anasarca had become pretty general, a sudden effusion has taken place into the cavity of the chest, or into the ventricles of the brain, and occasioned the death of the patient in a few hours, of which I have witnessed two instances.* “One sequel of the disease is a foetid purulent discharge from the ears, which is scarcely ever cured, and frequently terminates in permanent deafness. Keeping the meatus clean, by syringing it with warm water containing a small proportion of the Chloro-sodiac solution of Labaraque, and dropping into it a few drops of the following mixture, is the best mode of correcting the foetor and lessening the discharge :

R. Bals. Peruv. ℥ʒii.
Fellis Bovinæ fʒi. Misce.”

The principles, by which the treatment of Scarlatina anginosa should be regulated, have been satisfactorily established within the last few years; especially since the influence of diminished temperature, in febrile diseases, was demonstrated by the late Dr. Currie of Liverpool, and the effects of purgative medicines have been better understood. For we have

* There is some difference of opinion as to the dangerous tendency of the dropsical state, which succeeds the scarlet fever. Dr. Willan never saw any considerable effusion take place into the internal cavities; and several other writers look upon this dropsy as altogether harmless. (See Cullen, First Lines, § 664.—Dr. Jas. Sims on Scarlatina ang. in Mem. of the Med. Soc. vol. i.) Other practitioners, however, have mentioned the occurrence of these effusions as of dangerous tendency, and not unfrequently fatal. (See Plenciz, Tract. de Scarlatina; Frank de curand. Hom. Morbis, p. iii. § 295.; Vogel, de cognosc. et curand. Aff. § 154.)

thus acquired two instruments, which are singly of the utmost value in the management of fever, and when combined are greatly auxiliary to each other.

As a general rule, the *Scarlatina anginosa* must be submitted, from its commencement, to a strict anti-phlogistic treatment. The extraordinary heat, the great restlessness, anxiety, and distress, and the other symptoms of high excitement, which accompany the efflorescence, do not, indeed, require blood-letting, as was formerly supposed; on the contrary, that evacuation would, in most cases, occasion a hurtful waste of strength. But "it is impossible to lay down any general rule with regard to the use of the lancet in *Scarlatina*;" on the other hand, in respect to the moderate but free evacuation of the bowels, the use of cold drinks, and of external cold, and the interdiction of all stimulant and cordial ingesta, under this state of excitement, experience has clearly decided.

The best writers on this disease agree in recommending the exhibition of an emetic in the beginning of the fever; which some have deemed it advisable to repeat, at intervals of forty-eight or twenty-four hours, or even at shorter periods, according to the urgency of the symptoms.* An emetic is, doubtless, a safe, and perhaps an useful medicine, at the very onset of the disease: but this active employment of emetics seems to be supported neither by experience nor by principle.† Some practitioners, indeed, combined the emetic with Calomel, and ascribed a considerable portion of the advantage to the laxative operation.‡ Dr. Hamilton more lately has affirmed, that moderate purgatives of Calomel, with Rhubarb

* See Dr. Withering's Treatise before quoted.

† There appears to be a considerable inconsistency in Dr. Withering's recommendation of "larger doses" and "powerful vomits," in order "to secure a *certain violence* of action upon the system," and in the apprehension of the danger of their acting as purgatives, which he at the same time expresses, and principally from hypothetical considerations. (Loc. cit. p. 78—81.)

‡ Dr. Rush.

or Jalap, are not only extremely beneficial, in the early stages of Scarlatina ; but that they may supersede the use of emetics.* My own observation accords with this view of the subject. I have never witnessed any injurious effect from trusting to moderate purging, and have frequently seen the disease proceed with uniform security, where the affection of the throat was very considerable, under the use of laxatives alone, with the cool treatment to be mentioned immediately.

The value of moderate purgation, indeed, has been admitted by several cautious physicians. Dr. Willan, although stating that "purgatives have nearly the same debilitating effects as blood-letting," observes, nevertheless, that "the occasional stimulus of a small dose, as two or three grains, of Calomel, is very useful ;" and in the beginning of the disease he combined with it an equal portion of antimonial powder. The same combination, he informs us, was freely administered by a physician at Ipswich, in 1772, in larger doses ; and of three hundred patients, thus treated, none died. (P. 357, *note*.) Dr. Binns † candidly acknowledges his obligations to a medical acquaintance, "for his removal of a prejudice against laxatives in the early stage of the disease, imbibed from various authors, and confirmed by the dreadful consequences he had seen, when a diarrhoea came on in this fever." But, so far from producing injury, he was afterwards satisfied, that the laxatives actually tended to prevent the diarrhoea which he dreaded. ‡ "When the stomach

* See his Treatise on Purgative Med.

† See his able account of the management of Scarlatina, when it prevailed in the large school at Ackworth, in Dr. Willan's treatise, p. 357.

‡ It can scarcely be matter of surprise, that purgatives should have been deemed highly injurious in fevers, by those practitioners who were unacquainted with the cool treatment. For the extreme degree of depression and exhaustion which the hot regimen occasioned, was a sufficient cause for a just apprehension of the ill effects of purgation. Mr. White informs us, when speaking of the miliary fevers of puerperal women (which occurred under the depressing influence of that regimen), that "a few loose stools, in some cases spontaneous, in others

is very irritable, Calomel, in doses of from five to seven grains, uncombined with either antimonial or purgative, sooner allays this morbid irritability than any other medicine, whilst at the same time it stimulates the peristaltic motion of the bowels."

Many practitioners recommend the use of antimonials, and of saline and camphorated diaphoretics, in order to excite perspiration, during the first days of this fever; and some have advised the exhibition of opium in small doses, to alleviate the great inquietude and wakefulness that accompany it. But a little observation will prove, that such medicines fail altogether to produce either diaphoresis or rest, under the hot and scarlet condition of the skin; and that, on the contrary, they aggravate the heat and dryness of the surface, and increase the thirst, the restlessness, the quickness of pulse, and every other distressing symptom.* In truth, the temperature is considerably too high to admit of a diaphoresis; and the only "safe" or effectual "method" of producing it (which was a desideratum with Dr. Withering) consists in

produced by art, have sunk patients beyond recovery." (Treatise on the Management of Pregnant and Lying-in Women, chap. 8.)

We may remark, on the other hand, that the same artificial exhaustion created a necessity for the copious use of wine and other stimulants, in these fevers, to prevent the patients from sinking irrecoverably. And hence a great two-fold mistake, in the treatment of fevers, was propagated; viz., the fear of purgatives, and the excessive administration of stimulants. See Miliaria, *infra*.

* See Huxham on the malignant ulcerous Sore-throat; Fothergill; Grant; Plenciz, &c.—Dr. Huxham, however, acknowledges the great difficulty of producing sweating by any means. Dr. Withering writes "*Sudorifics, Cordials, Alexipharmics*. The medicines generally signified by these denominations have but little to do in the cure of Scarlatina. The patients are not disposed to sweat, when the scarlet rash prevails upon the skin; nor do I know of any *safe method* by which we could attempt to excite a diaphoresis, even if we should expect it to be advantageous," p. 81. Dr. Willan (p. 359.) and Dr. Blackburne (Facts and Obs., &c. on Scarlatina, p. 27.) make the same observation in stronger terms.

With respect to opium, Dr. Withering observes, "I never saw it effect the purpose for which it was given; on the contrary, it visibly increased the distress of the patient," p. 91. Dr. Cotton has a similar remark. (See his "Obs. on a particular Kind of Scarlet Fever, that prevailed at St. Alban's," 1749. p. 16.)

reducing the heat, by the application of external cold, upon the principles established by Dr. Currie.

We are possessed of no physical agent, as far as my experience has taught me (not excepting even the use of blood-letting in acute inflammation), by which the functions of the animal œconomy are controlled with so much certainty, safety, and promptitude, as by the application of cold water to the skin, under the augmented heat of Scarlatina, and of some other fevers. "The patient is to be taken out of bed, stripped naked, and placed in an empty tub : a bucket or two of cold water is then to be suddenly emptied over the head ; and, the body being quickly dried, he is to be again placed in bed. If the sensation of chilliness remain, a little warm wine and water is to be administered." This expedient combines in itself all the medicinal properties which are indicated in this state of disease, and which we should scarcely *à priori* expect it to possess : for it is not only the most effectual *febrifuge* (the "febrifugum magnum," as a reverend author long ago called it *), but it is, in fact, the only *sudorific* and *anodyne*, which will not disappoint the expectation of the practitioner under these circumstances. I have had the satisfaction, in numerous instances, of witnessing the immediate improvement of the symptoms, and the rapid change in the countenance of the patient, produced by washing the skin. Invariably, in the course of a few minutes, the pulse has been diminished in frequency, the thirst has abated, the tongue has become moist, a general free perspiration has broken forth, the skin has become soft and cool, and the eyes have brightened ; and these indications of relief have been speedily followed by a calm and refreshing sleep. In all these respects, the condition of the patient presented a

* Dr. Hancocke, rector of St. Margaret's, Lothbury, published a pamphlet in 1722, entitled "*Febrifugum Magnum ; or, Common Water the best Cure for all Fevers,*" &c., which contains many sound observations and valuable facts, detailed in the quaint language of the time.

complete contrast to that which preceded the cold washing; and his languor was exchanged for a considerable share of vigour. The morbid heat, it is true, when thus removed, is liable to return, and with it the distressing symptoms; but a repetition of the remedy is followed by the same beneficial effects as at first.*

Partly from the difficulty of managing the cold affusion, and partly from its formidable character in the estimation of mothers and nurses, imbued with the old prejudices, I have generally contented myself with recommending the *washing* of the skin with *cold water*, or water and vinegar, more or less frequently and extensively, according to the urgency of the heat. In the beginning of the disease, the affusion of a vessel of cold water over the naked body is, doubtless, the most efficacious: but, by a little management, all the benefits of a reduction of the morbid temperature that can be expected at a subsequent period, may be obtained by the simple washing. In less violent cases, washing the hands and arms, or the face and neck, is of material advantage.†

* After the extensive evidence, which a period of more than twenty years has furnished, in proof of the uniform efficacy and security of the external use of cold water in Scarlatina, and in other febrile diseases connected with high morbid heat of the skin, it is to be lamented that some practitioners still look upon the practice as an *experiment*, and repeat the remnants of exploded hypotheses, about repelling morbid matter, stopping pores, &c., as reasons for resisting the testimony of some of the greatest ornaments of the medical profession. For my own part, I have been in the constant habit of resorting to the practice at every opportunity in Scarlatina (and also in typhoid fevers, during my superintendence of the Fever Institution for the last ten years), attending to the simple rules laid down by Dr. Currie, and I have never witnessed any inconvenience, much less any injury, from it; but an uniformity in its beneficial operation, of which no other physical expedient, with which I am acquainted, affords an example.

† For the direction of those who may not be acquainted with the principles of this practice, if any such remain in the profession, it may be stated, in the words of Dr. Currie, that the cold washing is invariably safe and beneficial, "when the heat of the body is steadily above the natural temperature — when there is no sense of chilliness present, — and no general or profuse perspiration." But I have found the following direction to the nurses amply sufficient; viz., to apply it "whenever the skin is *hot* and *dry*." Dr. Stanger, in treating Scarlatina among

It is, of course, necessary to enjoin the cool regimen, as directed for the *Scarlatina simplex*; to attend to the ventilation and moderate temperature of the apartment; and to administer the drink cold.* Acidulated drinks are grateful, and, by coagulating the mucus secreted in the fauces, are beneficial to those parts. Dr. Willan and Dr. Stanger have recommended the oxygenated muriatic acid, in doses of half a drachm for adults, and ten or twelve drops for children, diluted in water, as an agreeable refrigerant.

When there is a considerable degree of inflammation and tumefaction of the tonsils, rendering the act of deglutition difficult, the application of a blister to the external fauces has proved extremely beneficial.† Acidulated gargles, “containing a moderate proportion of the Tincture of Capsicum,” likewise afford a material relief, and probably contribute to obviate the diarrhœa, by preventing the acrid mucus from being swallowed.

Wine, Cinchona, and other cordials and tonics, are not only useless, but injurious, until after the efflorescence has declined, together with the febrile symptoms. During the hot feverish state, the cold washing is, in fact, the best *cordial*; for, by allaying the excessive febrile action, it removes the cause of the extreme languor and depression, and thus prevents the tendency to those symptoms of malignancy and putrescency, to obviate which the bark and wine have

the children of the Foundling Hospital, found no other precaution necessary. “Its effects in cooling the skin, diminishing the frequency of the pulse, abating thirst, and disposing to sleep, were very remarkable. Finding this application so highly beneficial,” he adds, “I employed it at every period of the fever, provided the skin were hot and dry.” See a note in Dr. Willan’s Treatise, p. 360.

* Cold drink is, like the washing, always salutary in the same hot and dry state of the skin, and tends, like it, to promote perspiration.

† Drs. Willan, Heberden, Rush, Clark, and Sims have concurred in the same observation. But Dr. Withering was of opinion that blisters were injurious, when the brain was affected; and that they were less advantageous when the inflammation was confined to the fauces than in other quinseys.

been supposed to be particularly required. The convalescence, likewise, is more rapid, and the tendency to dropsical effusions is less, when the violence of the febrile symptoms has been restrained by this expedient. It is advisable, however, with a view to accelerate the convalescence, and to prevent anasarca, to resort to the Cinchona, with mineral acids, and a little wine, as soon as the fever and rash have entirely disappeared. The same medicines, combined with diuretics, and small purgative doses of Calomel, are generally efficacious remedies for the dropsy, when it supervenes.

SPECIES 3. SCARLATINA *maligna*, MALIGNANT SCARLET FEVER.

Syn. Cynanche *maligna* (*Cullen*): Angina *maligna seu gangrænosa* (*Auct. var.*): Empresma paristhmitis (*Good*): Angine *maligne* (*F.*)

This form of Scarlatina (Plate XXIII. fig. 3. of BATEMAN; Pl. 9. of THOMSON'S ATLAS), although it commences like the preceding, shows in a day or two symptoms of its peculiar severity. The efflorescence is usually faint, excepting in a few irregular patches, and the whole of it soon assumes a dark or livid red colour. It appears late, and is very uncertain in its duration; in some instances, it suddenly disappears a few hours after it is seen, and comes out again at the end of a week, continuing two or three days. The skin is of a less steady and intense heat: the pulse is small, feeble, and irregular: the functions of the sensorium are much disordered; sometimes there is early delirium, and sometimes coma, alternating with fretfulness and violence. The eyes are dull and suffused with redness, the cheeks exhibit a dark red flush, the mouth is incrustated with a blackish or brown fur, and there is a black streak in the centre of the tongue. "The tonsils are not much swelled; but, with the rest of the fauces, appear of a dark red hue." The ulcers in the throat are covered with dark sloughs, and surrounded by a livid base; and a large

quantity of viscid phlegm clogs up the fauces, impeding the respiration, and occasioning a rattling noise, as well as increasing the difficulty and pain of deglutition. An acrid, often fœtid discharge also distils from the nostrils, producing soreness, chaps, and even blisters of the upper lip. "The cervical glands also enlarge, and abscesses sometimes form in them." These symptoms are often accompanied by severe diarrhœa, and by petechiæ and vibices on the skin, with hæmorrhagy from the mouth, throat, bowels, or other parts, which, of course, but too often lead to a fatal termination. This generally takes place in the second or third week ; but, in a few instances, the patients have suddenly sunk as early as the second, third, or fourth day, probably from the occurrence of gangrene in the fauces, œsophagus, or other portions of the alimentary canal * : and sometimes, at a later period of the disease, when the symptoms had been previously moderate, the malignant changes have suddenly commenced, and proved rapidly fatal. Even those who escape through these dangers, have often to struggle against many distressing symptoms for a considerable length of time ; such as ulcerations spreading from the throat to the contiguous parts, suppuration of the glands, tedious cough and dyspnœa, excoriations about the nates, &c., with hectic fever.

"The most distressing sequel of every variety of Scarlatina is Dropsy, especially when the disease attacks children. It generally makes its appearance ten or twelve days after the desquamation ; sometimes, however, it does not display itself for several weeks after that event. It is preceded by great languor and lassitude ; the appetite fails, the bowels become costive, the urine scanty and coagulable, and the pulse quick and irregular. The fluid is sometimes deposited in

* "Hæc gangrena œsophagum, asperamque, arteriam, sæpe ante occupat, quàm illam percipere, illique mederi queamus." Navier, in *Com. de Reb.* p. i. vol. iv. 338.

the cellular membrane, at other times in the serous cavities, or in the head. It seems to depend on inflammation; and in fatal cases this is demonstrated in the lungs, or pleura, or kidneys, or other internal organs."

The treatment of *Scarlatina maligna* must necessarily be different from that prescribed for the preceding species, and is unfortunately much less efficient. "In the commencement, the use of the lancet may be necessary to subdue excitement with a full and firm pulse; but the quantity of blood taken should be moderate." The active remedies, which operate so favourably in the *S. anginosa*, especially the cold washing, are altogether out of place here: even the effect of a cathartic is admitted by the unprejudiced to be often deleterious, by rapidly sinking the powers of the constitution; "but, nevertheless, much advantage is obtained from Calomel, given to the extent of eight or ten grains for a dose, and permitting it to pass off without the aid of a cathartic:" blisters, also, are not always applied with impunity. On the whole, the practice of administering gentle emetics appears to be beneficial, especially at the very onset of the disease. It is of great importance to remove frequently, but in a gentle way, the viscid-offensive matter that encumbers the fauces, and which, if swallowed, produces considerable irritation in the stomach and bowels. For this purpose, warm restraining gargles are useful: such as the decoction of *Contrayerva*, with *Oxymel of Squills*, or *Muriatic Acid*: an infusion of *Capsicum*, or an acidulated decoction of *Cinchona*. "No gargle is more useful than the following:—

R. Solutionis Confect. Rosæ fʒvj,
Tinct. Capsici fʒij,
Acidi Muriatici diluti fʒss,

M. et cola ut ft. Gargarisma, sæpe utendum.

The Chloro-sodaic solution of *Labarraque*, in the proportion of fʒxij of the solution to fʒvss of water,

and ziv of honey, forms, also, an excellent gargle. The same solution, in the proportion of f̄3vj to f̄zv of water, without the addition of honey, if frequently thrown into the nostrils by means of a gum elastic bottle mounted with a tube, soon removes the Coryza; after which the malignant character of the disease vanishes, and the case is reduced to one of *Scarlatina anginosa*." Tincture of Myrrh, camphorated spirit, and other stimulant liquids, may be likewise employed with advantage. Fumigations, by means of the vapour of Myrrh and Vinegar, but particularly by the Nitrous Acid Gas (separated from powdered Nitre by the strong Sulphuric Acid), contribute materially to cleanse the fauces. The latter vapours, or the Nitro-muriatic Acid Gas (chlorine) (separated from a mixture of equal parts of powdered Nitre and of Sea Salt by the strong Sulphuric Acid), often supersede the necessity of gargles.

"A high eulogium on the powers of Ammonia in malignant *Scarlatina* has been paid by Dr. Peart, who regards it almost in the light of a specific. He recommends it to be administered in doses of gr. iij, dissolved in two or three tea-spoonfuls of water, every second or third hour, according to circumstances."

As the disease advances, and the symptoms of malignancy or extreme debility increase, it becomes necessary to support the patient by moderate cordials, Wine, Opium, and the mineral acids, with light nourishment. In this, as in other violent fevers accompanied with much sinking of the vital powers, it was formerly the custom to prescribe the *Cinchona* copiously. But while the tongue is loaded, the face flushed, and the skin parched, I believe this drug to be always prejudicial. Much of this malignancy, indeed, may be often counteracted by proper ventilation; and where the cutaneous heat is great, and the surface dry, gentle tepid washings, especially in the early stages of the disease, contribute much to prevent the future depression. Subsequently, where

there is great languor of the circulation in the skin, warm bathing or fomenting, or even the application of the warm vinegar and spirits, has been attended with benefit.

Similar treatment, both local and general, will be required in that variety of the disease, in which the throat is ulcerated, without any efflorescence on the skin, according to the degree of its virulence.

“The Dropsy that supervenes is best managed by blood-letting and purging, or, when the debility of the patient prevents the use of the lancet, by brisk purging alone. Diuretics are of no use; and the only tonic that is likely to prove useful after the excitement is reduced and the fluid removed, is the Tincture of Muriate of Iron. Country air, gentle exercise, and attention to diet and to the state of the bowels, form, however, still better modes of strengthening the powers of the habit.”

The Scarlatina rapidly infects children, whenever it is introduced among those who have not already undergone its influence in some one of its forms; insomuch that the most rigid separation of the diseased from the healthy, in schools or large families, has not always prevented its propagation. It is not accurately ascertained, at what period a convalescent ceases to be capable of communicating the infection: in some cases, the infectious power certainly remained above a fortnight after the decline of the efflorescence; and there seems to be little doubt that, so long as the least desquamation of the cuticle continues, the contagion may be propagated.*

* Dr. Hahnemann, and several continental physicians, recommend the administration of Extract of Belladonna in minute doses, during the prevalence of Scarlatina, to prevent the infection from being received. Two grains of the extract are dissolved in ℥ʒj of Cinnamon Water; and ℥ij of this solution are given night and morning to a child under one year of age; and in larger doses, according to the age of the children! It requires more faith than we possess to credit the assertions which have been given to the public on this subject. But we have no doubt that, by carrying the dose of Belladonna so far as to produce a scarlet efflorescence on the skin, the contagion might be warded off. T.

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GENUS III. URTICARIA.

Syn. Uredo (*Lin.*): Purpura urticata (*Junck*):
 Scarlatina urticata (*Saww.*): Febris urticata (*Vogel*):
 Essera, Aspritudo (*Auct. Var.*): Der Brennessel-
 ausschlag (*German*): Fièvre ortiée, Porcelaine (*F.*):
 Essera Benat allil (*Arab.*), *Nettle-rash*.

Def. ITCHING, NETTLE-STING WHEELS APPEARING
 ABOUT THE SECOND DAY AFTER A SLIGHT FEBRILE
 ATTACK; FADING AND REVIVING, AND WANDERING
 FROM PART TO PART.

The *nettle-rash* is distinguished by those elevations of the cuticle, which are usually denominated wheals, produced by the sting of the *urtica dioica*, stinging nettle. (*Def.* 9.) They have a white top, often surrounded by diffuse redness. The complaint is not contagious, "and the accompanying fever is generally of the remittent type; occasionally it has proved intermittent."* It may be confounded with Erythema

* Bricheteau mentions a case of this kind; see Journ. Comp. des Scien. Méd. t. xxxvii. p. 266.

nodosum; but this does not disappear and again reappear, nor has the elevated part the aspect of the sting of the nettle. It more closely resembles Roseola; but this never rises into wheals. Dr. Willan particularly noticed six species of Urticaria: —

- | | | |
|---------------------------|---------------------------|-----------------|
| (1. <i>U. febrilis</i> .) | 4. <i>U. conferta</i> . | <i>acute</i> |
| 2. <i>U. evanida</i> . | 5. <i>U. subcutanea</i> . | <i>+</i> |
| 3. <i>U. perstans</i> . | 6. <i>U. tuberosa</i> . | <i>chronic.</i> |

* SPECIES 1. URTICARIA *febrilis**: FEBRILE NETTLE-RASH.

Syn. Purpura urticata (*Juncker*): Febris erysipetalosa (*Sydenh.*): Exanthemata urticata (*Burserius*): Scarlatina urticata (*Sauv.*)

The rash, in this variety of Urticaria (Plate XXIV. fig. 2. of BATEMAN; Pl. 10. of THOMSON'S ATLAS), is preceded for two days or more by feverish symptoms, with cramps of the limbs, headach, pain and sickness of the stomach, and considerable languor, anxiety, and drowsiness, and sometimes even by syncope. The "appearance of the eruption mitigates these symptoms." The wheals appear in the midst of irregular patches of a vivid red efflorescence, sometimes nearly of a crimson colour, on different, even very distant parts of the body, and accompanied by an extreme degree of itching and tingling, especially during the night, or on exposing the parts affected by undressing.†

The eruption appears and disappears irregularly on

* This form of the disorder has been accurately described by Juncker and others under the name of "Purpura Urticata." (See his *Conspect. Med. Pract.* tab. 64.; also Lochner, *Eph. Nat. Cur.* cent. 6. obs. 96.; and Schacht, *Inst. Med. Pract.* cap. ix. § vi.) Sydenham has likewise described it, under the title of "Febris Erysipetalosa;" (*Obs. Med.* § v. cap. 6.) and Sauvages, as a variety of Scarlitana, spec. 2. S. urticata. But Vogel pointed out its distinction from Purpura, Erysipelas, and Scarlatina. (*De cogn. et curand. Morb.* § 158. "de Febre Urticata.") See also Burserius "de Exanthemata Urticato," tou. ii. cap. 5.; and Frank, "de curand. Hom. Morb." lib. iii. § 106.

† "Illud enim singulare habent, quod in frigido magis emergant, et in calido evanescent." Vogel. See also Burserius, § 96.; and Frank, § 309.

* The febrile symptoms are due to some general disorder of the system, of which the urticaria is but a consequence or result. *Sarsons* - Sometimes these symptoms are dependent upon the excessive nervous irritability of the skin - *Sarsons*

most parts of the body ; “ some days it appears on the arms, in others on the legs, or the trunk, or the face : ” but it may be excited on any part of the skin by strong friction or scratching.* The surrounding efflorescence fades during the day, and the wheals subside ; but both return in the evening, with slight fever. The patches are often elevated, with a hard border ; so that, when they are numerous, the face, or the limb chiefly affected, appears tense and enlarged.

The febrile nettle-rash continues about a week †, with considerable distress to the patient, in consequence of the heat, itching, and restlessness with which it is accompanied: the disorder of the stomach, however, is relieved by the appearance of the eruption ; but it returns if the eruption disappears. A slight exfoliation of the cuticle generally succeeds.

This eruption occurs chiefly in summer ; it affects persons of all ages, but most commonly the young : ” it is often connected with teething or disordered bowels in children, in whom, however, it is attended with less fever than in adults, and often disappears in a few hours ; and among adults, affects persons of full habit, who indulge in the gratifications of the table, or suffer from domestic afflictions and other causes of anxiety. It sometimes occurs as a symptom of other diseases, cancer uteri, for instance, as mentioned by Sir C. M. Clarke.‡

Modifications of the febrile nettle-rash, indeed, are produced by certain articles of food, which, in particular constitutions, are offensive to the stomach ; especially by shell-fish, such as lobsters, crabs, and shrimps, but above all by mussels.§ In a few indivi-

* See Sydenham ; and Frank, § 307.

† “ Febris primo septenario inter sudores decedit.” Vogel.

‡ *Observ. on Diseases of Females, which are attended with discharges.* By C. M. Clarke, 8vo. London, 1814.

§ On some parts of the coast of Yorkshire, where mussels are abundant, a belief is prevalent among the people, that they are poisonous, and they are consequently never eaten. This opinion is most probably the result of traditional observation, in regard to the frequent occurrence of *Urticaria*, after they were swallowed. A case, indeed, is

duals, in consequence of a peculiar idiosyncrasy, other substances, when eaten, are followed by the same immediate affection of the skin ; such as white of egg, mushrooms, honey, oatmeal, almonds, and the kernels of stone-fruit, raspberries, strawberries, green cucumber with the skin upon it*, &c. In some persons, the internal use of Valerian has produced the nettle-rash. † The operation of these substances is sometimes almost instantaneous ‡, and the symptoms are extremely violent for several hours ; but they generally cease altogether in a day or two. Not unfrequently, in delicate and irritable females, febrile nettle-rash arises from overloading the stomach. The eruption, however, is not always accompanied with wheals, but sometimes is a mere efflorescence, not unlike that of Scarlatina. It is generally attended by great disorder of the stomach, with violent pains in the epigastrium, and other parts of the body, sickness, languors, fainting, with great heat, itching, stiffness, and often much swelling of the skin. In a few instances, it is said to have been fatal. §

An emetic of Ipecacuanha, if there be suspicion that the disease arises from any thing which has been taken into the stomach ; but, if the offending cause be putrid fish, the Sulphate of Zinc, or that of Copper, is to be preferred as an emetic, on account of the

mentioned by Ammans and Valentinus, in which a man died so suddenly after eating mussels, that suspicion of having administered poison fell upon his wife. (See Behrens, "Diss. de Affectionibus a comestis Mytilis.")

* Dr. Winterbottom, who is subject to this affection after eating sweet almonds, observes that he takes them with impunity, when they are blanched. See Med. Facts and Obs. vol. v. where the symptoms are minutely described.

† Dr. Heberden, Med. Transact. vol. ii. p. 176.—Frank, § 510.

‡ See Moehring de Mytilorum Veneno. ægrot. iii. in Haller's Disput. tom. iii. p. 191.

§ "Licet etiam ea symptomata, quamcunque gravia, intra unum alterumque diem, sine vitæ periculo deflagrare, aut extingui soleant ; tamen non desunt exempla rariora, nobis quidem non visa, ubi mortem accessiverunt." Werlhoff, Pref. to the Diss. of Dr. Behrens, subjoined to his treatise "De Variolis et Anthracibus," Hanov. 1735 ; also Van Swieten, Comment. ad aph. 723.

quickness of its operation. This, followed by a gentle cathartic, or, in ordinary cases, by a gentle laxative, with light and cooling diet (with total abstinence from fermented liquors, and from sudorific medicines), "and confinement to bed," constitute the sole treatment which appears to be requisite for the safe conduct of these disorders to their period of decline ; at which time the Cinchona, with diluted Sulphuric Acid, is beneficial. "I have generally found it beneficial to combine Sulphate of Magnesia with the Infusion of Cinchona ; or to give it in the Infusion of the Confection of Roses, with Sulphate of Quinia, acidulated with the diluted Sulphuric acid." In children, when the disease does not soon spontaneously disappear, it is best managed by the Compound Powder of Contrayerva, or any other absorbent powder ; at the same time keeping the bowels in a lax state. As local applications to allay the sensation of stinging and tingling, which accompanies the wheals, a lotion consisting of one part of Alcohol with three of water, or of two parts of vinegar, and three of water, will be found beneficial.

SPECIES 2. The URTICARIA *evanida*, EVANESCENT NETTLE-RASH.

This species (Plate XXIV. fig. 1. of BATEMAN ; Pl. 10. of THOMSON'S ATLAS) is a chronic affection, in which the wheals are not stationary, but appear and disappear frequently, according to the temperature of the air, or the exposure of the patient, and vary with the exercise which he uses, &c. It is not accompanied by fever, and seldom by any other derangement of health. The wheals are sometimes round ; and sometimes longitudinal, like those which are produced by the stroke of a whip ; they may be excited on any part of the body, in a few seconds, by friction or scratching ; but these presently subside again.* They

* I knew a young lady, enjoying good health, who could at any time instantaneously excite long, white, and elevated wheals on her skin, by

are sometimes slightly red at the base ; but never surrounded by an extensive blush. A violent itching, with a sensation of tingling, or stinging, accompanies the eruption ; which, as in the febrile species, is most troublesome on undressing, and getting into bed.

The disorder is extremely various in its duration. The eruptions, as Dr. Heberden remarks, last only a few days in some persons ; while in others they continue, with very short intervals, for many months, and even for several years.* Persons affected with it are liable to suffer headach, languor, flying pains, and disorders of the stomach. It attacks people of all ages and both sexes ; but more especially those of sanguine temperament, and females more frequently than males.

As it is often obviously connected with irritability of the stomach, or some peculiar idiosyncrasy ; so, when it continues long, Dr. Willan justly suggests the probability, that it originates from some article of diet, which disturbs digestion. Hence, he says, " I have desired several persons, affected with chronic Urticaria, to omit first one, and then another article of food or drink, and have thus been frequently able to trace the cause of the symptoms. This appeared to be different in different persons. In some it was malt-liquor ; in others, spirit, or spirit and water ; in some, white wine ; in others, vinegar ; in some, fruit ; in others, sugar ; in some, fish ; in others, unprepared vegetables." He acknowledges, however, that, in some cases, a total alteration of diet did not produce the least alleviation of the complaint. In such cases, occasional laxatives, and the mineral acids, have been found the most advantageous remedies. Sometimes, where the indigestion was considerable, I

drawing the nails along it with some degree of pressure : but the wheals soon subsided, and she was not subject to them from any other cause. The same cutaneous irritability coexists occasionally with Impetigo, and other chronic affections of the skin, which have no relation to Urticaria.

* Med. Trans. p. 175. See also his Commentar. cap. 36. De Essera.

have found Soda or the Caustic Potass, combined with Aromatic bitters, such as Cascarella, afford relief. Dr. Underwood recommends the following : —

R. Hydrarg. Sulph. Rubri ʒss,
 Radicis Serpentariæ, in pulvere, ʒj,
 Syrupi q. s. ut fiat bolus,
 Bis die sumendus; superbibendo haust: Infusi florum
 Sambuci.

The complaint is generally too extensive to be completely alleviated by lotions of Spirit, Vinegar, or Lemon juice, &c., which afford local relief. But the warm bath is beneficial; and a persevering course of sea-bathing, for a considerable time, has generally been found an effectual remedy.

SPECIES 3. *URTICARIA perstans*, STATIONARY NETTLE-RASH.

This differs from the preceding species, principally in the stationary condition of the wheals; which remain after the redness, at first surrounding them, has disappeared. They continue hard and elevated, with occasional itching, when the patient is heated, for two or three weeks, and gradually subside, leaving a reddish spot for some days. The treatment directed for the foregoing species is here beneficial.

SPECIES 4. *URTICARIA conferta*, CONFLUENT NETTLE-RASH.

In this species the wheals are more numerous, and in many places coalesce, so as to appear of very irregular forms: they are also sometimes considerably inflamed at the base; and the itching is incessant. This variety of the complaint differs from *febrilis* in the absence of fever; and by its chronic character: it chiefly affects persons above forty years of age, who have a dry and swarthy skin; and seems to originate from violent exercise, or from indulgence in rich food and spirituous liquors. Hence the patients find little

relief from medicine, unless they use at the same time a light cooling diet, and abstain from malt-liquor, white wines, and spirits. Alterative medicines, or tonics, are sometimes useful, if this plan of diet be conjoined with them; and warm bathing affords a temporary relief. The eruption often continues many weeks.

SPECIES 5. *URTICARIA subcutanea*, SUBCUTANEOUS NETTLE-RASH.

This is a sort of lurking nettle-rash, which is marked by a violent and almost constant tingling in the skin, and which, from sudden changes of temperature, mental emotions, &c., is often increased to severe stinging pains, as if needles or sharp instruments were penetrating the surface. These sensations are at first limited to one spot on the leg or arm; but afterwards extend to other parts. It is only at distant intervals that an actual eruption of wheals takes place, which continue two or three days, without producing any change in the other distressing symptoms. In persons so affected, the stomach is frequently attacked with pain, and the muscles of the legs are subject to cramps. It is relieved by repeated warm-bathing in sea-water, and gentle friction.

SPECIES 6. *URTICARIA tuberosa*, TUMID NETTLE-RASH.

This species, which was named by Dr. Frank, is marked by a rapid increase of some of the wheals to a large size*, "sometimes the breadth of the hand; they are accompanied with intense itching," and form hard tuberosities, which seem to extend deeply, and occasion inability of motion and deep-seated pain. They appear chiefly on the limbs and loins, and are very hot

* "Tumores vero, palmæ latitudinem habentes, et colore rubro sed obscuro instructi, cum pruritu ad animi deliquium usque intolerabili, universam corporis, sed femorum imprimis, superficiem occupare cernuntur." Frank, loc. cit. § 399. tom. iii. p. 108.

and painful for some hours: they usually occur at night, and wholly subside before morning*, leaving the patient weak, languid, and sore, as if he had been bruised or much fatigued. It seems to be excited by excesses in diet, over-heating by exercise, and the too free use of spirits; and is often tedious and obstinate. A regular light diet and a course of warm-bathing are to be recommended, with occasional gentle laxatives, where the organs of digestion appear to be deranged.†

Books which may be consulted on Urticaria.

- BURROWS, London Med. Repository, vol. iii. p. 445.
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 CRAMER, *Diss. de Purpuræ Urticæ et Scarlat. Febris discrimine.* Hal. 1759.
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 PLUMBE, on Diseases of the Skin, 2d. edit. 1827.
 RAYER, *Traité des Maladies de la Peau,* 1826.
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GENUS IV. ROSEOLA.

Syn. Rubeola Rossalia, Rosania (*Auct. vet.*):
 Exanthesis Roseola (*Good*): Exanthisma Roseolie
 (*Young*): Roseole, Fausse rougeole, Eruption an-
 male rosace (*F.*), *Red-rash, Rose-rash.*

Def. A ROSE-COLOURED EFFLORESCENCE, VA-
 RIOUSLY FIGURED, MOSTLY CIRCULAR AND OVAL,
 WITHOUT WHEELS OR PAPULÆ, OCCASIONALLY
 FADING AND REVIVING: NOT CONTAGIOUS.

* Some writers have hence considered this eruption as the Epinyctis of the ancients: but Sennertus corrects this mistake. The epinyctides contained a bloody sanies, according to Galen, Aëtius, and Paul: and Celsus says, "reperitur inter exulceratio mucosa."

† Frank, loc. cit. § 312.

The efflorescence, to which Dr. Willan appropriated the title of Roseola, is of little importance in a practical view * ; for it is mostly symptomatic, occurring in connection with dentition, dyspepsia, and different febrile complaints, and requiring no deviation from the treatment respectively adapted to them. It is necessary, however, that practitioners should be acquainted with its appearances, in order to avoid the error of confounding it with the idiopathic exanthemata. It has been occasionally mistaken both for measles, erythema, urticaria, and scarlet fever ; and, from this want of discrimination, probably, the supposition that scarlatina was not limited, like the other eruptive fevers, to one attack during life, has been maintained by many persons up to the present time.† There is no difficulty in distinguishing it from erythema and urticaria ; from measles it is known by the absence of the catarrhal symptoms ; and from scarlatina by the course of the rash, which, contrary to what occurs in scarlatina, begins at the extremities and terminates upon the face and trunk of the body. It is not contagious.

There are seven species of Roseola :

- | | |
|--------------------------|-------------------------|
| 1. <i>R. æstiva.</i> | 5. <i>R. variolosa.</i> |
| 2. <i>R. autumnalis.</i> | 6. <i>R. vaccina.</i> |
| 3. <i>R. annulata.</i> | 7. <i>R. miliaris.</i> |
| 4. <i>R. infantilis.</i> | |

SPECIES 1. ROSEOLA *æstiva*, SUMMER ROSE-RASH.

This species (Plate XXV. fig. 1. of BATEMAN ;

* Fuller (in his *Exanthematologia*, p. 128.) speaks of this sort of rose-rash, as a flushing all over the body, like fine crimson, which is void of danger, and "rather a ludicrous spectacle, than an ill symptom." The appellation of Roseola is to be found in the works of some of the early modern writers ; but it was applied somewhat indiscriminately to scarlet fever, measles, &c. (See above, p. 58. *note*.)

† Instances have occurred in which undoubted Scarlatina has attacked the same individual more than once. I witnessed a severe instance which was the third attack of the disease in the same individual. T.

Pl. 11. of THOMSON'S ATLAS,) is sometimes preceded for a few days by slight febrile indisposition. It appears first on the arms, face, and neck, and, in the course of a day or two, is distributed over the rest of the body, producing a considerable degree of itching and tingling. The mode of distribution is into separate small patches, of various figure, not crescent-shaped, but larger and of more irregular forms, and paler than in the measles, with numerous interstices of the natural skin. It is at first red, but soon assumes the deep roseate hue peculiar to it. The fauces are tinged with the same colour, and a slight roughness of the tonsils is felt in swallowing. The rash continues vivid through the second day, after which it declines in brightness; slight specks only, of a dark red hue, remaining on the fourth day, which, together with the constitutional affection, wholly disappear on the fifth.

Not unfrequently, however, the efflorescence is partial, extending only over portions of the face, neck, and upper part of the breast and shoulders, in patches, very slightly elevated, and itching considerably, but without the tingling which accompanies nettle-rash. In this form the complaint continues a week or longer, the rash appearing and disappearing several times; sometimes without any apparent cause, and sometimes from sudden mental emotions, or from taking wine, spices, or warm liquors. The retrocession is usually accompanied with disorder of the stomach, headach, and faintness; which are immediately relieved on its appearance.

This variety of Roseola commonly occurs in summer, in females of irritable constitution; and is ascribed to sudden alternations of heat and cold, especially to drinking cold liquors after violent exercise. It is sometimes connected with the bowel-complaints of the season.

Light diet, and acidulated drinks, with occasional laxatives, alleviate the symptoms. The complaint is

liable to retrocession, it is affirmed, from the influence of very chill air, or the application of cold water, which occasions considerable disorder of the head and alimentary canal; but I have not seen any instance of this kind.

SPECIES 2. *ROSEOLA autumnalis*, AUTUMNAL ROSE-RASH.

This species (Plate XXV. fig. 2. of BATEMAN; Pl. 11. of THOMSON'S ATLAS,) occurs in children, in the autumn, in distinct circular or oval patches, which gradually increase to about the size of a shilling, and are of a dark damask-rose hue. They appear chiefly on the arms, and continue about a week, sometimes terminating by desquamation. There is little itching, tingling, or constitutional affection, connected with this efflorescence; and its decline seems to be expedited by the use of Sulphuric Acid internally, exhibited in the infusion of Conserve of Roses, or the infusion of Gentian, in combination with small doses of Sulphate of Magnesia.*

* The following cases are certainly severe instances of this species of Roseola, although Dr. Bateman, who details them, regarded them as different from any of the species described by Dr. Willan. I have quoted them to show the height to which the Febrile symptoms may extend:—

“The two cases, set down under the head of Roseola, were febrile diseases, and one of them was of considerable severity and duration. In both these instances the rash appeared on the second day of fever, and continued beyond the ninth day, the fever then declining with it. In the more severe case, the rash bore a considerable resemblance to that of rubeola, consisting of numerous small, slightly-elevated spots, of a pale red colour, not acuminated, covering the face, extremities, and trunk; but, although here and there confluent, not forming into crescents, like the measles, nor approaching to the raspberry hue. The patient complained during the whole period of great general distress; the skin was exceedingly hot, although the perspirations were considerable, and there was even a tendency to delirium. On the ninth day the eruption began to disappear, and the fever to diminish; but she was left in a state of great debility and languor, and recovered slowly. Purgatives, diaphoretics, and acids were principally employed; but it is probable that a cooler bed and apartment, than the parents of the girl chose to maintain, would have materially alleviated the complaint. The second patient, a younger girl, only eleven years of age, exhibited on the second day of a moderate fever, accompanied by sickness, a diffuse rose-red rash on the legs, of an erythematous form, slightly

SPECIES 3. The *ROSEOLA annulata*, ANNULAR ROSE-RASH.

This species (Plate XXVI. fig. 1. of BATEMAN ; Pl. 11. of THOMSON'S ATLAS,) appears on almost every part of the body, in rose-coloured rings, with central areas of the usual colour of the skin ; sometimes accompanied with feverish symptoms, in which case its duration is short ; at other times, without any constitutional disorder, when it continues for a considerable and uncertain period. The rings at

elevated, but of an uneven surface, the most elevated parts being reddest : on the fourth and fifth days (the fever, with slight headach, continuing), a similar rash appeared on the arms ; and on the sixth day, when the eruption on the legs began to fade, a large circular patch of the same bright red rash showed itself upon each cheek. These patches were extremely vivid, when the patient was first seen on the seventh day, at which time the eruption on the arms was less bright, and that on the legs was much faded, the elevated parts only remaining red, and giving a mottled appearance to the skin. Some remains of the rash continued on the face on the eleventh day, when she visited the Dispensary, free from fever ; and a slight roughness, from imperfect desquamation, was found on the arms. She had taken some laxative before she applied to the charity, and was treated with Infusum Rosæ and Magnesæ Sulphas, followed by the decoction of Cinchona and Sulphuric Acid.

"These febrile rashes, of which there is a considerable variety*, are not often either dangerous or severe, and chiefly deserve to be noticed with a view to the diagnosis from the contagious eruptive fevers, scarlatina and measles. I lately attended a case, resembling the former of these in appearance, although not in the severity of the concomitant fever, which excited a great alarm in the family, from the belief that it was scarlet-fever ; a supposition which was strengthened by the occurrence of a slight sore throat. But a careful attention to the form, distribution, and progress of the eruption, as well as to the concomitant circumstances, will generally enable an observer, accustomed to analyse those appearances, to decide promptly as to their difference from the contagious fevers just mentioned. The causes of them are by no means easily traced ; in the latter of the two cases above described, the disorder was supposed to have been occasioned by having been excessively heated, by working at a mangle, a week before the symptoms appeared." *Vide* Edin. Med. and Surg. Journ. vol. viii. p. 224.

* Neither of these cases accorded accurately with the species of *Roseola* described by Dr. Willan, as having most frequently occurred to his observation. But it were not easy to follow these rashes through all their varieties. They agreed with his general definition : "a rose-coloured efflorescence, variously figured, without wheals or papulæ, and not contagious."—Ord. III. Genus VI.

first are from a line to two lines in diameter; but they gradually dilate, leaving a larger central space, sometimes to the diameter of half an inch. The efflorescence is less vivid (and, in the chronic form, usually fades) in the morning, but increases in the evening, or night, and produces a heat and itching, or prickling in the skin. If it disappears or becomes very faint in colour for several days, the stomach is disordered, and languor, giddiness, and pain of the limbs ensue, — symptoms which are relieved by the warm bath.

Sea-bathing and the mineral acids afford much relief in the chronic form of this rash.

SPECIES 4. The ROSEOLA *infantilis*, INFANTILE ROSE-RASH.

This form of Rose-rash (Plate XXVI. fig. 2. of BATEMAN; Pl. 11. of THOMSON'S ATLAS,) is closer, leaving smaller interstices than the *R. æstiva* above described, and occurring in infants during the irritation of dentition, of disordered bowels, and in fevers. It is very irregular in its appearances, sometimes continuing only for a night; sometimes appearing and disappearing for several successive days, with violent disorder; and sometimes arising in single patches, in different parts of the body successively.

Where the rash is pretty generally diffused, it is often mistaken, as Dr. Underwood has remarked,* for measles and scarlatina: whence it is necessary that practitioners should be acquainted with it; although it requires no specific treatment, but is "alleviated by testaceous powders, or the Pulvis Contrayervæ Compositus and Nitre," and other remedies adapted to bowel-complaints, painful dentition, and various febrile affections, with which it is connected.

* On the Diseases of Children, vol. i. p. 87.

SPECIES 5. *ROSEOLA variolosa*, VARIOLOUS ROSE-RASH.

This rash (Plate XXVII. fig. 1, 2. of BATEMAN ; Pl. 11. of THOMSON'S ATLAS,) occurs previous to the eruption both of the natural and inoculated small-pox, but not often before the former. It appears in about one case in fifteen, in the inoculated disease, on the second day of the eruptive fever, which is generally the ninth or tenth after inoculation. It is first seen on the arms, breast, and face ; and on the following day it extends over the trunk of the body and the extremities. " In general, like rash in *R. æstiva* and *autumnalis*, it appears first on the extremities, and gradually advances to the trunk and face, taking the opposite course of scarlatina, which generally terminates on the extremities." * Its distribution is various : sometimes in oblong irregular patches, sometimes diffused with numerous interstices (see Pl. 10. of THOMSON'S ATLAS) ; and, in a few cases, it forms an almost continuous redness over the body, being in some parts slightly elevated. It continues about three days, on the second or last of which the variolous pustules may be distinguished, in the general redness, by their rounded elevation, by their hardness, and by the whiteness of their tops : and, as soon as these appear, the rose-rash declines.

* This course of the eruption is well exemplified in the following instance, which occurred previous to the eruption in a case of small-pox after vaccination. " On the 30th of June 1826, I was called to see Miss —, who was supposed to be labouring under scarlatina. The hands, the forearms, the feet, the legs half way up, and the mammæ around the nipples, are covered with the rose eruption ; but there are scarcely any patches on the thorax, and none on the face nor on the trunk of the body. The fever is moderate, the pulse soft, and the tongue moist : there is a slight blush over the fauces, and a pustule on the left tonsil. 1st July : The rash is nearly gone from the legs and arms, and beginning to appear on the face and neck and trunk ; the variolous pustules which have appeared, are few and distinct ; the pulse is soft ; there is no feeling of sore-throat. 2d July : The rash is entirely gone, and the pustules are advancing." T.

This rash is generally deemed, by inoculators, a certain prognostic of a small and favourable eruption of the smallpox; but such does not always follow.* It is not easily repelled by cold air or cold drinks, against which the old inoculators enforced many prohibitions and cautions.

These roseolous efflorescences, antecedent to the eruption of smallpox, were observed by the first writers on the disease; and, both by them and subsequent authors, were deemed measles, which were said to be converted into smallpox.

SPECIES 6. ROSEOLA *vaccina*; VACCINE ROSE-RASH.

An efflorescence (Plate XXVII. fig. 3. of BATEMAN; Pl. 10. of THOMSON'S ATLAS,) which appears generally in a congeries of dots and small patches, but sometimes diffuse, like the variolous Roseola, takes place in some children on the ninth and tenth day of vaccination, at the place of inoculation, and at the same time with the areola that is formed round the vesicle; and thence it spreads irregularly over the whole surface of the body. But this does not occur nearly so often as after variolous inoculation. It is usually attended with a very quick pulse, white tongue, and great restlessness.

* Dr. R. Walker, indeed, speaking of the natural smallpox, says, "In every bad kind of smallpox, the eruption is ushered in by a scarlet rash, which appears first upon the face, neck, and breast, and sometimes spreads over the whole body; it is observed some part of the second day, and within twelve hours, sooner or later, the pimples emerge from these inflamed parts of the skin." See his "Inquiry into the Smallpox, Medical and Political," chap. viii. Edin. 1790. — But Dr. Willan remarks, that it is an universal efflorescence, of a dark red colour, with violent fever, that indicates a confluent eruption and a fatal disease. See also Morton de Variol. et Morb. p. 186. — Rayet, speaking of the usual prognostic of a mild disease, when Variola is preceded by Roseola, remarks, "Mes observations, du moins, me conduisent à penser précisément le contraire." *Traité Théorique et Pratique des Maladies de la Peau*, tom. i. p. 47.

SPECIES 7. *ROSEOLA miliaris*, MILIARY ROSE-RASH.

This rash often accompanies an eruption of miliary vesicles, with fever.

In simple continued fevers *, whether the bilious fever of summer, in this climate, or the typhus or contagious fever, an efflorescence resembling the *Roseola æstiva* occasionally takes place, of a hue, however, more approaching to that of measles. I have seen this efflorescence in three cases of mild fever, in the House of Recovery, at a late period of its course ; in two of which it was slight, and remained from two to three days. In the third case, it appeared on the ninth day of fever, in a young woman, after a sound sleep and a moderate perspiration, in patches of a bright rose-pink colour, of an irregular oval form, somewhat elevated, and smooth on the surface, affecting the arms and breast, but most copious on the inside of the humerus. It was unaccompanied by any itching or other uneasy sensation. All the febrile symptoms were alleviated on that day, and she did not keep her bed afterwards. On the following day the efflorescence had extended, the patches having become larger and confluent ; but the colour, especially in the areas of the patches, had declined, and acquired a purplish hue in some parts, while the margins continued red and slightly elevated. The whole colour on the third day had a livid tendency ; and on the fourth there were scarcely any perceptible remains of it, or of the febrile symptoms.

A roseolous efflorescence is sometimes connected with attacks of gout, and of the febrile rheumatism. I lately attended a gentleman of gouty habit, in whom a *Roseola*, accompanied with considerable fever, and with extreme languor and depression of spirits, total loss of appetite, and torpid bowels, subsisted a

* These roseolous spots are also sometimes connected with intermittents. See Pechlin. Obs. Phys. Med. lib. ii. 18,

week upon the lower extremities, and also upon the forehead and vertex of the scalp. On the seventh day, the latter terminated by desquamation, and at midnight his knuckles and right foot were attacked with arthritic inflammation.

Books which may be consulted on Roseola.

- BAUMANN, Diss. de Roseolis saltantibus, Altd. 1700.
 BIETT, (Cazenave and Schedel) Abrégé Pratique des Maladies de la Peau, 8vo, Paris, 1828.
 EDINBURGH MED. AND SURG. JOURN. vol. viii. p. 245.
 HELM, Journ. de Méd. de Huffland, 1812.
 ORLOV, Programma de Rubeolarum et Morbil. discrimine, 4to. 1783.
 PLUMBE, On Diseases of the Skin, 2d. edit. 1827.
 RAYER, Traité Théorique et Pratique des Maladies de la Peau, 8vo. Paris.
 SEILER, Diss. de Morbilles inter et Rubeolas differentiâ verâ, 4to, 1805.
 WILLAN, Description and Treatment of Cutaneous Diseases, 4to. London.

GENUS V. PURPURA.

Syn. Πορφύρα (*G.*): Scorbutus, Petechiæ sine febre (*Auct. var.*): Purpura (*Sauv. Vog. Sag. Riverus Willan*): Hæmorrhœa petechialis (*Adair*): Profusio subcutanea (*Young*): Hæma-celinose (*Pierquin*): Porphyra (*Good*): (*Rayer*): Scurvy, Purple Spots.

Def. AN ERUPTION OF SMALL, DISTINCT, PURPLE SPECKS AND PATCHES, ATTENDED WITH LANGUOR, GENERAL DEBILITY, AND PAINS IN THE LIMBS.

The specks and patches, mentioned in this definition, are *petechiæ* and *ecchymomata*, or *vibices*, occasioned, not, as in the preceding exanthemata, by an increased determination of blood into the cutaneous vessels, but by an extravasation, from the extremities of these vessels, under the cuticle.* Purpura †, in

* Rayer objects, with justice, to Purpura being placed among the Exanthemata.—*Traité Théorique et Pratique des Maladies de la Peau*, Introduction, p. xii. T.

† The term Purpura was applied to *petechial* spots only by Riverius, Diemerbroeck, Sauvages, Cusson, and some others. But it has been employed by different writers in so many other acceptations, that some ambiguity would, perhaps, have been avoided by discarding it altogether;

this arrangement, is therefore intended to include every variety of petechial eruption, and of spontaneous ecchymosis ; not only the chronic form of it, which is unaccompanied by fever, and which has received various denominations (such as Hæmorrhœa petechialis, Petechiæ sine febre *, land-scurvy, &c.), but also that which accompanies typhoid and other malignant fevers.

The chronic Purpura appears under three or four varieties of form ; the first and second of which, however, seem to differ chiefly in the degree of severity of their symptoms.

There are five species of Purpura : —

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|----------------------------|--------------------------|
| 1. <i>P. simplex.</i> | 4. <i>P. senilis.</i> |
| 2. <i>P. hæmorrhagica.</i> | 5. <i>P. contagiosa.</i> |
| 3. <i>P. urticans.</i> | |

SPECIES 1. PURPURA *simplex*, PETECHIAL SCURVY.

Syn. Petechiæ sine febre (*Auct. var.*): Phænigmus petechialis (*Sawv.*): Profusio subcutanea

for some authors have used it as an appellation for measles, others for scarlet fever, for Miliaria, Strophulus, Lichen, Nettle-rash, and the petechiæ of malignant fevers. The title of *Hæmorrhœa petechialis*, which was given to the chronic form of the eruption by Dr. Adair, in his inaugural thesis in 1789, and which I adopted in my own dissertation upon the same subject in 1801, would perhaps have been more unexceptionable. But, in deference to Dr. Willan, I retain this term.

* This appellation is generally ascribed to Dr. Graaf (see his *Diss. Inaug. De Petech. sine Febre*, Gött. 1775); but it was employed half a century before his time by Rombergius (see *Ephem. Nat. Cur. decad. iii. ann. 9 & 10, obs. 108*; and *Acta Phys. Med. Acad. Nat. Curios. vol. ix. obs. 21. p. 95*). The term was adopted by many writers as expressive of the most remarkable feature of the disease; for petechiæ had been generally deemed symptomatic of fevers only. Whence also J. A. Raymann, who has given a good history of the disease, called the spots "petechiæ mendaces," in contradistinction from the febrile petechiæ, which he denominated "*sinceræ*." (See the *Acta Phys. Med.* for 1751, just quoted, p. 87.— See also Duncan's *Med. Cases and Obs.* p. 90; *Med. Comment.* vol. xv. and xx. and *Annals of Med.* vol. ii.— Dr. Ferris's case, *Med. Facts and Obs.* vol. ii. 1791.— Dr. Zetterstrœm's *Diss. Inaug. Upsal*, 1797). Amatus Lusitanus had also marked the absence of fever, about the year 1550, when he described the disease under the similar title of "*Morbus pulicaris sine fibre*" (*Curat. Med. cent. iii. obs. 70*); as had Cusson, who called it "*Purpura apyreta*." — Pezoldus (*obs. 6*) and Zwingerus (*Pædoiatreia Pract.* p. 622) treated of it under the appellation of "*maculæ nigræ sine febre*."

(*Young*): *Porphyra simplex*, var. *pulicosa* (*Good*): Blauflecken Rothe punkt (*Ger.*): Pourpre Pétéchies sans fièvre (*F.*): *Petechial Scurvy*.

In this species (Plate XXVIII. fig. 1. of BATEMAN; Pl. 12. of THOMSON'S ATLAS,) there is an appearance of petechiæ, without much disorder of the constitution, except languor, and loss of the muscular strength, with a pale or sallow complexion, and often with pain in the limbs. "The tongue is covered with a yellow fur, the bowels are constipated, the appetite is diminished, and not unfrequently there is nausea and head-ach." The petechiæ are most numerous on the breast, and on the inside of the arms and legs, and are of various sizes, from the most minute point to that of a fleabite, and commonly circular. They may be distinguished from recent fleabites, partly by their more livid or purple colour, and partly because, in the latter, there is a distinct central puncture (Pl. 12. of THOMSON'S ATLAS), the redness around which disappears on pressure: whereas the spots in *Purpura simplex* bear the strongest pressure without any change of hue. There is no itching, nor other sensation attending the petechiæ.

"The eruption varies in duration from two to three and four weeks. The spots are at first of a lively red, and this is more remarkable the younger the patient: after a few days the vividness is obscured, they gradually become yellow, and gradually disappear. The eruption appears in the most opposite states of the habit, occasionally shewing itself in strong and plethoric individuals; but most commonly it occurs in women, and in delicate children, with white, thin skins. It is seen more frequently in summer than in any other season."

"The treatment of this species of *Purpura* depends on the habit of the individual affected. In the plethoric and robust, bleeding must be resorted to, with cold bathing, and a spare diet: on the other hand, in

weak and broken-down systems, the opposite plan should be adopted: namely, preparations of iron, bitters, and a generous diet. M. Biett recommends an alcoholic vapour bath, at a temperature of 120° Fahrenheit."

SPECIES 2. PURPURA *Hæmorrhagica**, LAND SCURVY.

Syn. Ἰλκος αἱματιτῆς (*Hippoc.*): *Hæmorrhagia universalis* (*Wolf.*): *Stomacace universalis* (*Sauv.*): *Porphyra hæmorrhagica* (*Good*): *Morbus Maculosus hæmorrhagicus* (*Werlhoff.*): *Hémacelinose* (*Rayer*): *Pourpre*, *Hémorrhagie pétéchiale* (*F.*): *Land Scurvy*.

This species (Plate XXVIII. fig. 2. of BATEMAN; Pl. 12. of THOMSON'S ATLAS,) is considerably more severe than the former; the petechiæ are often of a larger size, and are interspersed with vibices and ecchymoses, or livid stripes and patches, resembling the marks left by the strokes of a whip or by violent bruises. They commonly appear first on the legs, and, at uncertain periods afterwards, on the thighs, arms, and trunk of the body; the hands being more rarely spotted with them, and the face generally free. They are usually of a bright red colour when they first appear, but soon become purple or livid; and, when about to disappear, they change to a brown or yellowish hue: so that, as new eruptions arise, and the absorption of the old ones slowly proceeds, this variety of colour is commonly seen in the different spots at the same time. The cuticle over them appears smooth and shining, but is not sensibly elevated:

* This term is not very correctly employed in this place; since it implies that these more extensive eruptions, or rather extravasations of Purpura, are always accompanied by hæmorrhages; which is not the fact.

By a sort of solecism, Sauvages has described this form of the disease under the title of *Stomacace universalis*, class ix. gen. 3. The Purpura simplex he terms *Phœnigmus petechialis*, class x. gen. 32.

in a few cases, however, the cuticle has been seen raised into a sort of vesicles, containing black blood.* This more frequently happens in the spots which appear on the tongue, gums, palate, and inside of the cheeks and lips, where the cuticle is extremely thin, and breaks from the slightest force, discharging the effused blood. The gentlest pressure on the skin, even such as is applied in feeling the pulse, will often produce a purple blotch, like that which is left after a severe bruise.

The same state of the habit which gives rise to these effusions under the cuticle †, produces likewise copious discharges of blood, especially from the internal parts, which are defended by more delicate coverings. These hæmorrhages are often very profuse, and not easily restrained, and therefore sometimes prove suddenly fatal. But in other cases they are less copious; sometimes returning every day at stated periods, and sometimes less frequently and at irregular intervals; and sometimes there is a slow and almost incessant oozing of blood. The bleeding occurs from the gums, nostrils, throat, inside of the cheeks, tongue, and lips, and sometimes from the lining membrane of the eyelids, the urethra, and the external ear; and also from the internal cavities of the lungs, stomach, bowels, uterus, kidneys, and bladder. There is the utmost variety, however, in different instances, as to the period of the disease in which the hæmorrhages commence and cease, and as to the proportion which they bear to the cutaneous efflorescence.

This singular disease is often preceded for some

* See Reil, *Memorab. Clinic.* vol. 1. — *Comment. in Reb. Med. &c. gestis*, Leipsic. vol. vi. — *Dr. Willan's Reports on the Dis. of London*, p. 167. — *Wolff. in Act. Nat. Cur.* (before quoted), vol. vii. obs. 131. and *Rogert, in Act. Reg. Soc. Med. Hauniensis*, vol. i. p. 185.

† It has been a question whether the vessels are dilated or ruptured: — it is certain that in hæmorrhage from the gums, and from some internal organs, as, for instance, the bladder, the blood comes from the whole surface, not from any organic lesion in one or more points. T.

weeks by great lassitude, faintness, and pains in the limbs, which render the patients incapable of any exertion; but, not unfrequently, it appears suddenly, in the midst of apparent good health.* It is always accompanied with extreme debility and depression of spirits: the pulse is commonly small and feeble, and sometimes hard and quickened; and shiverings, succeeded by heat, flushing, perspiration, and other symptoms of slight febrile irritation, recurring like the paroxysms of hectic, occasionally attend. In some patients, deep-seated pains have been felt about the præcordia, and in the chest, loins, or abdomen; and in others a considerable cough has accompanied the complaint, or a tumour and tension of the epigastrium and hypochondria, with tenderness on pressure, and a constipated or irregular state of bowels. But in many cases no febrile appearances have been noticed; and the functions of the intestines are often natural. In a few instances frequent syncope has occurred. When the disease has continued for some time, the patient becomes sallow, or of a dirty complexion; "the conjunctiva is tinged with bile; there is often a foetid odour about the body," and he is much emaciated; and some degree of œdema appears in the lower extremities, which afterwards extends to other parts.

The disease is extremely uncertain in its duration: in some instances it has terminated in a few days; while in others it has continued not only for many months, but even for years. Dr. Duncan related a case to me, when I was preparing my thesis on this

* See a case related by Dolæus, in the *Ephemer. Nat. Cur.* dec. ii. ann. iv. obs. 118, which occurred in a boy, "cujus omne corpus, absque dolore, febre, aut lassitudine prægressâ, subito unâ cum facie, labiis, et lingua, ubi mane absurgeret, numerosissimis maculis lividis et nigerrimis obsitum fuit," &c.—Similar cases are described by Zwingerus, in the *Act. Nat. Cur.* vol. ii. obs. 79: by Werlhoff, in the *Commerc. Liter. Norimberg.* ann. 1735, hebd. 7 & 2: and Biett, in the *Abrégé Pratique des Maladies de la Peau*, of Cazenave and Schedel, p. 465. In all these instances, the eruption was discovered on rising in the morning, having taken place during the night.

subject, which occurred in a boy, who was employed for several years by the players at *golf* to carry their sticks, and whose skin was constantly covered with petechiæ, and exhibited vibices and purple blotches wherever he received the slightest blow. Yet he was, in other respects, in good health. At length a profuse hæmorrhage took place from his lungs, which occasioned his death. When the disease terminates fatally, it is commonly from the copious discharge of blood, either suddenly effused from some important organ, or more slowly from several parts at the same time. A young medical friend of mine was instantaneously destroyed by pulmonary hæmorrhage, while affected with Purpura, in his convalescence from a fever, after he had gone into Lincolnshire to expedite his recovery * : and I have seen three instances of the latter mode of termination ; in all of which there was a constant oozing of blood from the mouth and nostrils, and at the same time considerable discharges of it from the bowels, and from the lungs by coughing ; and in one it was likewise ejected from the stomach by vomiting, for three or four days previous to death. † On the other hand, I lately saw a case of Purpura simplex, in which the petechiæ were confined to the legs, in a feeble woman, about forty years of age, who was suddenly relieved from the eruption and its attendant debility, after a severe catamenial flooding. ‡

The causes of this disease are by no means clearly ascertained, nor its pathology well understood. It

* Several instances of sudden death, in this disease, from the occurrence of profuse hæmorrhage, are mentioned by respectable authors. See Lister, *Exercit. de Scorbuto*, p. 96, &c. — Greg. Horst. lib. v. obs. 17. Two examples (one from pulmonary, and the other from uterine hæmorrhage) were communicated to me by my friend Mr. James Rumsey, of Amersham, one of which occurred in his own family.

† Two of these cases were described in my Report of the Diseases treated at the Dispensary, Carey Street, in the spring of 1810: See *Edin. Med. and Surg. Journal*, vol. vi. p. 374.

‡ See my Report for 1810, *ibid.* p. 124. — See also a case related by Wolff, in the *Act. Acad. Natur. Curios.* vol. iii. obs. 79.

occurs at every period of life, and in both sexes ; but most frequently in women, and in boys before the age of puberty, particularly in those who are of a delicate habit, who live in close and crowded situations, and on poor diet, or are employed in sedentary occupations, and subject to grief and anxiety of mind, fatigue and watching.* It has likewise attacked those who were left in a state of debility by previous acute or chronic diseases. In one of the fatal instances above mentioned, it came on during a severe salivation, which had been accidentally induced by a few grains of Mercury, given, as I was informed, in combination with opium, for the cure of rheumatism. It has sometimes occurred as a sequela of smallpox, and of measles ; and sometimes in the third or fourth week of puerperal confinement.† The disease, however, appears occasionally, and in its severest and fatal form, where none of these circumstances existed : for instance, in young persons living in the country, and previously enjoying good health, with all the necessaries and comforts of life. “ There seems, indeed, in some persons to be a peculiar predisposition to the disease ; depending upon defect of tone in the capillary system. Thence we can easily conceive the reason why it may appear in plethoric persons.”

This circumstance tends greatly to obscure the pathology of the disease. For it not only renders the operation of these alleged causes extremely questionable, but it seems to establish an essential difference in the origin and nature of the disorder, from that of *scurvy* ‡, to which the majority of

* See Dr. Willan's Reports on Dis. in London, p. 90.

† See Joerdens, in Act. Acad. N. Cur. vol. vii. obs. 110. — This is the *Purpura Symptomatica* of Sauvages, class iii. gen. vi. spec. 3.

‡ I mean the true *scurvy*, or rather *sea scurvy*, formerly prevalent among seamen in long voyages, and among people in other situations, when living upon putrid, salted, dried, or otherwise indigestible food, yielding imperfect nutriment. See Lind, Trotter, &c. on the Scurvy, and Vander Mye, de Morbis Bredanis. The symptoms are concisely detailed by Boerhaave in his 1151st aphorism.

writers have contented themselves with referring it. In scurvy, the tenderness of the superficial vessels appears to originate from deficiency of nutriment; and the disease is removed by resorting to wholesome and nutritious food, especially to fresh vegetables and to acids: while in many cases of Purpura, the same diet and medicine have been taken abundantly, without the smallest alleviation of the complaint. In the instance of the boy mentioned by Dr. Duncan, the remedies and regimen which would have infallibly cured the scorbutus, were liberally administered, without affording any relief; and in other cases, above alluded to, where a residence in the country, and the circumstances of the patients, necessarily placed them above all privation in these respects, the disease appeared in its severest degree.

On the other hand, the rapidity of the attack, the acuteness of the pains in the internal cavities, the actual inflammatory symptoms that sometimes supervene, the occasional removal of the disease by spontaneous hæmorrhage, the frequent relief derived from artificial discharges of blood*, and from purging, all tend to excite a suspicion that some local visceral congestion or obstruction is the cause of the symptoms in different instances. This point can only be ascertained by a careful examination of the viscera, after death, in persons who have died with these symptoms. The ancient physicians directly referred some of them, especially the hæmorrhages from the nose, gums, and other parts, to morbid enlargement of the spleen.† In one case, in which an opportunity of dissection was afforded at the Public Dispensary,

* See two cases of Purpura, related by an able and distinguished physician, Dr. Parry of Bath, which were speedily cured by two bleedings from the arm. In both these cases, which occurred in a lady and an officer, the latter accustomed to free living, some degree of feverishness accompanied the symptoms of Purpura; and the blood drawn exhibited a tenacious, contracted coagulum, covered with a thick coat of lymph. See *Edin. Med. and Surg. Journal*, vol. v. p. 7, for Jan. 1809.

† See *Celsus de Med. lib. ii. cap. 7.*

and which occurred in a boy under the inspection of my friend and colleague Dr. Laird, the spleen, which had been distinctly felt during life protruding itself downwards and forwards to near the spine of the ilium, was found enormously large. In another instance, which occurred under my own care, in a boy thirteen years old, the abdominal viscera were found to be sound; but a large morbid growth, consisting of a fleshy tumour, with a hard cartilaginous nucleus, weighing about half a pound, was found in the situation of the thymus gland, firmly attached to the sternum, clavicle, pericardium, and surrounding parts.* Cases not unfrequently occur, in which hepatic obstruction is connected with Purpura. A man, habituated to spirit-drinking, died in about a fortnight from the commencement of an eruption of petechiæ, which was soon followed by profuse and unceasing hæmorrhage from the mouth and nostrils; but I had no opportunity of examining the body. The jaundiced hue of the skin and eyes, however, with the pain in his side, dry cough, and quick wiry pulse, left no doubt of the existence of considerable hepatic congestion. And, lastly, I attended a young woman, about the same time, labouring under the third species of the disease (*P. urticans*), with a sallow complexion, a considerable pain in the abdomen, and constipation, without fever. While she was taking acids and purgatives, which had scarcely acted upon the bowels, the pain on a sudden became extremely acute, the pulse frequent and hard, and the skin hot, with other symptoms denoting inflammation in the bowels, which were immediately relieved by a copious bleeding from the arm, followed by purgatives; after which the sallowness of the skin was gone, and the purple spots soon disappeared.

* This boy, though delicate, had enjoyed a moderate share of health, until ten or twelve days previous to his death, notwithstanding the diminution of the cavity of the thorax, occasioned by this tumour. See the Edin. Journal, vol. vi. just referred to.

“*Purpura hæmorrhagica* may be confounded with some secondary syphilitic eruptions, which are accompanied with large ecchymosed spots; but the other symptoms of these eruptions and their progress point out the distinction.” “This species of *Purpura* is always a threatening disease, but it is seldom fatal if properly treated.”

These facts are not sufficient to afford any general inference, respecting the nature or requisite treatment of *Purpura hæmorrhagica*; on the contrary, they tend to prove, that the general conclusions which are usually deduced, and the simple indications* which are commonly laid down, have been too hastily adopted, and that no rule of practice can be universally applicable in all cases of the disease.

In the slighter degrees of the *Purpura*, occurring in children who are ill fed and nursed, and who reside in close places, where they are little exercised, or in women shut up in similar situations, and debilitated by want of proper food, and by fatigue, watching and anxiety, the use of tonics, with the mineral acids and wine, will doubtless be adequate to the cure of the disease, especially where exercise in the open air can be employed at the same time. † But when it occurs in adults, especially in those already enjoying the benefits of exercise in the air of the country, and who have suffered no privation in respect to diet; or when it appears in persons previously stout or even plethoric; when it is accom-

* I am sorry to be under the necessity of differing from my respected friend and preceptor, on this subject; who would, perhaps, subsequently, have deemed the following statement, respecting the method of cure in the hæmorrhagic *Purpura*, too general. “The mode of treatment for this disease is simple, and may be comprised in a very few words. It is proper to recommend a generous diet, the use of wine, Peruvian Bark, and acids, along with moderate exercise in the open air, and whatever may tend to produce cheerfulness and serenity of mind.” See Reports on the Dis. of London, p. 93, for May 1797.

† In enumerating the remedies, mentioned in the preceding note, Dr. Willan lays the most particular stress upon this point, and adds, that “without air, exercise, and an easy state of mind, the effect of medicines is very uncertain.” On Cutan. Dis. p. 461.

panied with a white and loaded tongue, a quick and somewhat sharp, though small, pulse, occasional chills and heats, and other symptoms of feverishness, however moderate; and if at the same time there are fixed internal pains, a dry cough, and an irregular state of the bowels; — symptoms which may be presumed to indicate the existence of some local congestion;—then the administration of tonic medicines, particularly of wine, Cinchona, and other warmer tonics, will be found inefficacious, if not decidedly injurious. In such cases, free and repeated evacuations of the bowels, by medicines containing some portion of the Submuriate of Mercury, will be found most beneficial. The continuance or repetition of these evacuants must, of course, be regulated by their effects on the symptoms of the complaint, or on the general constitution, and by the appearance of the excretions from the intestines.* “Indeed, the cases in which tonics are admissible in the commencement of the disease are rare; even when symptoms of debility are obvious, purgatives combined with Calomel are the means chiefly to be depended upon. In making this remark, however, it is essentially to distinguish between that debility which is dependent on poor, crude, indigestible diet, and a residence in confined, bad air, and that which is indirect and the result of febrile congestions.” If the pains are severe and fixed, and if the marks of febrile irritation are

* While these sheets were in the press, I received a valuable communication from my friend Dr. Harty, of Dublin, detailing the result of his experience in this obscure disease; and it afforded me great satisfaction to learn, that, after having witnessed the death of a patient, who was treated in the ordinary way, with nutritive diet and tonic medicines, he has been uniformly successful in the management of upwards of a dozen cases, since he relied solely upon the liberal administration of purgatives. He prescribed Calomel with Jalap, in active doses, daily, which appeared to be equally beneficial in the hæmorrhagic, as in the simple Purpura: the hæmorrhage ceased, and the purple extravasations disappeared, after a few doses had been taken.

This document being, in my estimation, too valuable to be lost, I transmitted it to Edinburgh, and it was published in the Medical and Surgical Journal, for April 1813.

considerable, and the spontaneous hæmorrhage not profuse, local or general blood-letting may, doubtless, be employed with great benefit, especially in robust adults; "but, even in such habits, much caution is requisite not to carry it too far." When the disease arises from congestion, and languor of the absorbents, blood-letting may be useful by taking off the load which obstructs the action both of the blood-vessels and the absorbents. It is a well-known fact, that blood-letting promotes absorption; and if Purpura be blood effused into the substance of the cutis, the bleeding, both by promoting absorption and relieving a congestion which implicates the venous capillaries, must be useful in Purpura. But it must be employed with cautious reference to the state of strength of the patient, separated from the temporary debility occasioned by the disease.

"In the majority of cases, in which blood-letting has been requisite, the blood has exhibited the buffy coat: in general there is little or no serum separated.

"When no congestion exists, and the disease appears to be referrible to want of tone in the extreme vessels, Dr. Whitlock Nicol has proposed the use of Oil of Turpentine, and has detailed two cases in which it proved successful.* It has also been successfully given by Dr. Magee of Dublin, in doses of fʒss mixed with fʒss of Castor Oil, and some Cinnamon or Peppermint Water."

When the urgency of the hæmorrhagic tendency has been diminished by these means, the constitution rallies, though not rapidly, with the assistance of the mineral acids, "especially the nitric acid," and the Decoction of Cinchona, or of Cascarella; or with the aid of some preparation of Iron, together with moderate exercise and nutritious diet.

* London Med. Repository, July 1811.

SPECIES 3. *PURPURA urticans*, NETTLE RASH SCURVY.

Syn. *Porphyra simplex* ; *Æ. urticans* (*Good*).

This species (Plate XXIX. of BATEMAN ; Pl. 12. of THOMSON'S ATLAS,) is distinguished by this peculiarity, that it commences in the form of rounded and reddish elevations of the cuticle, resembling wheals, but which are not accompanied, like the wheals of *Urticaria*, by any sensation of tingling or itching. These little tumours gradually dilate, but, within one or two days, they subside to the level of the surrounding cuticle, and at the same time their hue becomes darker, and at length livid. As these spots are not permanent, but appear in succession in different places, they are commonly seen of different hues ; the fresh and elevated ones being of a brighter red, while the level spots exhibit different degrees of lividity, and become brown as they disappear. They are most common on the legs, where they are frequently mixed with *petechiæ* ; but they sometimes appear also on the arms, thighs, breast, &c.

The duration of the complaint is various, from three to five weeks. It usually occurs in summer and autumn ; and attacks those who are liable to fatigue, and live on poor diet : or, on the contrary, delicate young women, who live luxuriously, and take little exercise. Some œdema of the extremities usually accompanies it, and it is occasionally preceded by a stiffness and weight of the limbs.

“ Bleeding and purging are more decidedly useful in this than in the preceding species ; but in general the same rules of treatment are applicable to all of them.”

SPECIES 4. *PURPURA senilis*, SCURVY OF OLD AGE.

I give this appellation to a variety of the complaint (Plate XXX. of BATEMAN ; Pl. 12. of THOMSON'S

ATLAS,) of which I have seen a few cases, occurring only in elderly women. It appears principally along the outside of the fore-arm, in successive dark purple blotches, of an irregular form and various magnitude. Each of these continues from a week to ten or twelve days, when the extravasated blood is absorbed. A constant series of these ecchymoses had appeared in one case during ten years, and in others for a shorter period; but in all, the skin of the arm was left of a brown colour. The health did not appear to suffer; nor did purgatives, blood-letting (which was tried in one case, in consequence of the extraordinary hardness of the pulse), tonics, or any other expedient, appear to exert any influence over the eruption.

SPECIES 5. PURPURA contagiosa, CONTAGIOUS SCURVY.

Syn. Purpura maligna (*Sawv.*).

This species is introduced for the purpose of noticing the eruption of petechiæ, which occasionally accompanies typhoid fevers, where they occur in close situations: but, as these are merely symptomatic, it would be superfluous to dilate upon the subject here. I may observe, in addition to the facts which I formerly communicated to Dr. Willan, respecting the occurrence of petechiæ in patients admitted into the Fever-House*, that such an efflorescence is very rarely seen in that establishment.

Works which may be consulted on Purpura.

ADAIR, Diss. inaug. de Hæmorrhæa Petechiali, 1781.

BATEMAN, Th. Dissert. inaug. Hæmorrhæa Petechiali, Edin. 8vo.

BIETT, Abrégé Pratique des Mal. de la Peau, 8vo. 1828.

BLACKALL (J.) on Dropsies, chap. viii. 3d edit. 1800. 1810.

BREE (R.), Med. and Phys. Journ., Lond. 1809.

COMBE (J. S.), Cases, Edin. Journ., vol. xvii. 1821.

DARWALL (J.), Edin. Journ., vol. xxiii. 1825.

DUNCAN (A.), jun., Edin. Journ., vol. xviii. 1822.

EDINBURGH Med. and Surg. Journal.

* See his Treatise on Cutan. Dis., p. 468 and 469, *note*.

- EYSEL, Dis. de Febre purpuratâ, 1702.
FAIRBAIRN (P.), Edin. Med. Chir. Trans. vol. ii. 1826.
GAIRDNER (E.), Edin. Med. Chir. Trans., vol. i. 1821.
GOLDIE, Cyclopædia of Pract. Med., vol. iii.
HARTY (E.), on Purgatives in Purpura (Edin. Journ. vol. ix.), 1813.
JOHNSTON (G.), Cases, Edin. Journ., vol. xviii. 1822.
 LONDON Med. Repository.
MASSIE (Steph.) de Purpurâ, 8vo. 1762.
MENTZLER, de Venæsect. in Purpurâ abusu, &c. 1744.
NICHOL (Wh.), Edin. Journ., vol. xviii. 1822.
NEUCRANTZ, de Purpurâ liber singularis, 1660.
PARRY (Ch.), Edin. Med. and Surg. Journ., vol. v. 1809.
PLUMBE on Diseases of the Skin, 2d edit. 1827.
RAYER, Traité des Maladies de la Peau, 1827.
STOKER's Pathological Observations, Part I. Dub. 1825.
TATTERSAL (W.) Cases of Petechiæ sine febre, Edin. Med. Com.,
 vol. xx. 8vo. 1795.
YEATS (G. D.), Med. Transactions, vol. v. 1815.

GENUS VI. ERYTHEMA, INFLAMMATORY BLUSH.

Syn. Ερυθρημα (*G.*): Erysipelas (*Celsus, Galen*): Hieropyr (*Vog.*): Erythema (*Sauv.*): Phlogosis erythema (*Cullen*): Caumor erythematum (*Young*): Dartre erythemoïde, Herpes erythemoïdes (*Alibert*): Efflorescence cutanée, (*F.*): Roadvouk (*Dutch*): Rödskailla (*Swed.*): Risculdamento (*Ital.*): Fuego (*Spanish*): die Hautröthe (*Germ.*): *Inflammatory Blush.*

Def. A RED SMOOTH FULNESS OF THE INTEGUMENTS: ACCOMPANIED WITH BURNING PAIN; TERMINATING GENERALLY IN SCALES; OCCASIONALLY, BUT RARELY, IN GANGRENE: NOT CONTAGIOUS.

ERYTHEMA, like Roseola, is commonly symptomatic, and occurs with much variety in its form; yet sometimes, like the same efflorescence, it is the most prominent symptom, and is, therefore, in like manner, liable to be mistaken for the idiopathic eruptive fevers. This term is often erroneously applied to eruptions, which, together with redness, exhibit distinct papular and vesicular elevations*; as,

* The word ερυθρημα, as used every where by Hippocrates, signifies simply redness; and is therefore correctly appropriated to this affection, which differs from Erysipelas, inasmuch as it is a mere rash or efflores-

for example, to the *Eczema* produced by the irritation of mercury.

“ Every part of the body may be attacked by Erythema; and, when it commences in one part, it is liable to extend to others. It runs its course generally in six or eight days; and, in some of the varieties, namely, *nodosum* and *tuberculatum*, it is occasionally accompanied with intermittent fever. This eruption is often *local*, and referrible to local irritations when the skin is delicate; when *general*, to gastric and intestinal irritation: it is more frequently observed in women than in men, and in delicate children. In no instance is it a fatal disease; for in all cases in which death has occurred when erythema has existed, the fatality is to be referred to the febrile affection, to which the erythematic eruption is merely secondary.”

Dr. Willan has described six species of Erythema, which include all the ordinary forms of the efflorescence; but there are, properly speaking, seven species:

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| 1. <i>E. fugax.</i> | 5. <i>E. tuberculatum.</i> |
| 2. <i>E. læve.</i> | 6. <i>E. nodosum.</i> |
| 3. <i>E. marginatum.</i> | 7. <i>E. intertrigo.</i> |
| 4. <i>E. papulatum.</i> | |

cence, and is not accompanied by any swelling, vesication, or regular fever. — Modern authors have not agreed in their distinctions between these two terms. Dr. Cullen applies the word *Erythema* to a slight affection of the skin, appearing without fever, or attended by a secondary fever of irritation; and *Erysipelas*, to an affection of the skin, when it is the result, or is symptomatic of fever; making no distinction as to the termination in bullæ, &c. See his Nosol. Meth. gen. vii. spec. 2.; and First Lines, § 274. — Prof. Callisen deems Erythema only a lesser degree of Erysipelas. See his Systema Chirurg. Hodiern. § 485.

Mr. Travers considers Erythema and Erysipelas “ modes of inflammation with inadequate power to carry them on to a termination. Thus they are deficient in the adhesive state; they are incapable of a healthy suppuration; and their imperfect effusion or suppuration is at the expense of the life of the part.” See his vol. on Constitutional Irritations, p. 220. However we might in part admit this reasoning in some of the species of Erysipelas, it certainly does not apply in Erythema. T.

In some of these, as appears from their titles, the surface is more or less elevated during the course of the disease, approximating to the papular or tubercular tumours; but these elevations are obscurely formed, and soon subside, leaving the redness undiminished.

SPECIES 1. ERYTHEMA *fugax*, FUGACIOUS INFLAMMATORY BLUSH.

Syn. L'Erythème symptomatique (*Rayer*).

This species consists of red patches, of an irregular form, and short duration, resembling the redness produced from pressure. These patches appear successively on the arms, neck, breast, and face, in various febrile diseases, and in bilious diarrhoea, generally denoting, as Hippocrates and the ancients have observed, a tedious and dangerous disease. They sometimes occur in chronic affections, especially "bilious diarrhoea, and other affections" in which the primæ viæ are deranged; as in dyspepsia, hysteria, hemicrania, &c.

SPECIES 2. ERYTHEMA *laeve*, SMOOTH INFLAMMATORY BLUSH.

Syn. Erythema œdematosum (*Good*): L'Erythème idiopathique (*Rayer*): Œdematous inflammation (*J. Hunter*).

This species exhibits an uniformly smooth, shining surface, and chiefly appears on the lower extremities, in confluent patches, and is generally accompanied by anasarca. It affects young persons, who are sedentary, with slight fever, and terminates gradually, after an uncertain period, in extensive desquamation, as soon as the anasarca has disappeared. Exercise, with diuretics and corroborants, contributes to shorten its duration in this class of patients. It occurs also in elderly persons, labouring under Anasarca (especially in those accustomed to excessive drinking), and is liable to terminate in gangrenous ulcers. Indeed,

under whatever circumstances Anasarca occurs, so as to stretch the skin greatly, this Erythema is liable to be produced : it is often chequered with patches and streaks of a dark red or purple hue. Relief is afforded by the horizontal posture of the limbs, by the internal use of diuretics and bark, and also by weak spirituous lotions, or those formed with Solution of Acetate of Ammonia and Camphor Mixture, or of diluted Acetate of Lead, applied to the surface.

This species of Erythema sometimes occurs, without œdema, when the bowels have been much disordered ; and, occasionally, in women, at the menstrual periods.

SPECIES 3. *ERYTHEMA marginatum*, MARGINATED INFLAMMATORY BLUSH.

(Plate XXXII. fig. 2. of BATEMAN ; Pl. 13. of THOMSON'S ATLAS.) The eruption in this species occurs in patches, which are bounded on one side by a hard, elevated, tortuous, red border, in some places obscurely papulated ; but the redness has no regular boundary on the open side. The patches appear on the extremities and loins in old people, and remain for an uncertain time, without producing any irritation in the skin. They are connected with some internal disorder, a small quick pulse, anorexia, pain of the limbs, and great depression ; and their occurrence is to be deemed unfavourable. Diaphoretics, gentle purgatives, followed by the mineral acids and light diet, constitute the treatment.

SPECIES 4. *ERYTHEMA papulatum*, PAPULATED INFLAMMATORY BLUSH.

(Plate XXXI. fig. 1. of BATEMAN ; Pl. 13. of THOMSON'S ATLAS.) This rash occurs chiefly on the arms, neck, and breast, in extensive irregular patches, " frequently slightly elevated above the unaffected skin," of a bright red hue, presenting not an inelegant painted appearance. For a day or

two, before the colour becomes vivid, the surface is rough or imperfectly papulated. The redness afterwards continues for about a fortnight; and, as the eruption declines, it assumes a blueish or pale purple hue, especially in the central parts of the patches. "It is generally attended, during the height of the eruption, with a sensation of tingling, which is much increased at night; and is sometimes followed, as the patches change in colour, by a sensation of soreness." I have seen this eruption attended with great disorder of the constitution, similar to that of the former species; especially with a frequent small pulse, anorexia, watchfulness, and extreme depression of strength and spirits, and with acute pains and great tenderness of the limbs: but the general disorder is often trifling.* Light diet, with diaphoretics, and the mineral acids, and an attention to the state of the bowels, comprise all that is necessary in the treatment of this disorder. "To allay the uneasy tingling, and secure rest at night, combinations of Tartar emetic, or of James's Powder and Opium, will be found useful."

SPECIES 5. *ERYTHEMA tuberculatum*, TUBERCULATED INFLAMMATORY BLUSH.

(Plate XXXI. fig. 2. of BATEMAN; Pl. 13. of THOMSON'S ATLAS.) This species resembles the last in the large irregular patches of red efflorescence which it exhibits; but they are small, slightly-elevated tumours interspersed through the patches, subsiding in about a week and leaving the Erythema, which becomes livid and disappears in about a week more. It commences with fever, and is accompanied with great languor, irritability, and restlessness, and succeeded by hectic. In the only three cases of this Erythema which had occurred to Dr. Willan, the medicines employed did not appear to alleviate the

* See Report of the Public Dispensary, Edin. Med. and Surg. Journ. for Jan. 1812.

symptoms, or to prevent the subsequent hectic. I have not seen any instance of it.

SPECIES 6. *ERYTHEMA nodosum*, NODOSE INFLAMMATORY BLUSH.

(Plate XXXII. fig. 1. of BATEMAN; Pl. 13. of THOMSON'S ATLAS.) This species is a more common and milder complaint: it seems to affect females chiefly: "but Dr. Merriman says, that he has 'frequently witnessed it in children of both sexes *:' and Mr. Plumbe has also seen it in children.† I have seen it several times in girls under ten years of age, and once only in a boy:" it occurs on the fore part of the legs. It is preceded by slight febrile symptoms for a week or more, which generally abate when the Erythema appears. It shows itself in large oval patches, the long diameter of which is parallel with the tibia, and which slowly rise into hard and painful protuberances, and as regularly soften and subside, in the course of nine or ten days; the red colour turning blueish on the eighth or ninth day, as if the leg had been bruised. It has always gone through its course mildly, under the use of small doses of Calomel and mild laxatives, followed by the mineral acids, Decoction of Cinchona Bark, and other tonics. When the pain is severe, an opiate, combined with James's Powder and Calomel, is necessary. The best local application is a lotion compounded of f_{3x} of Alcohol, and f_{3v} of Rose Water.

SPECIES 7. *ERYTHEMA intertrigo*, FRET OR EROSION OF THE SKIN.

Syn. Erythema intertrigo (*Saw.*): Intertrigo (*Linn. Vog.*): Erythema ab acri inquilino (*Cull.*): Maculæ volaticæ (*Auct. var.*): Kereh (*Arab.*):

* Underwood on the Diseases of Children, 8th edit. p. 176.

† Plumbe on Diseases of the Skin, 2d edit. p. 449.

Erat (*German*): Ecorchure, Rougeurs des nouveaux (*F.*) *Fret*.

Under the head of Erythema, Dr. Willan has made mention of that form of *Intertrigo* which is produced in some persons, especially those of sanguine temperament and corpulent habit, by the attrition of contiguous surfaces.* It most frequently occurs beneath the breasts, round the axillæ, in the groin, and at the upper part of the thighs. "This species of *Intertrigo* is very common in fat children, occurring in all the folds of the skin, and causing an acrimonious discharge, which excoriates the surface beyond the affected parts, if attention to cleanliness be neglected." Sometimes it is accompanied by a glairy foetid secretion; and sometimes the surface is dry, and the redness terminates in a scurfy or scaly exfoliation. An erythematous appearance, analogous to the *Intertrigo*, is occasioned by acrimonious discharges, as by those of fluor albus, dysentery, gonorrhœa, &c. and by the irritation of the urine and alvine discharges, in infants, when a sufficient attention is not paid to the proper changes of their linen.

The heat and uneasiness attendant on this complaint are allayed by frequent tepid ablution, which removes the acrid secretion, where it occurs, and tends to prevent excoriation. If this take place, any simple ointment, or, which is preferable, some mild absorbent powder, such as that of Calamine or of Cerussa, will be applied with relief. "When the discharge is foetid, the odour is almost immediately destroyed, and the inflammation rapidly allayed, by frequently bathing the affected parts with a lotion composed of six fluid drachms or a fluid ounce of the Chloro-sodaic solution and five fluid ounces of

* Sauvages includes this variety of *Intertrigo*, and the chafing and inflammation produced by riding on horseback, tight shoes, the use of tools, and even that of bedridden persons, under Erythema, denominating the former Erythema *intertrigo* (spec. 5), and the latter E. *paratrimma* (spec. 6.)

Water." When there is much irritability, a lotion composed of ten grains of Oxymuriate of Mercury, and six fluid ounces of Lime Water, will be found serviceable.

Books which may be consulted on Erythema.

ALIBERT, sur les Maladies de la Peau.

BIETT, Abrégé Pratique des Mal. de la Peau, 8vo. 1825.

Joy, Cyclopædia of Prac. Med., vol. ii. 8vo. 1832.

LECOURT-CHANTILLY, sur l'Erythème et l'Erysipèle, 4to. 1804.

PLUMBE on Diseases of the Skin, 2d edit. 1827.

RAYER, Traité des Maladies de la Peau, 1826.

GENUS VII. ERYSIPELAS.*

Syn. Ignis sacer (*Celsus*): Febris erysipelatosæ (*Sydenham*): Febris erysipelacea (*Hoffm. Vog.*): Emphlysis Erysipelas (*Good*): Erysipelas (*Auct. var.*): Rosa, Ignis Sancti Antonii (*Auct. var.*): Eresipèle, la Rose (*F.*): Rose, Rothlauf (*Germ.*): Roos, St. Anthony's vuur, (*Dutch*): Rosen (*Dan. Swed.*): Roza (*Polon.*): Risipola, Fuoco di S. Antonio (*Ital.*): Erisipela, Ros (*Span.*) Hemnet (*Arab.*): Akki (*Tam. Tel.*): Shirjah (*Duk.*): Pittā vichārchika (*Sans.*): Soorkh (*Pers.*): Kaszalapani (*Malayalie*): •*The Rose, St. Anthony's Fire.*

Def. A FEBRILE DISEASE, IN WHICH SOME PART OF THE BODY IS AFFECTED EXTERNALLY WITH HEAT, REDNESS, SWELLING, AND SOMETIMES VESICATIONS.

The tumour in this affection is soft, diffuse, and irregularly circumscribed, and not accompanied by

* In the former editions of this work, Erysipelas is ranked among Bullæ. It may, in my opinion, with more propriety be regarded as one of the Exanthemata; I have therefore removed it to this place. Vesications certainly occur in severe and aggravated cases of the disease; but, in the great majority of instances, this symptom is absent: and unless it be an invariable attendant of the disease, there is more propriety in placing Erysipelas in its present situation, than where it formerly stood in this work. T.

throbbing or acute pain, nor terminating in true suppuration.

The last-mentioned circumstances distinguish the tumour of Erysipelas from that of Phlegmon * ; and the presence of tumour, together with vesication, distinguishes the disease from Erythema. The disappearing of the redness on pressure, and its immediate return when the pressure is removed, are commonly mentioned among the characteristics of Erysipelas, by medical writers, from Galen downwards. † This phænomenon, however, belongs to Erysipelas in common with several of the Exanthemata ; as with the efflorescence in Scarlatina, in some varieties of Roseola, and in Erythema. “From Phlegmon it is distinguished by the sloughing of the cellular tissue in its advanced stage, in severe cases which only are likely to be confounded with Phlegmon.” Erysipelas is often a contagious disease. It more frequently attacks women than men.

“Mr. Lawrence, in a paper on Erysipelas ‡, conceives that this disease in every instance is a modification of inflammation, and that its various forms depend upon accidental circumstances. This doctrine appears to be evidently erroneous. It is indeed highly probable that Erysipelas arising from wounds or other injuries is simple inflammation, modified by the structure which it has attacked ; but that there is a distinct febrile affection, of which the eruption termed Erysipelas is a characteristic symptom, as much as the eruption in Scarlatina, or in any other of the Exanthemata. The eruption being preceded by the fever, the disease running a tolerably regular

* See Galen. Meth. Med. cap. xiv. and Comment. in aph. 20. lib. iv. ; also Aëtius, tetrab. iv. serm. ii. cap. 59.

† Galen speaks of Erysipelas *phlegmonodes* and *œdematodes*, in which he has been followed by Forest, Obs. Chirurg. lib. ii. 1. 3. & 4. ; by Plater, De Superfic. Corp. Dolore, cap. 17. ; and Frank, De Curand. Hom. Morbis, lib. iii. — Mr. Pearson divides Erysipelas into three species, adding the *gangrenous* to the two just mentioned. See his Principles of Surgery, chap. x.

‡ Med. Chirurg. Trans. vol. xiv.

course, its being occasionally contagious, and never by any treatment being cut short, are very strong evidences in favour of this opinion."

There are four species of Erysipelas :

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| 1. <i>E. phlegmonodes.</i> | 3. <i>E. gangrænosum.</i> |
| 2. <i>E. œdematodes.</i> | 4. <i>E. erraticum.</i> |

SPECIES 1. ERYSIPELAS *phlegmonodes*, PHLEGMONOUS ERYSIPELAS.*

It is scarcely necessary to enter into a minute description of the well-known appearance of acute Erysipelas.† This form of it most frequently occurs in the face, the head, the neck, and sometimes the chest, affecting usually one side of it only; sometimes, "indeed most frequently," it seizes one of the extremities; and in both cases it is ushered in by a smart feverish attack, "with great irritability of the stomach, often with delirium, and a tendency to coma. The colour of the eruption is more of scarlet than of the tint of the rose, as in the other species; and the pain and burning heat and tingling in the part are exceedingly distressing. The swelling generally appears on the second night, or the third day of the fever, "and extends to the cranium from the face: the cutis only, however, is affected, and in the line of its progress is elevated, and shews a well-defined edge, the diseased parts appearing upon the healthy almost as embossed work." The vesications, when they arise, appear on the fourth and fifth, and break or subside on the fifth or sixth day, when the redness changes to a yellowish hue, and the swelling and fever begin to diminish;—and on the eighth day both disappear: on the tenth, the new cuticle is commonly left exposed, the old one having cracked

* Mr. Arnott (Med. & Phys. Journ. vol. lvii. p. 210.) objects to this name, as being "unnecessary, inaccurate, and applied to dissimilar morbid conditions." See Mr. Earle's paper in the same volume.

† Dr. Cullen has given an excellent history of the disease. First Lines, § 1696.

and separated : the brownish or dark scab, which had formed where the fluid of the vesications had been discharged, having fallen off.—The progress of the disease, however, is more rapid, and its duration shorter, in young and sanguine habits, than in those more advanced in life* : in the former, the tumefaction is sometimes fully formed on the second day, and the whole terminates on the sixth or seventh ; while in the latter, it may be protracted to the tenth or twelfth, and the desquamation may not be completed before the fourteenth day. “As the redness declines, the swelling gradually subsides, and the skin assumes a yellow tinge: this is the usual progress of the attack when it ends in resolution.” The vesications, when these appear, are often succeeded by a profuse discharge of acrimonious lymph for several days, so that scabs do not form. Suppuration very rarely occurs in this species of Erysipelas, especially when it affects the face. It rarely terminates in death. “It may terminate in gangrene, in which disorganisation of the cellular substance takes place, and it comes away in shreds soaked in pus ; the integuments becoming livid and losing their vitality. When the patient survives, an agglutination of skin, fascia, and muscle takes place, and the motions of the parts are lost, or seriously impaired.

SPECIES 2. ERYSIPELAS *œdematodes*, EDEMATOSE ERYSIPELAS.

In this species, which is less severe in its attack, the tumour is more gradual in its rise and extension, is of a paler red, or of a yellowish brown colour, and is accompanied by less heat and local distress ; its surface is smooth and shining ; and if it be strongly pressed with the finger, a slight pit remains for a short time.† “The inflammation is subacute, and the

* Quo vehementius malum, eo etiam gravius est, sed brevius. Lorry de Morb. Cutan. 4to. p. 192.

† Mr. Pearson observes, that “the part affected is almost wholly free from tension, and gives the sensation of an *œdematose* or *emphysematose*

swelling pits, as in ordinary œdema." Vesications, which are smaller, less elevated, and more numerous than those which occasionally appear in the former species, rise on the third or fourth day from the commencement of the swelling; and are succeeded, in two or three days, by thin, dark-coloured scabs, giving an appearance not unlike the confluent smallpox, from the edges of which a clear lymph exudes. The whole face is much enlarged, so that the form of the features is scarcely recognised, and the appearance is not unaptly compared by Dr. Willan to that of a bladder distended with water. "This species is often accompanied with an affection of the throat, evidently erysipelatous. The symptoms are a red blush over the velum palatum and uvula, slight tumefaction, and considerable pain on deglutition. After a few days, excoriation and superficial ulceration sometimes extend to the larynx, affecting speech and respiration; sometimes to the pharynx and œsophagus."

Edematose Erysipelas is attended with considerable danger when it affects the face, as above described; for the disorder of the functions increases with the advancement of the external disease. Vomiting, rigors, and delirium, followed by coma, take place about the height of the disorder, and often terminate fatally on the seventh or eighth day: "there is great depression of the muscular strength; the pulse is feeble and quick, and the tongue dry, with a brown streak in the centre:" while in other cases, the symptoms continue undiminished, and death occurs at a later period; or a slow and tedious convalescence ensues.

This form of Erysipelas most commonly affects

state, except that there is no crepitation." He compares the sensation, on pressing a part in which a considerable formation of pus has taken place in Erysipelas, "to that which is excited by a quagmire or morass." Loc. cit.

persons of debilitated or impaired constitution, dropsical patients, and those who have long been subject to other chronic maladies, or live in habitual intemperance. It is not attended with danger, however, when it affects one of the extremities ; unless symptomatic of a punctured wound in a bad state of the habit. In some unfavourable cases matter is formed, which is apt to make its way through the cellular substance, producing irregular sinuses between the muscles, which it often materially injures, and prolonging the sufferings of the patient for many weeks. " In some situations, namely, on the scrotum or the lower extremities in dropsical patients, a cessation of pain sometimes suddenly takes place, the colour becomes livid, and gangrene is apt to supervene."

SPECIES 3. *ERYSIPELAS gangrænosum*, GANGRENOUS ERYSIPELAS.

This species commences sometimes like the one, and sometimes like the other, of the foregoing species ; and most commonly occurs in the face, neck, or shoulders. " It is not improbable that it is merely an increased degree of the first species." It is accompanied with symptoms of low fever, and with delirium, which is soon followed by coma, which remains through the subsequent course of the disease. The colour of the affected part is a dark red ; and scattered phlyctænæ, with a livid base, appear upon the surface, and frequently run into gangrenous ulcerations. Even when it terminates favourably, suppuration and gangrene of the muscles, tendons, and cellular substance often take place, producing little caverns and sinuses, which contain an ill-conditioned pus, together with sloughs of the mortified parts, which are ultimately evacuated from the ulcers. It is always a tedious and precarious disease, and irregular in the period of its termination.

A peculiar variety of gangrenous Erysipelas occasionally occurs in infants, a few days after birth,

especially in lying-in hospitals*, and is often fatal. Sometimes, indeed, infants have been born with livid patches, vesications, and even gangrene already advanced.† “In such young patients” it most frequently commences about the umbilicus or the genitals, and extends upwards, or downwards, affecting the parts which it reaches with moderate swelling, and slight hardness‡; the skin puts on a dark-red colour, and vesications with livid bases break out terminating in sphacelus, which, if the child be not speedily cut off, nearly destroys some of the fingers or toes, or even the genitals. In the milder cases, when the extremities alone are affected, suppurations take place rapidly about the joints of the hands and feet. The complaint, however, often terminates favourably in ten or twelve days.

SPECIES 4. ERYSIPELAS *erraticum*, WANDERING ERYSIPELAS.

In this species the morbid patches appear, one after another, on different parts of the body; in some cases, those which appeared first remain till the whole eruption be completed; in others, the first patches decline as fresh ones appear. Sometimes the disease thus travels progressively from the face downwards to the extremities.§ Sometimes it suddenly leaves one part, and appears at another. It

* See Underwood on the Diseases of Children, vol. i. p. 31. (5th edit.)—and an ample account of it by Dr. Garthshore, in the Med. Communications, vol. ii. art. v. (1790)—with some references.

† See a case related by Dr. Bromfield, in the same vol., art. iv.

‡ Umbilicalem regionem in infantibus frequentius infestat, ac inde per abdomen spargitur, cum pathematibus, funesto ut plurimum eventu.—Hoff. de Morb. Infantum, cap. 15. T.

§ Mr. Pearson mentions this progression of the disease as belonging to the Erysipelas œdematodes; and adds, that each renewed accession of the complaint was less and less severe, as it receded to a greater distance from the part first affected. § 308. See also Frank, lib. iii. § 281.

Ita à facie in genitalia sæpe ruit Erysipelas, quod jam intellexerat Hippocrates, ab aurium posticâ parte ad articulos fluxisse vidi, ab his in oculos. Lorry de Morb. Cutan. 4to. p. 193. T.

commonly terminates favourably, however, in a week or ten days.*

The exciting causes of Erysipelas are not always obvious : but it is commonly attributed to the action of cold or damp air, after being heated †, or to exposure to a strong heat, whether from the direct rays of the sun or from a fire ; to intemperance, or to violent emotions of the mind, especially anger and grief. “ Some practitioners refer it, in the majority of cases, to a superabundant acid in the blood, arising from acid or acidifiable diet, such as raw vegetables, too much fruit, sweets, &c. ; and it has even been stated that the serum in the vesicles is of an acid nature, which can be detected by tests. “ There can be no doubt that it is frequently symptomatic of gastro-enteric irritation ; and in such as are liable to derangements of the digestive organs, there appears to be a peculiar predisposition to the disease. Women at the period of the cessation of the menses are liable to attacks of it, accompanied with gastric symptoms. Erysipelas is more prevalent in spring and autumn than at the other periods of the year : it occasionally appears as an epidemic.” Erysipelas is likewise symptomatic of wounds and punctures, the local application of poisons, the stings of insects, &c. ‡ “ This is particularly the case in slight injuries of the scalp ; and not unfrequently terminates fatally,” especially when the periosteum is injured. “ It is

* ‘ It has been reasonably suggested by Mr. Arnott, that the term Erysipelas is improperly implied to aponeurotic inflammation, in which the skin is raised and becomes puffy, and often ends in suppuration. Many cases of what is regarded as Erysipelas Phlegmonodes are of this description.’ T.

† *Virum novi militarem qui nunquam aëris uvidi humiditati exponitur per horam unam aut alteram, quin illic corripitur erysipelate.* Lorry de Morb. Cutan. 4to. p. 196. †.

‡ An erysipelalous affection, which has even proved fatal, has occasionally come on two or three days after inoculation, both variolous and vaccine, in children of irritable habits. See some cases in the *Med. and Phys. Journal* for 1801.

more prevalent in spring and autumn, but rarely appears in winter."

It has been the subject of some discussion, whether Erysipelas be not sometimes propagated by contagion and infection. The disease has been noticed, in several hospitals, to prevail in certain wards, among patients admitted with different complaints; but has seldom been known to spread in private houses. Dr. Wells, indeed, has collected several examples of the apparent communication of Erysipelas by contagion, which occurred in private families*: "and instances recorded by Dr. Stevenson, Dr. Gibson, Mr. Lawrence, and others, leave no doubt on this head. Dr. Stevenson, in particular, met with many instances of it in private practice; and mentions one case in which a person who was attacked while attending an erysipelatous patient carried the disease home to her family, all the members of which were successively seized with it, and the mother died.† In the North London Hospital, in March, 1835, the disease, which accidentally occurred after an operation, spread through the ward, and even attacked a patient in an adjoining ward." But such cases, "in private families," are, at all events, extremely rare, and perhaps never happen in well-ventilated and cleanly houses. From the Royal Infirmary, at Edinburgh, this disease, like the puerperal fever, was banished by ventilation, whitewashing, and other means of purification; and it has seldom occurred in any hospital of late years, since a better system has been adopted in these respects. Other diseases, not infectious in themselves, appear to become united with typhus, or contagious fever, under similar circumstances, and thus to be propagated in their double form; the dysentery‡, for example, the peritonitis of women in

* See Transact. of a Soc. for the Improvement of Med. and Chirurg. Knowledge, vol. ii. art. xvii. (1800.)

† Trans. of Med. Chir. Soc. of Edin. vol. ii.

‡ See Dr. Harty's Observations on Dysentery.

childbed, ulcerated sore-throat, &c. * The simple phlegmonous Erysipelas, at all events, was never seen to spread like an infectious disease. "Persons who have once had the disease are very liable to a repetition of it. What, it may be asked, is the temperament which predisposes to it? Is it simple increased irritability? The solution of this question would throw great light upon the pathology of the disease."

The method of treatment must necessarily be widely different in the phlegmonous, from that which the other forms of the disease demand. "It also requires to be varied according to the age, temperament, and habit of the patient, and, not less so, according to the nature of any epidemic fever prevailing at the time. Sometimes a strict depleting plan is requisite, whilst at other times this would not only be indiscreet but highly injurious." In the ordinary cases of this species of Erysipelas, the principal plan of cure consists in the administration of moderate purgatives, with a light vegetable diet, and in enjoying repose of body and mind, and a cool apartment. "M. Reil and M. Retz strongly recommend emetics in the commencement of Erysipelas. Calomel, in full doses, is always beneficial in the early stage of the disease. Saline and other diaphoretic medicines may be employed, as auxiliaries of secondary importance; as, for instance, the Liquor Ammoniaë Acetatis, Tartarised Antimony, and similar sudorifics. Colchicum has been advantageously used in the two first species of the disease." Blood-letting, which has been much recommended as the principal remedy for the acute Erysipelas, "even of the phlegmonous kind," is seldom requisite, "unless the face or head be the part

* In the case of Mr. Newly, who died of a disease closely resembling Erysipelas œdematodes, caused by a wound received in dissection, Mr. Travers states, that besides the nurse, who took the disease and died, another woman, who merely assisted in the room, was attacked, but recovered. Travers on Constitutional Irritation, p. 289. T.

attacked, in which case the abstraction of blood should be free; and the general bleeding followed by cupping or leeches. In aged persons the bleeding should be altogether local: and even when this is taking place, the system should be supported by light cordials; and the utmost care taken to prevent exhaustion of the system. When the disease supervenes convalescence from other diseases, the best mode of abstracting blood is by punctures from the inflamed surface, and promoting the flow of the blood by poultices or fomentations." Unless there is a considerable tendency to delirium or coma, general bleeding cannot be repeated with advantage, at least in London, and other large towns.* Local bleeding and blistering may be substituted in such cases. It is usual to forbid leeches to be applied upon, or very near the diseased surface; "but although the bites of leeches are, in some states of the habit, followed by Erysipelas, yet they do no harm when applied to the inflamed surface in this disease." The administration of Cinchona, Sulphate of Quinia, and Opium, in this form of the complaint, is certainly unnecessary, and appears to be of very equivocal safety, notwithstanding the authority upon which it has been recommended. "In general, however, some form of tonic is requisite after purging: the best is a light Infusion of Cascarella Bark, so combined with Carbonate of Soda as to be taken in a state of effervescence. When wine or spirits have been indulged in, they should be allowed, under due restraint.† Under the impression of a prevailing acidity, Carbonate of Ammonia has been extolled as a remedy in this affection. It is probable that the benefit which results from it, depends more upon its power over the nervous system, than in its chemical union with the acid of the stomach."

* See Pearson's Principles of Surgery, § 320. — Bromfield's Chir. Obs. vol. i. p. 108.; — also Prof. Callisen, Syst. Hodiern. § 491.

† See Sir A. Cooper's Surgical Lectures, vol. i. p. 249.

In the Erysipelas *œdematodes*, and *erraticum*, the Cinchona or Quinia and Opium are highly useful, in accelerating the decline of the disease, and relieving irritation, when the active symptoms of the first three or four days have been subdued by purgatives and diaphoretics; or, if the functions of the sensorium were considerably disordered, by a blister between the shoulders, or a topical bleeding in the same part. The strength should be supported, during the decline of the complaint, by a more cordial regimen, with a view to obviate the tendency to gangrene: "and in such cases the allowance of wine should be liberal; and, indeed, solely regulated by its effects on the pulse."

In the Erysipelas *gangrænosum**, the Cinchona Bark is necessary, in considerable doses; "but Sulphate of Quinia is preferable. It may be given to adults in two-grain doses every three hours; and in Erysipelas *infantum*, which is a variety of this species, it is the medicine chiefly to be relied upon." Opium also, Camphor, the mineral acids, Wine, Wine-whey, and the general regimen adapted to gangrenous affections occurring under other circumstances, must be freely employed. The formation of sinuses, the separation of sphacelated parts, &c. will require surgical attention for some time.

With respect to external applications in the early stages of Erysipelas, experience seems to have decided that they are generally unnecessary, if not prejudicial.† "Puncturing or scarifying the skin with the point or the shoulder of a lancet has been found highly beneficial. In E. *phlegmonoides*, these incisions should be about an inch in length, and carried completely through the cutis vera; after which, fomentations should be applied over the incisions. This practice, however, is less frequently necessary than

* "In tenellis infantibus observatum fuit Erysipelas à causa abscondita, sæpissime lethali, nisi corticis usu occurratur malo." Callisen, p. 493. — See also Underwood, and Garthshore, before quoted.

† Mr. Pearson, § 331.

“ Mr. Copland Hutchison, who introduced the practice into this country, and” some other modern surgeons would lead us to believe.* It is useful in that state of the disease in which the inflammation runs so high as to threaten destruction to the subcutaneous structure. “ The employment of incisions is rarely required, except in the phlegmonous form of the disease : the operation, especially in elderly patients, requires to be done with caution, as fatal hæmorrhages have followed these incisions.” One advantage arising from incisions is the free exit which they afford to pus, when cellular suppuration occurs. The application of powdery substances has commonly, according to my own observation, augmented the heat and irritation in the commencement ; and afterwards, when the fluid of the vesications oozes out, such substances produce additional irritation, by forming, with the concreting fluid, hard crusts upon the tender surface.† In order to allay the irritation produced by the acrid discharge from the broken vesications, Dr. Willan recommends us to foment or wash the parts affected, from time to time, with milk, bran and water, thin gruel, or a decoction of elder flowers and poppy heads. In the early state of the inflammation, when the local heat and redness are great, moderate tepid washing, or the application of a cool but slightly-stimulant lotion, such as the diluted *Liquor Ammoniaë Acetatis*, has appeared to me to afford considerable relief. “ Compresses dipped in Camphorated Spirits of Wine in the first stages are beneficial. The following lotion has generally proved useful :

R̄ *Plumbi Acetatis* gr. xij,
Aquæ Rosæ fʒv,
Aceti Distillati fʒiij,
Spiritus Vini rectificati fʒv. M.

* See *Med. Chirurg. Trans.* vol. xiv.

† “ *Externa remediare solventia, emollientia, adstringentia, vel calida, vel frigida, — uti quoque pulveres varii, parum vel nihil in erysipelate prosunt ; nec omnis noxæ suspicionem, experientiâ teste, effugiunt.*” — Callisen.

Dr. Merriman recommends fomentations made of extract of Poppies diffused in warm water, and poultices made of crumb of bread and the same fluid.* When gangrene supervenes, Port wine poultices or the Nitrous acid lotion, in the proportion of f3j of the acid to Oij of water, are the best applications : or the Chloro-Sodaic Solution of Labarraque, diluted with five parts of water. The best local application, in ordinary cases, is that recommended by Mr. Higginbotham, on his own experience,—the lunar caustic. He desires that the part be well washed with warm soap and water, and then a long stick of caustic applied to the inflamed surface : but not sufficiently strong to abrade the surface. “ It arrests almost instantly the spreading of the inflammation ; its influence, besides, extends beyond the surface, and checks the tendency to cellular inflammation, the symptom to be most guarded against in Erysipelas.” †

“ No disease is so liable to return as Erysipelas. Tissot recommends the following as the best prophylactic plan : The patient must carefully avoid the use of milk, cream, all rich and viscid food, baked and strong meats, aromatics, strong wines, a sedentary life, mental irritations : and live on light, cooling vegetable food ; and drink water with a little weak wine.”

The *zona*, *zoster*, or *shingles*, is considered as a variety of Erysipelas by the nosologists, as well as by several practical writers : but it is invariably an eruption of vesicles, and possesses all the other characteristics of Herpes. See ord. vi. gen. 3.

Sauvages, under the head of Erysipelas *pestilens*, (spec. 5.) arranges the fatal epidemic disease, which prevailed extensively in the early and dark ages, as the sequel of war and famine, and which has received a variety of denominations ; such as *ignis sacer*, *ignis*

* See Merriman's edit. of Underwood, svo. p. 127.

† Higginbotham on the Use of Nitrate of Silver in the Cure of Inflammation, &c.

Stⁱ Anthonii, mal des ardens, ergot, Kriebel krankheit, die Feverflecke, &c. &c. according to its various modifications and degrees of severity, or according to the supposed cause of it.* The erysipelatous redness, however, followed by the dry gangrene, which often destroyed the limbs joint by joint, was only one of the forms or stages of that disease; as the contracted and palsied state of the limbs, to which the ancients gave the name of *scelotyrbe*†, constituted another. Instead of originating from eating rye affected with the *ergot*, as was supposed in France‡; or barley with which the *raphanus* was mixed, as was imagined in Sweden§; the disease was, doubtless, the result of deficient nourishment, — a severe land-scurvy, which was a great scourge of the ancient world, and often denominated *pestilence*. || — The name of St. Anthony seems to have been first associated with an epidemic disease of this kind, which prevailed in Dauphiné about the end of the twelfth century. An abbey, dedicated to that saint, had recently been

* Sagar has included the varieties of this disease under the genus *Necrosis*, of which he thus details the symptoms: — “Est partis mors lenta, sine prævio tumore, mollitie, et dissolutione fœtidâ, cum dolore ardente ordinario et stupore, quæ sequitur exsiccatio partis, induratio, nigredo, et mumia: differt à gangrenâ in eo, quod lentius procedat, cum dolore rodente et stupore, et in mumiam abeat; gangrena contra mollescat, phlyctænas elevat, putrescat, fœteat, atque cito decurrat.” *Syst. Morbor.* cl. iii. ord. vii. gen. 42. He describes five species; and of the fourth, *epidémica*, he says, “Apud Flandros regnavit hæc Necrosis 1749-50. spasmî artuum cum doloribus vagis; post 2 vel 3 septimanas stupor, fremitus obscurus, artus cum frigore glaciali, contracturis, et anæsthesiâ; tandem livor partis, nigredo, flavedo, phlyctænae, et siccissima mumia.”

† See *Plin. Nat. Hist.* lib. xxv. cap. 3.

‡ See an able history of the Ergot, in the *Mém. de la Soc. Roy. de Médecine de Paris*, tom. i. p. 260. by MM. Jussieu, Paulet, Saillant, and the Abbé Tessier. — See also the *Philos. Trans.* vol. lv. p. 118. An interesting account of the Kriebel krankheit, which was endemic in Hæssia and Westphalia during a season of dearth in 1597, is preserved by Greg. Horst. in *Oper.* lib. viii. obs. 22. tom. ii.

§ See *Linnæus, Amœnit. Academ.* vol. v.

|| Several instances of pestilence mentioned by Livy appear to have been of this kind. Indeed the learned Heyne observes: — “Nobis manifestum videtur, ne ullam quidem inter Romanos pestilentiam memorari, quæ pro *pestilentia propriè dictâ* haberi possit,” &c. (*Opusc. Academ.* iii. p. 113.)

founded at Vienne, in that province, where his bones were deposited ; and it was a popular opinion, in that and the succeeding century, that all the patients who were conveyed to this abbey were cured in a space of seven or nine days * ; a circumstance which the ample supply of food in those religious houses may probably satisfactorily explain. It would be foreign to my purpose to pursue the subject here.

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Order IV.

B U L L Æ.

BLEBS.

SYN. Phlyctænæ (*Auct. vet.*): Ecpylisis (*Good*): Inflammations Bulleuses, Bulles (*F.*): Wasserblattern (*Germ.*).

Def. A PORTION OF THE CUTICLE DETACHED FROM THE SKIN BY THE INTERPOSITION OF A TRANSPARENT WATERY FLUID.

In the original sketch of his arrangement, Dr. Willan conjoined in one Order the three following genera, ERYSIPELAS, PEMPHIGUS, and POMPHOLYX, and those which now constitute the Order of VESICLES: but he was led to separate them in consequence of a just criticism of Prof. Tilesius, of Leipsic.* The large and often irregular vesications, which are termed *Bullæ*, discharge a watery fluid when they break; and the excoriated surface sometimes becomes covered with a flat, yellowish or blackish scab, which remains till a new cuticle is formed underneath; and occasionally is converted into an ulcer, that does not readily heal.

“These blebs sometimes are preceded by redness of the skin, but at other times nothing of this kind

* This criticism was contained in a paper on herpetic eruptions, “Über die flechtenartigen Ausschläge,” published in a German periodical work, the *Paradoxien* of Dr. Martens, at Leipsic, 1802, ii band, i heft. Dr. Tilesius pointed out the improper application of Dr. Willan’s definition of *Bulla*, “of a large size, and irregularly circumscribed,” to the small, regular, and clustered vesicles of Herpes; and he mentioned also the common inflamed base, upon which the herpetic clusters are seated, the scabby crust which invariably forms upon them, &c., as further grounds of separation. See p. 18. et seq. of the *Paradoxien*.—The substance of the descriptive part of this paper was inserted by myself in the *Medical and Physical Journal*, for March 1804, vol. xi. p. 250., with an engraving of the Herpes zoster.

appears. Their progress is rapid; the full size of the bleb being often attained in forty-eight hours. They vary in size according to the part of the body on which they appear; those on the face being generally smaller than elsewhere."

"They appear on every part of the body, but most frequently on the lower limbs. They are seldom attended with danger."

For the reasons previously stated, Erysipelas has been removed from this order into that of the Exanthemata.

The genera of Bullæ are,

1. PEMPHIGUS.
2. POMPHOLYX.

GENUS I. PEMPHIGUS.*

Syn. Pemphigus (*Auct. var.*): Pemphigus major (*Sauv.*): Morta (*Lin.*): Febris bullosa (*Vog. Seliger, Marten*): Hidrea (*Piso*): Typhus vesicularis (*Young*): der Blasenausschlag (*German*): Blicmuitslag (*Dutch*): Blancpher (*Danish*): Bladderpert (*Smed.*): Penfigo (*Ital.*): Burbriga (*Span.*): Dartre phlycténoïde, Fièvre vésiculaire ou bulleuse (*Fr.*) *Vesicular Fever.*

Def. AN ERUPTION OF TRANSPARENT VESICLES, ABOUT THE SIZE OF A FILBERT, WITH A RED, INFLAMED EDGE, BUT WITHOUT SURROUNDING BLUSH OR TUMEFACTION, CONTAINING A PELLUCID FLUID; ON BREAKING DISPOSED TO ULCERATE.

There is probably no such fever as that which has been described by a few continental physicians, under the titles of *Febris vesicularis*, *ampullosa*, or *bullosa*, and to which Sauvages applied the term

* Πεμφιξ, a bleb.

Pemphigus. * Subsequent nosologists have given definitions of the disease, upon the same authority, as an idiopathic, contagious, and malignant fever, in the course of which phlyctænæ or vesications, of the size of a filbert, with an inflamed base, appear in succession on different parts of the surface of the body, and sometimes in the mouth.† But Dr. Cullen justly expressed his doubts as to the accuracy of the original writers. The case related by Selliger ‡, on which Sauvages founds his first species, Pemphigus major, is worthy of little attention, and was perhaps, as Dr. Willan suggests, a case of Erysipelas, with some incidental variation. The account of the epidemic at Prague, mentioned by Thierry §, which is the prototype of the Pemphigus castrensis (spec. 2.) of Sauvages, is not entitled to credit, as Dr. Cullen remarks, in some of its circumstances: the bullæ are supposed by Dr. Willan to have been symptomatic of severe typhus, or of pestilential fever, in the same manner as Dr. Hodges described those appearances in the plague of 1666, and as they are occasionally seen, intermixed with petechiæ and vibices, or with patches, of Erythema fugax in typhoid fevers. Again, as to the Pemphigus Helveticus (spec. 3.) of Sauvages, which is borrowed from the description of Dr. Langhans ||, Dr. Cullen is of opinion that the disease was the Cynanche maligna; and Dr. Frank viewed it in the same light, referring it to Scarlatina anginosa.¶ Dr. Willan,

* From *πιμφοί*, *bullæ*, *phlyctæna*. See his Nosol. Method. class iii. gen. 3.

† Dr. Cullen defines Pemphigus, "Typhus contagiosa; primo, secundo, vel tertio morbi die, in variis partibus vesiculæ, avellanæ magnitudine, per plures dies manentes, tandem ichorem tenuem fundentes." Nosol. Meth. gen. xxxiv. — Linnæus, who has designated the disease by the barbarous term *Morta*, characterises it as "Febris diaria, malignissima, funestissima." Gen. Morbor. class. i. gen. 1.

‡ See Ephem. Acad. Nat. Cur. dec. i. ann. viii. obs. 56. — Also Delius, Amœnit. Medicæ, referred to by Sauvages.

§ See his Médecine Expérimentale, p. 134. Par. 1755.

|| In the Acta Helvetica, vol. ii. p. 260.

¶ "Quem *Helveticum* alii dixerunt Pemphigum, hic ad *Scarlatinæ* speciem *ulcerosæ* pertinere videtur." Lib. iii. p. 263. Dr. Frank himself,

who points out the unsatisfactory nature of the history given by Langhans, independently of the contradictions which it contains, proposes a query, whether the disease was not rather *endemic*, than epidemic or contagious, and referable to some local cause, like the *Ergot*, *Mal des Ardens*, &c. before alluded to?

In a word, this conclusion seems to be deducible from an examination of these slight and imperfect histories of the subject, that the notion of an idiopathic contagious fever, terminating in a critical eruption of bullæ, has been founded in error. All the cases of phlyctænæ, which have been related by authors, are therefore referable either to typhoid fevers, malignant dysentery, &c. in which they are accidental and symptomatic * ; or to the following genus, *Pompholyx*, in which they are unconnected with fever. “Notwithstanding the authorities which Dr. Bateman has brought forward to negative the existence of *Pemphigus*, I cannot help agreeing with Biett and those who take the opposite side of the question, having some years since been fortunate enough to meet with an acute case of it in a boy of fourteen years of age. The eruption appeared in successive crops, and was accompanied with fever not of a typhoid type. None of the vesicles exceeded the size of a filbert.”

Dr. Willan mentions a *Pemphigus infantilis*, of which he had seen a few cases in infants, generally soon after birth, and which he considered as analogous

however, is the author of a singular confusion in regard to the genus *Pemphigus*. He divides it into two species; the first of which, *P. amplior*, includes the eruptions of bullæ, which he deems in all cases *symptomatic* of gastric or nervous fevers, or of a chronic nature, without any fever: and the second, *P. variolodes*, which is the chicken-pox; and which he again subdivides into *vesicularis* (the true chicken or swine-pox), and *solidescens* (the acuminated, warty, dry hornpock), which is, in fact, smallpox.

* Such was the *Pemphigus Indicus* (spec. 4.) of Sauvages, taken from a single case mentioned by Bontius. — The swine-pox, however, seems to have been described by mistake under the title of *Pemphigus*, by Mr. R. B. Blagden, in the *Med. Facts and Observations*, vol. i. p. 205.

to the Erysipelas, which occurs at the same period, and as originating from the same causes. It commonly affected weak and emaciated infants, with a dry shriveled skin, and proved fatal in a few days, from the complicated distress arising from pain, loss of sleep, and violent fever. The vesications, which were at first small and transparent, became large, oblong, and of a purplish hue, and finally turbid, and were surrounded by a livid red border. After breaking, they left ulcerations, which spread beyond their original limits, and became extremely painful. * “Gentle purgatives, with Bark, are the remedies which have been found most beneficial in this affection.”

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WILSON on Febrile Diseases, vol. ii. 8vo. 1800.

GENUS II. POMPHOLYX.

Syn. Πομφολύξ (*Auct. Græc.*): Pemphigus sine pyrexia (*Saw.*): Pemphigus apyretus (*Plenck.*): Dartre phlyctenoïde confluenta — Herpes phlyctenoïdes confluens (*Alibert*): Ecphlysis Pompholyx (*Good*): Wassenblasen (*G.*): Ahenje (*Arab.*)
Water blebs.

Def. AN ERUPTION OF BULLÆ, OR BLEBS, “WITHOUT ANY INFLAMMATION ROUND THEM, AND WITHOUT

* Consistently with the opinion that all these bullæ are symptomatic, and that the existence of a peculiar eruptive fever, characterised by such vesications, is imaginary, this infantile disease should, I conceive, have been referred to Pompholyx, since it appears to differ from the Pompholyx benignus of infants, only in being connected with a severe and fatal marasmus, instead of the irritation of dentition.

FEVER," BREAKING AND HEALING WITHOUT SCALE OR CRUST.

Dr. Willan has described three species of Pompholyx* :

1. *P. benignus.*
2. *P. diutinus.*
3. *P. solitarius.*

SPECIES 1. POMPHOLYX *benignus*, MILD WATER BLEBS.

This species exhibits a succession of transparent bullæ, about the size of a pea, or sometimes of a hazel-nut, which break in three or four days, discharge their lymph, and soon heal. They appear chiefly on the face, neck, and extremities; and occur in boys in hot weather, in infants during dentition, and in young persons of irritable habit from eating acrid vegetable substances, or from swallowing a few grains of mercury. "This appears to be the disease which Dr. Underwood has described under the title Phlyctænæ. He says it occurs during dentition, and sometimes in new-born infants, and always appears to be beneficial: 'it consists of vesications or blisters, of different sizes, resembling little scalds or burns, and continues for several days. They come out in different parts, but chiefly on the belly, ribs, and thighs; and contain a sharp lymph, which it may be prudent to let out by a puncture.' No medicine is necessary but such as the particular state of the bowels may call for."

SPECIES 2. POMPHOLYX *diutinus*, LINGERING OR CHRONIC WATER BLEBS.

Syn. Le Pemphigus chronique (*Rayer*).

(Plate XXXIII. of BATEMAN; Pl. 14. of THOMSON'S ATLAS). This is a tedious and painful disorder,

* Foësius observes (Œconon. Hippoc. ad voc. *πομφοι*) that Hippocrates uses that word to denote wheals, or those eminences which resemble the eruption produced by nettles (lib. ii. *Περι Παθων*), and that *πομφολυγες* are bubbles of air, which appear upon water: but that Galen explains the *pomphi*, as eminences of the cuticle, containing a fluid; in Exegeti, lib. ii. de Mulier. — See also Goræus, Def. Med.

and is usually preceded for some weeks by languor and lassitude, headach, sickness, and pains in the limbs. Numerous, red, pimple-like elevations of the cuticle appear, with a sensation of tingling. These are presently raised into transparent vesications, that become as large as a pea within twenty-four hours, and, if not broken, afterwards attain the size of a walnut. If they are rubbed off prematurely, the excoriated surface is sore and inflamed, and does not readily heal. The bullæ continue to arise in succession on different parts of the body, and even re-appear on the parts first affected, in some cases for several weeks, so that the whole number of bullæ is very great ; and when the excoriations are thus multiplied, a slight febrile paroxysm occurs every night, and the patient suffers much from the irritation, and from want of sleep.

This disease chiefly affects persons of debilitated habits, and is very severe in the aged. It seems to originate under different conditions of the body, but often after continued fatigue and anxiety, with low diet ; sometimes from intemperance ; and not unfrequently it is connected with anasarca, or general dropsy, scurvy, Purpura, and other states of the constitution, in which the powers of the cutaneous circulation are feeble. It has, in some instances, appeared after profuse sweating, during which cold liquors were copiously swallowed, in common with several other forms of chronic cutaneous disease. In the fevers in which it has been observed, it was obviously symptomatic ; for it has not only occurred at various periods, and varied much in its duration, but has accompanied fevers of the continued, remittent, and intermittent type, as well as arthritic, and other secondary fevers. *

* Many cases illustrative of these observations are on record ; especially those related, under the appellation of Pemphigus, by Mr. Gaitskell, and Mr. Upton, in the Memoirs of the Medical Society of London, vol. iv. art. i. and vol. iii. appendix ; by Mr. Christie, in the Lond. Med. Journal, vol. x. p. 385. (for 1789) ; by Dr. Stewart, in the Edin. Med.

“ This form of Pompholyx may be confounded with Ecthyma ; but, to an accustomed eye, this is not very likely to occur, as the bullæ of the one differ from the pustules of the other, both during their continuance, and in the marks which they leave after they disappear. The bullæ of Pompholyx leave a dusky red, isolated, irregular stain, sometimes slightly scaly, like Psoriasis. From Herpes it is easily distinguished by the vesicles in the former appearing in clusters, in the centre of inflamed patches.”

It is sufficiently clear, from the statements of the writers just referred to, that the Pompholyx is never communicated by contagion—“ indeed, when lymph was taken from a vesicle, and introduced by inoculation into the system of another individual, no disease followed. The fluid contained in the vesicles is not ichorous, but a bland lymph*, resembling that which is poured into the ventricles of the brain in hydrocephalus. In several of the persons, whose cases are recorded, the disease occurred more than once. The Pompholyx is most troublesome and obstinate in old persons, in whom the transparent bullæ sometimes equal the size of a turkey's egg, while others of a smaller size are intermixed with them, which appear dark and livid. When broken, they leave a black excoriated surface, which sometimes ulcerates. “ The first-mentioned form of this disease is seldom severe, and never fatal, unless complicated with some internal inflammation : but the second, the *distinus*, is often followed by severe ulcerations, which, in the aged, are not devoid of danger.”

Commentaries, vol. vi. art. 3. p. 79.; by Dr. Hall, in the Annals of Med. vol. iii. art. ix.; by Mr. Ring, in the Lond. Med. Journ. xi. p. 235.; by Dr. Dickson, in the Trans. of the Royal Irish Academy for 1787, and Lond. Med. J. vol. ix. p. 309.; and by Bang, in the Acta Reg. Soc. Med. Hauniensis, vol. i. p. 8., &c. See also Frank, de Curand. Hom. Morbis, lib. iii. p. 263. Sennert. de Scorbuto, cap. v. § 59.

* Mr. Gaitskell not only proved this by analysis; but also ascertained the uncontagious nature of the fluid, by inoculating himself with it with perfect impunity.

The warm bath, used every second day, was considered by Dr. Willan as the most active palliative, and the best remedy. I think I have seen the decoction of Cinchona, with cordials and diuretics, of considerable advantage in these cases, especially when the eruption was combined with anasarca. In young persons, in whom Pompholyx is seldom severe, these remedies are affirmed by Dr. Willan to be successful within two or three weeks ; but the warm bath seems to increase both the tingling in the skin, and the number of the vesications, in these patients.* “ In the benign form of the disease little is required from the physician : diluents, or vegetable cooling diet and mild purgatives, constitute the whole of the treatment. When accompanied with inflammation of the mucous membrane, the necessary remedies to relieve this are to be prescribed without any reference to the cutaneous eruption. The excoriations which follow the rupture of the vesicles are to be dressed with any mild ointment, and if troublesome, to be touched with the nitrate of silver. In the more severe form of the disease, the warm bath proves often highly beneficial ; but it must not be too long continued ; never to produce fainting. If there is internal inflammation, the antiphlogistic treatment is to be pushed to its utmost length. Narcotics are also useful ; but the preparations of these ought not to contain either wine or alcohol. In old persons, and those of a delicate habit, acidulated decoction of Cinchona Bark, or the Sulphate of Quinia, if not forbidden by intestinal irritation, are necessary for maintaining the tone of the habit. Purgatives are always injurious in the chronic form of Pompholyx.”

* The warm bath sometimes aggravates the disease, even in the aged, as I lately had an opportunity of witnessing in an old lady of 80. In this case, however, the *bullæ*, of which eight or ten arose daily for several months, were surrounded by an extensive erythematous inflammation, and there was a considerable tendency to the febrile state. A single immersion in the warm bath excited a violent fever ; and Bark, Sarsaparilla, and other tonics, produced a similar effect. She ultimately recovered, under a light and refrigerant diet and regimen.

SPECIES 3. The *POMPHOLYX solitarius* is a rare form of the disease, which seems to affect only women. One large vesication usually appears in the night, after a sensation of tingling in the skin, and rapidly distends itself so as to contain sometimes a tea-cupful of lymph, "and closely resembles the effect produced by a blistering plaster." Within forty-eight hours it breaks, discharging its fluid, and leaving a superficial ulceration. Near this another bulla arises in a day or two, and goes through the same course; and it is sometimes followed, in like manner, by two or three others in succession; so that the whole duration shall be eight or ten days. Cinchona, with the diluted Sulphuric Acid, internally, and linseed poultices, followed by light dressings to the sores externally, were employed with advantage in three cases seen by Dr. Willan.

*Books which may be consulted on Pompholyx,**

- ACTA Reg. Soc. Med. Hauniensis, vol. i.
 ANNALS of Medicine, vol. iii.
 BUNEL, Dissertation sur le Pemphigus, 4to. 1811.
 EDIN. Med. Commentaries, vol. vi.
 FRANK de Curand. Hom. Morb. lib. iii.
 GILBERT, Monographie du Pemphigus, 8vo. 1815.
 LONDON Med. Journ. vol. ix. x. xi.
 LONDON Med. Repository, vol. ii. vi.
 MEM. of the Med. Society of London, vol. iii. iv.
 PLUMBE'S Practical Treatise on Diseases of the Skin, 2d edit. 1827.
 RAYER, Traité des Maladies de la Peau, 8vo. 1826.
 TRANS. of the Roy. Irish Acad. 1787.
 WICHMANN, Boitrag zur kenntnis des Pemphigus, 1791.
 WILLAN on Cutaneous Diseases.

* In most of the works referred to, the disease is termed Pemphigus.

Order V.

PUSTULÆ.

PUSTULES.

SYN. Φλυκταιναι (*Auct. Græc.*): Pustulæ (*Linn. Sag.*): Pustules, Boutons (*F.*): die Eiterblattern (*German*).

Def. (PUSTULE): AN ELEVATION OF THE CUTICLE, WITH AN INFLAMED BASE CONTAINING PUS.

There are four varieties of pustules.

a. Phlyzaciūm; a pustule commonly of a large size, raised on a hard circular base, of a vivid red colour, and succeeded by a thick, hard, dark-coloured scab.* This variety generally accompanies acute diseases.

b. Psydraciūm; a small pustule, often irregularly circumscribed, producing but a slight elevation of the cuticle, and terminating in a laminated scab.† Many of the psydracia usually appear together, and become confluent; and, after the discharge of pus, they pour out a thin watery humour, which frequently forms an irregular incrustation. They appear in chronic affections.

* The derivation of this term, “απο του φλυω, φλυζω, sive φλυσσω, quod *fervere* significat, et *ebullire*,” (Gorræi *Def. Med.*) would render it sufficiently appropriate to elevated and inflamed pustules, if we had not possessed also the interpretation left by Celsus: “φλυζακιον autem paulo durior pustula est, subalbida, acuta; ex qua quod exprimitur, humidum est. Ex pustulus vero nonnunquam etiam ulcuscula fiunt, aut aridiora, aut humidiora: et modo tantum cum prurigine, modo etiam cum inflammatione aut dolore; exitque aut pus, aut sanies, aut utrumque. Maximeque id evenit in ætate puerili: raro in medio corpore; sæpe in eminentibus partibus.” (*De Medicina*, lib. v. cap. 28. § 15.)

† As the *Phlyzacia* were denominated from the heat of the eruption, so the *Psydracia* received their appellation from the opposite quality, “quasi ψυκρα ὑδρακια, id est, *frigida* seu *frigefactæ guttula*,” says Gorræus.—The psydracia are enumerated among the eruptions peculiar to the head by Alexander and Paul, and some other Greek writers; but Galen and others mention them as common to other parts of the body (See Alex. Trall. *Op. lib. i. cap. 5.* Paul. *Ægin. lib. iii. cap. 1.* Actuarius, *lib. vi. cap. 2.*) See also *Impetigo*, below, p. 145.

c. *Achor*; and

d. *Favus*. These two pustules are considered by the majority of writers from the Greeks downwards, as varieties of the same genus, differing chiefly in magnitude.* The *Achor* may be defined, a small acuminate pustule, containing a straw-coloured matter, which has the appearance and nearly the consistence of strained honey, and succeeded by a thin brown or yellowish scab. The *Favus*, or *κηρσιον*, is larger than the *achor*, flatter, and not acuminate, and contains a more viscid matter; its base, which is often irregular, is slightly inflamed; and it is succeeded by a yellow, semi-transparent, and sometimes cellular scab, like a honeycomb; whence it has obtained its name.

Pustules† originate from an inflammation of the skin, and the consequent partial effusion of purulent matter under the cuticle, by which the latter is elevated into small circumscribed tumours. Sometimes several of these elevations arise upon a common inflamed surface; but most frequently the inflammation of the base of each is distinct and circumscribed. The fluid contained in them desiccates, and often terminates in a scabby incrustation, varying in

* See Aëtius, tetrab. ii. serm. ii. cap. 68.—Alex. Trall. lib. i. cap. 8. & 9.—Paul. Ægin. de Re Med. lib. iii. cap. 3.—Oribas. de Loc. Affect. lib. iv. cap. 12.

† Although it seems obvious, that the origin of this term was deduced from the *purulent* contents of the eruption (quasi, *pus tulit*); yet the best ancient authority sanctions the common indefinite and unlimited use of it. For Celsus applies it to every *elevation* of the cuticle, including evens wheals and papulæ, “quæ ex urtica, vel ex sudore nascuntur;” and he deems it synonymous with *εξανθημα* of the Greeks, which was, in fact, the general term for every species of *eruption*. (Celsus de Med. lib. v. cap. 28. § 15.)—The Greek physicians appear to have comprehended both pustules and vesicles under the term *φλυκταιναι*, which their translators have rendered by the word *pustulæ*; and in this double sense the latter has also been generally used. Some discriminating writers, however, have correctly appropriated it to suppurating eruptions. “Pustularum nimirum conditio,” says Prof. Arnemann, “exigit, ut in apice *suppurentur* vel in *pus* abeant.” Commentar. de Aphthis, Gött. 1787. § 2. See also Linn. Gen. Morb. class. xi. ord. 4. —Sagar, class i. ord. 2.

hardness according to the various tenacity of the contained fluid: sometimes in superficial ulceration. "Rayer justly remarks, that the number, form, and aspect of the pustulous ulcerations, of the tubercles which succeed them, and even of the cicatrices, should be attentively studied, as they are often characteristic of the genera." "Every part of the body may be the seat of pustules: but some are more liable to attack certain parts than others: thus *Porrigo* generally affects the hairy scalp, *Acnè* the face and chin, and *Impetigo* the lower extremities. The colour of pustules varies from a dull white to a bright yellow; and that of the crusts that succeed them from greenish-yellow to dark brown."

"Pustular eruptions are usually contagious; but they also appear spontaneously. The diagnosis is not difficult, and depends on the opacity of the fluid contained in the pustules, at an early stage, whereas in vesicular eruptions, the sero-purulent matter of the vesicles does not appear until their decline, the fluid in the commencement being nearly transparent." With the exception of smallpox, the prognosis in the pustulæ is favourable: they rarely or never terminate in death. The five genera of pustular diseases, comprehended in this order, have nothing in common in their character, except the appearance of pustules in some state of their progress; for some are contagious, and others not; some are acute, and others chronic. These genera are,

- | | |
|--------------|-------------|
| 1. IMPETIGO. | 4. VARIOLA. |
| 2. PORRIGO. | 5. SCABIES. |
| 3. ECTHYMA. | |

GENUS I. IMPETIGO.

Syn. *Lepra Squamosa*, herpes, vitiligo, phlystena, (*Auctorum*): *Ecpyesis Impetigo* (*Good*): *Phlysis Impetigo* (*Young*): *Herez* (*Arab.*): *Courap* (*Hindos.*): *der Kleienausatz* *Zittermal*, ring-worm

(*G.*): Schurfftheid, ring-worm (*D.*): Ringworm (*Dan.* and *Swed.*): Impetigine (*Ital.*): Compeine (*Span.*): Dartre crustacée, Lèpre humide (*F.*): *Humid* or *Running Tetter*, or *Scall*.

Def. AN ERUPTION OF YELLOW, ITCHING PUSTULES APPEARING IN CLUSTERS; AND TERMINATING IN A YELLOW, THIN, SCALY CRUST.

This eruption is characterised by the appearance of the small pustules, denominated *Psydracia*. It is not accompanied by fever, is not contagious, nor communicable by inoculation. It chiefly occurs on the extremities, although sometimes on the face. It appears under the seven following forms* :

- | | |
|------------------------------|------------------------|
| 1. <i>I. figurata.</i> | 5. <i>I. rodens.</i> |
| 2. <i>I. sparsa.</i> | 6. <i>I. larvalis.</i> |
| 3. <i>I. erysipelatodes.</i> | 7. <i>I. favosa.</i> |
| 4. <i>I. scabida.</i> | |

Although the Editor would willingly retain the arrangement of Bateman, yet he prefers a modification of that which he proposed in the article *Impetigo*, in the Cyclopædia of Practical Medicine; namely,

SPECIES 1. *IMPETIGO simplex.*

- Var. a. Impetigo figurata,*
b. Impetigo sparsa,
c. Impetigo scabida,
d. Impetigo rodens,
e. Impetigo larvalis,
f. Impetigo favosa :

2. *Impetigo erysipelatodes.*

In the first of the above species, little or no fever precedes the eruption; in the second it is always a preliminary.

* Celsus has described four species of Impetigo, the first of which is a pustular disease, terminating in excoriation, and corresponds with the affection described in the text. His other varieties seem to include some of the more violent forms of Psoriasis, or Lepra. See the 28th chapter of his 5th book, § 17.

The ulcerated Psora (*ψωρα ἐλκωδης*) of the Greeks was apparently the same affection with the Impetigo of Celsus.

SPECIES 1. *IMPETIGO simplex.*

Var. a. Impetigo figurata, FIGURED OR HERPETIC SCALL.

Syn. Ecpyesis Herpetica (*Good*): Herpes (*Cullen*): Phlyctæna (*Vog.*).

This species (Plate XXXIV. of BATEMAN; Pl. 15. of THOMSON'S ATLAS,) is the most common variety of the moist tetter. "It generally attacks the young, and those who possess what is termed a lymphatic temperament; but is rarely preceded by symptoms of fever, or general derangement of the habit. It is more commonly situated on the face, as the cheeks, the chin, the upper lip, the sides of the nostrils, than on other parts of the body: but it occasionally occurs on the extremities." It appears in circumscribed patches, of various figure and magnitude, which are usually small and circular on the upper, and large, oval, and irregular on the lower extremities. The patches consist at first of clusters of the yellow psudracious pustules, set close together, and surrounded by a slight inflammatory border; the whole being somewhat raised, but the pustules not very prominent nor acuminated. In a few days the pustules break, and discharge their fluid; the surface becomes red and excoriated, shining as if it were stretched, but exhibiting numerous minute pores, from which a considerable ichorous discharge is poured out, accompanied with much troublesome itching, heat, and smarting. The discharge soon concretes partially into thin, semitransparent, yellowish or greenish scabs; but it still continues to ooze from under the scab, which it forms, "and occasionally forms a thick crust, not unlike the exudation of gum on a cherry tree." In the course of three or four weeks, as the quantity of the discharge diminishes, the scabs dry and fall off, leaving the surface of the cuticle red, rough, and somewhat thickened, and at the same time extremely brittle, and liable to crack and to be excoriated; so that the ichorous discharge and scabbing are easily reproduced, and the disease is often thus much

prolonged in its duration. Occasionally fresh crops of the psydracious pustules re-appear, as at the commencement; and the whole course of the eruption is repeated.

When the Impetigo figurata is beginning to heal, the patches undergo a process somewhat similar to that which takes place in the *Lepra vulgaris*. The amendment commences at the centre of the patch, which first subsides, leaving the border elevated: at length this also disappears; but the cuticle, which was the seat of the patch, remains for some weeks red, shining, and tender.

But though this is the most usual and regular, it is by no means the uniform progress of Impetigo. For this eruption, like Scabies and Eczema, varies so much in its phenomena, as almost to bid defiance to arrangement. Sometimes the patches enlarge by the formation of successive pustular margins; an exterior circle of pustules arising, while the preceding border is drying, to be followed by others which go through the same course, until the patch attains a considerable extent. The area, in the meantime, becomes dry and rough, with a scaly or scabby incrustation in its centre.* Sometimes the papulæ of the *Lichen agrius* become pustular, or are intermixed with psydracia, as before mentioned, and the disease assumes all the characters of Impetigo.

But the affinity of Impetigo with the vesicular diseases is manifested by a common variety of it, in the upper extremities, in which the psydracious

* This impetiginous *ringworm* bears a considerable resemblance to the *Herpes circinatus*, which spreads by a succession of *vesicular* borders. A severe form of this tetter occurs in hot climates, according to the testimony of physicians who have practised there. See Hilary on the Diseases of Barbadoes, p. 352. (2d edit.)—Towne on the same, chap. 8.—Winterbottom's Account of Sierra Leone, vol. ii. chap. 9.—Probably it is this form of Impetigo which Bontius mentions as a most distressing disease in India, where it is called by the natives *Courap*. (De Med. Indorum, cap. 17.)

pustules are intermixed with transparent vesicles, resembling the pustules in size and form. Where this intermixture occurs, the disease is much more troublesome, from the extreme irritation, itching, smarting, and heat, which accompany it; and much more tedious and difficult of cure. It takes place chiefly on the hand, about the knuckles and sides of the fingers, or on the wrist; and the space between the metacarpal bones of the fore-finger and thumb is usually the seat of one of the blotches. The vesicles are slower in their progress than the psydracia: they remain many days transparent, but not much elevated, the cuticle over them being thick in that situation. When they break, an acrid ichor is discharged, which produces inflamed points where it touches the cuticle, and these become vesicles or psydracia. Each vesicle, thus broken, is not disposed to heal; but the cuticle round its base now becomes inflamed and raised, and discharges a thin ichor, when in any degree irritated. The vesicles appear, in slow succession, at a little distance from each other and from the pustules; and at length an irregular blotch is produced, of a red, chopped, and thickened cuticle, interspersed with the rising eruptions, little humid ulcers, and chops or fissures.* The sense of burning and intense itching,

* This mixed form of the disease has misled the generality of writers to confound it with Herpes, under which term it is commonly described. Such is the Herpes of Dr. Cullen. "Phlyctænæ, vel ulcuscula plurima, gregalia, serpentina, dysepuleta." Nosol. gen. 147. And Prof. Callisen's brief description of Herpes, in one of its varieties, is an accurate delineation of this Impetigo. "Herpes *pustulosus, crustosus, serpigio*, quem constituunt papulæ peiores corrosivæ, quæ congestæ aream circularem constituunt, acutè pungentem, valdè pruriginosam, deindè pars illa tegitur crusta cuti firmiter adglutinata, à transudatione humoris tenuis et acris è cute porosa; ichor, si tangit alias partes, istas simili malo defædat, unde late serpere solet hoc malum, tamen absque exulceratione." (Chirurg. Hodiern. § 612.) See also Wiseman's Chirurg. Treatises, i. chap. 17. on Herpes. Turner on the Dis. of the Skin, chap. v., where Herpes and Tetter are used as synonymous terms.—But it is to be recollected, that, in this arrangement, Herpes is appropriated to a purely vesicular disease, which has a short and nearly uniform course of ten or twelve days, the vesicles of each patch becoming confluent, and at length covered with a dry crust. Of this genus, the shingles afford the most characteristic example.

accompanying especially the first rise of the vesicles, is extremely distressing, and is much aggravated by the irritation of almost every application that is resorted to.

Var. b. IMPETIGO *sparsa*, SCATTERED RUNNING SCALL.

Syn. Ecpyesis *sparsa* (*Good*).

This species (Plate XXXV. of BATEMAN; Pl. 15. of THOMSON'S ATLAS) differs from the preceding rather in the *form*, than in the nature and progress of the eruption; for, with the exception of the indeterminate distribution of the pustules, which are not congregated in circumscribed clusters, but dispersed without any regular order along the extremities, and sometimes about the neck and shoulders, and even on the face, ears, and scalp, the foregoing description is applicable to both species of the disorder. The Impetigo *sparsa* more frequently occurs in the lower extremities than the former; and is, in that situation, more troublesome and obstinate. It occasionally appears in one limb only, whilst every other part of the body is free from eruption. In elderly people, especially of debilitated habits, the excoriations are liable to pass into deep, irregular ulcers, surrounded by a purplish colour, and often accompanied with œdema.

These two forms of Impetigo are not always traced to any obvious exciting cause: but they are frequently preceded by some derangement of the digestive organs, languor, and headach. A predisposition to the disease appears to be connected with the sanguine temperament, with a thin soft skin, and a relaxed and bloated habit of body; or with the sanguineo-melancholic temperament, a spare form, and a thin but harsh skin. Certain seasons appear to have great influence on the disease, in those who are predisposed to it. "Certain kinds of diet also, as salt, and especially tainted food." The *I. sparsa*, especially

on the lower extremities, is apt to return with regularity in spring and at the latter end of autumn, and to harass the patient during the whole of the winter, but disappears in the warm weather: while the *I. figurata*, affecting the upper extremities, is liable to recur chiefly in the spring; of both which I have witnessed several examples.* The accession of the eruption has, in other instances, been ascribed to violent exercise, intemperance, cold, and sudden depressing passions, especially fear and grief.†

The *I. sparsa* is not unfrequent in young children, in whom it appears to be a sequela of the *Porri* (*Impetigo larvalis*); if, indeed, it be not the same disease, as I have above hinted. The disease in these young subjects fixes itself particularly in the flexures of the large joints, and is accompanied with intense itching, which greatly disturbs the rest. It recurs frequently under every irritation, as from dentition, &c., sometimes even till after the second dentition is completed, or till near the period of puberty; after which the predisposition to its attack ceases. It occasionally supervenes to Lichen.

Local Tetter is produced by the action of particular irritants on the cuticle, which soon disappear, when the source of irritation is withdrawn. The

* In this and some of the preceding circumstances, the accuracy of the brief description of Celsus is manifest. The first form of *Impetigo* is that, "quæ similitudine scabiem repræsentat; nam et rubet, et durior est, et exulcerata est, et rodit. Distat autem ab ea, quæ magis exulcerata est, et varis similes pustulas habet, videnturque esse in ea quasi bullulæ quædam, ex quibus interpositio tempore quasi squamulæ solvuntur; certioribusque hæc temporibus revertitur."

† In two gentlemen, whom I lately had occasion to see, affected with *Impetigo*, the eruption was imputed to great alarm and agitation of mind. Some of the scaly eruptions also are now and then referred to fear and grief, as well as the tubercular *Elephantiasis*. See Dr. Tho. Heberden's remarks on the *Elephantiasis* in Madeira (*Med. Trans.* vol. i. art. 2.); and those of Dr. Joannis on that of Martigues (*Med. Obs. and Inquir.* vol. i. art. 19.) Some time ago we witnessed the extraordinary influence of mental alarm on the cutaneous circulation, in a poor woman, who became a patient of the Public Dispensary. A sudden universal anasarca followed, in one night, the shock occasioned by the loss of a small sum of money, which was all she possessed. (See *Edinb. Med. and Surg. Journal*, vol. v. p. 127.)

affection of the hands and fingers, in those who work among sugar, which is called the *grocer's itch*, is of this nature; and similar eruptions are produced on the hands of bricklayers, by the acrid stimulus of lime; and in workmen employed with some metallic powders. It is worthy of remark, that both the *grocer's* and the *bricklayer's itch* is, in some individuals, a pustular, and in others a vesicular eruption, referable to the Eczema; but in neither case contagious, as the popular appellation might lead us to suppose.

Local pustular patches are also the result of the application of the Tartrate of Antimony and Potassa to the skin by friction, and in some cases of the application of blisters, and other stimulating plasters. These pustules are liable to extend considerably beyond the blistered or stimulated part, and sometimes continue to arise in succession for a fortnight or more; and many of them often assume the form of Phlyzacia (Def. 5. a), or of large protuberant pustules, with a hard, elevated, and inflamed base. Some of these even acquire the size of small boils, and suppurate deeply and slowly, with great pain, and considerable restlessness and feverish heat in the night.

The Impetigo *figurata* and *sparsa* are sometimes confounded with two contagious diseases, of the pustular order, Porrigo and Scabies. The appellation of *ring-worm*, which is popularly given to the oval or circular patches of the first, has partly contributed to occasion this mistake. They differ, however, from the circles of Porrigo, inasmuch as the *I. figurata* seldom affects children, — occurs principally on the extremities, — and they do not continue to discharge a purulent and glutinous, but, after the first eruption, an ichorous humour, — nor do they form the thick, soft, and copious scabs of Porrigo: not to mention the absence of contagion.

The prevalence of transparent vesicles in the patches of Impetigo, may mislead an incautious or

inexperienced observer into a suspicion that the disease is Scabies : but the distribution of the eruption in patches, — the copious exudation of ichor, — the rough, reddened, and fissured cuticle, — the magnitude and slow progress of the vesicles, and the heat and smarting which accompany the itching in Impetigo, will serve in general to determine the diagnosis. In the strictly purulent form of Scabies, the pustules about the hands arise to a much greater magnitude and elevation than the psudraccia; they are filled with a thick yellow pus, and are more considerably inflamed round their base.

The Impetigo in its advanced stage is, however, more liable to be mistaken by common observers, and is, in fact, daily mistaken for Psoriasis or Lepra; as a sufficient discrimination is not made between the laminated and scale-like concretions of the ichorous matter, and the exfoliations of morbid cuticle which constitute the true *scab*. But the scaly diseases emit no fluid and the very existence of a discharge, however slight, is sufficient to determine the diagnosis of the eruption.

“ The scabby eruption that often appears on the face in secondary syphilis, has also been mistaken for Impetigo. In the latter disease, the crusts are large, thick, dark-coloured, very adhesive, and seated on a lurid or violet-coloured base; and generally leave, when they fall, either deep ulcerations or permanent cicatrices. These characters aid sufficiently the diagnosis.”

In the incipient state of these two forms of Impetigo, it is useful to administer Sulphur internally, in such quantities as not to induce purging; and if there is much irritability or inflammation of the cuticle, a portion of Soda, Nitre, or Crystals of Tartar, with which Conium, and Acids, as that of Lemons, Limes, or Barberries, may be advantageously combined. The Impetigo *sparsa* commonly yields to these medicines, particularly if diligent

ablution with tepid water be at the same time employed. But when the disease is of long standing, it requires a treatment somewhat similar to that recommended for inveterate Psoriasis; namely, the diet drinks, decoctions of Sarsaparilla and Cinchona, with the fixed Alkalies and Antimonials. The mercurial alteratives, however, in this affection are of essential assistance to this plan of cure; such as small doses of Cinnabar, the Hydrargyrus cum Creta, or the pill of Dr. Plummer. "In those cases which have come under my care, I have seen more benefit from the occasional administration of from gr. v to gr. viij of Submuriate of Mercury at bedtime, and a brisk cathartic on the following morning, than from a continued course of alteratives."

The external applications adapted to these forms of Impetigo, especially to the figured species, are the mild desiccative ointments; for, in the majority of cases, the irritable surface of the tetter will not bear stimulants with impunity. When the discharge is considerable, the ointments prepared with the Oxide of Zinc alone, or united with Saturnine Ointment, or with the white precipitated Oxide of Mercury, are the most efficacious, in allaying the inflammatory condition of the excoriated surface, and in reducing the quantity of the discharge. When there is less of this irritability and exudation, the Tar Ointment most effectually relieves the itching; the ointment of the Nitrate of Mercury, diluted with five or six parts of simple ointment, will also be beneficial. From the too active employment of this ointment, and still more of that of the Nitric Oxide of Mercury, and various other stimulant lotions and applications, by practitioners unacquainted with the character of the disorder, a great aggravation of the eruption and of the sufferings of the patient is sometimes occasioned.*

* Formerly a lotion made by macerating the root of the Water Dock (*Lapathum*) in vinegar was much employed. T.

In some instances, indeed, the skin, under this impetiginous affection, is peculiarly sensible to the stimulus of Mercury, whether employed internally or externally. I think I have observed this circumstance most frequently in a few cases which were the sequelæ of Lichen. But the most irritable of all the varieties of Impetigo are those in which vesicles abound; in some of which the Zinc, and saturnine applications, and even simple lard, occasion an aggravation of the symptoms. In these cases, it is particularly necessary to keep the parts covered, with a view to avoid the effects of friction from the clothes, as well as of heat, and of cold; to wash the surface daily with some emollient fluid, such as milk and water, or an infusion of bran; to interdict the use of soap; and to besmear the parts with cream, or an emulsion of almonds. A lotion prepared by boiling Mallow, Digitalis, and Poppy-heads has been found serviceable where the parts are very painful. In many cases, however, the stiffness, which ensues upon the speedy drying of these lotions, renders it impossible to use them, and it is necessary to cover the part lightly with dry lint only, or to interpose between it and the diseased surface a sprinkling of the Oxide of Zinc: sometimes, however, the application of linen dipped in melted suet affords relief, when no other greasy substance can be used. "The editor was induced, some years since, to apply the Hydrocyanic Acid in the form of lotion in Impetigo, and found that it allayed the irritation more effectually than any other means. It has since been very generally employed for this purpose. The following is the formula which he originally used:—

℞ Acidi Hydrocyanici fʒiv,
 Aquæ distillatæ fʒvij,
 Alcoholis fʒiv;

Misce ut fiat lotio.

"He has, however, lately found, that the efficacy of this application is greatly increased by the

addition of sixteen grains of the Acetate of Lead. This lotion not only soothes the irritability of the part, but also disposes the skin to take on its healthy action. Mr. Plumbe cautions against the external employment of Hydrocyanic Acid, and mentions that in two cases, of both legs, in which the eruption extended from the ankle to the knee, where it was employed, a considerable intermission of the pulse took place, which ceased on its being discontinued. In my experience of the external use of Hydrocyanic Acid, I have seen no bad effects result from it."

In the drier and less irritable forms of the Impetigo, the use of the waters of Harrowgate is the most effectual remedy, and likewise the best preventive of its returns: under the same circumstances, the warm sea-water bath, followed by a course of bathing in the open sea, is productive of great benefit. But during the existence of any actual inflammation, the irritation of salt-water is decidedly injurious. "Nothing in the form of bath is so successful as the Sulphur Vapour Bath."

Var. c. IMPETIGO *scabida* CRUSTED RUNNING SCALL.

Syn. Lepra Herpetica (*Sauvages*): Ecpyesis laminosa (*Good*).

In this more rare and severe form of the disease (Plate XXXVI. of BATEMAN; Plate 15. of THOMSON'S ATLAS), one or more of the limbs becomes encased in a thick, yellowish, scabby crust, not unlike the bark of a tree, which is accompanied with a disagreeable heat and itching, and renders the motion of the affected limbs difficult and painful. This crust is the result of the concretion of an acrimonious humour, which is discharged in great abundance from numerous psudracious pustules, as they successively form, break, and ulcerate over the surface of the limb. The concretion commences

about the third or fourth week, when the discharge begins to abate, and invests the whole of the arm from the elbow to the wrist, or the leg from the knee to the ankle.* After some time longer, the scabby coating is divided by large cracks or fissures, from which a thin ichor exudes, and concretes into additional layers of scabs. If any portion of the scab be removed, the excoriated surface pours out its fluid again, and fills up the space with a new concretion. In the lower extremities the disease is most severe and obstinate, is ultimately conjoined with Anasarca, and often produces severe ulceration. The incrustation sometimes extends to the fingers and toes, and destroys the nails; and, as in other similar instances, the new ones are thick, notched, and irregular. †

The *I. scabida* requires the same internal medicines which have been recommended for the inveterate forms of the preceding varieties, especially the sulphureous waters. The chief peculiarity of its treatment consists in clearing the surface of its incrustation, and correcting the morbid action of the superficial vessels. The thick scab can only be softened and gradually removed, by perseverance in the application of the steam of warm water to it, for a short time, daily; or mild poultices. Those parts of the surface which are thus cleared must be covered with soft linen, after tepid ablution, twice a day; and some of the Unguentum Zinci, or a much-diluted ointment of Nitrate of Mercury, with common cerate (containing, for example, a

* Sauvages observes, that this affection is called *Dartres encroulees* by the French; but he describes it under the appellation of *Lepra herpetica*. "Cognoscitur ex herpetibus crustaceis, squamosis, albis, hyeme majoribus, et suppurantibus; noctu intolerabiliter prurientibus: brachia ambo usque ad carpum, ambo femora tibiasque usque ad pedes, quandoque tegentibus; scalptu cruentatur hæc lepra; poplites et cubiti vix flecti possunt: præcesserunt non raro tineæ malignæ." Class x. gen. xxvii. spec. 7.

† See *Lepra*, above, p. 27.

fourth or fifth part of the mercurial), or simply the Oxide of Zinc, or Calamine in powder, must be interposed.

Var. d. IMPETIGO *rodens*, CORRODING RUNNING SCALL.

Syn. Ecpyesis Exedens (*Good*).

This is a rare but intractable species of the disease, probably of a cancerous nature, in which the cellular membrane is affected, as well as the skin, and seems to shrink away as the ulceration and discharge go on. The disorder commences with a cluster of pustules, sometimes intermixed with vesicles, which soon break, and discharge for a long period of time an acrid humour, from open pores or from under scabs; and the skin and cellular texture are slowly, but deeply and extensively, corroded, with extreme irritation and pain, which are only to be alleviated by large doses of opium. The disease commonly begins on the side of the chest or trunk of the body, and gradually extends itself. I have not seen any instance of this disease, which is said to have always terminated fatally, and to have been benefited by no medicine, either external or internal, which had been employed.

Var. e. IMPETIGO *larvalis*, MILK SCALL.

Syn. Ἀχὼε (*Auct. Græc.*): Crusta lactea (*Auct. var. Lat.*): Tinea lactea (*Sauv.*): Scabies capitis simplex (*Plenck*): Tinea benigna (*Auctorum*): Ecpyesis Porrigo, *α.* Crustacea (*Good*): Teigne muqueuse. Tinea muciflua (*Alibert*): Porrigo larvalis (*Willan, Bateman*): die Kopfraude, der Milchgrind (*German*): Croute de Lait (*F.*): Munday Cárāpāng (*Tamool*).

This is the *Crusta lactea* of authors (Plate XXXVII. of BATEMAN; Pl. 16. of THOMSON'S ATLAS), and is almost exclusively a disease of infancy. "It is generally supposed to be non-conta-

gious ; but Alibert mentions the case of an infant who was inoculated with the complaint, and took it. The same author remarks, that it most commonly appears in those who have golden-coloured hair." " The children of the poor, who are often permitted to eat bacon, and other gross kinds of food, and are, at the same time, the victims of uncleanness, often suffer from this species of impetigo." * It commonly appears first on the forehead and cheeks, in an eruption of numerous minute and whitish pustules, which are crowded together, upon a red surface. These pustules soon break, and discharge a clear, viscid fluid, which concretes into thin yellowish or greenish scabs. As the pustular patches spread, the discharge is renewed, and continues also from beneath the scabs, increasing their thickness and extent, until the forehead, cheeks, and even the whole face, become enveloped, as by a mask (whence the epithet *larvalis*), the eyelids alone remaining exempt from the incrustation. † " The odour of the eruption is rank and peculiar." ‡ The eruption is liable, however, to considerable variation in its course ; the discharge being sometimes profuse, and the surface red and excoriated ; a state to which young infants are very liable : at other times the discharge is scarcely perceptible, so that the surface remains covered with a dry and brown scab. When the scab ultimately falls off, and ceases to be renewed, a red, elevated, and tender cuticle, marked with deep lines, and exfoliating several times, is left behind ; differing from that which succeeds to Impetigo scabida, inasmuch as it does not crack into deep fissures.

* A case of it in an adult lately came under the care of the Editor, which could only be traced to continued excesses in drinking. The eruption covered the face, ears, neck, and breast. T.

† " Imo quandoque frontem occupant, et totam faciem, exceptis palpebris, *larvâ* tegunt." Plenck, p. 77.

‡ " Celle du lait qui commence à s'aigrir ou à se putréfier." Alibert, liv. i. p. 11. T.

Smaller patches of the disease not unfrequently appear about the neck and breast, and sometimes on the extremities: and the ears and scalp are usually affected in the course of its progress. In general the health of the child is not materially affected, especially when the eruption does not appear in the early period of lactation; but it is always accompanied with considerable itching and irritation, which are most severe in young infants, and often greatly diminish the natural sleep, and disturb the digestion. “In children of full habits, as Mr. Plumbe justly remarks*, when the eruption occupies the fore part of the neck, ‘extending from the chin and angles of the lower jaw to the clavicles,’ the pain and irritation are most distressing to the little sufferers:” and much debility sometimes ensues. The eyes and eyelids become inflamed, and purulent discharges take place from them and from the ears; the parotid † and subsequently the mesenteric glands also inflame; and marasmus, with diarrhœa and hectic, cut off the patient.

Most commonly, however, the disease terminates favourably, though its duration is often long and uncertain. It sometimes suddenly puts on the appearance of cessation, and afterwards returns with severity; sometimes it disappears spontaneously soon after weaning, or after the cutting of the first teeth; and sometimes it will continue from two or three months to a year and a half, or even longer. Dr. Underwood says, “I never saw an infant much loaded with it, but it has always been healthy, and cuts its teeth remarkably well. ‡ In general, however, although it appears in the most healthy children, yet it is the consequence of repletion, and the irritation of undigested food upon highly excitable systems; and

* Practical Treatise on Diseases of the Skin, 2d edit. 1827, p. 220.

† Plenck says, “Tumidæ simul sunt glandulæ jugulares raro parotides.” Doct. de Morb. Cut. p. 77. T.

‡ Underwood’s Treatise on Diseases of Children, 8th edit. p. 170.

in these it probably prevents the attack of more formidable diseases." It is remarkable, that, whatever excoriation may be produced, no permanent deformity ensues. Dr. Strack has affirmed, that "when the disease is about to terminate, the urine of the patient acquires the odour of the urine of cats; and that, when the usual odour remains unchanged, the disease will generally be of long continuance." * "Dr. Strack's opinion, however, on this part of the prognosis is not to be depended upon, as he prescribed the *Viola tricolor* as a specific in this disease; and it is well known that that plant communicates to the urine of those who take it the odour of the urine of cats."

"The remote cause of this species of Impetigo is improper diet, either as respects quantity or quality, in strong and healthy children. I have been able, frequently, to trace it to too free use of acescent food, such as fruit tarts and puddings, sugar and the various articles of confectionary into which it largely enters, by children of full and gross habits of body. It frequently, also, appears to be the result of dentition, in children of full habits; and in this case is always beneficial."

In the commencement of the Impetigo *larvalis*, while the discharge is copious and acrid, it is necessary to clear the surface two or three times a day by careful ablution with some tepid and mild fluid, as milk and water, thin gruel, or a decoction of bran †; and to apply a mild ointment, such as the Unguentum Oxydi Zinci, or a combination of this with a Saturnine Cerate. "I have seen no ointment so quickly beneficial as the Unguentum Hydrargyri Nitratis diluted with seven parts of Spermaceti oint-

* See his Dis. de Crusta lactea infantum, et ejusdem specifi remedio : — also Lond. Med. Journal, vol. ii. p. 187.

† The Hindoo physicians foment the parts with a decoction of the *Sida populifolia* (*toottie elley*); and touch excoriated parts, when the scabs are rubbed off, with "a little finely-prepared Castor oil." Ainslie's Mat. Indica, vol. ii. p. 530. T.

ment. To aid in removing the crusts, a cataplasm of oatmeal water and butter, with the juice of the Nasturtium (*Tropæolum majus*), has been found very serviceable." The Saturnine Cerate will be useful to obviate excoriation, while the surface remains red and tender, after the discharge has ceased. "I lately saw much benefit derived from the application of a weak solution of Nitrate of Silver, (gr. iij *Nitratis* and fʒj *Aquæ*) in the cure of an adult, in whom the disease spread over the whole of the face and the breast. Two days after the lotion was applied the inflammation disappeared, and the swelling subsided." "Plenck *, and several Continental physicians, consider it dangerous to check suddenly the eruption by external applications; and imagine that it is likely to produce diseases of the head and chest; as fever, ophthalmia, swelled glands, cough, anasarca, hydrocephalus, and apoplexy. Dr. Granville thinks he has observed this to be the case in the Dispensary for Children; but in my own experience, which has been extensive both in Dispensaries and in private practice, I have seen no injury result from checking the eruption."

The removal of the disease is much accelerated in adults by repeated very small bleedings, followed by the use of alterative doses of mercurial purgatives (especially where the biliary secretion is defective, the abdomen tumid, or the mesenteric glands enlarged), which should be continued for three weeks or longer, according to circumstances. "In children bleeding is unnecessary; and the use of the alteratives may be at once commenced;" small doses of the Submuriate of Mercury may be given twice a day, alone, or in combination with Soda and a testaceous powder; or, if the bowels are very irritable, the Hydrargyrus cum

* Plenck, under the title *Crusta lactea infantum larvata*, says,—“Repressis autem papulis crustasis morbi glandularum, tussis, asthma, tabes sæpe oriuntur.” He also says, “Scabies capitis *retropulsa* exigit sinapismum, vel vesicatorium abraso capiti imponendum, ut revocetur scabies, vel denique novam infectionem ope applicatæ mitræ scabiosæ.” Doct. de Morb. Cutaneis, p. 76.

Cretâ, or the Cinereous Oxide, may be substituted. But if the general health appear sound, the inflammatory condition of the skin, and the profuse exudation, may be alleviated by the internal use of Soda with precipitated Sulphur, or with the Testacea. "If the discharge be considerable and very acrid, the denuded surface should be washed with a solution of ʒij of Bicarbonate of Soda, ʒʒss of Hydrocyanic Acid, ʒʒviii of Bitter Almond Emulsion. In young subjects the Hydrocyanic Acid should be omitted."

When the state of irritation is removed, and the crusts are dry and falling off, the Unguentum Hydrargyri Nitratis, much diluted, may be applied with advantage. And now some gentle tonic, such as Infusion of Calumba, the Decoction of Sarsaparilla, or the Decoction of the Water Dock, should be administered with Subcarbonate of Soda, or the Chalybeates (which are more readily taken by children), especially the saturated solution of the Tartrate, or the Vinum Ferri. "The Solution of Sulphate of Quinine, or the Decoction of Cinchona Bark acidulated, have also proved beneficial."

I cannot speak from experience respecting the medicine recommended as a specific by Dr. Strack; namely, a decoction of the leaves of the *Viola tricolor* of Linnæus, in milk.* In the course of the first week, this medicine is said to increase the eruption considerably; but at the same time the urine acquires the smell above mentioned, and, at the end of a fortnight, the crusts begin to fall off, and the skin underneath appears clean. Professor Selle, however, has affirmed, that this plant is either noxious in this complaint, or wholly inert.† "When the milk is thick, if the infant be altogether nourished at the breast, the nurse must be changed. If it be fed,

* He prescribes a handful of the fresh, or half a drachm of the dried leaves, to be boiled in half a pint of cow's milk, and the whole to be taken night and morning.

† *Medicina Clinica*, i. 185.

much care must be taken to repress a voracious appetite in the child, and to make the food as light as possible : avoiding the use of sugar, and every fermentable substance."

SPECIES 2. IMPETIGO *favosa*, HONEYCOMB SCALL.

Syn. *Tinea favosa* (*Haly Abbas, Astruc. Sauv.*) : *Tinea volatica*, *Ignis volaticus*. *Mentagra Infantum* (*Auct. Var.*) : *Scabies, capitis favosa* (*Plenck*) : *Dartre crustacée flavescence* ; *Herpes crustaceus* (*Alibert*) : *Ecpyesis Porrigo, γ favosa* (*Good*) : *Κηρίον* (*G.*) : *Favus* (*Lat.*) : *Teigne faveuse* (*F.*) : *Pódóghoo* (*Tam.*) : *Goorig* (*Duk.*) : *Podooghoo Kurapanie* (*Tel.*) : *Badkhora* (*Pers.*)

This species of the disorder (Plate XLI. of BATEMAN ; Pl. 16. of THOMSON'S ATLAS,) consists of an eruption of soft, straw-coloured pustules, denominated *favi*, without apparent previous inflammation. These are not in general globular, with a regularly circular margin ; but somewhat flattened, with an irregular edge, and surrounded by a slight inflammation. They occur on all parts of the body ; sometimes on the scalp alone, in which case the pustules are small, and the pus, instead of exuding, dries under the cuticle ; sometimes they appear on the face, or on the trunk and extremities only ; but most commonly they spread from the scalp, especially from behind the ears, to the face, or from the lips and chin to the scalp, and occasionally from the extremities to the trunk and head.* They are usually accompanied with considerable itching. Children from six months to four years of age are most liable to this eruption ; but adults are not unfrequently affected with it. Cooks are very liable, according to Alibert †, to this species of Impetigo."

The pustules, especially on the scalp, appear at

* When it thus spreads from one part to another, the names *Tinea volatica*, *Ignis volaticus*, &c., have been given by Sauvages and others.

† *Mal. de la Peau*, p. 88. T.

first distinct, though near together ; but on the face and extremities they generally rise in irregular clusters, becoming confluent when broken, and discharging a viscid matter, which gradually concretes into greenish, or yellowish, semi-transparent scabs, " which are very adhesive, sometimes remaining in a dry brittle state for months." The disease extends, by the successive formation of new blotches, which sometimes cover the chin, or surround the mouth, and spread to the cheeks and nose * ; and, on the scalp, the ulceration ultimately extends, in a similar manner, over the whole head, with a constant discharge, by which the hair and moist scabs are matted together : " and a most disgusting odour is exhaled." Under the last-mentioned circumstances, pediculi are often generated in great numbers, and aggravate the itching and irritation of the disease. " The hair often separates with the slightest touch, leaving the scalp bald." " It has been, indeed, supposed, that the disease originates in the bulbs of the hair ; but it is more probable that the reticular tissue is the seat of the disease, in which case, the hairs may be detached without being diseased." On the face, too, a similar aggravation of the symptoms is occasioned, in children, by an incessant picking and scratching about the edges of the scabs, which the itching demands, and by which the skin is kept sore, and the ulceration extended ; while the scabs are thickened into irregular masses, not unlike honeycomb, by the accumulating and concreting discharge. On the lower extremities considerable ulcerations sometimes form, especially about the heels, and roots of the toes ; and the ends of the toes are sometimes ulcerated, the pustules arising at their sides, and even under the nails.

The ulcerating blotches seldom continue long,

* Rayer says, " Je l'ai vue occuper toute la partie postérieure jusqu'au sacrum." *Traité des Mal. de la Peau*, tome i. p. 497. T.

or extend far, before the lymphatic system exhibits marks of irritation, probably from the acrimony of the absorbed matter. When the scalp or face is the seat of the disease, the glands on the sides of the neck enlarge and harden, being at first perceived like a chain of little tumours, lying loose under the skin; and the submaxillary and parotid glands are often affected in a similar manner.* At length some of them inflame, the skin becomes discoloured, and they suppurate slowly, and with much pain and irritation. The eruption, in these situations, is likewise often accompanied by a discharge from behind the ears, or from the ears themselves, with a tumid upper lip, and inflammation of the eyes, or obstinate ulcerations of the edges of the eyelids. When the eruption appears on the trunk, although the pustules there are smaller and less confluent, and the scabs thinner and less permanent, the axillary glands are liable to be affected in the same way.

The discharge from the ulcerated surfaces, especially on the scalp, when the crusts and coverings are removed, exhales an offensive rancid vapour, not only affecting the organs of smell and taste, but the eyes of those who examine the diseased parts. † The acrimony of the discharge is also manifested by the appearance of inflammation, followed by pustules, ulceration, and scabbing, on any portion of the sound skin, which comes into frequent contact with the parts diseased: thus, in young children, the breast is inoculated by the chin, and the hands and arms by contact with the face. The disease is also contagious. The arm and breasts of the nurse are liable to receive

* Non criticè, non depuratorie, sed mali communicatione." Lorry de Morb. Cutan. p. 466. T.

† It has been supposed that the similarity of the odour of this discharge to that of garlic (*porrum*) gave rise to the appellation of *Porriigo*, which the disease was formerly called.

Rayer says that, after the application of poultices to detach the crust, this odour is "nauséabonde, et analogue à celle des os qu'on a fait bouillir avec leurs ligamens." l. c. p. 499. T.

the eruption ; but it is not so readily communicated to adults as to children.

The duration of this form of Impetigo is very uncertain ; but it is, on the whole, much more manageable than the *I. scutulata* and *decalvans*. Young infants often suffer severely from the pain and irritation of the eruption, and of the glandular affections which it induces ; and those who are bred in large towns, and are ill fed and nursed, are thus sometimes reduced to a state of fatal marasmus.

“ This species of Impetigo occurs at all seasons of the year, in both sexes. It seems to originate from bad nourishment, and imperfect clothing, in strumous habits : and there can be no doubt that damp, ill-ventilated dwellings, and the miseries of poverty in all their forms, are its most common predisposing causes.

“ The only disease with which it is likely to be confounded is Impetigo *furfurans* ; but, as every other part of the body, besides the hairy scalp, is likely to be affected, it is recognised.”

The Impetigo *favosa* requires the exhibition of the same alteratives internally, which have been recommended for the cure of the Impetigo *larvalis*, in doses proportioned to the age and strength of the patients. The diet and exercise should also be regulated with care : all crude vegetables and fruits on the one hand, all saccharine preparations and stimulating substances, whether solid or fluid, on the other, should be avoided ; and light animal food, milk, and puddings, should be alone recommended. “ The exercise of the patient should be regular, but never carried to fatigue : and it should be taken out of doors only in dry, temperate weather.” If the patient be of a squalid habit, or if the glandular affections be severe, the Cinchona Bark and Chalybeates, “ especially the Ioduret of Iron *, in doses of two or three grains in two ounces of In-

* The Ioduret is sold in solution, or as a hydriodate, in the strength of gr. iij. to fʒj of water, by Mr. Squires, Chemist, Duke Street, Manchester Square. It should always be kept in solution.

fusion of Orange Peel, or in the same quantity of water, to which gr. viij. of Bicarbonate of Potassa are added just before the dose is taken, so as to form Hydriodate of Potassa and Protocarbonate of Iron, will be found useful. In either mode of administration the Ioduret may be given three times a day." Or the solution of Muriate of Baryta united with the former, will contribute materially to the restoration of health. "Those cases that have come under my care have generally yielded to the administration of the Hydrargyrus cum Creta, in doses proportionate to the age of the patient, given every night; with the Carbonate or Subcarbonate of Soda, in full doses, given in the Infusion of Cinchona, or of Cascarilla Bark, three times a day."

There is commonly some degree of inflammation present, which contra-indicates the use of active stimulants externally. "Sulphur baths have been found sometimes injurious: but the simple warm bath and fomentations are serviceable." The Unguentum Zinci, or the Unguentum Hydrargyri præcipitati albi, mixed with the former, or with a saturnine ointment, will be preferred as external applications, especially where the discharge is copious: and the ointment of the Nitrate of Mercury, diluted with about equal parts of simple Cerate and of the Ceratum Plumbi Superacetatis, is generally beneficial; but the proportion of the Unguentum Ceræ must be varied according to the degree of inflammation. "The following is an old, but a useful ointment:

R. Picis liquidæ ℥iv,
 Ceræ flavæ ℥iv,
 Solve lento igne,
 et sperge ante frigescat
 Sulphuris Vivi ℥j.
 Tere ut fiat unguentum."

All stiff and rigid coverings, whether of oiled silk, or, according to a popular practice, of the leaves of Cabbage, Beet, &c. should be prohibited; for they

often excite a most severe irritation. I have witnessed, in several instances, an universal ulceration, with copious purulent discharge, and a highly inflammatory and painful state of the scalp, exciting even a considerable degree of symptomatic fever, produced by such applications. The substitution of a poultice, in these cases, removed this irritative condition in two or three days, and the disease was speedily subdued by the treatment above recommended. "The treatment of the brothers Mahon, in the Parisian hospitals, is said to prove most efficacious. The hair is first cut off, so as to leave it throughout only two inches long; the crusts are next cleared away as completely as possible by linseed meal poultices, and soap and water. This part of the treatment occupies four or five days. After having thus prepared the scalp, the affected parts are next to be covered with an ointment composed of Chalk, Silix, Alum, Oxide of Iron, a small quantity of Subcarbonate of Potassa, some Lime, and a little Charcoal, rubbed up with lard: the proportions in this heterogeneous mass are kept secret. This ointment is to be applied on alternate days for upwards of a month: and on the intermediate days a comb is passed gently over the parts to detach the loosened hairs with as little pain as possible. At the end of this time a powder composed of the same materials as the ointment, with the exception of the charcoal, is to be sprinkled over the affected parts; and, after using the comb on the following day, the ointment is again resorted to; and by continuing this method the disease yields, and the skin regains its natural and healthy condition. I have had no experience of this method of treating the disease."

"Many other ointments and pommades have been recommended. The influence of all of them is stimulant. In obstinate cases, the crusts have been removed, and a feather dipped in the mineral acids applied to the sores, bathing the parts immediately afterwards with cold water."

It may be mentioned, in conclusion, that an eruption of *favi* is sometimes seen on the face (Plate XLII. of BATEMAN); on the ears, neck, and occiput, in adults*; in whom it is preceded and accompanied by considerable derangement of the constitution, headach, pain of the stomach, loss of appetite, constipation, and some degree of fever. The pustules become confluent, discharge a viscid humour, and scab, as in the eruption just described; but they are surrounded by more extensive inflammation, and become harder and more prominent, somewhat resembling, in this respect, the Ecthyma. Their course, however, is more rapid than that of the Ecthyma, or of the tubercular Sycosis, to which also the disease bears some affinity. A cathartic, followed by the *Pilula Hydrargyri Submuriatis comp.* of the last Pharmacopœia, or Dr. Plummer's Pill, and a vegetable tonic, especially the Decoction of Sarsaparilla, will be found serviceable; and the mild external applications, above mentioned, must be employed according to the degree of inflammation present.

A sudden eruption of *Impetigo favosa*, accompanied by fever, occasionally takes place also in children. A considerable alarm was excited by such an occurrence in a family which I was requested to see, in which the disease was deemed to be some new or anomalous contagion. The first patient, aged five, was seized with severe fever, in which the pulse was at one time 140, and continued at 110 for several days; at the same time, clusters of favous pustules appeared behind the ears, which were speedily followed by others on the scalp, and about the apertures of the nostrils, which they plugged up as the scabs were formed. A few days after the commencement of this attack, a younger child, aged two years, was seized in a similar

* Of this form of *Impetigo favosa* on the cheek, the 16th plate of M. Alibert appears to be a representation. He calls it "Dartre crustacée flavescente."

manner ; but in her, the pustules appeared also about the chest, the glands of the neck swelled, and the abdomen became tumid. The contagion was immediately, though but locally, received by the mother and the nurse : the former of whom was inoculated about the mouth, by kissing the children ; the latter in the palm of the hand. These children were somewhat squalid, and apparently ill nursed, especially in respect to cleanliness and exercise.

“ All the species of Impetigo are, sometimes, spontaneously cured, even after they have long resisted all remedies.

“ Alibert mentions the case of a girl of sixteen who had a very obstinate attack of Impetigo favosa, which yielded to no remedies, but disappeared soon after she was attacked with fever and Erysipelas.”*

SPECIES 2. IMPETIGO ERYSIPELATODES. ERYSIPELATOUS RUNNING SCALL.

Syn. Ecpyesis Erythematica (Good).

This form of the disease, in its commencement, presents nearly the ordinary appearances of Erysipelas ; namely, a redness and puffy swelling of the upper part of the face, with œdema of the eyelids ; and is accompanied with slight febrile symptoms for the space of two or three days. But on a minute examination, the surface, instead of the smooth polish of Erysipelas, is found to exhibit a slight inequality, as if it were obscurely papulated ; and, in a day or two, the true character of the disease is manifested, by the eruption of numerous psudracious pustules, over the inflamed and tumid skin, instead of the large irregular bullæ of Erysipelas. These pustules first appear below the eyes, but soon cover the greater part of the face, and sometimes extend to the neck and breast ; they are accompanied with a distressing sense of heat, smarting, and itching. When they

* Malad. de la Peau, p. 93.

break, they discharge a hot and acrid fluid, which adds to the irritation and excoriation of the surface. In this painful condition the face remains for ten days or a fortnight, when the discharge begins to diminish, and to concrete into thin yellowish scabs. But on the interstices between the scabs, fresh pustules arise at intervals, with renewed heat and pain, and subsequently discharge, ulcerate, and form scabs like the former. The disease continues thus severe and troublesome for an uncertain period, from one to two or three months; and ultimately leaves the cuticle in the same dry, red, and brittle state, which remains after the other forms of Impetigo. The constitution is scarcely disturbed during the progress of this disease, and is much less disordered in the outset than in Erysipelas. Its affinity with Impetigo has been further evinced, in some cases which I have seen, by the occurrence of the other forms of the eruption on the extremities during its course: occasionally, indeed, extending over the whole surface, a capite ad calcem.

In the commencement of the disease, purgative medicines, with the antiphlogistic regimen, afford great alleviation to the symptoms; but when the copious exudation and scabbing take place, the Cinchona in considerable doses, alone or with the Sarsaparilla, or the mineral acids, is administered with the greatest benefit. The same local treatment is requisite as in the other forms of the eruption; viz. tepid ablution, with emollient liquids; the application of the mildest ointments; and the use of sea-bathing, or of the sulphureous waters, in its decline." I have seen more benefit derived from Nitrate of Silver than any other topical application.

Books which may be consulted on Impetigo.

PLUMBE on Diseases of the Skin, 2d edit. 1827.

RAYER, *Traité des Mal. de la Peau*, 8vo. 1826.

WILLAN, *Practical Treatise on Impetigo*, 4to. 1814.

GENUS II, PORRIGO.

Syn. Porrigo (*Auct. var.*): Crusta lactea (*Auct. var.*): Pityriasis (*Swediaur*): Ecpyesis porrigo (*Good*): Phlysis porrigo (*Young*): Tinea (*Auct. var.*): *Αχως* (*G.*): Favus (*L.*): der Kleingrind (*German*): Hofdchilfers (*Dutch*): Aspe (*Dan.*): Kliskorf (*Swed.*): Netek (*Hebrew*): Gourme Forfere (*Ital.*): Carpa (*Span.*): Teigne (*F.*): *Moist Scall*.

Def. AN ERUPTION OF STRAW-COLOURED PUSTULES; CONCRETING INTO YELLOW OR BROWNISH CRUSTS OR CELLULAR SCABS.

PORRIGO * is a contagious disease, which may occur at any period of life, although it is more common under the age of puberty. It is principally characterised, as the definitions tates, by an eruption of the pustules, denominated *favi* and *achores* (*Def. 5. c, d*), unaccompanied by fever. The several ap-

* This term is adopted, as a generic appellation, nearly in the same sense in which it was used by Celsus, who included the moist and ulcerating as well as the dry and furfuraceous eruptions of the scalp, under this denomination. (*De Med. lib. vi. cap. 3.*) The word *Tinea* is employed in the same generic sense by Sauvages; but being a term of no authority, and probably of Arabic origin †, it is properly superseded by the classical appellation. Numerous writers, ancient and modern, have designated the varieties of the disease by distinct names; such as crusta lactea, alopecia, pityriasis, favi, achores, scabies capitis, &c.: but the most intelligent observers have pointed out the identity of the nature and causes of these various eruptions. See Sennert. *de Morb. Infant. p. ii. cap. 4.*; and *Pract. lib. v. p. iii. § ii. cap. 4.* — Heister. *Chirurg. p. i. lib. v. cap. x.* — Tilingius, *Lilium curiosum, cap. 17.* — Vogel, *de cognos. et cur. Hom. M orb. class. viii. § 713.* — Stoll, *Rat. Med. i. 49.*

† Si eidem auctori (Avicenna) credamus, ab humore melancholico causam accipit, cutem corrumpit atque corrodit, hæcque est *alwathim* à quo nomine barbari, ut videtur, thim et thineum et tinean fecerunt. *Lorry de Morb. Cutaneis, p. 463. T.*

pearances which the disorder assumes may be arranged into three sections, containing four specific forms.*

SECT. I. PORRIGO, *true porriginous eruption.*

SP. 1. *P. lupinosa.*

SECT. II. ECZEMATOUS PORRIGO.

SP. 1. *P. furfurans.*

SECT. III. ANOMALOUS PORRIGO.

SP. 1. *P. scutulata.*

SP. 2. *P. decalvans.*

SECTION I.

TRUE PORRIGO.

SPECIES 1. PORRIGO *lupinosa*, LUPINE-LIKE SCALL.

Syn. Scabies capitis lupina (*Plenck*): Tinea lupina (*Astruc. Sauv.*): Teigne faveuse †, Tinea fa-

* In a note, subjoined in this place, in the two preceding editions of this work, I remarked, that the non-contagious quality, and some other features of this disease, indicated an analogy to Impetigo. My subsequent experience has led me to question altogether the propriety with which Dr. Willan classed the crusta lactea under the genus *Porrigo*, and to believe that Impetigo *larvalis* would have been the more correct appellation. Even on the face and scalp, the character of the eruption is impetiginous; the pustules being psudracia, and not favi or achores; the crusts thin and laminated, not elevated and indented, like the honeycomb of Porrigo; and the subsequent oozing of ichor, from numerous points, and the repeated recession and renewal of the inflammation and incrustation, still more completely establish the identity of this disease with Impetigo, as well as its universal attacks over the whole body and extremities, fixing especially in the flexures of the large joints, and returning occasionally for several years, even till the age of puberty, in the spring and autumnal seasons; and from every successive irritation from both the processes of dentition, and other causes.— With these remarks, however, I leave the disease in its original place, in deference to my venerated preceptor, and in order to avoid the confusion of altered arrangement.

The present Editor accords with the opinion of Dr. Bateman, and therefore has removed *P. larvalis* and *favosa* to Impetigo. *P. scutulata* and *decalvans* are also improperly placed under Porrigo; but they are too little understood to admit of being properly arranged.

† Alibert says, "La Teigne faveuse est celle qui s'est le plus fréquemment présentée à nos regards," p. 14. He also says, "J'ai observé cette affection sur des têtes dont les cheveux étoient noirs, blonds, et même rouges." Liv. i. p. 15. T.

vosa (*Alibert*): Teigne annulaire ; Teigne rugueuse ; Rache sèche (*F.*).

“ This species of Porrigo, (Pl. 15. of THOMSON'S ATLAS,) which is occasionally congenital, and sometimes hereditary *,” is characterised by the formation of dry, circular scabs, of a yellowish white colour, set deeply in the skin, with elevated edges and a central indentation or cup-like depression, sometimes containing a white scaly powder, and resembling, on the whole, the seeds of lupines †, or rather certain species of lichens. These scabs are formed upon small separate clusters of *achores*, by the concretion of the purulent fluid, which exudes when they break ‡; and they acquire, when seated on the scalp, the size of a sixpence. Frequently there is also a thin white incrustation, covering the intervening parts of the scalp, which commonly exfoliates ; but, if allowed to accumulate through inattention to cleanliness, it forms an elevated crustaceous cup. The disease, however, is not exclusively confined to the head ; but sometimes appears on the chest, belly, shoulders, loins, and the extremities, where the little white and indented scabs do not exceed two lines in diameter. “ It is accompanied with great itching, and pediculi frequently infest the crevices of the crusts. The odour of the favi, Alibert compares to the urine of the cat ; or chambers which have been infested with mice.” This variety of Porrigo is liable to increase much if neglected ; and is usually tedious, and of long duration. “ When neglected, the acrid pus, is absorbed, and swells the cervical glands. In old

* Alibert mentions a case of it which appears to have been hereditary : “ son père,” says he, “ en étoit atteint.” Liv. i. p. 15. T.

† From this resemblance, the same epithet was applied to the disease by Haly Abbas, who has distinguished six species. “ Quinta est lupinosa, sicca, et colore alba, lupino similis, à qua quasi cortices et squamæ fluunt albæ.” (Theorice, lib. viii. cap. 18.) See also Guid. Cauliac. tract. vi. cap. 1. Sennert. lib. v. p. i. cap. 32.

‡ Thenard and Vauquelin found that the purulent discharge in this species affords much albumen.

cases, in which the disease is abandoned to its progress, complete baldness or *alopecia* occurs.

The internal treatment in *P. lupinosa* does not differ from that necessary in *Impetigo larvalis*. The first object in the local management of this form of the disease, is to remove the crusts and indented scabs, by a diligent application of soap and water, "or by a poultice of oatmeal, or of brown soap and oatmeal half boiled," or other emollient applications. If the scalp be the seat of the disease, the previous removal of the hair will be necessary. If the scabs are not penetrable by these ablutions or by ointments, or if any thick intervening incrustation is present, a lotion of the *Liquor Potassæ* *, or of the *Muriatic Acid*, or the *Sulphuric Acid* in a diluted state, may be employed. When the surface is cleared, "the *rete mucosum* is seen red and covered with numerous small ulcers, which exude a viscid, fœtid, straw-coloured fluid. At this time" the ointment of *Cocculus Indicus* may be applied to the red and shining cuticle; and afterwards the more stimulant unguents, as in the case of *P. furfurans*, with regular daily ablution, will complete the cure.

SECTION II.

ECZEMATOUS PORRIGO.

SPECIES 1. PORRIGO *furfurans*.† FURFURACEOUS SCALL.

* An alkaline lotion may be made with the proportions of a drachm of the *Aqua Kali Puri*, two or three drachms of Oil, and an ounce of Water. — "Imprimis *salia lixivia*," says Prof. Selle, "ad crustam tam firmam atque alias insolubilem emolliendam sunt apta." *Medic. Clin.* 187.

† Sennert de Curat. Infant. p. ii. cap. 4. — Sauvages, Nos. Method. class. x. gen. xxix. spec. 6. Plenck, Doctr. de Morb. Cut. class. vii. Alibert, plate 3., where it is well represented. It may be observed that the "*T. amiantacée*" of this writer (plate 4.) appears to be a variety *P. furfurans*. It is, in fact, to a *furfuraceous* disease alone that the translators of the Greek physicians, and many modern Latin writers,

Syn. *Tinea furfuracea* (*Sennert*): *Tinea porriginosa* (*Astruc. Sauv.*): *Porrigo furfuracea* (*Plenck*): *Eopyesis porrigo*, ε, *furfuracea* (*Good*): *Teigne furfuracée*. *Tinea furfuracea* (*Alibert*): *Eczema de cuir chevelu* (*Biet, Rayer.*): *Rache farineuse* (*F.*).

In this form of the disease, (Plate XXXVIII. of BATEMAN; Pl. 16. of THOMSON'S ATLAS,) which commences with an eruption of small *achores*, the discharge from the pustules is moderate in quantity, and the excoriation slight; the humour, therefore, soon concretes, and separates in innumerable thin laminated scabs, or scale-like exfoliations. At irregular periods, the pustules re-appear, and the discharge being renewed, the eruption becomes moist; but it soon dries again and exfoliates. It is attended with a good deal of itching, and some soreness of the scalp, to which the disease is often confined, "although I have seen it extend to the ears." "It frequently appears first on the nape of the neck, at the margin of the hairy scalp, and on the temples. The discharge is viscid, and exhales a nauseous odour; it adheres to the hair; and in drying forms a powdery scurf, which easily separates by slight friction." The hair, which partially falls off, becomes thin, less strong in its texture, and sometimes lighter in its colour.* Occasionally the glands of the neck are

apply the term *Porrigo*, deeming it synonymous with the Greek *περυπιασις*. From the authority of Celsus, however, it is obvious that this is a misapplication of the term; and it is improper to comprehend the single dandruff, and the contagious scall, under the same generic appellation. See *Pityriasis*, above, p. 45. *note*. *Plenck*, though applying the term to both, marks the distinction, calling the contagious disease, *Porrigo furfuracea, seu vera*,—and the other *P. farinosa, seu spuria*, which he considers as a mere accumulation of the secretion from the sebaceous glands.

* *Alibert* correctly remarks, "Toutes les fois que nous avons dépouillé le cuir chevelu des écailles qui le recouvroient, nous avons observé qu'il étoit dénué de son epiderme, qu'il avoit une couleur rosée, et offroit une surface lisse, polie, luisante, comme vernisée." *Liv.* 1. p. 7. He also remarks that it is most common in those who have bright chestnut-coloured hair. T.

swelled and painful, owing to the acrid pus confined under the scales being absorbed.

The *P. furfurans* occurs principally in adults*, especially in females, of a lymphatic temperament, in whom it is not always easily distinguished from the scaly diseases, Pityriasis, Psoriasis, or *Lepra*, affecting the capillitium. It usually commences with aches so minute, and containing transparent pus, that they are often mistaken for vesicles; and the disease regarded as Eczema. The circumstances just enumerated, however, will serve to establish the diagnosis: as in those diseases, no pustules appear in the beginning, — there is no moisture or ulceration, — and the hair is not detached, nor changed in texture and colour; — neither are they communicable by contact.

“Although no general treatment is supposed to be requisite in this species of Porrigo, yet it is rarely effectually removed without the aid of a light alterative course of internal medicine, and occasional small bleedings, followed by six or eight grains of calomel and a brisk cathartic. The best alterative for an adult is gr. viij. of Hydrargyrum cum Cretâ, and twenty or thirty minims of Liquor Potassæ, three times a day, gradually augmenting the dose to one hundred drops. The best vehicle is milk, or table-beer.”

In the local treatment of the *P. furfurans*, it is supposed to be absolutely necessary to keep the scalp closely shaven. “Many objections, however, are often made to shaving the head, which may not be absolutely requisite, if the hair be cut short, and the following lotion employed: —

℞ Potassæ Sulphureti (recentis prep.) ʒij.
Saponis Mollis ʒj.
Aquæ Calcis fʒviii.
Spir. Rect. fʒij. M. fiat lotio.”

The branny scabs should be removed by gentle wash-

* Alibert nevertheless says, “Je n’ai jamais observé que la Teigne furfuracée attaquât les adultes.” Liv. 1. p. 7. T.

ing, with some mild soap and water, twice a day ; and an oil-silk cap should be worn, partly for the purpose of keeping the surface moist as well as warm, and partly for the convenience of retaining an ointment in contact with it.

The nature of the ointments employed in this, as in the other species of *Porrigo*, must be varied, according to the period of the disease, and the irritability of the part affected. In the commencement of the eruption, when the surface is moist, tender, and somewhat inflamed, the Oxyd of Zinc ointment should be applied ; or, when inflammation is present, an ointment prepared with the *Coculus Indicus*, in the proportion of two drachms of the powdered berry to an ounce of lard. But when the scalp becomes dry and irritable, in the progress of the complaint, it may be washed with the common soft soap and water ; or with a lather made by mixing equal portions of soft soap and *Unguentum Sulphuris* in warm water. More stimulant ointments will then be requisite, such as the *Unguentum Hydrargyri Nitratis*, *Unguentum Hydrargyri Nitrico-oxydi*, the Tar and Sulphur Ointments, or the *Unguentum Acidi Nitrosi* of the *Edinburgh Pharmacopœia*. These and other stimulant applications* succeed in different individuals in the inert state of the *P. furfurans* ; but they must be intermitted, in case the inflammation and discharge return.

“ The diet should be mild and nutritive, and all salted meats, pork, and fish avoided.”

* A long catalogue of stimulants, of similar quality, may be collected from the writings of the Greeks, as remedies for the furfuraceous *Porrigo* : such as liniments of frankincense and vinegar, or the same gum with wine and oil ; others prepared with oil of rue, litharge, and vinegar ; or with stavesacre and oil ; lotions of the decoction of *scenugreek*, the roots of beet, and of the *cucumis silvestris*, &c. See *Oribas. Synops. lib. viii. cap. 25.* *Aëtius, tetrab. ii. serm. ii. cap. 76.* *Alex. Trall. lib. i. cap. 4.*

SECTION III.

3. ANOMALOUS PORRIGO.

SPECIES 4. PORRIGO *scutulata*, SCALDED HEAD, OR RINGWORM OF THE SCALP.

Syn. *Tinea ficosa* (*Astruc. Sauv.*): *Achores*, seu *Scabies Capitis* (*Plenck*): *Tinea granulata* (*Alison*): *Ecpyesis Porrigo*, 6, *Galeata* (*Good*): *Teigne granulée* (*Alibert*): *Shirine* (*Arab.*): *Kel* (*Pers. Turk.*): *Grind*; *Haarschuppen* (*German*): *Tête Teigneuse* (*F.*).

(Plate XXXIX. of BATEMAN; Pl. 16. of THOMSON'S ATLAS). This species of Porrigo appears in distinct and even distant patches, of an irregularly circular figure, upon the scalp, forehead, and neck.*

It commences with clusters of small light yellow pustules, which soon break and form thin scabs over each patch, which, if neglected, become thick and hard by accumulation.† If the scabs are removed, however, the surface of the patches is left red, and shining, but studded with slight elevated points, or papulæ, in some of which minute globules of pus again appear, in a few days. By these repetitions of the eruption of *achores*, the incrustations become thicker, and the areas of the patches extend, often becoming confluent, if the progress of the disease be unimpeded, so as to affect the whole head. As the patches extend, the hair covering them becomes lighter in its colour, and sometimes breaks off short; and as the process of pustulation and scabbing is repeated. the roots of the hair are destroyed, and

* "Les enfans les plus sujets à la Teigne granulée, sont ceux dont la peau est brune ou basanée." Alibert, p. 15. T.

† Thenard and Vaugelien found the crusts in this species of Porrigo to be wholly gelatine.

at length there remains uninjured only a narrow border of hair round the head. "Sometimes the achores are not perceptible in the commencement of the disease ; but the falling off of the hair is the first notice of its existence. The pustules are often preceded by erythematic patches, which itch ; and, as M. Biett first observed, when viewed with a lens, each pustule has a central depression, and is generally traversed with a hair. The pustules, indeed, are generally seated at the roots of the hairs, which, as M. Biett has observed, are found penetrating the achores."

This very unmanageable form of *Porriigo* generally occurs in children of three or four years old and upwards, and often continues for several years. Whether the circles remain red, smooth, and shining, or become dry and scurfy, the prospect of a cure is still distant ; for the pustules will return, and the ulceration and scabbing will be repeated. It can only be considered as about to terminate, when the redness and exfoliation disappear together, and the hair begins to grow of its natural colour and texture.

The disease seems to originate spontaneously in children of feeble and flabby habits, or in a state approaching to *marasmus*, who are ill-fed, uncleanly, and not sufficiently exercised : but it is principally propagated "by contagion, both to the other parts of the head of the individual affected, by the conveyance of the matter from the diseased to the healthy parts," and to others, by the frequent contact of the heads of children, but more generally by the use of the same towels, combs, caps, and hats. Whence the multiplication of boarding schools appears to have given rise to an increased prevalence of this disease, among the more cleanly classes of the community, at the present time. For such is the anxiety of parents to regain the lost years of education, that they too often send their children to these schools, when capable of communicating the infection, although supposed to be

cured ; against which no vigilance on the part of the superintendents can afford a sufficient security.

“ The duration of the disease is very uncertain ; and, even under the most favourable circumstances, the prospect of cure is always a distant one. If the surface appear red, smooth, and shining or scurfy, the disease is still in progress ; but when redness and exfoliation are absent, and the hair begins to grow in its natural form and colour, it may be regarded as on the decline.”

“ The causes of the disease are not known. It often originates in weak, ill-nourished children : but in general it is propagated by contagion ; and there is much reason for thinking that it is one of the many evils bestowed upon us from our Oriental possessions. It has been propagated chiefly in schools, and public establishments, where many children are brought together.”

The principles of local treatment already laid down, are particularly applicable in this species of Porrigo. While the patches are in an inflamed and irritable condition, it is necessary to limit the local applications to regular ablution, or sponging, with warm water or with lime-water, or some emollient fomentation.* Even the operation of shaving the head, which is necessary to be repeated at intervals of eight

* This mode of treatment was recommended by some of the ancients. Oribasius observes, that “ if there is much *heat* or *inflammation* connected with the *achores*, this must be first alleviated by a *moist sedative*.” (Synops. lib. viii. cap. 27.) Aëtius also observes, “ Quod si incideris in *achores inflammatos et dolentes*, dolorem prius liquido medicamento concoctorio mollienteque ac leni mitigabis,” &c. (tetrab. ii. serm. ii. cap. 68.) And among the moderns, Heister has made a similar discrimination respecting the treatment of Porrigo. He recommends, in all instances, in the commencement of the disease, the use of mild emollient applications ; as cream with cerussa, oleum ovorum, “ ung. de enula, de cerussa, diapompholygos, aliudve simile saturninum,” while moderate alteratives, of calomel, antimony, &c. are given internally. He affirms that the application of mercurial and sulphur ointments, in the first instance, is exceedingly pernicious. Chirurg. part. i. lib. v. cap. 10. *Riedlinus* relates, that a gentlewoman whose son was afflicted with Porrigo had tried many applications in vain, and indeed had received no benefit until she was recommended to cover the whole head with a cataplasm

or ten days, produces a temporary increase of irritation. At this time, the patient should wear a light linen cap, which should be frequently changed; and all stimulant lotions and ointments, which tend only to aggravate the disease, should be proscribed. "I have seen much benefit derived from the continued application of linen rags dipped in cold or iced water; and over these an oil-silk cap. Alibert recommends a cataplasm of Hemlock; but I have never seen any advantage result from it, nor from Cataplasms of Henbane or of Belladonna. The latter produces great dilatation of the pupils and blindness, vertigo, and other nervous symptoms: it, therefore, should be used with caution."

In the progress of the disorder, various changes take place, which require corresponding variations of the method of treatment. By degrees the inflammatory state is diminished, and a dry exfoliation and scabbing ensue: but the pustular eruption returns, and the patches become again red and tender; or, in some cases, without much redness, there is an acrimonious exudation, with considerable irritability of the scalp. In other instances, the surface becomes inert, and in some degree torpid, while a dry scaly scab constantly appears, and active stimulants are requisite to effect any change in the disorder. It is very obvious, as Dr. Willan used to remark, that the adoption of any one mode of practice, or of any single pretended *specific*, under these varying circumstances of the disease, must be unavailing, and often extremely injurious.

In the more irritative states, the milder ointments, such as those prepared with *Cocculus Indicus*, "in the proportion of ʒij of the Pulvis Cocculi to ʒj of Lard;" or with the Submuriate of Mercury, the

composed of oatmeal, water, and butter, which soon succeeded in curing the disease, and restoring the healthy state of the scalp. *Lin. Med. Ann.* 6. Feb. 25. p. 215. seq.

Oxide of Zinc, the Superacetate of Lead, or with Opium or Tobacco, should be employed; or sedative lotions, such as decoctions or infusion of Poppy-heads, or of Tobacco, may be substituted. Where there is an acrimonious discharge, the Zinc and saturnine with the milder mercurial ointments, such as the Unguentum Hydrargyri præcipitati albi, or the ointment of Calomel, or a lotion of Lime-water with Calomel, "or a soap composed of equal parts of soft Soap and of Sulphur ointment," are advantageous.

According to the different degrees of inertness which ensue, various well-known stimulants must be resorted to, and may be diluted, or strengthened, and combined, according to the circumstances. The Mercurial ointments, as the Unguentum Hydrargyri nitrico-oxydi, and especially the Unguentum Hydrargyri nitratis, are often effectual remedies: "Banyer's Ointment, which is composed of lbss. of Litharge, ʒij of burnt Alum, ʒjss of Calomel, lbss of Venice Turpentine, and lbij of Lard, well rubbed together, is much employed on the Continent." Ointments prepared with Sulphur, Tar, Hellebore, Turpentine, and Sabidilla, the Unguentum Elemi, "or the Unguentum Sulphuris, with a small addition of the Calx Hydrargyri alba," &c., separately or in combination, occasionally succeed; as well as preparations of Mustard *, Staves-acre, Black Pepper †, Capsicum, Galls, Rue, and other acrid vegetable substances ‡: but all have occasionally failed. "In India, where the

* See Sennert. loc. cit.—Underwood on the Dis. of Children, vol. ii.

† There is an Unguentum Piperis nigri in the Dublin pharmacopœia, of the efficacy of which Dr. Tuomy speaks highly: See his Essay on the Diseases of Dublin.

‡ The ancients were accustomed to employ a similar collection of stimulants for the achores; among which were Sulphur Vivum, Attramentum Sutorium (Sulphate of Iron), Tar, burnt Paper with Oil, Soap; Oil of Rue and of Myrtle; Resin, Myrrh, and Frankincense, with Wine and Vinegar, &c. Vinegar was deemed an efficacious remedy. "Acetum vero acerrimum ad achoras omni tempore accommodatum est." See Oribas. Synops. lib. viii. 27. Aët. tet. ii. serm. ii. cap. 68.

disease is very prevalent, an ointment composed of ℥j of powdered Galls, ʒj of Sulphate of Copper, and ℥j of Lard, or simple Cerate, is greatly recommended. In this country, one of the last local remedies in vogue is Kreosote: I have used it, and seen it occasionally successful, but, like every other local application, it as frequently fails." Lotions containing the Sulphates of Zinc and of Copper, or the Oxy muriate of Mercury, in solution, are likewise occasionally beneficial. "Decoction of Tobacco has been recommended; but it must be applied with caution. Nitric Acid rubbed up with Lard was tried by Alibert without permanent benefit. Underwood, in cases of long standing, advises the scalp to be shaved, then well washed with a strong lather of soap; and, afterwards, the Unguentum Picis made with Petroleum, instead of Pix liquida, to be rubbed in for nearly an hour at a time, using it hot, and covering the head with a bladder, both to keep on the ointment and to promote the perspiration of the part. If the hairs loosen, they should be pulled out by the roots.* Desault (*Journ. de Chirurg.*) mentions a plaster composed of Ammoniacum and Vinegar, which being spread on linen, is applied over the head, and left on it for two months. Alibert, who, it has been stated, recommends, a cataplasm of Hemlock, asserts that three cases out of four are cured by this application in five months."

In the very dry and inert state of the patches, the more caustic substances are often extremely successful. Thus I have seen a lotion, containing from three to six grains of the Nitrate of Silver in an ounce of distilled water, effectually remove the disease in this condition. Touching the patches with the Tincture muriated of Iron, or with any of the mineral acids, "particularly the Sulphuric," slightly diluted, in some cases removes the morbid cuticle, and the new one assumes a healthy action.† The application of a

* Treatise on Diseases of Children, 8vo. 8th edit. p. 434.

† Mr. P. Fernandez mentioned to me an instance of speedy recovery

blister in like manner sometimes effectually accomplishes the same end. But, in many instances, the effect of these renovations of the cuticle is merely temporary, and the disease returns in a week or two, upon the new surface.

Professor Hamilton, of Edinburgh, who considers the ringworm of the scalp as "quite different from the scalled head," has affirmed, that he has seldom failed to cure the former by the use of the Unguentum ad Scabiem of Banyer. For delicate children, he dilutes this ointment with an equal portion of simple Cerate, and sometimes alternates the use of it with that of common Basilicon.

These various applications are enumerated, because not one of them is always successful, singly, even even under circumstances apparently the same. They must be varied, and combined; and the best criterion in the choice and combination of them, is the degree of existing irritation in the morbid parts, or in the general habit. The rude and severe employment of depilatories, which some practitioners have recommended, is not always to be advised, as often inflicting great injury to the scalp, and retarding, rather than expediting, the progress to recovery. "They have been adopted on the supposition that the bulb of the hair is the seat of the disease. They are, nevertheless, recommended by some who do not refer the disease to the roots of the hair, but regard them only as sources of irritation in the diseased part. Mr. Plumbe * recommends, as a preliminary step to any method of local management, to discharge the contents of the pustules, to remove the hairs, and to wash the matter from the scalp. Having removed the hairs and discharged the pustules, he recommends

which followed a single application of the strong Sulphuric Acid, which was instantaneously washed off. A new and healthy cuticle succeeded. The Acetic Acid, or Aromatic Vinegar, which acts as a more gentle, yet very effectual caustic, has proved an effectual remedy in a few instances.

* A Practical Treatise on Diseases of the Skin, p. 70.

the part to be rubbed with finely powdered Sulphate of Copper, which is afterwards to be washed off. This should be repeated as often as any new pustules make their appearance. Should the pustules recur when new hair grows on the spots, he recommends pressure by adhesive straps and cold lotions. A more easy method of getting rid of the hairs is that recommended by Mr. M. Mahon in *Impetigo favosa*. The hair is cut short, and the crusts and scurf removed by a cataplasm of Linseed meal applied every night for four or five days, and washing the scalp with soap and water. The affected parts are then to be anointed with a depilatory composed of weak (nearly carbonated) Quicklime, Silex, Alum, and Oxyd of Iron, a small quantity of Carbonate of Potass, some Charcoal, and a sufficient quantity of Lard. During the time of applying this, the hairs and scurf are to be removed by washing with soap and water. I have seen nearly the same advantages from using a lotion composed of one part of Liquor Potassæ, two parts of Alcohol, and two parts of Water. It is to be rubbed only on the diseased spot by means of a sponge."

I have said nothing respecting the administration of internal medicines ; because the disease is often merely local, being communicated by contagion to children in other respects healthy. But in those in whom it appears in combination with cachectic symptoms, chalybeate medicines, or the decoction of Cinchona and alteratives, must be prescribed, according to the particular indications ; and the diet, clothing, and exercise of the patient must be carefully regulated. " The feet in particular should be kept warm and dry ; and every means adopted to maintain a due equilibrium of the circulation and the insensible perspiration ; at the same time all crude aliments, raw vegetable matter, and whatever is likely to irritate the stomach, should be carefully avoided. I have always found advantage from keeping the bowels open, by saline purgatives in stout children, and by those of a warm and tonic cha-

racter in scrophulous subjects. The tepid bath, also, used in the morning, is beneficial.

SPECIES 5. PORRIGO *decalvans*, BALD OR RING-WORM SCALL.

Syn. Area (*Celsus*): Alopecia areata (*Sawv.*): Trichosis Area (*Good*).

This singular variety of the disease (Plate XL. of BATEMAN: Pl. 16. of THOMSON'S ATLAS,) presents no appearance whatever, except patches of simple baldness, of a more or less circular form, on which not a single hair remains, while that which surrounds the patches is as thick as usual. The surface of the scalp, within these areas, is smooth, shining, and remarkably white.* It is probable, though not ascertained, that there may be an eruption of minute aches about the roots of the hair, in the first instance, which are not permanent, and do not discharge any fluid.† The disease, however, has been seen to occur, in one or two instances, in a large assemblage of children, among whom the other forms of the Porrigo prevailed. But in other cases, and also in adults, it has appeared where no communication could be traced or conjectured. The areas gradually enlarge, and sometimes become confluent, producing extensive baldness, in which condition the scalp remains many weeks, especially if no curative measures are adopted. The hair which begins to grow is of a softer texture, and lighter colour, than the rest; and in persons beyond the middle age, it is grey. "It is difficult to trace the cause of this curious disease. It seems to be some

* Celsus, and after him some other writers, have described this affection under the appellation of "Area." Under this generic term, he comprises two varieties, called by the Greeks *Alopecia*, and *Ophiasis*; the former of which spreads in irregular patches; and the latter in a serpentine form, round both sides of the head, from the occiput. — *De Medicina*, lib. vi. cap. 4.

† It is not unfrequent in countries where the inhabitants live chiefly upon fish; as, for instance, formerly in the Shetland islands, where baldness from this cause was so common, that it was familiarly said, "that there was not a hair between them and Heaven." *Sir R. Sibbald's Description of Shetland*, fol. p. 25.

morbid condition of the secreting follicles of the hair, for there are no achores present that can be detected, nor any disease of the skin. The bald part, however, is pale and exsanguine, which seems to indicate some contracted state of the capillaries. There is occasionally a slight degree of itching, which seems to indicate some nervous excitement in the patches."

If the scalp is cleared by constant shaving, and at the same time some stimulant liniment be steadily applied to it, this obstinate affection may be at length overcome, and the hair will regain its usual strength and colour. In fact, until this change takes place, the means of cure must not be intermitted.* Some of the more active ointments, mentioned under the preceding head, may be employed with friction; but liniments, containing an essential oil dissolved in spirit (for instance, two drachms of the oil of Mace, in three or four ounces of Alcohol), or prepared with Oil of Tar, Petroleum Barbadosense, Camphor, Turpentine, &c. are more efficacious.

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* All that can be prescribed respecting the treatment of this affection has been expressed by Celsus with his usual terseness:—"Quidam hæc genera arearum scalpello exasperant: quidam illinunt adurentia ex oleo, maximeque chartam combustum: quidam resinam terebinthinam cum thapsia inducunt. Sed nihil melius est, quam novacula quotidie radere: quia, cum paulatim summa pellicula excisa est, adaperiuntur pilorum radiculae. Neque ante oportet desistere, quam frequentem pilum nasci apparuerit. Id autem, quod subinde raditur, illini atramento sutorio satis est." Loc. cit.

OLDENBOURG, de Porrigine, 1762.

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GENUS III. ECTHYMA.*

Syn. Εκθύμα τερμινθος επινηκίς (*Græcorum*): Terebinthus (*L.*): Albotin, Schera, Botsor (*Arabarum*): Terminthus (*Wiseman, Turner, Lorry, Plenck*): Epinyctis (*Sauvages*): Citerrole flechte (*Sprengel*): Phlysis Ecthyma (*Young*): Ecpyesis Ecthyma (*Good*): Dartre crustacée, Faruncle atonique (*F.*) Erbsen blattern (*G.*): *Papulous Scall*.

Def. AN ERUPTION OF LARGE PHLYZACIOUS PUSTULES; EACH SEATED ON A HARD, ELEVATED RED BASE; AND TERMINATING IN A THICK, HARD, GREENISH OR DARK-COLOURED SCAB. THEY ARE DISTINCT, SPARINGLY SCATTERED, AND NOT CONTAGIOUS.

“The pustules sometimes appear in successive crops; but generally they run an independent course, appearing and terminating at different times.

* The term *εκθύμα* seems to have been used by the Greeks in a general sense, and nearly synonymous with *εξανθήμα*, or *eruption*. Perhaps the more elevated and inflammatory eruptions were particularly called *ecthymata*; since, as Galen has observed, in his Commentary on the third book of the Epidemics of Hippocrates, the term is derived from *εκθειν*, “quod est εξορμαν (*impetu erumpere*) in iis quæ sponte extuberant in cute.” (§ 51.) See also Erotian de voc. apud Hippoc.; — and Foës, *Œconom. Hipp. ad voc. εκθύματα*. This view of the subject has led many authors, Fernel, Paré, Vidus, Vidius, Sennert, Sebizius, &c. to believe, that the terms *ecthymata* and *exanthemata* were used specifically, as the denominations of smallpox and measles. “Variolas vocant *εκθύματα*, pustulas extumescentes, morbillos autem *εξανθήματα* nominant, maculas in cute apparentes,” &c. See a learned Treatise of Melchior Sebizius, *De Variol. et Morbil.* Argent. 1642. These views sanction the appropriation of the term to the “*pustulæ extumescentes*” of this genus.

“ This eruption is, sometimes, but not always, preceded by fever : but more generally by gastric irritation.” It does not very frequently alone demand the assistance of medicine. It is commonly indicative of some state of distress, if that expression may be used, under which the constitution labours ; and, although it is not attended by actual fever, yet a degree of general irritation, or erethism, is often present with it, arising from great fatigue, defective nourishment, surfeits, imperfect clothing, ill-ventilated houses, sloth and filth. “ Their developement is frequently accompanied with very acute stinging pains, not unlike those that often precede Herpes *Zoster*. Their progress is always slow : the suppuration being often imperfect ; and the pus occupying only the apex of the pustule. On the extremities, however, the pustules are so generally suppurated as to assume the appearance of blebs. They terminate sometimes in thin white crusts ; sometimes in deep ulceration ; sometimes in permanent indurations.”

“ Ecthyma attacks all ages and constitutions : but young men are more liable to it than children of either sex.” “ The degree of strength of the constitution modifies greatly the progress of the pustule ; when it is low, the suppurative process is imperfect ; the pus, from the relaxed state of the capillaries, is often mingled with blood, at least with red globules ; thence an imperfect scab is formed : this becomes an irritating cause, so as to augment the exudation of the secretion, which accumulating, elevates and enlarges the scab.” It shows itself under three or four different forms, and is usually attributed to long-continued exertion and fatigue, to much watching, to anxiety of mind, to imperfect nutriment, to the influence of a cold and moist atmosphere, to an abuse of spirituous liquors, to a state of pregnancy, or to the debilitating effects of previous malignant fevers, especially of smallpox, measles, and scarlatina. It occurs most frequently on the extremities, but sometimes on the chest, “ abdo-

men, nates, loins, neck, rarely on the face, and scalp, and still more rarely on the trunk of the body.”

The diagnosis of this eruption from the contagious pustular diseases, as well as from some of the secondary appearances of syphilis, is of considerable importance in practice, which renders it necessary to notice this genus. “It may be mistaken for pustular scabies, from which, however, it is distinguished by the pustules appearing and running their course independent of one another, some being on the decline whilst others are just appearing; and by never being mixed with intervening vesicles. There is no itching, but a stinging pain in Ecthyma. It has also been confounded with Lichen and Furunculi.”

The genus comprehends four species :

- | | |
|-------------------------|----------------------------|
| 1. <i>E. vulgare.</i> | 3. <i>E. luridum.</i> |
| 2. <i>E. infantile.</i> | 4. <i>E. cachecticum.*</i> |

SPECIES 1. ECTHYMA *vulgare.*

Syn. Epinyctis vulgaris (*Sauvages*): Ecpyesis Ecthyma, $\alpha.$ vulgare (*Good*): L'Ecthyma aigu (*Rayer*): Psoris crustacea acuta (*Alibert*): *Common Papulous Scall.*

This (Plate XLIII. fig. 1. of BATEMAN; Pl. 17. of THOMSON'S ATLAS,) is the slightest form of the disorder, and consists of a partial eruption of small hard pustules, on some part of the extremities, or on the neck and shoulders, which is completed in three or four days. In the course of a similar period, the pustules successively enlarge, and inflame highly at the base, while pus is formed in the apex; and in a day or two more they break, pour out their pus, and afterwards a thinner fluid, which speedily concretes into brown scabs. “The progress of the pustules is attended with sharp stinging pains. In young sub-

* Rayer objects to this arrangement, and proposes to divide the genus into two species — *acute* and *chronic Ecthyma*; and although I retain the classification of Dr. Willan, here adopted by Dr. Bateman, yet I am decidedly of opinion that Rayer's is preferable. T.

jects they are of a bright red colour." In a week more, the pains, soreness, and inflammation subside, and the scabs soon afterwards fall off, leaving no mark behind. " But sometimes they are for some time adherent, and leave, when detached, a dark red spot : occasionally the lymphatic glands in their neighbourhood swell and inflame."

This eruption commonly supervenes on a state of languor and general depression of some continuance, with loss of appetite, irregularity of the alvine evacuations, headach, and pains in the stomach or limbs, restlessness and watchfulness at night. There is sometimes a suffused state of the eye, and erysipelatous inflammation of the fauces. Young persons are principally subject to it, and children are sometimes affected with it, especially in the spring or summer, after being over-heated, or fatigued, or from disturbing the digestive organs by improper food. The constitutional derangement is not immediately relieved on the appearance of the eruption, but ceases before its decline.

The use of gentle purgatives, in the early stage of the disease, and of the decoction of Cinchona, or of the Sulphate of Quinia, in combination with the diluted Sulphuric Acid, after the maturation of the pustules, appears to comprehend all that is requisite in regard to medicine. " Mercurial preparations, if exhibited so as to affect the habit, invariably aggravate the disease, except where the alvine secretions are very unhealthy, in which case a few grains of Hydrargyrum cum Cretâ, with a few drops of Tincture of Opium may prove useful. I have lately seen the shower-bath highly beneficial."

SPECIES 2. ECTHYMA *infantile*.

Syn. Ecpyesis Ecthyma, 6. Infantile (*Good*):
Infantile Pupulous Scall.

This species occurs in weakly infants, during the period of lactation, when an insufficient nutriment

is afforded them. It sometimes appears after the first teeth are cut. The pustules are, in appearance, the same as those of the preceding species, and go through similar stages of progress, in the same time. But the disorder does not terminate here: fresh eruptions of phlyzacia continue to rise in succession, and to a much greater extent than in the *E. vulgare* appearing not only over the extremities and trunk, but on the scalp, and even on the face; in which situation the pustules do not occur, except, sometimes, in the fourth species of Ecthyma. "The pustules generally appear first on the abdomen below the umbilicus, and afterwards in the groins, and the axilla; on the nates and thighs before they attack the face and scalp." Hence, also, the duration of the eruption is much greater than in the preceding species, being occasionally protracted for several months. Yet the patients usually remain free from fever, and the pain and irritation seem to be inconsiderable, except when a few of the pustules become very large and hard, with a livid base, and ulcerate to some depth: in this case, also, a slight whitish depression is permanently left on the seat of the pustule. Improper nourishment, and cold and moisture, are the exciting causes of this species of Ecthyma. Plenck states that it is sometimes epidemic.

The principal means of cure will be found in changing the nurse, "or altering her milk by a change of diet, especially by leaving off the use of porter." And the advantages of better aliment will be aided by proper clothing and exercise, as well as by moderate alteratives, "mild aperients," and by the Cinchona, the Sulphate of Quinia, or chalybeates. "If the pustules are irritable, they may be fomented with decoction of Poppy heads; or a solution of Chloride of Lime."

SPECIES 3. *ECTHYMA luridum*.

Syn. Terminthus (*Auct. var.*); Melasma (*Plenck*,

Linn. Vogel): Ecpyesis Ecchyma, γ . *Luridum* (*Good*): L'Ecchyma chronique (*Rayer*): *Lurid Papulous Scall*.

The most obvious peculiarity of this variety of the phlyzacious pustule (Plate XLIII. fig. 2. of BATEMAN; Pl. 17. of THOMSON'S ATLAS,) is the dark red colour of its base, which is likewise hard and elevated. But the pustules of *Ecchyma luridum* differ also from the two preceding varieties, in being of a larger size; and from the first variety, in the slow but long succession in which they arise, and in the extent of surface over which they spread, the face alone being, generally, but not always, exempt from their occurrence. "Their suppuration is seldom completed in less than eight or ten days. In some instances, instead of suppurating, they pass into violet-coloured tubercles, which, if they suppurate, proceed to ulceration, and leave irregular cicatrices in the skin." This form of the disease is most frequently seen in persons of an advanced age, who have injured their constitutions by hard labour, intemperance in the use of ardent spirits, and night-watching; and it is most severe in the winter season.

Under all circumstances, the pustules, as might be expected, are slow in healing. They break in the course of eight or ten days, and discharge a curdly, sanious, or bloody matter: the ulcerated cavities, extending beyond the original boundary, soon become filled with hard, dark scabs, and remain surrounded by a deep-seated hardness in the flesh, and dark inflamed borders, until the scabs are about to separate, — a period generally of several weeks, and sometimes of many months. The scabs are commonly firmly seated; but if removed by violence, they are not speedily reproduced; on the contrary, tedious ulcers, with callous edges and a sanious discharge, are often thus occasioned. "This species of *Ecchyma* is said to be always a symptomatic affection. It prevails chiefly in those of broken-down constitutions, pri-

soners, and the victims of poverty and wretchedness. Unwholesome food, salted provisions, bacon, and the abuse of spirituous liquors, are its exciting causes."

The treatment of this Ecthyma must be chiefly directed to the amendment of the constitution, by means of good diet, by rest, the occasional use of the warm bath, and by the Cinchona Bark, the Sulphate of Quinia, and tonic vegetable decoctions, internally. "Sea-bathing has been found to produce highly beneficial effects, as an adjunct to tonics; and, when it cannot be obtained, nearly the same benefit may be procured from sponging the trunk of the body with tepid salt and water before getting out of bed in the morning."

A *symptomatic* Ecthyma, which bears a considerable analogy to the *E. luridum*, sometimes occurs during the cachectic state which follows the measles, and occasionally after the scarlet fever and small-pox. It is accompanied with a hectic fever, laborious respiration, and swellings of the glands; and is attended with extreme pain and soreness, sometimes with a tedious sloughing, in some of the larger pustules, which, in children particularly, are productive of considerable distress. The phlyzacia arise in various parts of the extremities and trunk, and are highly inflamed at their bases, even after the scabbing takes place. "Mr. Plumbe remarks, that when this symptomatic Ecthyma follows measles and other eruptive fevers, it is usually seen in its very earliest stage about the waist. It exhibits a few reddened and slightly elevated spots, covered with a very thin lamina of cuticle, which readily separates. Some of these have a minute elevation in their centre resembling a vesicle: the latter, however, contains nothing like the serum of the herpetic vesicle, but a glutinous fluid, which dries upon the part, and forms with the morbid cuticle an elevated scab of a conical form, the basis of which, in a day or two, is sur-

rounded by a small inflamed areola.”* The whole duration of the disease is often from one to two months ; and the majority of patients struggle through it.

Opiates and the warm bath afford essential relief to the distressing irritation occasioned by this affection ; and a liberal use of the Cinchona Bark, where it can be administered, and of other vegetable tonics, both shortens and alleviates the disease.

SPECIES 4. *ECTHYMA cachecticum*, CACHECTIC PAPULOUS SCALL.

An extensive eruption of phlyzacious pustules (Plate XLIV. of BATEMAN ; Pl. 17. of THOMSON'S ATLAS) not unfrequently occurs, in connection with a state of cachexia, apparently indicative of the operation of a morbid poison in the habit : for the phænomena of the disease much resemble some of the secondary symptoms of syphilis, and it is often treated as syphilitic.†

The disorder usually commences with a febrile paroxysm, which is sometimes considerable. In the course of two or three days, numerous scattered pustules appear, with a hard inflamed base, sometimes first on the breast, but most commonly on the extremities : and these are multiplied day after day by a succession of similar pustules, which continue to rise and decline for the space of several weeks, until the skin is thickly studded with the eruption, under various phases. For, as the successive pus-

* Plumbe on Diseases of the Skin, 2d edit. p. 440.

† A disease indicated by copper-coloured blotches, the size of a sixpence, on the nates and the soles of the feet, arising from a syphilitic taint in the parents, is not uncommon in London. It closely resembles this species of Ecthyma ; but requires the aid of Mercury for its removal. I have generally removed it with small doses of Hydrargyrus cum Cretâ ; and minute doses of the Oxymuriate of Mercury in Decoction of Elm Bark, or Emulsion of Bitter Almonds ; and more lately with the Hydriodate of Potassa, or the Hydriodate of Iron. The former may be commenced with doses of gr. iij, and carried to gr. x, three times a day : the dose of the latter may be, at first, gr. ij, and carried to gr. v, three times a day. T.

tules go through their stages of inflammation, supuration, scabbing, and desquamation, at similar periods after their rise, they are necessarily seen under all these conditions, at the same time; the rising pustules exhibiting a bright red hue at the base, which changes to a purple or chocolate tinge, as the inflammation declines, and the little laminated scabs are formed upon their tops: when these fall off, a dark stain is left upon the site of the pustules. In different cases the eruption varies in its distribution: it is sometimes confined to the extremities, where it is either generally diffused, or clustered in irregular patches; but it frequently extends also over the trunk, face, and scalp. The pustules which occupy the breast and abdomen are generally less prominent than those on the face and arms, contain less matter, and terminate rather in scales than in scabs.

The febrile symptoms are diminished, but not removed, on the appearance of the eruption; for a constant erethism or hectic continues during the progress of the disease. It is accompanied by great languor, and by much depression both of the spirits and muscular strength. "Delirium occasionally attends the febrile state; and in habits with a predisposition to insanity, the depression of spirits is occasionally so great as to lead to suicide." The fever is throughout accompanied by headach and pains of the limbs, which are described as rheumatic; and by restlessness and impaired digestion, with irregularity of the bowels. There is commonly also some degree of ophthalmia, affecting both the conjunctiva and the tarsi; and the fauces are the seat of a slow inflammation, which is commonly accompanied by superficial ulcerations.

The duration of this disease seems to be from two to four months, in the course of which time, by the aid of the vegetable tonics, Cinchona, Sarsaparilla, Serpentaria, &c., with Antimonials, and the warm bath, the constitution gradually throws off the mor-

bid condition which gives rise to it. The administration of Mercury is not necessary to its cure, nor does it appear to accelerate recovery.*

* The success attending the treatment pursued in the following case induces me to publish it. The patient, an unfortunate German gentleman, having fallen ill of a fever, lost all his employment, and became so depressed both in mind and body, that he sunk into a cachectic state of habit, and was soon attacked with Ecthyma. He applied to me on the 27th of June, 1828, two months after the disease had made its appearance. The eruption covered the whole of the body, with the exception of the hands and the face. The stinging sensation was also accompanied with itching, or rather a tingling, which induced an involuntary desire to scratch, by which not only the heads of the pustules were rubbed off, but large portions of skin, in some places two inches in length, and nearly an inch in breadth, were torn off by the action of the nails during sleep. Those pustules which had run their course had left dark stains behind, so that the greater part of the entire skin was covered with these and the crusted pustules. When the pustules were early rubbed, black dots of effused blood remained. The thighs were covered with ulcers. The body was greatly emaciated; there was a regular evening exacerbation of fever; the tongue was clean, but red and glazed: the skin felt dry and harsh; and the patient stated that the delirium attending the fever and the depression of mind had driven him nearly to commit suicide. The bowels were irregular. The following medicines were ordered:—

℞. Pulv. Jacobi veri gr. iij,
 Extracti Stramonii gr. ʒ,
 ——— Hyosciami gr. iij : fiat pilulæ ij,
 horâ somni omni nocte sumendæ.

℞. Magnesiæ Sulphatis ʒj,
 Magnesiæ Carbonatis ʒj. M.
 pulvis omni mane sumendus.

℞. Acidi Sulphurici diluti fʒxij,
 Tincturæ Opii fʒiv. M.
 Sumatur ʒ xx ex cyatho Decocti Corticis Cinchonæ Cordi-
 foliæ ter quotidie.

When the irritation is severe, let the surface be sponged with hot water. Let the diet be milk, fresh-boiled vegetables, and a moderate share of mutton under-cooked.

July 5th. Few fresh pustules have appeared; and the dark colour of the blotches is much less. The new pustules contain a mild pus. The bowels are regulated by the aperient; and although the fever still returns every evening, yet the delirium which attended it has disappeared. He feels, occasionally, as if a cloud had settled upon him, and cut him off from all external impressions. The tingling and irritation are less, and return only in paroxysms, during which he still tears off large portions of the skin.

Cont. medicamenta.

℞. Plumbi Acetatis ʒss.
 Acidi Hydrocyanici fʒiij,
 Ung. Cetacei ʒiij. M.

Fiat unguentum partibus cutis nudatis applicandum.

The diagnosis between this disease and the syphilitic Ecthyma, is to be collected rather from the history of the disease, than from the prominent symptoms: unless, indeed, we are ready to concede to a recent writer, that this and similar affections are never the result of the true syphilitic poison.*

Dr. Willan mentioned a *topical* variety of Ecthyma, occurring on the hands and fingers of workmen employed among metallic powders, which I have never seen. As it commences in a vesicular form, and, though afterwards purulent, produces irregular patches

18th July. He is much better in every respect, and the irritation is so much abated, that he can now sleep without excoriating his body. He is gaining both in flesh and strength.

Perstet in usu medicamentorum.

August 2d. The eruption is nearly gone, and the skin is regaining its natural aspect. He complains of watchfulness, and great depression; but the want of employment and distress of mind seem to be counteracting the full powers of the medicines.

Cont. medicamenta.

℞. Camphoræ gr. v,
Pulveris Jacobi gr. iij,
Extracti Hyosciami gr. iij.

Fiant pilulæ ij. h. s. sumendæ.

From this time the disease rapidly abated, and having discontinued his visits to me, he became fat, got into health, and is now in Germany.

The chief feature in the treatment of this case is the combination of the Tincture of Opium with the diluted acid, and the external application of the Hydrocyanic Acid, in the form of ointment. The Opium thus combined seemed to allay the irritation, and certainly augmented the tonic power of the Bark; whilst the ointment deadened the insupportable itching which had caused the tearing of the skin. T.

* See Part First of an "Essay on the Venereal Diseases, which have been confounded with Syphilis," by Richard Carmichael, President of the Royal College of Surgeons, Dublin, 1814. If I rightly comprehend this interesting but unfinished work, Mr. Carmichael maintains that the true syphilitic ulcer is followed exclusively by *one eruption*, the scaly copper blotch, or *Lepra venerea*, described by Dr. Willan. It will now scarcely be doubted, indeed, that the above-mentioned Ecthyma, and some other eruptive diseases of an analogous character, are frequently, though erroneously, pronounced syphilitic; but we are not prepared, by the present state of the evidence, to limit the syphilitic eruptions thus narrowly.

of thin scabs, it should perhaps have been referred to Eczema.*

Books which may be consulted on Ecthyma.

- CAZENEVE et SCHEDEL, *Abrégé Pratique des Maladies de la Peau*, 8vo.
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GENUS IV. VARIOLA. †

Syn. Euphlogia (*Rhazes*): Pocken, Blattern, Empyesis variola (*Good*): Variolæ (*Auct. var.*) Febris variolosa (*Hoffman, Vogel*): Synochus variolosa (*Young*): Kindspocken (*Germ.*): Kinderpokjes, Pokjes, Kinderziecke (*Dutch*): Kopper, Birnekopper (*Danish*): Kopper, Smakopper (*Swedish*): Vajuolo (*Ital.*): Viruelas, Viruela (*Spanish*): Petite verole, Picote (*F.*): Jedrie (*Arabic*): Perse ummay (*Tam.*): Burriseetle (*Duk.*): Pédumma (*Tel.*): Kruevan (*Bali*): Másoorikeh (*Sans.*): Kelumbuan-Chucur (*Malay*): Gootry (*Bengalese*): *Smallpox.*

Def. AN ERUPTION OF PUSTULES APPEARING FROM THE THIRD TO THE FIFTH DAY OF A CONTAGIOUS FEVER, AND SUPPURATING FROM THE EIGHTH TO THE TENTH: THE FEVER IS FREQUENTLY ACCOMPANIED WITH VOMITING AND PAIN WHEN PRESSURE IS MADE ON THE EPIGASTRIUM.

“*Variola*, as the definition states, is a contagious disease. The virus remains sometimes before it even induces fever, and after this commences the eruption is delayed for some time. It is seldom that any change is perceived by the patient on receiving

* A topical variety of Ecthyma is produced by Tartar Emetic ointment, and similar irritating applications. T.

† *Variola, quasi parvi vari.*

the infection, although it is said that an unpleasant odour, or a feeling of giddiness, sickness, or some alarm, is experienced. The period between the reception of the infection and the sickening, or febrile stage, is from twelve days to three weeks. A rigor then occurs, with pain or weakness of the back, sometimes pain of the epigastrium, with nausea, vomiting, and vertigo. The prostration of strength is considerable; and sometimes epileptic fits supervene, especially in children, whilst adults become delirious. In forty-eight or fifty hours after the rigor or headach comes on, the eruption shows itself; but circumstances may lengthen that period. The eruptive fever is not always evident: towards its close, in infants, vomiting and convulsions are not unfrequent. The eruption attacks at once the skin and mucous membrane of the lungs and of the primæ viæ: appears first on the face, thence it extends to the neck, the trunk of the body and the arms, and lastly to the lower extremities. It first shows itself in the form of small, hard, red papulæ, which, about the fifth day, become whey-coloured pustules, with a depression in the centre, which is filled up on the eighth day. When the pustules are few in number, they appear in groups of four or five, which assume a crescent form. The pustules are now spherical, turgid with pus, and inflamed at the base. About the eleventh day they spontaneously ooze out pus, which concretes to a crust; this, after some time, falls off, and leaves the skin of a reddish colour, which remains for many days before the natural colour is restored. The real variolous pustule is cellular, and tied down in the centre*; the vesicle of Chickenpox, Varicella, is a

* Dr. Macartney of Dublin thus describes the change of structure to produce the smallpox pustule: "In the cellular tissue which surrounds the villi of the cutis, a few blood-vessels are perceived determining to a central point, and producing a pimple, which feels hard under the finger: this acuminates; but by degrees the acumination disappears, and the centre of the pimple is depressed, and a cellular, radiated arrangement ensues. These cells, as well as the depression, are formed by the adhe-

single cell ; the pustule of modified smallpox is converted into a small horny button, on the fifth day from the coagulation of the gelatinous lymph.

“ Authors have spoken of two species of smallpox, the *distinct*, and the *confluent* ; but these insensibly run into one another, and are mere varieties of the same disease, depending, in a great degree, on the habit of body of the individual who is infected. Another variety of less frequent occurrence, is marked by the pustules remaining solid throughout : this has been termed the *Warty smallpox*, *Variola verrucosa*.*

“ The eruption, when the disease is produced by infection, follows the general fever ; when it is communicated by inoculation, there is a local affection often extending beyond the points where the virus was introduced previous to the formation of the general fever. It cannot be communicated by the blood of an infected person, as was proved by the experiments of Sutton the inoculator.”

VAR. 1. VARIOLA *discreta*, DISTINCT SMALLPOX (THOMSON'S ATLAS, Pl. XVIII.). The fever, in this variety of smallpox, is of the inflammatory type. It is accompanied with pains of the back, limbs, and loins ; sometimes with pains, also, of the chest, dryness of the fauces, and coma. In the first day of the fever, the rigors are more or less prolonged, alternated with bursts of heat, general uneasiness, nausea, or a diminished appetite. On the second day, the nausea increases ; arising sometimes to bilious vomiting : and, at the same time, a bilious diarrhoea supervenes.

sion of the central portion of the membrane to an inflamed part of the villous surface of the true skin.” T.

M. Velpeau, after many experiments on both the dead and living body, to discover the seat of the pustules, was led to conclude that they are developed chiefly in the sebaceous follicles. — Bull. de Soc. Philomath, Juin, 1825. T.

* Dr. John Thomson has endeavoured to prove that variola and varicella are merely modifications of the same disease, and communicable by the same virus. As the question is still *sub judice*, I refrain from hazarding my opinion regarding it in this place. T.

A little before the eruption appears, children are seized with an epileptic fit ; sometimes there is only a convulsive twitching of the mouth and face : the face is flushed ; the eyes are impatient of light ; and there is an uneasy sense of oppression at the epigastrium, which is greatly increased by pressure.

Roseola sometimes accompanies or follows the first appearance of the eruption. The pustules at first are small, red, isolated, distinct points like fleabites ; appearing on the face and hairy scalp, and extending over the whole body. This eruption is spread not only over the skin, but over the mucous membrane of the mouth, pharynx, and bowels, the prepuce and the vulva. On the second or third day of the eruption, the little tubercles are found to contain a fluid at the apex, which is, at first, nearly colourless and semitransparent, and depressed in the centre : but the eighth day they become spherical, and evidently contain pus. The face swells, and as it subsides, about the tenth or eleventh day, the hands and feet swell and continue swelled for some days ; and if not in excess, these swellings are to be regarded indicative of a favourable termination of the disease. When the pustules are few, they become opaque, white, and ultimately yellow ; and acquire the size of a small pea. After this, the shrinking and incrustation take place, as has been already described ; the swelling of the face and other parts disappears ; and a slight salivation and a hoarseness which accompany the swelling subside. The crusts generally drop about the fourteenth day of the disease, and leave brownish red blotches : convulsions seldom succeed to distinct smallpox.

The fever, in mild cases, seems to disappear after the eruption is fully formed : but “in severe cases, when the cellular matter is involved with the skin in inflammation, it continues, and is greatly aggravated. In general, this secondary fever” returns about the eleventh day ; and when the pustules are numerous, is

sometimes more severe than the eruptive fever. "The secondary fever is sometimes accompanied with ophthalmia; and, in very severe cases, the most aggravated affection of the conjunctiva supervenes, involving the structure of the eye, and completely destroying its organisation. Sometimes gangrenous inflammation of the genitals occur. The internal organs, namely, the lungs, the liver, the other abdominal viscera, and the brain, are all, more or less, involved in the secondary fever; and, in severe cases, display their morbid state, by pleurisy, hepatitis, bronchitis, and erysipelas."

VAR. 2. *VARIOLA confluens*, CONFLUENT SMALL-POX (THOMSON'S ATLAS, Pl. XVIII.), differs from the distinct, in the greater severity of all the symptoms. The headach is violent, often accompanied with delirium. The eruption appears earlier, and is less elevated above the surface of the skin than in the distinct Variola; the pustules are more numerous, sooner suppurate; and on the face they become flat and run together, or are confounded with one another, and have no inflamed base. The face continues longer swelled than in the other variety, and when the incrustation takes place, the whole visage seems as if covered with a single scab. The fever assumes the typhoid character, and a peculiar odour exhales from the surface of the body of the patient. As the desquamation proceeds, the fever increases; and, sometimes, coma suddenly supervenes, and carries off the patient in forty-eight hours. In this form of the disease, when the crusts fall, they are replaced by scales which not unfrequently ulcerate and leave pits.

"The salivation is more distressing than in distinct Smallpox, the mouth and pharynx being covered with pustules: sometimes the cornea is the seat of a pustule, and becomes opaque, if it be not destroyed by the ulceration. Petechiæ appear in this form of the disease, when the strength fails. The matter in the pustules, instead of becoming yellow, remains

white, or becomes brown, or almost black ; and is, sometimes, mixed with extravasated blood. It is occasionally so acrid as to ulcerate deeply, and to destroy even the bones of the face. When the pustules are about to be confluent, the purging is often considerable ; the stools are very fœtid, and, sometimes, mixed with blood.

“ Authors have pointed out several anomalous forms of Smallpox : but in a practical point of view these distinctions are of little value.

“ Measles and Smallpox, now and then, occur simultaneously* ; but, in general, in such cases, the progress of the Smallpox is arrested until the Measles run their course, and then it goes on in the usual way.

“ Confluent Smallpox is apt to leave behind it very distressing consequences when it does not prove fatal : blindness ; a predisposition to inflammatory affections ; obstructions of the glands ; and pulmonary consumption, are not unfrequently the result of its attack. Dr. Tauchou has been led, by the result of many dissections, to attribute the fatal cases of Variola to inflammation of the arteries, extending from those on the surface to the large arterial trunks and the heart.

“ From these descriptions it will readily appear that the prognosis is not difficult in Smallpox. Danger is always to be dreaded in the confluent form of the disease ; and a fatal termination is, too frequently, the consequence when the fever assumes, early, a typhoid character.

“ Confluence on the face is more to be dreaded than on the trunk or the extremities. Hoarseness, and copious spitting, when they occur early, are unfavourable symptoms : and it is scarcely necessary to remark, that the same may be affirmed of restlessness, deli-

* M. Delagarde has lately recorded a case of this kind in the 13th volume of the Medico-Chirurgical Transactions. Vogel mentions a case in which Smallpox attacked the right side of the body and Measles the left side, at the same time, the boundary of each disease being perpendicular, drawn through the middle of the body. T.

rium, moaning, and despondency. Grinding of the teeth in children ; vibices ; and the eruption appearing white and pasty on the face, indicate that danger is impending.

“ In forming a prognosis, the age of the patient should be taken into account : persons above forty always run hazard ; the most favourable age is from the seventh to the fifteenth year. Persons of plethoric habits, or predisposed to strumous diseases, or constitutionally weak, run additional risks.

“ The treatment of Variola is modified by the variety of the disease. The first object is to moderate the eruptive fever, so as to diminish the number of the pustules : but this is to be done with as little expense of strength as possible. Free exposure to cool air ; mild purging ; saline effervescing medicines ; and, if the fever run high, the cold effusion, are the most efficient means to keep down, if not cut short, the fever. In India, the cold bath has been employed by the natives during the eruptive fever, from time immemorial, with the best effects. Whether the bath be used, or the patient be merely exposed to cold air, it must always be kept in mind that the patient should suffer no sensation of cold. His complaining of cold should be sufficient to terminate the use of that remedy ; indeed, in every instance, caution is requisite. If the stomach is loaded, it ought to be relieved by an emetic ; after which, saline draughts given in a state of effervescence, with Nitre, or the Tartarized Soda, will be found very serviceable. A moderate catharsis is necessary in the eruptive fever of Smallpox ; but all drastic purgatives should be avoided ; and, indeed, much purging by any means is injurious. Sydenham recommended the free use of the lancet ; but there are few cases that require or can warrant blood-letting in the eruptive fever of Variola : and if it be not admissible in the commencement of the disease, it is much less so in the termination. Local blood-letting, however, either

by leeches or cupping, is useful, when the head is severely affected ; it is proper, in such cases, to accompany the local bleeding with cold lotions applied to the shaved scalp ; and to follow them with aperients and anodynes.

“ Nothing is more useful in the eruptive fever than the use of the tepid bath, under 96°. It diminishes the febrile irritation ; in general subdues the convulsions which precede the appearance of the eruption, particularly if the bowels have been previously cleared. When the stomach remains very irritable, and the eruption is tardy in appearing on the extremities, a blister may be applied over the epigastrium and the pediluvium, with mustard employed. The use of opiates is at least doubtful in the eruptive fever, unless there is reason to expect the confluent form of the disease : the pain is more effectually subdued, and the heat of surface diminished, by the use of the warm bath ; and this is equally useful, after the maturation of the pustules, for removing the crusts, and lessening the risk of pitting.

“ In the milder form of the disease, the patient need not be confined to bed : but in the confluent state, he should use no exertion, nor even be allowed to sit up longer than to have his bed made. In this form of the disease, also, cathartics are recommended to be cautiously employed, and given only to remove costiveness ; but whatever may be the form of the disease, cathartics are always beneficial in the eruptive fever. I have found six or eight grains of Calomel, with twelve or fourteen of the powder of Jalap, form the best purgative, if the patient be not under six years of age : but this should not be repeated, the saline purges being the most useful after the intestines have been once freely evacuated. If the strength does not admit of purging, the bowels should be regulated by mild cathartic clysters. When local inflammations supervene, as, for example, in the chest, resembling bronchitis, moderate general blood-

letting is then indicated : and it is equally so when a flushed face, headach, suffused eyes, and beatings of the carotid and temporal arteries denote great determination to the brain. In such a state the lancet should be freely used. The cold effusion is not admissible in the secondary fever ; which, on the contrary, in the confluent form of the disease, requires the free exhibition of Wine, Bark, and other tonics. The Sulphate of Quinia, in the solution of the Confection of Roses, acidulated with the diluted Sulphuric Acid, is an excellent form of tonic in confluent smallpox.

“ It has long been a practice in eastern countries to pierce the pustules with fine needles, in order to lessen the violence of the secondary fever ; for a similar reason, M. Serres has lately observed that Lunar Caustic, applied to the pustules on the fourth day, arrests their progress, cuts short the secondary fever, and prevents pitting. The pustule is directed to be opened, and the caustic introduced into it on the end of a silver stilet. I have had no experience of the utility of this practice. I have seen much advantage derived from washing the surface during the state of incrustation of the pustules in Confluent Variola with a dilute solution of Chloruret of Soda of Labarraque. It lessens the acrimony of the pustular discharges, takes off the fœtor of the eruption, and, in every circumstance connected with the scabbing process, greatly mitigates the sufferings of the patient.

“ When the fever has actually assumed the typhoid character, Cinchona Bark, or Sulphate of Quinia, Opium, and Wine are alone to be depended on. The empty vesicles are filled ; the pus assumes a healthy appearance ; and petechiæ disappear. When vomiting is a troublesome symptom, and the ordinary effervescing draughts fail to relieve it, Camphor, with the Tincture of Calumba in a glass of sound Sherry, may succeed. If a retrocession of the eruption occur,

the best remedies are Wine and Opium; and the Semicupium should be employed, in conjunction with blisters, to the wrists and forearms."*

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* "It may naturally be expected that I should here notice not only the effects of Vaccination as a preventive of Smallpox; but also that I should enter into the question of the nature of those cases which have occurred after vaccination, and have received the appellation 'modified Smallpox.' I shall notice the first under Vaccinia; and briefly state my opinion of the second under Varicella."

GENUS V. SCABIES.*

Syn. Κνησμος; ψωρα (*Gr.*): Pruritus, Scabies (*Auct. var.*): Psora (*Linn. Cull. Darwin, Parr*): Ecpyesis Scabies (*Good*): Phlysis scabies (*Young*): die Krätze (*Germ.*): Kraxunju kraauw zel Schurft (*Dutch*): Swierzb (*Polish*): Scab, Kloë, Snat (*Danish*): Skaab, Klüda (*Swedish*): Scabbia, Rogna, Raspa, Raschia (*Italian*): Sarna Doña (*Spanish*): The Yuck (*Scotch*): La Gale (*F.*): Nekeb (*Arab.*): Chéringoo (*Tam.*): Chieri (*Malayalie*): Ghejæ (*Tel.*) Khârisht (*Duk.*): Pâmā (*Sans*): *The Itch.*

Def. A CONTAGIOUS ERUPTION OF MINUTE PIMPLES, PUPULAR, VESICULAR, PUSTULAR, OR INTERMIXED ACCORDING TO CIRCUMSTANCES; APPEARING CHIEFLY BETWEEN THE FINGERS, AND IN THE FLEXURES OF THE JOINTS; TERMINATING IN SCABS, AND ACCOMPANIED WITH INTOLERABLE ITCHING.

This troublesome disease, which, from its affinity with three orders of eruptive appearances, Pustules, Vesicles, and Papulæ, almost bids defiance to any attempt to reduce it to an artificial classifi-

* The Greek term *Psora* has been very generally, but incorrectly, adopted for the designation of this disease, in consequence of the example of some of the early translators, who considered Scabies (quasi *scabrities*) as synonymous with ψωρα, which we have already seen (page 10. *note*), was universally employed by the Greeks as denoting a scaly or scurfy disorder of the skin, more rough than Lichen, but less scaly than Lepra. They did indeed occasionally use the term, in conjunction with the epithet ἐλκωδης, or *ulcerating*, as applicable to a pustular disease, apparently the Impetigo: but when used alone, it invariably implied the dry scaly or scurfy tetter, Psoriasis. (See above, ord. ii. gen. 2.) Sir John Pringle, indeed, after noticing this inaccuracy, concludes that the itch was probably unknown, or at least uncommon, in ancient times:—"The Psora of the Greeks has generally been supposed to be the Itch; but as this does not appear by the description they give of it, I should conclude," &c. (On Diseases of the Army, part iii. chap. 5.)

cation *, is not easily characterised in few words. An extreme latitude in the acceptation of the term has indeed been assumed by writers, from Celsus downwards; and no distinct or limited view of the disease has been given, until near our own times. Celsus has included other forms of pustular disease among the different species of Scabies; and some of the earlier writers, after the revival of learning, considered almost all the eruptions, to which the skin is liable, as modifications of this disease: even our countryman Willis, to whom the contagious nature of true Scabies, as well as its specific remedy, was well known, has not sufficiently separated it from some other pustular and pruriginous affections. †

The SCABIES, or *Itch*, appears occasionally on every part of the body, the face only excepted ‡; but most abundantly about the wrists and fingers, the axillæ, the fossa of the nates, and the flexures of the joints. §

- Among the various forms which the disease assumes, four have been distinguished, with considerable accuracy, by the vulgar, who have, indeed, the most ample opportunities of becoming acquainted with its character; and to these they have given the epithets of *rank*, *watery*, *pocky*, and *scorbutic* Itch. Their subdivision was adopted by Dr. Willan, with the appropriate titles,

- | | |
|----------------------------|--------------------------|
| 1. <i>S. papuliformis.</i> | 3. <i>S. purulenta.</i> |
| 2. <i>S. lymphatica.</i> | 4. <i>S. cachectica.</i> |

* Biett and Rayer class it with the Vesiculæ; Dr. Paget with the Papulæ.

† See Celsus, lib. v. cap. 28.; Plater, de Superfic. Corp. Colorib. cap. 7.; Hafenreffer, Nosodoch, lib. i. cap. 15.; Willis Pharmac. Rational. part i. § iii. cap. 6.

‡ Some German authors, however, assert that they have seen Pustular Scabies affecting the ears and face. In one child who came under my care, it affected the side of the face, near the ear. T.

§ "*Scabies est pustularum purulentarum, vel saniosarum, vel papularum siccarum, ex duriore et rubicundiore cute, eruptio, — prurimum, sæpe quoque dolorem, creans, — interdum totum corpus, facie excepta, invadens, — sæpissimè tamen solos artus externos, digitorum imprimis interstitia, occupans.*" — Callisen, Syst. Chirur. Hodiern. i. § 824.

The characteristics of these species, and the diagnosis between them and the papular, vesicular, and pustular eruptions, which they resemble, I shall endeavour to point out; but must admit, at the same time, that the practical discrimination, in many of these cases, is more difficult than in any other Order of cutaneous disease.

SPECIES 1. SCABIES *papuliformis*, RANK ITCH.

Syn. Scabies sicca (*Plenck*): Ecpyesis scabies, var. *α.* popularis (*Good*).

This species consists of an extensive eruption of minute intensely itching vesicles, which are slightly inflamed and acuminate, resembling papulæ when examined by the naked eye. They commonly arise first about the bend of the wrist and between the fingers, or in the epigastrium; on which parts, as well as about the axillæ and nates, and in the flexures of the upper and lower limbs, they are at all periods most numerous, and often intermixed with a few phlyzacious pustules, containing a thick yellow matter. The itching is extremely troublesome in this form of Scabies, more especially when the patient becomes warm after getting into bed. The appearance of the disease is modified by the abrasion of the tops of the vesicles and pustules, and even of the rest of the skin, by the frequent scratching, which cannot be withheld. Hence long red lines are here and there left, and the blood and humour concrete upon the vesicles into little brown or blackish scabs.

These mixed appearances, partly belonging to the disease, and partly the result of abrasion by the nails, being in some measure common to the Lichen and Prurigo, where much scratching is also often employed, render the diagnosis of the Scabies *papuliformis* more difficult than it would be from the mere similarity in the form of the eruption. But, as the most effectual remedy for the Scabies is detrimental in the latter affections, the distinction is of great practical importance.

With respect to the eruption itself, the unbroken elevations in *Scabies papuliformis*, when carefully examined, are found to be vesicular, and not papular; they are often intermixed, in particular situations, with pustules; and, when they break, are succeeded by scabs: whereas in Lichen, the papulæ terminate spontaneously in scurfy exfoliations. In Scabies, the eruption is unconnected with any constitutional or internal disorder, and the itching is severe: but in Lichen there is commonly some constitutional affection, and a tingling sensation, as well as itching. The highly contagious nature of Scabies will, in many cases, have already manifested itself, and removed all doubt; for the Lichen is not thus communicable.*

In Prurigo, the papulæ, where no friction has been applied, retain the usual colour of the skin, are commonly flatter, or less acuminated, and present no moisture or scab, except when their tops have been forcibly abraded; they are not particularly numerous in the parts above mentioned; and they remain long distinctly papular, without showing any contagious property. The eruption which I have called Lichen *urticatus*, and which often occurs in weakly children, and exhibits a troublesome series of papulæ, sometimes intermixed with minute vesicles, bears a close resemblance to Scabies, especially when it has been of some continuance. But the first appearance of these spots, in the shape of inflamed wheals, not unlike the inflammation produced by the bites of gnats,—their subsequent papular or vesicular appearance, with little or no surrounding inflammation,—the intermixture of these two states of the eruption,—the ultimate formation of a minute globular brown scab, which is set firm in the apex of each elevation,—and the absence of contagion, will serve as diagnostic marks.

* See the quotation from M. Lorry, *supra*, p. 12., *note*.

SPECIES 2. SCABIES *lymphatica*, WATERY ITCH.

This form of Scabies (Plate XLV. of BATEMAN ; Pl. 18. of THOMSON'S ATLAS) is distinguished by an eruption of transparent vesicles, of a considerable size, and without any inflammation at their base. They arise in succession, with intense itching, chiefly round the wrists, between the fingers, on the back of the hands, and on the feet and toes : they often occur also about the axillæ, the hams, the bend of the elbows, and fossa of the nates, where they are intermixed with pustules : but they do not frequently appear, like the papuliform species, over the breast and epigastrium, nor on the thighs and upper parts of the arms.

In a day or two the vesicles break, and some of them heal, under the little scab that concretes upon them. But others inflame, and become pustules, which discharge at length a yellow matter, and extend into small ulcerated blotches, over which a dark scab is ultimately formed : so that, during the progress of the eruption, all these appearances are intermixed with one another ; the vesicles, and pustules, the excoriated blotches discharging pus, the minute dry scabs, and the larger ones succeeding the ulceration, may be observed at the same time. This circumstance constitutes one of the points of diagnosis between this and other vesicular diseases. Of these, however, the Herpes and Eczema, especially the latter, are alone liable to be confounded with Scabies lymphatica : for the acute form and short course of all the varieties of Varicella render that eruption sufficiently distinct. The Herpes, likewise, differs materially from Scabies in the regularity of its course and termination, and in the arrangement of its vesicles in clusters, which are commonly not numerous, and appear on those parts which Scabies is not very apt to attack.

The most difficult diagnosis relates to some of the varieties of Eczema, which closely resemble this, and sometimes the former species of Scabies ; so that it is

not so much from the mere appearances of the eruption, as from the consideration of the collateral circumstances, that a decision is to be obtained. The Eczema can often be traced to distinct sources of irritation affecting the skin, such as exposure to the solar rays, or to great heat, —and to the application of acrid substances, such as lime, sugar, mercury, cantharides, &c. It sometimes becomes inflamed after the vesicles have discharged their lymph, but it does not produce the large phlyzacious pustules; and, although the itching is sometimes intense, yet there is commonly a tingling and smarting pain with Eczema, that does not belong to Scabies: nor is it ever, like the latter, communicated by contagion.

SPECIES 3. SCABIES *purulenta*, POCKY ITCH.

Syn. Scabies humida (*Plenck*): Empyesis scabies, *var. γ. purulenta*.

This species (Plate XLVI. fig. 1. of BATEMAN; Pl. 18. of THOMSON'S ATLAS) is often mistaken by those who confine their notion of the disease to the ordinary small and ichorous vesicle of the two former species. The eruption consists of distinct, prominent, yellow pustules, which have a moderate inflammation round their bases, and which maturate and break in two or three days, and then ulcerate, with increasing pain and inflammation. These pustules commonly appear first, and attain the largest size, on the hands and feet, especially about the knuckles and roots of the toes, between the fingers, and particularly between the forefinger and thumb, and round the wrists. In these situations, the pustules often exceed two lines in diameter, and assume a prominent globular form: whence, from their general resemblance to the large well-maturated pustules of Smallpox* (and not from

* "Licet interdum majusculæ sint, cum fundamento rubro, et pure impleantur, fere tanquam variolæ." Heberden, Com. de Morb. Hist. et Curat. cap. 23.

any allusion to Syphilis, as some have erroneously supposed), the popular term "*pocky*" has been applied to them. If the disease continue a few weeks, the pustules begin to appear on the other parts of the body which Scabies usually attacks, especially about the axillæ, on the back and shoulders, and on the arms and thighs near the joints of the knee and elbow, in the fossa of the nates, and sometimes, though of a smaller size, even about the epigastrium. "In one case, where it affected a whole family, it appeared on the side of the face in one of the children, a boy of six years of age." In several of these situations, where the pustules are largest and numerous, they coalesce, and form irregular blotches, which ulcerate to some extent, with hardness and elevation of the surface; but at length hard and dry scabs are formed, which adhere tenaciously for a considerable time.

The majority of the cases of Scabies purulenta, which I have seen, have occurred in children between the age of seven years and the period of puberty; and in them it not unfrequently assumes this form.

The Scabies purulenta cannot be easily mistaken for Impetigo, when it occurs in patches, in consequence of the large size, the greater prominence, and comparatively small number of its pustules; not to mention the absence of the intense itching, and of contagion, in the former.* From Impetigo favosa affecting the extremities, it will be distinguished chiefly by its situation about the fingers, axillæ, fossa natum, and flexures of the joints, and by the total absence of the eruption from the face, ears, and scalp; by the nature of the discharge; and by the thin, hard,

* Sauvages has described a variety of Scabies, which he terms *herpetica* (spec. 4.); Herpes, in his language, as in that of many other writers, signifying the same with Impetigo in the nomenclature of Dr. Willan. "Cognoscitur ex signis herpetis et scabiei simul concurrentibus, in amplos corymbos coeuntibus, papulis pruriginosis, rubris, quæ squamas albas, farinaceas deponunt." But this termination in branny scurf, and the commencement in papulæ, point out the eruption as a Lichen, probably the *L. circumscriptus*.

and more permanent scab, which succeeds, instead of the soft, elevated, semitransparent scab, formed by the viscous humour of the favi.

The only other disease, with which the Scabies purulenta has any affinity, is the Ecthyma: but the hard, elevated, vivid red or livid base, which surrounds the pustules of Ecthyma,—their slow progress both towards maturity and in the course of suppuration,—the deep ulceration, with a hard raised border, and the rounded imbedded scab, which succeed,—as well as the distinct and separate distribution of them,—will afford the means of discrimination; to which the incessant itching, and the contagious property of Scabies, may be added.

SPECIES 4. SCABIES *cachectica*. This variety of Scabies exhibits, in different parts of the body, all the appearances which belong to the three foregoing species. It is occasionally also combined with patches resembling Lichen, Psoriasis, or Impetigo, especially in adults, or young persons approaching the term of puberty; whence it assumes an ambiguous character. In several instances, this form of Scabies has been obviously contagious in its double character; and after the scabious affection has disappeared, the impetiginous patches have remained for some time, in a drier form, and yielded very slowly to medicine. For although this form of Scabies does not so readily spread by contagion, it is much more obstinate under the use of remedies, than the preceding.

Another peculiarity of the *S. cachectica* is, that it often originates, independently of contagion, in weakly children, and also in adults, when the constitution is suffering under some chronic malady, or is debilitated by some previous acute disease*: and, however it is

* Sir John Pringle observed, that, in military hospitals, the patients often became the subjects of itch after the crisis of fevers. Loc. cit. p. iii. cap. 8.

produced, it is liable to return at intervals, especially in the spring and autumnal seasons, after it has been to all appearance cured.*

A severe degree of this ambiguous and combined form of Scabies is often seen in this country, in persons who have come from India: I have chiefly had occasion to observe it in children brought from that country. The eruption is exceedingly rank and extensive, sometimes even spreading to the face, and giving a more dark and sordid hue to the skin than the ordinary Scabies: the intermixture of patches of an impetiginous character, where the pustules become confluent, is considerable. It is extremely contagious, and also obstinate in its resistance to the operation of remedies.†

Another violent form of Scabies is excited by the contact of dogs, cats, hogs, and other animals, affected with *mange*. (Plate XLVI. fig. 2. of BATEMAN.) This also extends over the whole body, the pustules being very rank and numerous, and more inflamed and hard at the base than in the ordinary eruption; the general surface of the skin is also rough, and of a browner hue; and the excoriations and abrasions more extensive, in consequence of the more violent and irresistible application of the nails.

The most ordinary cause of Scabies is contagion;

* "Quædam est etiam ejus species, quæ quanquam in ipso corpore non genita sit, sed aliunde advecta, quanquam et consuetis remediis primo sanata fuerit, tamen non cessat redire semel vel bis quotannis." Heberden, Commentar. Perhaps the Scabies herpetica of Sauvages may include some of these cases of S. cachectica.

† Bontius, in his work de Medecina Indorum, lib. iii. cap. 17., has described this severe disease, under the appellation of "Herpes, seu Impetigo Indica," as frequent among the inhabitants of India, by whom it is denominatèd *Courap*, which is equivalent to our term *itch*. The cure of it, he says, is generally much neglected there, in consequence of a prevalent notion, that it renders a person secure from all violent diseases: yet the itching is severe and incessant, and so much abrasion is produced by scratching, that the linen often adheres to the excoriated parts, so as not to be removed without drawing blood.—This is the Scabies *Indica* of Sauvages, spec. 6.

the virus being communicated by the actual contact of those already affected with it, or of their clothes, bedding, &c., especially where there is much close intercourse. It seems to originate, however, in crowded, close, and uncleanly houses; and is, therefore, extremely prevalent in work-houses, gaols, and hospitals, where the means of great cleanliness are not easily obtained, and is mostly seen among the families of the poor.* When the contagion has been introduced, however, into families, where every attention to cleanliness is enforced, it will frequently spread to all the individuals, children and adults, and continue, in spite of the utmost cleanliness, until the proper remedies are resorted to.

Some writers have ascribed the origin of the itch, in all cases, to the presence of a minute insect breeding and burrowing in the skin; while others have doubted the existence of such an insect.† Both these opinions appear to be incorrect; and probably that of Sauvages is right, who considers the insect as generated only in some cases of Scabies, and therefore speaks of a Scabies *vermicularis*, as a separate species.‡

The existence of such an insect, in some cases of Scabies, has been fully demonstrated; and, although never able to discover it in any patient myself, I have seen it, in one instance, when it had been taken from the diseased surface by another practitioner. In fact, it was first described by Abinzoar, or, as he is sometimes called, Avenzoar, a Hispano-Arabian physician of the twelfth century, and subsequently by Ingrassias of Naples, by Gabucinus, Laurence Joubert, and other

* Plenck adds, "victu acri, salso, pingui nascitur. Hæc difficiliter quam acquisitu curatur. *Doct. de Morb. Cut.* p. 42. T.

† Dr. Heberden never saw any of these insects; and he was informed both by Baker and Canton, who excelled in the use of the microscope, that they had never been able to detect them. *Loc. cit.*

‡ *Nosol. Method. loc. cit. spec. 11.*

writers of the fifteenth and sixteenth centuries, who are quoted by our countryman Moufet.* These writers describe the insects as *acari*, that is, very minute and almost invisible animalcula, burrowing under the cuticle, and exciting small pustules, filled with a thin fluid, and intense itching. Moufet states, that they do not reside *in* the vesicles or pustules, but *near* them; a remark which has been confirmed by Linnæus and Dr. Adams†, who ascertained that this *acarus* leaps; that they are not of the same genus with lice, which live exterior to the cuticle;—that they are similar to the *acari*, or *mites*, of cheese, wax, &c., but are called *wheel-worms* in man;—and that when they are pressed between the nails, a small sound is heard. Most of these points have been subsequently confirmed. The insects, first noticed (by Avenzoar, were accurately ascertained and figured by the aid of the microscope) by Bonomo‡, in 1683, whose account was afterwards published by Dr. Mead§, Schwiebe, Baker, and others: and Linnæus, De Geer||, Wichmann, &c. have since that period illustrated the subject of these *Acari scabiei*.¶ The latest authors particularly confirm the observation of Moufet the entomologist, that the insects are not to be found in the pustules, but in the reddish streaks or furrows near them, or in the recent minute vesicles: but I must acknowledge my own want of success to discover them in any of these situations. I am disposed, there-

* See his "Theatrum Insectorum," printed in 1634, cap. 24. "de Syronibus, Acaris, Tineisque Animalium."

† Observations, &c. p. 296.

‡ See his Letter to Redi—(Mr. Kirkby remarks that his plates, as copied by Baker, are far from accurate)—also *Miscell. Nat. Curios.* ann. x. dec. 2.

§ See *Philosoph. Transact.* vol. xxiii. for 1702.

|| De Geer's figure is the most correct; vide vol. viii. t. 5. f. 12. 14.

¶ See Linn. "Exanthemata Viva," 1757;—and *Amœnit. Acad.* vol. iii. p. 333., and vol. v. p. 95.—Wichmann, *Aetiologie der Kraetze*, Hanover, 1786; also in the *Lond. Med. Journal*, vol. ix. p. 28.—De Geer, *Mémoires pour servir à l'Hist. des Insectes*.

fore, to believe, that the breeding of these Acari in the scabious skin is a rare and casual circumstance, like the individual instance of the production of a minute Pulex in Prurigo, observed by Dr. Willan; and that the contagious property of Scabies exists in the fluid secreted in the pustules, and not in the transference of insects. "Such is also the opinion of the Editor, although the opinions of Redi, Wichmann, Osiander, Pringle, and Dr. Gales are in opposition to this idea, and strongly support the notion of a distinct animalcule as the direct cause of the disease. Dr. Gales's opportunities to ascertain this point at the Hospital of St. Louis were numerous, and he took every advantage of them. He examined, under the microscope, upwards of three hundred of these insects, and found that they agreed with the descriptions of Linnæus and Latreille. He also produced the disease on himself, by transferring the insect to his own skin; and he inoculated, in the same manner, three children, all of whom became covered with the eruption of Scabies. More lately, M. Suriray of Havre, and others, revived the discussion of this subject, and denied the existence of such an insect; an opinion supported by the investigations of Biett, Cazenave, and Schedel; but, on the other hand, M. Rennuic and M. Beau de have still more lately brought forward proofs of their existence. Mr. Plumbe, also, states that he has seen great numbers of the insects extracted with the point of a needle. He supposes that the insect is unable to live in the fluid, which is the result of the irritation it induces; and therefore escapes from the vesicle."*

"Whatever may be the cause of the disease and the medium of its communication, it is very evident that the *same* virus will produce all the varieties of the disease; and consequently these depend on the

* Plumbe on Diseases of the Skin, 2d edit. p. 306.

state of habit of the individual affected. In one family which the editor attended, the four younger children had the purulent form of the disease ; and, in two of them, the pustules were mingled with vesicles ; while the parents and an elder sister had the ordinary papulous itch. In all, the eruption was preceded by some degree of fever."

Among the remedies appropriated to the cure of Scabies, Sulphur has long been deemed, both by the vulgar and the erudite, to possess *specific* powers.* The common people treated the disease with this substance alone, a century ago, administering it internally in milk, and applying it externally in butter or Hog's-lard.† In the less violent degrees of Scabies, and in the purulent species affecting the hands and wrists, perhaps no improvement can be made upon this practice. The latter species, when it occurs in children, is often readily removed by the internal use of this medicine alone, or in combination with a neutral salt, independently of any external application.‡

℞ Sulphuris (vivi dicti) ʒiij,
Muriatis Ammoniacæ ʒij,
Adipis Suillæ ʒxiiij.

Tere optimè.

Anoint the parts twice a day before a good fire.

"The great French specific, which was proposed by M. Helmerich, an army surgeon, and is now constantly and successfully employed at the Hôpital de St. Louis, consists of two parts of Sulphur, one part

* See Willis, Pharmaceut. Rational. part. ii. sect. iii. cap. 6.

† See Turner, de Morbis Cutaneis.

‡ Writers in general agree in asserting the greater facility of curing the humid than the dry forms of Scabies. But under the term Scabies *sicca*, it is obvious that they describe the Prurigo, and even some scaly and furfuraceous eruptions, accompanied with itching, which are often more difficult of removal than any variety of true Scabies. See Sauvages and Sennert (loc. cit.), and Vogel, de curand. Hom. Morb.

of Subcarbonate of Potassa, and eight parts of Lard. Another application, used in the Parisian hospitals, is Sulphuret of Lime, rendered semifluid by being triturated with a small quantity of Olive oil." There are few cases of Scabies which will not yield to the steady employment of the Sulphur ointment, continued a sufficient time, and rubbed on the parts affected, nightly, with assiduity. Five or six applications are commonly sufficient for the cure of the disease: but sometimes it is necessary to persevere in the inunction for the space of a fortnight, or even longer; from which no detriment ensues to the constitution. "The quantity of the Sulphur ointment to be used, and the mode of using it, are of great consequence in the cure of this disease. I believe that if the whole body be well rubbed over with it, and the patient be kept in bed, in a flannel dress, for twenty-four hours, a second application will seldom be necessary. He should immediately afterwards take a warm bath, and cleanse the skin well with soap; and be careful not to put on his former clothes until they have been several times fumigated with Sulphur."

The disgusting odour of the sulphur*, however, has led practitioners to resort to various other stimulating applications; some of which have been recommended from ancient times, for the cure of scabid and pruriginous eruptions. Among these the root of the white Hellebore is possessed of considerable efficacy, and may be applied in the form of the following ointment:—

* Both the smell and sordid appearance of the Sulphur ointment may be in a considerable degree obviated by the following combination:—

℞ Potassæ Subcarbonatis ℥ss,
 Aquæ Rosæ ℥j,
 Hydrargyri Sulphuretti Rubri ℥j,
 Olei Essentialis Bergamotæ ℥ss,
 Sulphuris-sublimati,
 Adipis Suillæ ā ā ℥ix. Misce secundum artem.

R Pulveris radices Veratri albi ʒss,
 Hydrargyri præcipitati albi ʒj,
 Olei Citri Limonis fʒj,
 Adipis ʒxiv.

Tere ut fiat Unguentum, bis die utendum :

or in that of decoction. In the latter form I have generally found it advisable to employ a stronger decoction than that which is recommended in the Pharmacopœia of the College. Potass, in a state of deliquescence, was a favourite addition to these applications with Willis and his predecessors; and Muriate of Ammonia, and some other saline stimulants, have been more recently used, and not without benefit.* The strong Sulphuric Acid, which was long ago recommended by Crollius, mixed with lard, in the proportion of fʒss. to ʒj of lard, and applied by external friction, has also been employed †; and it certainly possesses the recommendations of being inodorous and comparatively cleanly. But independently of its corrosive action on the patient's clothing, it has appeared to me to be very uncertain in its effects. The Muriate of Mercury, and the white precipitated oxide, are very old remedies, and both possessed of considerable efficacy in the relief of Scabies. The testimonies in favour of the latter are very numerous. ‡ It seems particularly well adapted

* This salt, together with Hellebore, is said to constitute a part of a celebrated nostrum for Scabies, called the Edinburgh Ointment.

† See Hafenreffer de Cute, lib. i. cap. 14. The Sulphuric Acid was also recommended to be taken internally, as a remedy for Scabies, by Dr. Cothenius, who is said to have used it with success in the Prussian army, in 1756. See Edin. Med. Com. vol. i. p. 103. Dr. Albertus H. A. Helmich, of Berlin, also recommended it. The title of his treatise is, "Dissertatio Inauguralis Medica de usu interno Olei Vitrioli diluti in nonnullis Scabiei Speciebus." But subsequent experience has not confirmed their reports.

‡ See Willis, Vogel, Sauvages, Callisen, Heberden, &c. Prof. Selle affirms, "Scabies è contagio externo maximè ex parte per solum merc. præcip. albi usum tollitur." Med. Clin. 191. See also Fordyce, Fragmenta Chirurgica. Turner, Treatise on Dis. of the Skin, 4th edit. p. 58. He combined it with Ol. Tart. per deliquium.

to the impetiginous form of the disease, which is liable to be irritated by the more acrid applications. The Muriate has probably derived some of its remedial character from its efficacy in the relief of Prurigo, and other eruptions, accompanied by itching, with little inflammation; but it is not altogether destitute of power in Scabies itself.

A committee of French physicians reported the result of some experiments made with the root of the *Plumbago Europæa* (pounded and mixed with boiling oil) to the Medical Society of Paris; from which they inferred, that it cured Scabies more speedily than any other remedy. The third or fourth inunction with this substance, they affirm, is generally successful.* Several of the continental writers recommend, in strong terms, the formula of an "Unguentum ad Scabiem," prescribed by Jasser, which directs equal parts of Sulphate of Zinc, Flowers of Sulphur, and Laurel Berries, to be made into a liniment with Olive or Linseed Oil: "about the size of a bean is to be rubbed upon the palms of the hands every morning and night."† From a few trials of this ointment, I am disposed to believe that it is possessed of considerable efficacy. "Dr. G. Pellegrini has extolled highly the external use of Conium, either the recent juice, or a solution of the extract, or a decoction of the dried plant. It is said to effect a cure in obstinate cases in five or six days. M. Derheims has found a solution of the Chloruret of Lime, in the proportion of $\bar{z}j$ to Oj of water, used twice or thrice a day, very beneficial.‡ The most cleanly method of treating Scabies is the Sulphur vapour baths."

* See Mémoires de la Soc. Roy. de Médecine de Paris, tom. iii.; also London Med. Journal, vol. v.

† See Plenck, Doctr. de Morbis Cutaneis, p. 42.; Callisen, Syst. Chirurg. Hodiern.

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Order VI.

VESICULÆ.

SYN. Die Wasserblattern (*German*): *Vésicules* (*F.*): *Vesicles*.

Vesicles are small elevations of the cuticle, containing a transparent, serous fluid. After some time the fluid is often absorbed, and the cuticle separates in the form of white scales, occasionally in the form of thin, yellow, laminated crusts. The vesicles are sometimes seated upon an inflamed base, at others they exhibit only a very slight inflammatory areola. They appear on every part of the body; in some cases covering the entire surface; in others, limited to certain parts. In general, vesicular diseases are not dangerous: in some instances they terminate by resolution: in others, the fluid exudes and concretes into yellowish crusts. The Order comprehends seven genera:—

- | | |
|---------------|--------------|
| 1. VARICELLA. | 5. MILIARIA. |
| 2. VACCINIA. | 6. ECZEMA. |
| 3. HERPES. | 7. APHTHA? |
| 4. RUPIA? | |

 GENUS I. VARICELLA.*

Syn. Crystalli, Variola spuria (*Auct. var.*): Variola lymphatica (*Auct.*): Variolæ pusillæ (*Heber-*

* Since the introduction of vaccination, considerable differences of opinion have existed among medical practitioners, respecting the character of the eruption, which has occasionally appeared, after exposure to variolous infection, in persons previously vaccinated, some denominated it Chicken-pox, and others Smallpox. The most careful observers must have admitted the difficulty of establishing a decisive distinction in

den): Exanthema varicella (*Parr*): Synochus varicella (*Young*): Cottamillie ummay (*Tam.*): Kāngé niāhn (*Duk.*): Cottāmillie (*Tel.*): Pittāmásoorikā (*Sans.*): Ravaglione (*Ital.*): die unächten Kindspocken (*German*): Vérole volante (*F.*): *Chicken-pox*, *Water jags*.

Def. ACCOMPANYING A SLIGHT ATTACK OF FEVER, AN ERUPTION OF SEMI-TRANSPARENT GLABROUS VESICLES, SELDOM PASSING INTO SUPPURATION ; BUT, ON THE THIRD DAY, BURSTING AT THE TIP, AND CONCRETING INTO PUCKERED SCABS.

This disease is usually so slight as to require little medical assistance ; but, in consequence of the resemblance of the eruption, under some of its varieties, to the Smallpox, it becomes important, as a point of diagnosis, to establish its character with accuracy.

Although its appearances were described by writers on the Smallpox three centuries ago, under the appellation of *Crystalli** ; and at a period not much later, it had even acquired popular names in Italy, France, and Germany, and subsequently in England † ;

many of these cases. A series of interesting observations, which have lately been made at Edinburgh, have led the ingenious Prof. John Thomson to believe that the Chicken-pox itself is in fact a modified Smallpox. While the question is still *sub judice*, I leave Varicella in its nosological seat ; but many facts crowd upon my own recollection, which incline me to believe that this suggestion will ultimately prove to be correct. See *Edin. Med. and Surg. Journ.* Oct. 1818.

* Vidus Vidius (*De Crystallis*) and Ingrassias (*De Tumor. præt. Nat. lib. i. cap. 1.*) describe these *crystalli* as white shining pustules, containing lymph, nearly as large as lupine seeds, and attended with little fever ; “suntque hæ minus periculosæ (i. e. than smallpox), et sæpe citra notabilem febrem infantesprehendunt.”

† We have the testimony of many writers, in proof of the prior discrimination of the vulgar, in respect to this eruptive disease. Sennertus, who was a professor at Wittemberg, at the commencement of the seventeenth century, observes, in his treatise on smallpox and measles, that there are other varieties, “*præter communes variolas et morbillos*,” which are popularly known, in Germany, by the terms *Schaffsblattern* (sheep-pox or vesicles), or *Windpocken* (wind-pox). See his *Med. Pract. lib. iv. cap. 12.* And Riverius, who was professor at Montpellier at the same period, speaks of the eruption as familiarly known by the common people, in France, by the appellation of *Verolette*. See his *Prax. Med. cap. ii.* In Italy it was called *Ravaglione*. *Ibid.* — See also Diemerbroeck,

yet most of the systematic writers, down to the latter part of the eighteenth century, seem to have looked upon it as a variety of Smallpox. Dr. Heberden, in the year 1767, pointed out the distinction with his accustomed perspicuity; "and stated that it affords no protection from Smallpox."* Perhaps, however, as this learned physician, in his posthumous work, continues to designate the disease by the term Variola†, the employment of same term by the systematic writers above alluded to, with the epithets *volatica*, *spuria*‡, &c. cannot be deemed evidence that they actually considered the disease as generically the same with Smallpox. "So late as 1805 Dr. Frank of Vienna, and in 1809 Dr. Heim of Berlin, investigated this subject, and arrived at the same conclusions as Dr. Heberden." The discussion of this question has also been revived by Dr. John Thomson; and his opinion, founded on his own extensive observation, is supported by many practitioners. "His chief arguments are, 1. that there are no records of Chicken-pox appearing as an epidemic without cases of Smallpox appearing at the same time: 2. that the most strictly vesicular eruptions have appeared after exposure to variolous contagion, and where the disorder could be referred to such a source: 3. that he had never witnessed Chicken-pox in those who had under-

De Variolis et Morbis, cap. 2. — Fuller, in his "Exanthematologia," published in 1730, describes the eruption, and acknowledges himself indebted to the nurses for the appellation. "I have adventured to think," he says, "that this is that which among our women goeth by the name of chicken-pox," p. 161. And it is mentioned familiarly, at Edinburgh, in 1733, as "the bastard or chicken-pox." See Edin. Med. Essays, vol. ii. art. 2. At Newcastle, and in Cumberland, it is popularly known by the name of *Water-jags*. See Dr. Wood, in the Med. and Phys. Journal, vol. xiii. p. 58. note.

* See his paper in the Med. Transact. of the Coll. of Phys. vol. i. art. xvii.

† "*Variola pusilla*." See his Comment. de Morbis, cap. 96.

‡ See Vogel, de cognoscend. et cur. Hom. Morb. § 128. (edit. 1772). Burserius, Inst. Med. vol. ii. cap. 9. § 305. Sauvages, however, actually makes it a *species* of Variola, class. iii. gen. ii. spec. i. *V. lymphatica*.

gone Smallpox: 4. that the shades of difference between modified Smallpox and Chicken-pox were so indistinct as to render the diagnosis almost impossible." Thus Dr. Thomson has remarked that the Variola, in its undoubted form, and Varicella, appear under the same exciting causes, whether the persons have been vaccinated or not: thence he concludes that they are merely varieties of the same disease. He also affirms that persons exposed to the contagion of Varicella have had Variola, and that Varicella never appears in those whose constitutions have been modified by previous Variola. "The first of his positions has been refuted by the appearance of Varicella as an epidemic without Smallpox existing in Copenhagen, in 1809 and several years afterwards."* But I believe vesicular Varicella has never been communicated by inoculation; that children have Chicken-pox in the mildest form who have had Smallpox, or who afterwards take it. One might understand how Smallpox occurring a second time might be modified into Chicken-pox: but, if the majority of children have Chicken-pox in the mild form, under all circumstances, I cannot accord in the opinion of Dr. Thomson. Besides, Varicella has never been prevented by vaccination."

The three principal species of Chicken-pox were well known a century ago, and were distinguished in the north of England, and in some counties of Scotland, by the popular names of Chicken-pox, Swine-pox, and Hives. Dr. Willan proposed to distinguish them, according to the different forms of the vesicles, by the epithets,

1. *V. lentiformis.*
2. *V. coniformis.*
3. *V. globularis.*†

* Mohl. de Variolibus et Varicellis, Copenhagen, 1817.

† See his treatise "On Vaccine Inoculation," published in 1806, sect. vii.—Dr. Fuller, above quoted, described these three varieties under the appellations of Chicken-pox, Swine-pox, and Crystalli, p. 161-3.

SPECIES 1. VARICELLA *lentiformis*, LENTICULAR
VARICELLA.

Syn. Crystalli (auct. var.): Varicella lymphatica
(*Plenck*): Pemphigus variolodes vesicularis (*Frank*)

This species (Plate XLVII. XLVIII. of BATEMAN; .
Pl. 18. of THOMSON'S ATLAS) appears on the first
day of the eruption, "and is seldom preceded by any
febrile symptoms," in the form of small red protu-
berances, not exactly circular, but tending to an ob-
long figure, having a nearly flat and shining surface,
in the centre of which a minute transparent vesicle
is speedily formed. "When the febrile symptoms
which precede the eruption are obvious, they consist
of rigor, lassitude, short cough, broken sleep, furred
tongue, sore throat, quick pulse, loss of appetite, and
occasionally wandering pains. The best idea which
can be given of the early appearance of the eruption
is, that it resembles what might be conceived to be
the effects of sprinkling boiling water over the skin
from a loose brush." There is no hardness of base.
On the second day of the eruption, the vesicle is filled
with a whitish lymph, and is about the tenth of an
inch in diameter. On the third day it has under-
gone no change, except that the lymph is straw-
coloured. On the fourth day, those vesicles which
have not been broken begin to subside, and are
puckered at their edges. Few of them remain entire
on the fifth day; but the orifices of several broken
vesicles are closed, or adhere to the skin, so as to con-
fine a little opaque lymph within the puckered mar-
gins. On the sixth day, small brown scabs appear
universally in place of the vesicles. The scabs, on the
seventh and eighth days, become yellowish, and gra-
dually dry from the circumference towards the centre.
On the ninth and tenth days they fall off, leaving for
a time red marks on the skin, without depression.
Sometimes, however, the duration of the disease is
longer than the period just stated, as fresh vesicles
arise during two or three successive days, and go

through the same stages as the first. "The vesicles are seldom very numerous, and generally distinct * ; they appear first on the back, whereas the pustules of Smallpox appear first on the face, neck, and breast. The vesicles, even when they suppurate, rarely pit, or leave cicatrices." "This form of Varicella is generally distinguished by the absence of premonitory fever ; but as such may occur, this cannot be regarded as diagnostic : a much more valuable sign is the absence of the hard base and the central depression that characterise even the mildest cases of modified Variola. As a physical distinction, it may be stated that, on puncturing a vesicle of Varicella, it falls to the level of the skin."

SPECIES 2. *VARICELLA coniformis* : CONOIDAL VARICELLA : SWINE-POX.

Syn. *Varicella verrucosa* (*Plenck*)† : *Pemphigus variolodes* (*Frank.*) : *Variola lymphatica* (*Sauv.*) : *Hydrachnis* (*Cusson*) : *Vérolette* (*F.*) : *Ravaglio* (*Ital.*) : *Swine-pox*, *Water-pox*.

In this form of the disease the vesicles rise suddenly, and have a somewhat hard and inflamed border : they are, on the first day of their appearance, acuminated, and contain a bright transparent lymph : "the eruption is sometimes preceded by a slight cough, restlessness, and fever." On the second day they appear somewhat more turgid, and are surrounded by more extensive inflammation : the lymph contained in many of them is of a light straw-colour. On the third day, the vesicles are shrivelled ; those which have been broken exhibit at the top slight gummy scabs, formed by a concretion of the exuding lymph. Some of the shrivelled vesicles, which remain entire, but have much inflammation round them, evidently

* Mr. Ring (*Lond. Med. and Phys. Journal*, xiv. 1805) has described a case of confluent Smallpox.

† In *Plenck's* description of this species, he says, "supra cutem prominentes, in quibus nullus humor est," l. c. p. 52. T.

contain on this day whitish purulent fluid : every vesicle of this kind leaves, after scabbing, a durable cicatrix or pit. On the fourth day, thin dark-brown scabs appear intermixed with others, which are rounded, yellowish, and semi-transparent. These scabs gradually dry and separate, and fall off in four or five days. A fresh eruption of vesicles usually takes place on the second and third day ; and, as each set has a similar course, the whole duration of the eruptive stage in this species of Varicella is six days. " In some cases minute red tubercles rise, but do not pass into vesicles, and disappear." The last-formed scabs are not separated till the eleventh or twelfth day. " When the febrile symptoms are severe, and after the scabs fall off, in places subjected to pressure, inflammation and ulceration take place sometimes ; but there is no sloughing, as in Smallpox. These ulcers generally leave pits."

SPECIES 3. VARICELLA globularis : HIVES.

Syn. Varicellæ duræ ovales (*German*).

In this species the vesicles are large and *globular*, but their base is not exactly circular. There is an inflammation round them, and they contain a transparent lymph, which, on the second day of the eruption, resembles milk-whey. On the third day, the vesicles subside, and become puckered and shrivelled, as in the two former species. They likewise appear yellowish, a small quantity of pus being mixed with the lymph. Some of them remain in the same state till the following morning ; but, before the conclusion of the fourth day, the cuticle separates, and thin blackish scabs cover the bases of the vesicles. The scabs dry and fall off in four or five days.

Some degree of fever generally precedes the eruption of all the species of Varicella for a couple of days, which occasionally continues to the third day of the eruption. This is sometimes very slight, so that it is only recollected, as having been previously indicated

by fretfulness, after the eruption appeared.* “ The eruption usually commences on the breast and back, appearing next on the face and scalp, and lastly on the extremities. It is attended, especially in children, with an incessant tingling or itching, which leads them to scratch off the tops of the vesicles ; so that the characteristics of the disease are often destroyed at an early period. Many of the vesicles thus broken and irritated, but not removed, are presently surrounded by inflammation, and afterwards become pustules, containing thick yellow matter. These continue three or four days, and finally leave pits in the skin.”

The eruption is sometimes preceded, for a few hours, by a general erythematous rash. It is usually fullest in the *conoidal* form of Varicella, in which the vesicles are sometimes coherent, or seated close together, but seldom confluent.† The incidental appearance of pustules, just mentioned, among the vesicles, sometimes occasions a doubt respecting the nature of the eruption. The following circumstances, however, if carefully attended to, will afford sufficient grounds of diagnosis : —

The “ vesicle full of serum on the top of the pock,” as Dr. Heberden expresses it, on the first day of the eruption ; — the early abrasion of many of these vesicles ; — their irregular and oblong form ; — the shrivelled or wrinkled state of those which remain entire, on the third and fourth day, and the radiating furrows of others, which have had their ruptured apices closed by a slight incrustation ; — the general appearance of the small scabs on the fifth day, at which time the Smallpox are not at the height of their supuration, — sufficiently distinguish the erup-

* Dr. Heberden observes, “ These pocks come out in many without any illness or previous sign.” — But Dr. Willan states, “ I do not remember to have seen any case of Varicella without some disorder of the constitution.” Loc. cit.

† See Dr. Willan’s treatise. A case of confluent Chicken-pox, illustrated by a coloured engraving, was published by Mr. Ring, in the Med. and Phys. Journal for 1805, vol. xiv. p. 141.

tion of Varicella, from the firm, durable, and slowly-maturing pustules of Smallpox. Dr. Willan also points out a circumstance, which is very characteristic; *viz.* "that variolous pustules, on the first and second day of their eruption, are small, *hard*, globular, red, and painful: the sensation of them to the touch, on passing the finger over them, is similar to that which one might conceive would be excited by the pressure of small round seeds under the cuticle. In the Varicella almost every vesicle has, on the first day, a hard inflamed *margin*; but the sensation communicated to the finger, in this case, is like that from a round seed, flattened by pressure."

Dr. Willan remarks likewise, that, as the vesicles of the Chicken-pox appear in succession during three or four days, different vesicles will be at once in different states of progress: and if the whole eruption, on the face, breast, and limbs, be examined on the fifth or sixth days, every gradation of the progress of the vesicles will appear at the same time. But this circumstance cannot take place in the slow and regulated progress of the Smallpox.

When the globular vesicles of the Hives appear (and they are occasionally intermixed both with the lenticular and conoidal vesicles), they afford a ready distinction from the Smallpox, to the pustules of which they bear little resemblance.

There is a variety of Smallpox, which is occasionally produced by variolous inoculation, and which has usually appeared where vaccination had only partially influenced the constitution: this commonly dries up on the sixth or seventh day, without maturation. But the small, hard, tubercular form of this eruption is sufficiently distinct from every form of the vesicles of Chicken-pox.

It is unnecessary to say any thing respecting the treatment of Varicella; since nothing in general is requisite beyond an attention to the state of the

bowels, and abstinence from animal diet for two or three days.

From some experiments made, in his own family, by an eminent surgeon, and from others performed at the Smallpox Hospital, it appears that Varicella is communicable by inoculation with the lymph of the vesicles ; — that it may be introduced while the constitution is under the influence of vaccination, without impeding the progress of the latter, or being itself interrupted ; — that Smallpox, inoculated during the eruptive fever of Varicella, proceeds regularly in its course, without occasioning any deviation in that of the latter ; — but that, when variolous and varicellous virus is inserted at the same time, the Smallpox proceeds through its course, while that of the Chickenpox is in a great degree interrupted.* But the experiments have not been sufficiently numerous to warrant the accuracy of these general conclusions.

Books which may be consulted on Varicella.

- CAZENAVE et SCHEDEL, *Abrégé pratique des Maladies de la Peau*, 8vo.
 HEBERDEN, *Med. Trans. of Col. of Phys.*, vol. 1. xvii.
 HEBERDEN, *Trans. of the Roy. Col. of Physicians*, 8vo. vol. i. 1767.
 RAYER, *Traité des Maladies de la Peau*, 8vo.
 RING, *Med. and Phys Journ.*, vol. xiv.
 THOMSON, Dr. J., on Varioloid Diseases, 8vo.
 WILLAN on Vaccine Inoculation, 4to.
 WILSON on Febrile Diseases.

GENUS II. VACCINIA. COW-POX.

Syn. Variola vaccina (*Jenner*): Vaccina (*Auct. var.*): Exanthema vaccina (*Parr*): Synocha vaccina (*Young*): Emphlysis vaccinia. γ . Inserta (*Good*). Kuhpocken schutzblattern (*Germ.*): Koepokken (*Dutch*): Vaccine (*F.*): Vajuolo vaccino, Vaccina (*Ital.*): Vacuna (*Span.*): Pässuwoo ummay (*Ta-*

* See Dr. Willan's Treatise on Vaccination, pp. 97—103.

mul): Gŷke seetlā (*Dukanie*): Avoummā (*Tellingoo*): Ghoomāsoorikeh (*Sanscrit*): *Inoculated Cow-pox*.

Def. A CIRCULAR, SEMI-TRANSPARENT, PEARL-COLOURED VESICLE, CONFINED TO THE PLACE OF PUNCTURE: DEPRESSED IN THE CENTRE; SURROUNDED WITH A RED AREOLA; CONCRETING INTO A HARD DARK-COLOURED SCAB AFTER THE TWELFTH DAY.

This disease appears naturally upon the teats of the cow, from which it is transferred to the human species; either by natural inoculation, when the milkers have chopped hands; or artificial, by inserting the virus, on the point of a lancet, under the skin. It appears on the day after that on which the inoculation took place, in the form of a small hard tubercle, which about the fourth day has assumed the character of a small semi-transparent pearl-coloured vesicle, with a circular or somewhat oval base; and with the upper surface, until the end of the eighth day, more elevated at the margin than in the centre, and with the margin itself turgid, shining, and rotate, so as to extend a little over the line of the base. It is formed of a number of cells, the parietes of which secrete the lymph that fills the vesicle. This vesicle is filled with clear lymph, contained in the little cells, that communicate with one another. After the eighth or ninth day from the insertion of the virus, it is surrounded by a bright red circumscribed areola, which varies in its diameter, in different cases, from a quarter of an inch to two inches, and is usually attended with a considerable tumour and hardness of the adjoining cellular membrane. This areola declines on the eleventh and twelfth day; the surface of the vesicle then becomes brown in the centre; and the fluid in the cells gradually concretes into a hard rounded scab, of a reddish-brown colour, which at length becomes black, contracted, and dry, but is not detached till after the twentieth day from the inoculation. "In the agglutinising process, the cells become

gradually consolidated ; and the fluid having become hard, a scab is formed, beneath which a small portion of the villi of the cutis is removed, and the loss of this causes the mark peculiar to the mild and regular vesicle." It leaves a permanent circular cicatrix, about five lines in diameter, and a little depressed, the surface being marked with very minute pits or indentations, denoting the number of cells of which the vesicle had been composed.*

A vesicle possessing these characters, and passing through these regular gradations, whether accompanied by any obvious disorder of the constitution or not, was supposed effectually and permanently to secure the individual from the danger, and almost universally from the contagion, of Smallpox.† " This opinion, however, must be taken with great modification ; and even Dr. Jenner himself, before his death, had reason to be satisfied that Smallpox may occur after the most perfect vaccination. Whether this depends on what has been termed the variolous diathesis, we shall not attempt to determine. In some instances it may depend on pre-occupation of the skin by some cutaneous eruption, overlooked by the vaccinator ; for it is a well-known fact, that the presence of Herpetic or Psoriastic eruptions will impede the constitutional influence of Vaccinia ; and thence the propriety of early vaccination. It cannot, nevertheless, be denied that Smallpox has existed as an epidemic in many parts of Great Britain since Cow-pox was introduced ; but it is satisfactory, in reviewing the history of these epidemics, to find, that of those

* See Dr. Willan's Treatise on Vaccination, p. 9.

† After so many years from the promulgation of the discovery, although this truth does not remain in full force, yet the very exceptions to it (and what result of human research is free from exceptions?) may be said, without a solecism, to corroborate it. For, in the very small number of cases (such as that of the son of Earl Grosvenor) where an *extensive* eruption of Smallpox has occurred subsequent to vaccination, the controlling influence of the Cow-pox has been invariably and strikingly manifested by the sudden interruption of the Smallpox in the middle of its course, and the rapid convalescence of the patient.

persons who were attacked with Smallpox who had not been vaccinated, the proportion of deaths was as one in four ; whilst of those who had undergone vaccination, the proportion was not one in four hundred and fifty. It is sufficient if Vaccinia can modify Smallpox so as to moderate its violence ; the hope of eradicating it can scarcely be entertained.”

“ When the disease proceeds regularly, the constitution becomes affected in the seventh day ; fever, with restlessness, and deranged bowels, are the chief symptoms : they subside in two or three days. But in many instances, there is not even the slightest indication of fever ; the constitutional affection, although, when thus displayed, it indicates full effect of the virus upon the system, yet it is not essential that the symptoms should be so conspicuous to ensure the success of the process. Fever is more frequent in the adult than in the young patient : the vesicles also differ in some respects. They are more easily ruptured, the lymph is more yellow, and the areola more extensive ; and the axillary glands swell, which rarely happens in the child.”

It is requisite that the vaccinator should attend to the *irregular* appearances which are produced either by the insertion of matter, that is so far corrupted or deteriorated as to be incapable of exciting the perfect disease, or by the inoculation of proper lymph, under certain circumstances of the habit which interfere with its operation, and which will be mentioned presently.

“ When the progress of the disease is irregular, itching often attends the formation of the vesicle. But there is no uniform appearance which is characteristic of imperfect vaccination — on the contrary, three varieties of irregularity have been noticed ; namely, pustules*, ulcerations, and vesicles of an

* The pustules here mentioned occur on the inoculated part. Those pustules which appeared over the body, in the first experiments with the vaccine virus made in the *Smallpox Hospital*, by Dr. Woodville, and

irregular form. The *pustule*, which is sometimes produced instead of the proper vaccine vesicle, is more like a common festering boil, occasioned by a thorn, or any other small extraneous body, sticking in the skin, according to Dr. Jenner; and it throws out a premature efflorescence, which is seldom circumscribed.* It is, as Dr. Willan has stated, of a conoidal form, and raised upon a hard inflamed base, with diffuse redness extending beyond it; it increases rapidly from the second to the sixth day, and is usually broken before the end of the latter, when an irregular yellowish-brown scab succeeds.† *Ulceration*, occupying the place of a regular vesicle, must be obviously incorrect: it probably originates from the pustules just mentioned, which, on account of the itching that is excited, are sometimes scratched off at a very early period; or, being prominent and tender, are readily injured and exasperated by the friction of the clothes, &c.‡

With respect to the *irregular vesicles*, “which do not wholly secure the constitution from the Small-pox,” Dr. Willan has described and figured three sorts. The *first* is a single pearl-coloured vesicle, set on a hard dark red base, slightly elevated. It is larger and more globular than the pustule above represented, but much less than the genuine vesicle: its top is flattened, or sometimes a little depressed, but the margin is not rounded or prominent. The

which puzzled the early vaccinators, were subsequently proved, and admitted by Dr. Woodville himself, to have been genuine smallpox, the result of the contagion of the place.

* See Med. and Physical Journ. vol. xii. for Aug. 1804, p. 98.

† This premature advancement was pointed out by Dr. Jenner as a characteristic of the irregular pock, in his Paper of Instructions for Vaccine Inoculation, at an early period of the practice. He also justly remarked, in respect to the “soft amber-coloured” scab, left by these pustules, that “*purulent* matter cannot form a scab so hard and compact as *limpid* matter,” *loc. cit.* p. 99. *note*. In other words, that the scab succeeding a *pustule* is less hard and compact than the scab which forms on a *vesicle*.

‡ Dr. Willan, *loc. cit.*

second appears to be cellular, like the genuine vesicle; but it is somewhat smaller, and more sessile, and has a sharp angulated edge. In the *first* the areola is usually diffuse, and of a dark rose colour; in the *second*, it is sometimes of a dilute scarlet colour, radiated, and very extensive, as from the sting of a wasp. The areola appears (earlier) round these vesicles, on the seventh or eighth day after inoculation, and continues more or less vivid for three days, during which time the scab is completely formed. The scab is smaller and less regular than that which succeeds the genuine vesicle; it also falls off much sooner, and, when separated, leaves a smaller cicatrix, which is sometimes angulated. The *third* irregular appearance is a vesicle without an areola.”*

There are two causes, as I have intimated above, for these imperfect inoculations: the one is the insertion of effete or corrupted virus; and the other, the presence of certain cutaneous eruptions, acute and chronic. “Certain states of the habit also predispose to irregularity, which is rendered evident by the fact, that the virus of an irregular vesicle transferred to a healthy subject will produce a regular vesicle.” “The period of life for vaccination is also of consequence. It is not easy to determine why the period

* It appears to me that Mr. Bryce, in his able and valuable work on the Inoculation of Cow-pox, has, without any sound reason, impugned these observations upon the “irregular vesicles,” and considered the introduction of the terms as productive of “much injury to the true interests of vaccination,” and as serving “to screen ignorance or inattention in the operator:” and that his own reasoning, which amounts to nothing more than a hypothetical explanation (and consequently an admission) of the fact, is irrelevant. He divides the vesicles “into constitutional and local;” but at the same time admits that he knows no criterion by which they are to be distinguished, save the ultimate security against smallpox produced by the one, and not by the other. (Appendix, No. x. p. 114. edit. 2d.) Now this is surely to screen ignorance and inattention, by representing minute observation of appearances as unnecessary. However, he more than compensates for this error of logic, by the ingenious test of a double inoculation, at the interval of five or six days, which he has established, and which is sufficiently mechanical to be employed without any unusual nicety of observation or tact.

of infancy between one and three months is the best, but experience has proved it to be so ; and, probably, it is owing to the habit of the infant being more susceptible of that specific change which is requisite to secure it from Smallpox than that of the adult. It cannot be owing to the degree of febrile action ; for, in general, this is comparatively greatest in the adult."

The lymph of the vaccine vesicle becomes altered in its qualities soon after the appearance of the inflamed areola ; so that, if it be taken for the purposes of inoculation after the twelfth day, or after the vesicle has suppurated, it frequently fails to produce any effect whatever ; and in some cases it suddenly excites a pustule or ulceration, in others an irregular vesicle, and in others Erysipelas. If taken when scabs are formed over the vesicles (as in the case of the pustules of Smallpox), the virus is occasionally so putrescent and acrid, that it excites the same violent and fatal disease which arises from slight wounds received in dissecting putrid bodies.

Again, the lymph, although taken from a perfect vesicle on the sixth, seventh, or eighth day, may be so injured before its application, by heat, exposure to the air, moisture, rust, and other causes*, as to be rendered incapable of exciting the true disease. "No lymph can be depended on which is taken after the eighth day. Many of the cases of Variola after Vaccinia may be attributed to the neglect of this rule. But although many practitioners are of opinion that a vaccine vesicle produced by virus taken after the eighth day cannot be depended on for exciting that constitutional disease which is required for securing the habit from Smallpox ; yet, Dr. George Gregory thinks this opinion fallacious, and that a vesicle produced by the scab, softened in water, is as good as one from recent six-day virus. The best period for taking the lymph is from the fifth to the ninth day. After

* Dr. Willan, loc. cit.

this time it becomes opaque and purulent, and cannot be depended upon, either for producing a vesicle, or, if this occur, for securing the individual from Small-pox. The virus ought not to be kept in a heat exceeding 95° of Fahrenheit; for, when this is the case, the most active vaccine virus loses its power of communicating the disease. When it is necessary to keep the virus, it should be preserved in little glass globules of the form or size of the marginal figure.

The vesicle from which the virus is to be taken is punctured, and after warming the little ball, *a*, in the mouth to expel some of the air it contains, the open orifice, *b*, should be applied to the exuded lymph, and the ball wetted: as the contained air cools, the lymph ascends into the tube and ball. The end of the tube *b*, must then be hermetically sealed by melting it in the flame of a candle."



" In vaccinating, care should be taken to have the lancet as clean as possible, and perfectly sharp. When the lancet does not penetrate the skin easily, the lymph, if recent and semifluid, is thrown back on the lancet instead of entering the puncture. The skin should be kept tense when the puncture is made; and three punctures, at an inch from each other, should be made on the arm. The child should be in perfect health. The best age for vaccinating is from the sixth to the twelfth week after birth."

The most frequent causes of the imperfections in the progress of the vesicle, seem to be "dentition, inflammatory fever, or inflammation of any viscus, hooping-cough," the presence of chronic cutaneous eruptions, or the concurrence of eruptive fevers, or even of other febrile diseases. The chronic cutaneous diseases, which sometimes impede the formation of the genuine vaccine vesicle, have been described by Dr. Jenner under the ordinary indefinite term Herpes*, and *Tinea capitis*. In the more accurate

* See his letter to Dr. Marcet, Med. and Phys. Journ. for May, 1803; also, the same Journal for Aug. 1804.

phraseology of Dr. Willan, they are Herpes (including the *shingles* and *vesicular ring-worm*), Psoriasis, and Impetigo (the dry and humid *tetter*), the Lichen, and most frequently the varieties of Porrigo, comprising the contagious eruptions denominated by authors *crusta*, *lactea*, *area*, *achores*, and *favi*. Dr. Willan thinks that the *Itch* and Prurigo likewise have the same influence.

Of the interference of the eruptive fevers, Measles, Scarlet fever, and Chicken-pox, with the progress of the vaccine vesicle, when they occur soon after vaccination, numerous instances have been recorded. The *suspension* of its progress, indeed, would be expected, under such circumstances, from the known facts respecting the reciprocal action of these contagious fevers on each other. But the action of the vaccine virus is not only suspended by these fevers, so that the vesicle is very slow in its progress, and the areola not formed till after the fourteenth day or later, and sometimes not at all; but it is occasionally rendered altogether inefficient. Even Typhus fever, and the Influenza, have been observed to produce a similar interruption in the progress of vaccination.

A vesicle without an areola takes place if the person inoculated have previously received the infection of Smallpox, or if he be affected with some other contagious disease during the progress of vaccination.*

Other irregularities may probably have occurred. At all events, though the constitution is sometimes fully secured from the infection of Smallpox, even by the irregular vesicles; yet, as it is more commonly but imperfectly guarded by such vesicles, the propriety of Dr. Jenner's caution is obvious; that, "when a deviation arises, of whatever kind it may be, common prudence points out the necessity of re-inoculation."† "Those who have been inoculated

* Dr. Willan, loc. cit.

† Paper of Instructions, before quoted.

for Smallpox in early life, and have had the disease, are usually unsusceptible of Cowpox, although often a kind of vesicle is formed : but the fluid it contains will not produce the genuine disease." " Dr. Jenner believed Smallpox and Cowpox to be varieties of the same disease ; an opinion which was said to have been confirmed by some experiments lately made in Egypt, by which it has been discovered, that by inoculating a cow with Smallpox matter from the human body, active vaccine virus is produced. Children were successfully inoculated from this cow.* It is said, however, that experiments of a similar nature made at the Veterinary College failed.

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GENUS III. HERPES. *

Syn. ἐρπηϛ (*Auct. Græc.*): ζωστρη (*Pliny*): Zona (*Scriben, Sag. Russel*): Formica (*Avicenna*): Zona ignea (*Hoff. Darwin*): Erysipelas phlyctænodes (*Cullen*): Serpigo (*Auct.*): Cytisma Herpes (*Young*): Lepidosis Herpes (*Good*): Herpes, Zona, Ignis Sacer (*Lat.*): Zittermal, Flechte, der Yustel (*Germ.*): Springend vuur (*Dutch*): Herpe, la Jartière (*Fr.*): Erpete (*Ital.*): Herpes Sarpallido (*Span.*): Neshr (*Arabic*): *Tetter*.

Def. VESICLES IN DISTINCT, IRREGULAR CLUSTERS, UPON AN INFLAMED BASE, EXTENDING A LITTLE WAY BEYOND THE MARGIN OF EACH CLUSTER: ACCOMPANIED WITH TINGLING: CONCRETING INTO SCABS.

This appellation is here limited to a vesicular disease, which, in most of its forms, passes through a regular course of increase, maturation, and decline, and terminates in about ten, twelve, or fourteen days. The eruption is preceded, when it is extensive, by considerable constitutional disorder, and is accompanied by a sensation of heat and tingling, sometimes by severe deep-seated pain, as if hot needles were

* Actuarius explains the origin of this term, as well as of the application of the word *fire*, to these hot and spreading eruptions. "*Herpes dicitur eo quod videatur ἐρπειν (quod est serpere per summam cutem), modo hanc ejus partem, modo proximam occupans, quod semper, priore sanata, propinqua ejus vitium excipiat; non secus quam ignis qui proxima quæque depascitur, ubi ea quæ prius accensa erant, deficiente jam materia idoneâ, prius quoque extinguuntur.*" Meth. Med. lib. ii. cap. 12. — From this creeping progress, the disease was called *Formica* by the Arabians.

run into the parts affected.* The lymph of the vesicles, which is at first clear and colourless, becomes gradually milky and opaque, and ultimately concretes into scabs: but, in some cases, a copious discharge of it takes place, and tedious ulcerations ensue. "In some instances, as the vesicles congregate, and the crusts fall off in one part, fresh crops arise in the vicinity; and thus the eruption creeps over a considerable part of the skin." The disorder is not contagious in any of its forms.

The ancients, although they frequently mention Herpes, and give distinctive appellations to its varieties, have nowhere minutely described it: hence their followers have not agreed in their acceptation of the term.† It has been principally confounded with Erysipelas, on the one hand, and with Eczema, Impetigo‡, and other slowly-spreading eruptions, on the other. But if the preceding character be well considered, the diagnosis between these affections and Herpes will be sufficiently obvious. From Erysipelas it may be distinguished by the numerous, small,

* This deep-seated pain has often been taken for Pleurisy, and thence, we hear of cases of this disease cured by a critical eruption of Herpes.

† Although some of the ancients are more anxious to point out the nature of the morbid humour, to which the Herpes was to be imputed, than to describe its symptoms; yet, most of them speak of *small bullæ*, or *phlyctænae*, as characteristic of the eruption. (See Galen de Tumoribus præt. Naturam; — Aëtius, tetrab. iv. serm. ii. cap. 60.; — Paulus, lib. iv. cap. 20.; — Actuarius, lib. ii. cap. 12.) Again, Scribonius Largus speaks of the most remarkable form of this vesicular disease (the Zoster, or shingles) as a species of Herpes. "Zona quam Græci *ἑρπητα* dicunt." See Scribon. de Compos. Medicam. cap. 13. In describing the appearance of this disease, under the appellation of Ignis Sacer, Celsus has properly characterised it by the numerous and congregated eruption, the small and nearly equal size of the vesicles, and the situations which it more frequently occupies, &c. "Exasperatumque per pustulas continuas, quarum nulla alterâ major est, sed plurimæ perexiguæ: in his semper fere pus, et sæpe rubor cum calore est: serpitque id nonnunquam sanescente eo quod primum vitiatum est; nonnunquam etiam exulcerato, ubi, ruptis pustulis, ulcus continuatur, humorque exit, qui esse inter saniem et pus videri potest. Fit maxime in pectore, aut lateribus, aut eminentibus partibus, præcipueque in plantis." Lib. v. cap. 23. § 4.

‡ See Dr. Cullen's definition of Herpes. Nosol. Method. gen. 147.

clustering vesicles, by the natural condition of the surface in the interstices between the clusters, and by the absence of redness and tumefaction before the vesicles appear : and from the chronic eruptions just alluded to, by the purely vesicular form of the cuticular elevations in the commencement, by the regularity of their progress, maturation, and scabbing, and by the limitation of their duration, in general, to a certain number of days.

The ancient division of Herpes into three varieties, *miliary* (κεγχριας), *vesicular* (φλυκταινωδης), and *eroding* (εσθιομενος), may be properly discarded : for there appears to be no essential distinction between the first two, which differ only in respect to the size of the vesicles ; and the last is incorrectly classed with Herpes, being perhaps referable rather to Pompholyx, or those larger bullæ, which arise in bad habits of body, and are followed by ill-conditional ulcerations of the skin.* The various appearances of Herpes may be comprehended under the six following species : —

- | | |
|-----------------------------|----------------------------|
| 1. <i>H. phlyctænodes</i> , | 4. <i>H. labialis</i> , |
| 2. <i>H. zoster</i> , | 5. <i>H. præputialis</i> , |
| 3. <i>H. circinatus</i> , | 6. <i>H. Iris</i> . |

“ The Editor conceives that the second, third, fourth, and fifth species of this arrangement are merely varieties of the first, and, consequently, that the whole may be arranged under two distinct spe-

* Celsus, has, in fact, made this distinction between the Herpes esthiomenos and the proper Herpes, ranking the latter under the head of Ignis Sacer; a term which most of the translators of the Greek writings have incorrectly substituted for Erysipelas. Whereas he speaks of the *H. esthiomenos* as a deep-spreading ulcer, of a cancerous character. “Fit ex his ulcus quod ἐρπητα εσθιομενον Græci vocant, quia celeriter serpendo penetrandoque usque ossa, corpus vorat. Id ulcus inæquale est, cæno simile, inestque multus humor glutinosus, odor intolerabilis, majorque quam pro modo ulceris inflammatio. Utrumque, (scil. θηρωμα et ἐρπητις) sicut omnis cancer, fit maxime in senibus, vel iis quorum corpora mali habitus sunt.” Celsus de Medecina, lib. v. cap. 28. — See also Sennert. Pract. lib. v. part. i. cap. 17.

cies, namely, *H. phlyctænodes*, and *H. Iris*. The following arrangement, therefore, is that which he has adopted : —

Species 1. HERPES *phlyctænodes*.

- Var. *a.* *H. zoster*,
- b.* *H. circinatus*,
- c.* *H. labialis*.
- d.* *H. præputialis*.

2. HERPES *Iris*.

SPECIES 1. HERPES *phlyctænodes*, MILIARY HERPES.

Syn. Herpes exedens, Serpigo (*Underwood*): Herpes miliaris (*Auct. var.*): Lepidosis Herpes. *a.* Miliaris (*Good*): Dartre phlycténoïde (*Alibert*): die Flechte (*German*).

This species of Herpes, (Plate XLIX. of *Bateman*; Pl. 20. of *THOMSON'S ATLAS*.) including the miliary variety above mentioned, is commonly preceded by a slight febrile attack for two or three days, accompanied by thirst, heat of stomach, and flatulence, and which is not always relieved by the appearance of the eruption, but, on the contrary, it is sometimes augmented after it shows itself. Small transparent vesicles then appear, in irregular clusters*, sometimes containing colourless, and sometimes a brownish lymph; and, for two or three days more, other clusters successively arise near the former. The eruption has no certain seat: sometimes it commences on the cheeks or forehead, and sometimes on one of the extremities; “sometimes about the fingers or toe-nails;” and occasionally it begins on the neck and breast, and gradually extends over

* Occasionally, however, the patches are of a *regular circular form*, and the aræ are completely covered with crowded vesicles: and in these cases the constitution is more violently disordered, and the heat and pain attending the eruption, amounting to a sensation of actual burning or scalding, are more severe than in any other form of Herpes. To this variety of the eruption more particularly the popular appellation of *Nirles* has been given.

the trunk to the lower extremities, new clusters successively appearing for nearly the space of a week. It is chiefly the more minute or miliary variety which spreads thus extensively; for those which, at their maturity, attain a considerable size and an oval form*, seldom appear in more than two or three clusters together; and sometimes there is only a single cluster. "Biett remarks, that previous to the appearance of the vesicles, minute red points, very closely grouped, may be detected on the spot where the vesicles show themselves on the following day, on an inflamed base, resisting compression, and varying in size from that of a millet seed to that of a pea. I have seen red patches, which give a sensation of roughness when the finger has been passed over them, but never the peculiar papular appearance that Biett has described. The skin between the clusters of vesicles retains its natural colour, although on the space occupied by the group, and for a small space beyond it, it is red." The included lymph sometimes becomes milky or opaque in the course of ten or twelve hours; and about the fourth day the inflammation round the vesicles assumes a duller red hue, while the vesicles themselves break, and discharge their fluid, or begin to dry and flatten, and dark or yellowish scabs concrete upon them. These fall off about the eighth or tenth day, leaving a reddened and irritable surface, which slowly regains its healthy appearance. As the successive clusters go through a similar course, the termination of the whole is not complete before the thirteenth or fourteenth day.

The disorder of the constitution is not immediately relieved by the appearance of the eruption, but ceases as the latter proceeds. The heat, itching, and

* One of Alibert's best plates contains a representation of a vesicular disease of the face and neck, which might appear to be referable to this species of Herpes; but, from his description of the disease, it is obviously a case of Pompholyx. He calls it "Dartre phlycténoïde confluente." See his plate 25.

tingling in the skin which accompany the patches as they successively rise, are sometimes productive of much restlessness and uneasiness, being aggravated especially by external heat, and by the warmth of the bed.

The predisposing and exciting causes are equally obscure: "but there is almost always some previous deranged condition of the digestive organs. In some instances it has proved critical of a catarrhal attack, in which case the eruption may be regarded as a translation of diseased action from the mucous membrane to the skin." The eruption occurs in its miliary form, and spreads most extensively (sometimes over the greater portion of the surface of the body) in young and robust people, who generally refer its origin to cold. But it is apt to appear, in its more partial forms, in those persons who are subject to headaches, and other local pains, which are probably connected with derangements of the chylopoietic organs.

"The diagnosis of *Herpes phlyctænodes* is obvious; pemphigus, the only disease with which it is possible to confound it, consisting of distinct solitary bullæ, whereas *Herpes* consists of groups of vesicles on isolated surfaces."

As the same treatment is requisite for this species as for its varieties, I shall postpone any mention of it until they have been described. "When this disease appears in children, Dr. Underwood recommends the expressed juice of *Sium nodiflorum**, Creeping Water Parsnep." From one to four or five table-spoonfuls mixed with one or more spoonfuls of new milk may be given three times a day, according to the child's age and the state of its stomach, regulating the bowels. In obstinate cases *Hydrargyrus cum Creta* will be found useful: and as a

* Dr. Underwood terms it *aquaticum*, which is the old name of Morison. It is common in rivulets, flowering in July and August. Underwood on the Diseases of Children, 8th edit. 8vo. p. 182. T.

local application, the Unguentum Picis. Should the vesicles ulcerate, Solution of Sulphate of Zinc will be found useful; whilst the little ulcers may be touched with Butter of Antimony. Decoction of Sarsaparilla is a useful alterative.

VAR. a. HERPES zoster*, SHINGLES.

Syn. Zoster (*Pliny*): Formica (*Avicenna*): Ignis sacer (*Celsus*): Zona ignea (*Hoffmann*): Dartre phlycténoïde en Zone,— Herpes phlyctenoides Zonæformis (*Alibert*): Zona (*Scrib. Sag. Russell*): Erysipelas Zoster (*Saww.*): Le Zone Ceinture dartreuse (*F.*): die Fevergürtel (*German*): *Shingles*.

This form of the eruption (Plate L. of Bateman; Pl. 20. of THOMSON'S ATLAS), which is sufficiently known to have obtained a popular appellation, the *Shingles*†, is very uniform in its appearance, following a course similar to that of Smallpox, and the other exanthematic fevers of the nosologists. It is usually preceded for two or three days by languor and loss of appetite, rigors, headach, sickness, and a

* Ζωστήρ, Ζώνη, a belt. These terms have been applied to this form of Herpes, from the situation which it always occupies on the trunk of the body. It has been called simply *zoster* (see *Plin. Nat. Hist. lib. xxvi. cap. 11.*), and *zona*, or *zona ignea*, &c. by different writers; and its symptoms may be recognised, as I have stated above, in the first species of *sacer ignis*, described by *Celsus*. The disease has been described with different degrees of accuracy, by *Tulpius* (*Obs. Med. lib. iii. cap. 44.*), *Hoffmann* (*Med. Syst. Rat. tom. iv. part. i. cap. 13. § 6. & obs. 6.*), *De Haen* (*De Divis. Febrium, p. 112, &c.*), *Callisen* (*Syst. Chirurg. Hod. tom. i. p. 424.*), *Burserius* (*Inst. Med. Pract. tom. ii. cap. 3.*), and others. *Sauvages* has included it under two genera, with the appellations of *Erysipelas zoster* and *Herpes zoster*. (*Nosol. Method. class. iii. gen. 7. & class. i. gen. 7.*) *Dr. Cullen* has classed it with the former disease under the title of *Erysipelas phlyctænodes*; but at the same time expresses a doubt of the propriety of this classification. (*Nosol. Meth. gen. 31. spec. 2.*)

M. Alibert has given an indifferent representation of *Herpes zoster*, plate 24., under the title of "Dartre phlycténoïde en zone."

† Is this a corruption from the Latin *Cingulum*? *Johnson* held the affirmative: and it seems not less distinctly deducible from this word, than the vulgar terms *quinsey* and *megrin*, from their Greek roots *cynanche* and *hemigrania*; except that the latter had received a previous corruption by the French, in *esquinancie* and *migraine*, from which we doubtless took our words.

frequent pulse, together with a scalding heat and tingling in the skin, and shooting pains through the chest and epigastrium. Sometimes, however, the precursory febrile symptoms are slight and scarcely noticed, and the attention of the patient is first attracted by a sense of heat, itching, and tingling, in some part of the trunk, where he finds several red patches of an irregular form, at a little distance from one another, upon each of which numerous small elevations appear, clustered together. These, if examined minutely, are found to be distinctly vesicular; and, in the course of twenty-four hours, they enlarge to the size of small pearls, and are perfectly transparent, being filled with a limpid fluid. The clusters are of various diameter, from one to two, or even three, inches, and are surrounded by a narrow red margin, in consequence of the extension of the inflamed base a little beyond the congregated vesicles. During three or four days, other clusters continue to arise in succession, and with considerable regularity; that is, nearly in a line with the first, extending always obliquely towards the spine at one extremity, and towards the sternum, or *linea alba* of the abdomen, at the other, most commonly round the waist like half a sash, but sometimes like a sword-belt across the shoulder, never in a vertical position.* “Instead of the trunk, the clusters sometimes beginning on the loins or the nates, extend, in an oblique direction, down the thigh to the knee.”

* “*Hac tamen perpetua lege,*” says De Haen, “*ut ab anteriore parte nunquam lineam albam, nunquam à postica spinam, transcenderent.*” (De Divis. Februm, p. 112.) This observation, however, is not without exceptions; although the rarity of the occurrence probably gave rise to the popular apprehension, which is as old as Pliny, that if the eruption completed the circle of the body, it would be fatal. “*Zoster appellatur, et enecat, si cinxerit.*” (Plin. loc. cit.) I have seen the clusters extend across the *linea alba* in front; and Turner asserts, that he has more than once observed it to surround the body. (On Dis. of the Skin, chap. v. p. 80.) Dr. Russell (De Tab. glandulari, hist. 33.) and Tulpius (Obs. Med. lib. iii. cap. 44.), also contradict the affirmation of Pliny.

Plenck says, “*Sub umbilico et in regione ischiadica usque ad genua hunc morbum vidi.*” *Doctrina de Morbis Cutaneis. Viennæ, 1783.* p. 28. T.

“ Rayer mentions having seen a case in which the eruption extended from the face into the mouth. One half of the tongue was tumified, red, and covered with white, soft, irregular, patches; some of the vesicles resembled those on the skin, others were of large size, approaching to the character of Bullæ: the saliva, which was secreted in large quantity, was thready, the breath foetid, but not like that produced by mercury.”*

While the new clusters are appearing, the vesicles of the first begin to lose their transparency, and on the fourth day acquire a milky or yellowish hue †, which is soon followed by a bluish, or livid colour of the bases of the vesicles, and of the contained fluid. They now become somewhat, “ but never completely,” confluent, and flatten or subside, so that the outlines of many of them are nearly obliterated. About this time they are often broken, and for three or four days discharge a small quantity of a serous fluid; which at length concretes into thin dark scabs, at first lying loosely over the contained matter, but soon becoming harder, and adhering more firmly, until they fall off about the twelfth or fourteenth day. The surface of the skin is left in a red and tender state; and where the ulceration and discharge have been considerable, numerous cicatrices or pits are left. “ They sometimes ulcerate, and Biett says that he has seen them pass into gangrene.”

As all the clusters go through a similar series of changes, those which appeared latest, arrive at their termination several days later than the first; whence the disease is sometimes protracted to twenty or even twenty-four days, before the crusts exfoliate. In one or two instances I have seen the vesicles terminate in numerous small ulcers, or suppurating foramina, which continued to discharge for many days, and were not all healed before the end of the fourth week.

* *Traité des Mal. de la Peau.* t. i. p. 230.

† Can the fluid be now regarded sero-purulent? T.

The febrile symptoms commonly subside when the eruption is completed; but sometimes they continue during the whole course of the disease, probably from the incessant irritation of the itching and smarting connected with it. In many instances, the most distressing part of the complaint is an intense darting pain, not superficial, but deep-seated in the chest, which continues to the latter stages of the disease, and is not easily allayed by anodynes*: sometimes this pain precedes the eruption. "In old persons, and those of a delicate habit of body, a feeling of pain or local burning often is experienced for a week or more previous to the eruption, on the appearance of which it is relieved. This is sometimes so severe as to be mistaken for pleurisy, and treated by venesection. I have seen great relief procured by a combination of Magnesia, wine of Colchicum, and tincture of Opium, taken at bed-time."

Although the *Shingles* commonly follow the regular course of fever, eruption, maturation, and decline, within a limited period, like the eruptive fevers or exanthemata of the nosologists†, yet the disorder is not, like the latter, contagious, and may occur more than once in the same individual.‡ The disease, on the whole, is slight; it has never, in any instance that I have witnessed, exhibited any untoward symptom, or been followed by much debility: in the

* Hoffmann observes, "Inde quidem symptomata remiserunt, excepto exquisito ardente dolore, qui tantus erat, ut nec somnum capere, nec locum affectum contingere posset." *Med. Syst. Rat. tom. iv. part. i. cap. 13. § 6. obs. vi.*

† The regularity and brevity of its course have not been sufficiently attended to. Bursarius has, however, observed, "*Zoster acutus et brevis ut plurimum morbus est; nam, quanquam Lorryus et chronicum, et interdum epidemicum esse existimet, (quod de igne sacro latè sumpto fortasse ei concedendum est) hanc speciem tamen diutinam non vidi.*" *Inst. Med. Pract. tom. ii. cap. 3. § 52.*

‡ In the course of my attendance at the Public Dispensary, during twelve years, between thirty and forty cases of shingles have occurred, none of which were traced to a contagious origin, or occasioned the disease in other individuals.

majority of cases, it did not confine the patients to the house.*

The causes of the *Shingles* are not always obvious. Young persons from the age of twelve to twenty-five are most frequently the subjects of the disease, although the aged are not altogether exempt from its attacks, and suffer severely from the pains which accompany it. It is most frequent in the summer and autumn, and seems occasionally to arise from exposure to cold, after violent exercise. Sometimes it has appeared critical, when supervening to bowel-complaints, or to the chronic pains of the chest remaining after acute pulmonary affections. Like Erysipelas, it has been ascribed by some authors to paroxysms of anger.† “It is not contagious.”

“There is no difficulty in the diagnosis. It resembles closely, in some instances, the *H. phlyctænodes*, of which, indeed, it is a variety: the absence of puffiness, and of the disappearance of the redness on pressure, readily distinguishes it from Erysipelas.”

It is scarcely necessary to speak of the treatment of a disorder, the course of which requires only to be regulated, and cannot be shortened, by medicine. Gentle laxatives and diaphoretics, with occasional anodynes, when the severe deep-seated pains occur, and a light diet, seem to comprise every thing that is requisite in the cure. Experience altogether contradicts the cautionary precepts, which the majority of writers, even down to Burserius, have enjoined, in respect to the administration of purgatives, and which

* Some authors, as Platner and Hoffmann, have deemed the *Zoster* a malignant and dangerous disease; and Langius (Epist. Med. p. 110.) has mentioned two fatal cases occurring in noblemen. But they have apparently mistaken the disease. Lorry, Burserius, Geoffroy, and others, (Hist. de la Soc. Roy. de Méd. ann. 1777-8) more correctly assert that it is free from danger.

† See Schwartz Diss. de *Zonâ serpiginosâ*, Halæ, 1745: he saw three instances, which followed violent fits of passion, p. 17.; and Plenck affirms that he saw it occur twice after violent anger, and a copious potation of beer. (De Morb. cutan. p. 28.)

are founded entirely upon the prejudices of the humoral pathology.*

In general, no external application to the clustered vesicles is necessary: "the best plan is to prevent their breaking, by bathing the parts with a spirituous lotion, consisting of one part of Alcohol and four of distilled water; or a solution of Nitrate of Silver in the proportion of two grains of the nitrate to one ounce of distilled water." When they are abraded by the friction of the clothes, a glutinous discharge takes place, which occasions the linen to adhere to the affected parts, producing some irritation. Under these circumstances, a little simple ointment, "or that of the Oxide of Zinc spread on lint," may be interposed, to obviate that effect. With the view of clearing off the morbid humours, the older practitioners cut away the vesicles, and covered the surface with their unguents †, or even irritated it with the Nitrico-oxyd of Mercury, notwithstanding the extreme tenderness of the parts. ‡ These pernicious interruptions of the healing process probably gave rise to ulceration, and prolonged the duration of the disease, and thus contributed to mislead practitioners in their views respecting its nature. §

VAR. *b.* HERPES *circinatus*, VESICULAR RING-WORM.

Syn. Formica ambulatoria (*Celsus*): Herpes serpigo (*Saww.*): Annulus repens (*Darwin*): Dartre encroûtée (*F.*).

This form of Herpes (Plate LI. fig. 1. of BATE-

* De Meza relates an instance of a repelled Herpes being immediately followed by an intermittent. — Act. Soc. Med. Hafn. T. 1. N. 10. T.

† See Turner on Dis. of the Skin, chap. 5.

‡ "Illa autem ut inspicio," says Dr. Russell, "vesiculis depressis, et minime tumentibus, at livescentibus inducta esse, (the natural decline of the eruption) atque acrem quandam ichorem substaré cerno, proinde secantur vesiculæ, et præcipitato rubro, cum unguento aur. et cerate, ut medicamenta fixa atque immota emanerent, curantur." De Tabæ glandulari, hist. 33.

§ Plenck says, "Pinguia et humida, ut vidi, admodum nocent;" l. c. p. 21. T.

MAN ; Pl. 20. of THOMSON'S ATLAS,) is vulgarly termed a *Ringworm*, and is, in this country, a very slight affection, being unaccompanied with any disorder of the constitution. It appears in small circular patches, in which the vesicles arise only round the circumference : these are small, with moderately red bases, and contain a transparent fluid, which is discharged in three or four days, when little prominent dark scabs form over them. The central area, in each vesicular ring, is, at first, free from any eruption ; but the surface becomes somewhat rough, and of a dull red colour, and throws off an exfoliation, as the vesicular eruption declines, which terminates in about a week with the falling off of the scabs, leaving the cuticle red for a short time.

The whole disease, however, does not conclude so soon : for there is commonly a succession of the vesicular circles, on the upper parts of the body, as the face and neck, and the arms and shoulders, which have occasionally extended to the lower extremities, protracting the duration of the whole to the end of the second or third week. No inconvenience, however, attends the eruption, except a disagreeable itching and tingling in the patches.

The *herpetic* ringworm is most commonly seen in children, and has been deemed contagious. It has sometimes, indeed, been observed in several children, in one school or family, at the same time : but this was most probably to be attributed to the season, or some other common cause ; since none of the other species of Herpes are communicable by contact. It is scarcely necessary to point out here the difference between this *vesicular* ringworm, and the contagious *pustular* eruption of the scalp and forehead, which bears a similar popular appellation, " and for which it may be mistaken. The vesicular character of the eruption, the regular course which it runs, the hair

* See *Porrigo scutulata*, above, p. 169.

not falling off, and its contagious nature, distinguish *H. circinatus* from *Porriago scutulata*.”

The itching and tingling in this variety are considerably alleviated by the use of astringent and slightly-stimulant applications, and the vesicles are somewhat repressed by the same expedients. It is a popular practice to besmear them with ink : but solutions of the salts of iron, copper, or zinc, or of borax, alum, &c. in a less dirty form, answer the same end. Dr. Underwood remarks, “the use of a flesh-brush is a good prophylactic, in habits accustomed to the complaint.”*

Another form of *Herpes circinatus* sometimes occurs, in which the whole area of the circles is covered with close-set vesicles, and the whole is surrounded by a circular inflamed border. The vesicles are of a considerable size, and filled with transparent lymph. The pain, heat, and irritation in the part are very distressing, and there is often a considerable constitutional disturbance accompanying the eruption. One cluster forms after another in rapid succession on the face, arms, and neck, and sometimes on the day following on the trunk and lower limbs. The pain, feverishness, and inquietude do not abate till the sixth day of the eruption, when the vesicles flatten, and the inflammation subsides. On the ninth and tenth days a scabby crust begins to form on some, while others dry, and exfoliate; the whole disease terminating about the fifteenth day.

All the forms of *Herpes* appear to be more severe in warm climates than in our northern latitudes; and the inhabitants of the former are liable to a variety of herpetic ringworm, which is almost unknown here. This variety differs materially from the preceding in its course, and is of much greater duration, for it does not heal with the disappearance of the first vesicles, but its area continually dilates by the extension of the vesicular margin. The vesicles terminate

* Treatise on: e Diseases of Children, 8th edit. p. 459.

in ulcerations, which are often of a considerable depth ; and while these undergo the healing process, a new circle of vesicles rises beyond them, which passes through a similar course, and is succeeded by another circle exterior to itself : and thus the disease proceeds, often to a great extent, the internal parts of the ring healing, as the ulcerous and vesicular circumference expands.*

Var. c. HERPES labialis, HERPES OF THE LIPS.

A vesicular eruption upon the edge of the upper and under lip, and at the angle of the mouth, sometimes forming a semicircle, or even completing a circle round the mouth, by the successive rising of the vesicles, is very common, and has been described by the oldest writers. At first the vesicles contain a transparent lymph, which in the course of twenty-four hours becomes turbid, and of a yellowish white colour, and ultimately assumes a puriform appearance. The lips become red, hard, and tumid, as well as sore, stiff, and painful, with a sensation of great heat and smarting, which continues troublesome for three or four days, until the fluid is discharged, and thick, dark scabs are formed over the excoriated parts. The swelling then subsides, and in four or five days more, the crusts begin to fall off ; the whole duration being, as in the other herpetic affections, about ten or twelve days.

The labial Herpes occasionally appears as an idiopathic affection, originating from cold, fatigue, &c., and is then preceded for about three days by the usual febrile symptoms, shiverings, head-ach, pains in the limbs and the stomach, with nausea, lassitude, and languor. Under these circumstances, a sort of *herpetic* sore-throat is sometimes connected with it ; a

* Celsus appears to have described this form of Herpes as his second species of *Ignis sacer*. "Alterum autem est in summæ cutis exulceratione, sed sine altitudine, latum, sublividum, inæqualiter tamen : mediuque sanescit, extremis procedentibus ; ac sæpe id, quod jam sanum videbatur, iterum exulceratur, &c. loc. cit. § 4.

similar eruption of inflamed vesicles taking place over the tonsils and uvula, and producing considerable pain and difficulty of deglutition. The internal vesicles, being kept in a state of moisture, form slight ulcerations when they break; but these heal about the eighth and ninth days, while the scabs are drying upon the external eruption.

The Herpes labialis, however, occurs most frequently in the course of diseases of the viscera, of which it is symptomatic, and often critical; for these diseases are frequently alleviated as soon as it appears. Such an occurrence is most common in bilious Fevers, in Cholera, and Dysentery, in Peritonitis, Peripneumony, and severe Catarrhs; but it is not unfrequent in continued malignant Fevers, and even in Intermittents.*

“ This variety of the disease seldom requires any particular management; it runs its course in a few days, and spontaneously disappears; but, occasionally, it has proved obstinate, and resisted every form of management. I have, however, found that it yields rapidly to moderate doses of the Hydrargyrum cum Creta and James’s Powder, in the proportion of sixteen grains of the former and three grains of the latter, taken every night at bed-time. During the day, it is necessary to give the Liquor Potassæ in large doses, commencing with fifteen minims, and gradually ascending to one hundred, in a large cupful of Decoction of the Root of *Rumex acutus*, or the *obtusifolius*.† This dose should be repeated three times during the day: the food should be light and free from acidity. Milk and a light animal diet are to be preferred.” The best topical application is the diluted ointment of the Nitrate of Mercury. When the disease is very obstinate, we must look for its

* See Huxham, De Aëre et Morb. Epid. vol. ii. p. 56. — Plenck, Doct. de Morb. Cutan. p. 83.

† The decoction is made by boiling one ounce of the root, *transversely* sliced, in a quart of water, till it is reduced one third: then let it be strained. T.

causes in the visceral secretions ; and especially in the morbid condition of these, which follow grief and anxiety, and direct our remedies according to the nature of the general disease.

Var. d. HERPES *præputialis*, HERPES OF THE PREPUCE.

This local variety of Herpes (Plate LI. fig. 2. of BATEMAN, Pl. 20. of THOMSON'S ATLAS) was not noticed by Dr. Willan ; but it is particularly worthy of attention, because it occurs in a situation where it is liable to occasion a practical mistake of serious consequence to the patient. The progress of the herpetic clusters, when seated on the prepuce, so closely resembles that of chancre, as described by some authors, that it may be doubted whether it has not been frequently confounded with the latter.*

The attention of the patient is attracted to the part by an extreme itching, with some sense of heat ; and, on examining the prepuce, he finds one, or sometimes two, red patches, about the size of a silver penny, upon which are clustered five or six minute transparent vesicles, which, from their extreme tenuity, appear of the same red hue as the base on which they stand. In the course of twenty-four or thirty hours, the vesicles enlarge, and become of a milky hue, having lost their transparency ; and on the third day, they are coherent, and assume an almost pustular appearance. If the eruption is seated within that part of the prepuce which is in many individuals extended over the glans, so that the vesicles are kept constantly covered and moist (like those that occur in the throat), they commonly break about the fourth or fifth day, and form a small ulceration upon each patch. This discharges a little turbid serum, and has a white base,

* As a similar description of this eruption will be found under the article Herpes, in Dr. Rees's New Cyclopædia, I might perhaps, in this as in some other instances, incur the charge of plagiarism, if I did not state that the articles " in *Medicine*," contained in that work, from letter C inclusive, were written by myself.

with a slight elevation at the edges ; and by an inaccurate or inexperienced observer it may be readily mistaken for chancre ; more especially if any escharotic has been applied to it, which produces much irritation, as well as a deep-seated hardness beneath the sore, such as is felt in true chancre. If no irritant be applied, the slight ulceration continues till the ninth or tenth day nearly unchanged, and then begins to heal ; which process is completed by the twelfth, and the scabs fall off on the thirteenth or fourteenth day. “ An affection very similar in every respect sometimes occurs on the labia pudendi.”

When the patches occur, however, on the exterior portion of the prepuce, or where that part does not cover the glans, the duration of the eruption is shortened, and ulceration does not actually take place. The contents of the vesicles begin to dry about the sixth day, and soon form a small, hard, acuminate scab, under which, if it be not rubbed off, the part is entirely healed by the ninth or tenth day, after which the little indented scab is loosened, and falls out.

This circumstance suggests the propriety of avoiding not only irritative, but even unctuous or moist applications, in the treatment of this variety of Herpes. And accordingly it will be found, that, where ulceration occurs within the prepuce, it will proceed with less irritation, and its course will be brought within the period above mentioned, if a little clean, dry lint alone be interposed, twice a day, between the prepuce and the glans.

I have not been able to ascertain the causes of this eruption on the prepuce. Mr. Pearson is inclined to ascribe it to the previous use of mercury.* “ It seldom appears in young men ; the editor has traced it

* Soon after the publication of the last edition, my friend, Mr. Copeland, surgeon, of Golden Square, informed me that he had observed this affection of the prepuce to be connected with an irritable state, or with actual stricture of the urethra ; and that by the removal of this condition, by means of the bougie, the recurrence of the Herpes had been prevented.

occasionally to an irritable state of the urethra accompanying stricture : but he has seen it where no mercury had been taken, and no stricture of the urethra existed. Like the other species of Herpes, it evidently depends on some sympathy with the digestive organs, which are always in fault when this species of Herpes occurs. In some persons it occurs whenever the secretion at the root of the glans becomes acrid, and is immediately relieved by merely washing the parts with tepid mild soap and water." Whencesoever it may originate, it is liable to recur in the same individual, and often at intervals of six or eight weeks.

SPECIES 2. HERPES *Iris*, RAINBOW RINGWORM.

This rare and singular morbid appearance (Plate LII. of BATEMAN, Pl. 20. of THOMSON'S ATLAS), which has not been noticed by medical writers, occurs in small circular patches, each of which is composed of concentric rings, of different colours. Its usual seat is on the back of the hands, or the palms and fingers, sometimes on the instep. Its first appearance is like an efflorescence* ; but when it is fully formed, not only the central umbo, but the surrounding rings become distinctly vesicular. The patches are at first small, and gradually attain their full size, which is nearly that of a sixpence, in the course of a week, or nine days, at the end of which time the central part is prominent and distended, and the vesicular circles are also turgid with lymph ; and, after remaining nearly stationary a couple of days, they gradually decline, and entirely disappear in about a week more. The central vesicle is of a yellowish white colour : the first ring surrounding it is of a dark or brownish red ; the second is nearly of the same colour as the centre ; and the third, which is narrower than the rest, is of a

* Having at first seen it only in its incipient stage, Dr. Willan announced the *Iris*, on the cover of his second part, as a genus of the exanthematic order.

dark red colour ; the fourth and outer ring, or areola, does not appear until the seventh, eighth, or ninth day, and is of a light red hue, which is gradually lost in the ordinary colour of the skin.

The *H. Iris* has been observed only in young people, and unconnected with any constitutional disorder, nor could it be traced to any assignable cause. In one or two cases, it followed a severe catarrhal affection, accompanied with hoarseness, and also with an eruption of *Herpes labialis*. In others, it had recurred several times in the persons affected, occupying always the same parts, and going through its course in the same periods of time.

No internal medicine is requisite in the treatment of the different species of Herpes, except when the constitution is disordered (and then moderate bleeding and the general antiphlogistic plan must be adopted); for, like the other eruptive diseases, which go through a regular and limited course, the eruptions cannot be interrupted, nor accelerated in their progress, by any medicinal expedient ; but their termination may be retarded by improper treatment. " In obstinate cases the arsenical solution in combination with *Liquor Potassæ*, administered in the decoction of *Rumex obtusifolius*, has proved beneficial.

Works which may be consulted on Herpes.

BASHEL, J. B., *Essai sur le Virus Herpetique*, 8vo. 1803.

BEDDOES, *Considerations on Factitious Aïrs, &c.* 8vo.

CAMFFEN's *Dissertatio de Herpete*, Duisbury, 1802.

CAZENAVE and SCHEDL, *Abregé Pratique des Mal. de la Peau*, 8vo. 1828.

GOLDBECK, *Dissertatio de Herpete*, 1797.

HENSLEB, J. D., *De Herpete*, 8vo. 1802.

KIRSCHNER, *De Zostere*, 1816.

KLEIN, J. T., *Tentamen Herpetologiæ*, 4to. 1755.

MONTAGNANA, M. A., *De Herpete*, 4to. 1589.

NYMMANN, *Dissertatio de Herpete*, 1594.

PLUMBE on *Diseases of the Skin*, 2d edit. 8vo. 1827.

RAYER, *Traité des Maladies de la Peau*, 8vo. 1827.

RUSSELL, " *De Tectu Glandularum*," 8vo.

WEDEL, *Dissertatio de Herpete*, 1703.

GENUS IV. RUPIA.

Syn. Cæphylis Rhyphia (*Good*).

Def. AN ERUPTION OF FLAT, DISTINCT VESICLES, WITH THE BASE SLIGHTLY INFLAMED; CONTAINING A SANIOUS FLUID; SCABS ACCUMULATING, SOMETIMES IN A CONICAL FORM; EASILY RUBBED OFF, AND SOON REPRODUCED.

The eruptive disease, to which this appellation is appropriated*, was not noticed in the enumeration of the genera, formerly given by Dr. Willan. For practical purposes, it might have been included with the Ecthymata, as it occurs under similar circumstances with the Ecthyma *luridum* and *cachecticum*; but the different form of the eruption, for the sake of consistency of language, rendered the separation necessary.

The RUPIA is characterised by an appearance of broad and flattish vesicles, in different parts of the body, which do not become confluent: they are slightly inflamed at the base, slow in their progress, and succeeded by an ill-conditioned discharge, which concretes into thin and superficial scabs, that are easily rubbed off, and presently regenerated.† It comprehends the three following species:

1. *R. simplex.*
2. *R. prominens.*
3. *R. escharotica.*

SPECIES 1. RUPIA *simplex*, SIMPLE RUPIA.

This species, which shows itself on many parts of the body (Plate LIII. of BATEMAN, Plate 21. of THOMSON'S ATLAS), consists of little vesications, containing, on their first appearance, a clear lymph. In

* This term is arbitrarily formed from *ρυπος*, *sordes*, as indicative of the ill smell and sordid condition of the diseased parts.

† This circumstance serves to mark the distinction between Rupia and Ecthyma, independently of the pustular form, and highly-inflamed hard base of the latter: for the scab of Ecthyma is hard, deeply indented, and surrounded by a deep-seated hardness in the muscular flesh, especially in the larger forms of it.

a short time, the fluid included in them begins to thicken, and becomes at length opaque and somewhat puriform : a slight ulceration of the skin takes place, with a sanious discharge, followed by scabbing ; and when this heals, it leaves the surface of a livid or blackish colour, as if from a thickening of the rete mucosum.

SPECIES 2. *RUPIA prominens*, CONICAL RUPIA.

This curious form of the disease (Plate LIV. of BATEMAN, Pl. 21. of THOMSON'S ATLAS) is distinguished by elevated, conical scabs, which are gradually formed upon the vesicated bases. A fluted scab is first generated, and with some rapidity (*e. g.* in the course of the night), as the fluid of the vesication concretes. This extends itself by the successive small advancement of the red border, upon which a new scab arises, raising the concretion above it, so as ultimately to form a conical crust, not unlike the the shell of a small limpet. This scab is quite superficial, and if it be rubbed off, a new incrustation covers the excoriated spot in the space of six hours. The ulceration, however, is not phagedenic, but at length heals ; although it often proves very tedious, especially in old and intemperate persons, in whom, and in young persons of delicate constitution, it most commonly occurs. "The persons most liable to this species of *Rupia* generally belong to the lower classes of society ; and, if they be not intemperate in their habits, have, almost always, been in a half-starved state from extreme indigence ; or have long laboured under some chronic disease, which has wasted down the body." *

These varieties of *Rupia* are to be combated by the means recommended for the cure of *Ecthyma* ; *i. e.* by supporting the system, by means of good,

* Mr. Plumbe says, "In the cases of this kind answering to the *Rupia prominens*, which have come under my notice in the St. Giles's Infirmary, the patients have been not unfrequently the subjects of syphilis." Practical Treatise, 2d edit. p. 445. T.

light, nutritious diet, "regulating the bowels," and by the use of alterative and tonic medicines; such as Plummer's pill, Cinchona, or rather Sulphate of Quinia, and Sarsaparilla. "Sometimes, however, they will not yield except to a mercurial course, continued until the mouth is slightly affected; after which the constitution should be supported, and the tone of the habit restored, by Sulphate of Quinia, or Decoction of Bark with diluted Sulphuric Acid. As the constitution improves, the local affection is advantageously treated by the application of the Nitrate of Silver to the ulcerated surface, from which the crust has been removed. It stimulates the relaxed surface, and disposes to cicatrization."

SPECIES 3. *RUPIA escharotica*, CACHECTIC *RUPIA*.

This species affects only infants and young children, when in a cachectic state, whether induced by previous diseases, especially the Smallpox, or by imperfect feeding and clothing, &c.; whence, among the poor, where it is commonly seen, it often terminates fatally. — The vesicles generally occur on the loins, thighs, and lower extremities, and appear to contain a corrosive sanies: many of them terminate with gangrenous eschars, which leave deep pits. Nothing can ward off the fatal termination of this species of *Rupia*, except change of air; a good nutritious diet; sea-bathing; and the Cinchona Bark, or the Sulphate of Quinia, with the mineral acids.

Works which may be consulted on Rupia.

CAZENAVE and SCHEDEL, *Abrégé Pratique des Mal. de la Peau*, 8vo. 1828.

PLUMBE on Diseases of the Skin, 8vo. 2d edit. 1827.

RAYE des Maladies de la Peau, 8vo. 1827.

GENUS V. MILIARIA.

Syn. Miliaris (Sag. Sawv.): Exanthema Miliare (Burser): Miliaris, nova febris (Syden., Webster):

Purpura (*Hoff.*): Febris Miliaris (*Vogel, Webster*): Febris Purpurea (*Trenck*): Febris Asserosa (*Zac. Lusit.*): Febris Punctularis (*R. a-Cast*): Morbus Miliarium (*Allim.*): Exanthema Miliara (*Parr*): Synochus Miliaria (*Young*): Emphlysis, Miliaria (*Good*): die Friselbattern der Friesel (*German*): Frieselbattern, Frieselfieber, Gierskoorts (*Dutch*): Friesler (*Dan.*): Friesel, hirta Friseln (*Swed.*): Febre migliare (*Ital.*): Milios, calentura miliar, tabardillo pintado (*Span.*): Millet, fièvre miliare (*F.*): *Miliary Eruption.*

Def. AN ERUPTION OF MINUTE VESICULAR PIMPLES, FILLED WITH A COLOURLESS, ACRID FLUID; TERMINATING IN SCURF.

An eruption of miliary vesicles (Pl. LV. fig. 1. of BATEMAN, Pl. 22. of THOMSON'S ATLAS) is perhaps invariably *symptomatic*, being connected with some feverish state of the body, previously induced; and it has occurred in every species of fever, continued, remittent, inflammatory, and contagious, as well as in other cases of disease, in which considerable heat of the skin and much sweating had been accidentally excited. The physicians and nosologists, who have described a miliary fever, as an idiopathic eruptive fever like the Measles, Smallpox, and Scarlatina, have erred in different ways; some of them, in supposing it to originate from a specific virus, or acrimony, like the contagion of the diseases just mentioned*; and some by actually confounding the miliary eruption with the efflorescence of Scarlatina. †

* Of the writers who have committed this error, a numerous host may be referred to. See Sir David Hamilton, *De Febre Miliari*, 1710;—Allionius, *De Miliarium Orig. Progressu, Nat. et Cur.* 1758;—Fordyce (*Joan.*) *Hist. Febris Miliaris*, 1758;—Collin, *Epistle de Pust. Miliar.* 1764;—Blackmore, on the Plague;—Macbride, *Introduct. to Theor. and Pract. of Med.* part ii. chap. 17;—Baraillon, in *Mém. de la Soc. Roy. de Méd. de Paris*, tom. i. p. 193;—An *Essay on the Cure of the Miliary Fever*, by a Subject of Mithridates, 1751;—Sauvages, *Nosol. Meth. class. iii. gen. 5.*;—Bursarius, *Inst. Med.* vol. ii. p. 2. cap. ii. &c. &c.

† In the history of the epidemic miliary fever, which occurred at Leipsic, about the year 1650, and which has been considered as the pro-

The MILIARIA, of which we here speak, is characterised by a scattered eruption of minute round vesicles about the size of millet seeds*, surrounded by a slight inflammation, or rash, and appearing at an uncertain period of febrile disorders. The eruption is immediately preceded by unusual languor and faintness; by profuse perspiration, which often emits a sourish odour; and by a sense of great heat, with a prickling and tingling in the skin. It appears most abundantly upon the neck, breast, and back, sometimes in irregular patches, and sometimes more generally diffused, and remains on those parts during several days: on the face and extremities, it is less copious, and appears and disappears several times without any certain order. The vesicles, on their first rising, being extremely small and filled with a perfectly transparent lymph, exhibit the red colour of the inflamed surface beneath them; but, in the course of thirty hours, the lymph often acquires a milky opacity, and the vesicles assume necessarily a white or pearly appearance. This seems to have been partly the foundation of the epithets *rubra* and *alba*, which have been applied as specific appellations to miliary fevers.† The tongue is furred, and of a dark red colour at the edges, and its papillæ are considerably elongated; and not un-

totype of all miliary fevers, this mistake was obviously committed. See Godofr. Welsch, *Hist. Med. novum istum puerperar. morbum continens, qui ipsis der Friesel dicitur*; in Haller's *Disput. Med. tom. v. § 174*; — also Christ. Joan. Langius, *Prax. Med. part. ii. cap. 14. § 9. De Purpura*; — Etmuller de *Febribus*; — Schacher, de *Febre acut. Exanthem. Lips. 1723*, in Haller's *Disp. v. § 175*; — and Saltzmann, *Hist. Purpuræ Miliaris albæ, ibid. § 176*.

* Whence the denomination of the disease, from *milium*, the *millet*.

† I say *partly*, because it appears that, among those physicians, who confounded the efflorescence of Scarlatina with the miliary eruption, the terms of *red* and *white* Miliary Fever, or *red* and *white* Purpura, were used to denote the two eruptions respectively. And again, the miliary vesicles, like those of Varicella, were occasionally preceded by a diffuse efflorescence, which disappeared a few days after the rising of the vesicles; whence the *red* Miliaria has been said to be occasionally changed into the *white*.

usually aphthous vesicles and sloughs appear at the same time in the mouth and fauces.

The miliary eruption affords no crisis to the fever in which it supervenes, nor any relief to the symptoms; and its total duration, in consequence of a daily rising of fresh vesicles, is altogether uncertain; but frequently from seven to ten days, and sometimes much longer. Indeed, under the former treatment, when the sick lay "*drowning* in sweats" (as Sir Richard Blackmore says of one of his patients), it was not uncommon for these "crops" of vesicles to be repeated a second, third, or even fourth time, and the whole disease to be protracted to nearly fifty days.*

It is scarcely necessary now to enter into any detail of proofs, that the miliary eruption is the result of a highly heated and perspiring state of the skin; and that in its severe and fatal degree, it is solely the effect of a stimulating regimen, in a confined atmosphere. The almost total annihilation of the disease, of late years, since the general adoption of a better practice, is of itself unequivocal evidence of its origin: while, on the other hand, the rarity of its occurrence, both before the abuse of hypothetical speculation had misled physicians from the path of observation, and in the practice of those who subsequently returned to that path, is an additional corroboration of the same truth. Hippocrates, whose mode of treatment in febrile diseases was not calculated to produce excitement, has once or twice but casually mentioned the miliary eruption.† And again, at the latter part of the seventeenth century,

* Blackmore, loc. cit. — Brocklesby, in the Med. Obs. and Inquir. vol. iv. p. 30.

† See especially the second book of Epidemics, sect. iii.; where he states that, in a hot and dry summer, fevers were in some instances terminated by a critical sweat, and about the seventh, eighth, and ninth day, miliary elevations (*τρηχισματα κεγχρωδεια*) appeared on the skin, and continued till the crisis. See also the book of Prognostics, where he speaks of miliary sweats (*ιδρωτες κεγχρωειδες*).

when in the practice of the majority of physicians the miliary fever was a frequent and fatal occurrence, Sydenham witnessed no such fever; but mentions the occasional appearance only of miliary vesicles, which he ascribes to their proper cause.* More than half a century elapsed, however, before the doctrine of Sydenham was established by De Haen, in Germany, and by Mr. White, of Manchester, Dr. Cullen, and others, in this country.†

As a symptomatic eruption, the Miliaria frequently appears during dentition, in blotches about the face and neck.

Among the various circumstances under which the Miliaria was formerly excited, the *puerperal state* appears to have been most frequently the source of it; insomuch that it was first described as an epidemic among puerperal women. This is sufficiently accounted for by the treatment, which was unhappily pursued during the confinement after child-birth, and of which an impressive description is given by Mr. White. For not only was the mother immediately loaded with bed-clothes, from which she was not allowed to put out "even her nose," and supplied with heating liquors from the spout of a teapot; but to her room, heated by a crowd of visitors and a fire,

* Sir Richard Blackmore states, that miliary fever was "the most frequent in this country, of all the *malignant* kind;" and that, when the eruption was copious, it was "often fatal and always dangerous." (Loc. cit.) His contemporary, Sydenham, said of the miliary eruptions, "Licet sua sponte nonnunquam ingruant, sæpius tamen *lecti calore et cardiacis extorquentur.*" See his Sched. de Nov. Febris Ingressu.

† See De Haen, Theses sistent. Febrium Divis. § 4.; and again in his Rat. Medend. vol. ii. p. 8.;—White, on the Management of Pregnant and Lying-in Women, chap. ii.;—Cullen, First Lines, par. 723., and Nosol. Method. It appears, however, that, in the middle of the last century, the better educated members of the profession had already adopted the right opinions upon the subject. For a weak anonymous writer, of the Blackmore School, in 1751, in reprehending what he calls the "stupidity" and "unpardonable ignorance" of his brethren respecting the disease, ascribes it to "the *prevailing* opinion of some physicians that *this fever is a creature of our own making,*" which, he believes, had "run through the whole College, and from thence the dangerous infection been conveyed to the apothecaries," &c. See the Essay by a Subject of Mithridates, *Pref.* p. iv.

all access of air was denied, even through a key-hole. From these causes fever was almost necessarily induced, with the most profuse sweats, oppression, anxiety, and fainting; and these again were aggravated by spicy caudles, spirits, opiates, and ammoniacal medicines. That numbers should perish, under such management, with every symptom of malignity, and that many who survived it should escape with broken constitutions, will surprise no person who is acquainted with the baneful influence of over excitement in febrile complaints.*

With other fevers, in which a similar method of treatment was pursued, though in a less degree, and which confined the patient to bed, the miliary eruption, with its attendant languor and exhaustion, was frequently conjoined, especially with *catarrhal* and *rheumatic* fevers, and also with typhoid, remittent, and intermittent fevers. Whence the writers, who have described the miliary fever, speak of it as being disguised under or counterfeiting the character of these fevers respectively. In the summer, indeed, where ventilation and coolness are not sufficiently attained or attended to, a slight miliary eruption is even now occasionally seen: and a *Miliaria clinica*, in fact, may be thus induced by any circumstance that confines a person to bed; as an accident, or a surgical operation †, an attack of hysteria, a state of asthenia, &c. From the increase of cutaneous heat, connected

* The occurrence of this fatal Miliaria must be deemed one of the greatest *opprobria medicorum*; for it was the direct result of a mischievous practice, originating in a false hypothesis respecting the concoction and expulsion of morbid matter: and when we recollect that there was not a febrile disease in which this mischief was not more or less inflicted on the sick, we must blush for the character of our art. "Quid verò demum generi humano calamitosius," exclaims De Haen, "quam quòd, et plebe et medicis conspirantibus, tot melleni quotannis ægri, ab ipso principio acutorum, in sudores symptomaticos agitentur, ac veluti fundantur, ut coacta omnino crisis, in plerisque aut lethalis aut periculosa saltem, producat; interea dum salutaria Naturæ molimina turbantur, confunduntur, ac penitus sufflaminantur. Faxit Deus, ut demum sapiant Phryges!"—De Februm Divis.

† Mr. White, loc. cit.

with the exanthematous fevers of the nosologists, some degree of Miliaria is liable to occur in them all, but more especially in Scarlatina; and a few larger pearl-coloured vesicles also occasionally appear.*

It is unnecessary to dwell upon the method of treatment applicable to Miliaria; since, under the full employment of ventilation, and a cool regimen, the symptom will very rarely be produced. The room, in which a puerperal woman, or a patient under any febrile disease, is confined, ought to be as free from all unpleasant odour as any other apartment; and under the cordial influence of pure air, the support of spirituous and vinous liquors is so far from being requisite, that a small proportion of these stimulants will produce even a deleterious excitement.† Extreme cleanliness, a frequent change of linen, cool diluent drinks, light diet, and the other circumstances of what has been called the antiphlogistic regimen, will always be attended to with advantage, where the miliary eruption shows itself. The mineral acids, if no other symptom contraindicate the use of them, are advantageous.

Books which may be consulted on Miliaria.

ALLIENIUS, C., Tract. de Miliarium Origine, &c., 8vo. 1758.

BALGUY, de Febre Miliari.

CHANEL, Dict. de Med. (art. *Miliare*), 1826.

* See Fordyce (*loc. cit.*), "Nonnunquam bullæ insignes, apice digit: non minores, hic elevantur."—Also the Anon. Essay on the Cure of Mil. Fever;—and Brocklesby, *loc. cit.*

† Mr. White observes, that a woman in child-bed is so much exhausted by the mode of treatment before described, "that the highest cordials have been necessary to support her; nay, I have been credibly informed," he adds, "that under these circumstances a patient has sometimes drunk a *gallon of wine* in a single day, *exclusive of brandy, and of the cordials from the apothecary's shop*, and all this too without intoxication." *loc. cit.* chap. viii.—Similar enormous potations of wine have been recommended by later practitioners in typhoid fevers, who have not been aware that the very impunity with which these doses have been administered, has arisen from the artificial exhaustion of the patient by external circumstances, and not from the necessary tendency of the disease. Many facts have occurred to my notice, in the course of my attendance at the Fever Institution, which have satisfied me of the correctness of this opinion, which I may probably illustrate at a future opportunity.

- FISCHER, J. B. de, De Febre Miliari, 8vo. 1827.
 FORDYCE, J., M. D. Historia Febris Miliaris, &c. 8vo. 1750.
 HAMILTON, Sir David, A Treatise on Miliary Fever, 8vo. 1737.
 HOFFMAN, Fr. de Purpura Genuina Origine, 4to. 1725.
 MENFALCON, Dict. des Sciences Med. (art. *Miliare*), 1819.
 RAYER, Traité des Maladies de la Peau, 8vo. 1827.
 TWEEDIE, Cyclop. of Pract. Med., vol. iii. 1834.
 VASANI, F., Storia Singulare d'una Febbre Miliare, 8vo. 1815.
 WELSCH, G., Historia Morbi qui der Friesel Dicitur, 4to. 1655.

GENUS VI. ECZEMA.*

Syn. Hidroa (*Saw. Vog.*): Eczesis, Eczesma, Eczesmus (*Auct.*): Cystisma Eczema (*Young*): Ecphtysis Eczema (*Good*): Asef (*Arab.*): Schweisblattern (*German*): Vrucrige puisten (*Dutch*): Echauboulure, Dartre vive (*F.*): *Heat eruption.*

Def. AN ERUPTION OF MINUTE VESICLES, NOT CONTAGIOUS, CROWDED TOGETHER; AND WHICH, FROM THE ABSORPTION OF THE FLUID THEY CONTAIN, FORM INTO THIN FLAKES OR CRUSTS.

This eruption is generally the effect of irritation, whether internally or externally applied, and is occasionally produced by a great variety of irritants, in persons whose skin is constitutionally very irritable. It differs from Miliaria, inasmuch as it is not the result of fever, and, unless it be very extensively diffused, is not accompanied with any derangement of the constitution: except in the most violent cases, the functions of the sensorium and of the stomach are seldom disturbed. "It may be confined to a small part of the surface of the body, or extended over the whole skin: it chiefly, however, affects the

* Aëtius observes, that an eruption of hot and smarting phlyctænæ arises in all parts of the body, without proceeding to ulceration. "Eas εκζεματα ab ebulliente fervore, Græci vulgo appellant." Tetrab iv. serm. i. cap. 128. According to Paulus (lib. iv. cap. 10.), and Actuarius, (lib. vi. cap. 8.), they were also called περιζεματα, and περιζεματα "quasi vehementer ferventia." See Gorræus, Defin. Med.; and Sennert. Pract. Med., lib. v. part i. cap. 2.

inside of the thighs, the axilla, and those places in which the mucous follicles are most abundant in men ; the under parts of the mammæ, the vulva, and the anus in women." When limited to the fingers, hand, and part of the fore-arm, it is not unfrequently mistaken for Scabies : but it may be distinguished by the appearance of its acuminate and pellucid vesicles ; by the closeness and uniformity of their distribution ; by the absence of surrounding inflammation, and of subsequent ulceration ; and, in many cases, by the sensations of smarting and tingling, rather than of itching, which accompany them. According to the nature of the irritating cause, the extent and form of the disease are somewhat various ; and constitute three species of the genus : —

1. *E. solare.*
2. *E. impetiginodes.*
4. *E. rubrum.*

Var. a. *E. mercuriale.*

SPECIES 1. ECZEMA solare ; SUN-HEAT.

This form of Eczema (Plate LVI. of BATEMAN ; Pl. 22. of THOMSON'S ATLAS,) occurs in the summer season, and is the effect of irritation from the direct rays of the sun, or from the heated air. Hence it affects almost exclusively those parts of the surface which are exposed to their influence ; as the face, the neck, and fore-arms, in women, but more particularly the back of the hands and fingers. The eruption is preceded and accompanied by a sense of heat and tingling, and these sensations are aggravated even to smarting, when the parts affected are exposed to the sunshine, or to the heat of a fire. The whole fingers are sometimes swelled*, and so thickly beset

* As this eruption about the fingers, the ball of the thumbs, and the wrists, is often continued for several weeks, it is in this situation more particularly liable to be mistaken for the itch : but the circumstances just noticed, as well as those mentioned under the head of Scabies, will contribute to aid the diagnosis.

with the vesicles, as to leave no interstice of the natural appearance of the skin, nor any intervening redness. The vesicles themselves are small, and slightly elevated; they are filled with a thin, milky serum, which gives them a whitish colour, or sometimes with a brownish lymph; and they are without any surrounding inflammation. On the upper part of the arm, however, and, in women, on the breast, neck, and shoulders, the eczematous vesicles are sometimes surrounded by an inflammatory circle; when they are popularly termed *heat-spots*. It sometimes happens, indeed, in men of sanguine temperament, who use violent exercise in hot weather, that these vesicles are intermixed, in various places, with actual phlyzacious pustules, or with hard and painful tubercles, which appear in succession, and rise to the size of small boils, and suppurate very slowly. This, however, is a more frequent occurrence in the more local forms of the disease, included under the second head.

The eruption is successive, and has no regular period of duration or decline: it commonly continues for two or three weeks, without any particular internal disorder. The included lymph becomes more milky, and is gradually absorbed, or dried into thin brownish scales, which exfoliate, or into brownish yellow scabs, of the size of a small pin's head, especially when the vesicles are broken. But successive eruptions of the vesicles are apt to appear, which terminate in a similar manner by exfoliation or scabbing; and in those persons who, by the peculiar irritability of their skin, are much predisposed to the disorder, it is thus continued many weeks, to the end of autumn, or even prolonged to the winter. When this happens, the vesicles generally pour out an acrid serum, by which the surface is inflamed, rendered tender, and even slightly ulcerated, and the disease assumes the form of *Impetigo*.

The course of this disorder does not appear to be

materially shortened by the operation of medicine. The mineral acids, with a decoction of Cinchona, or other vegetable tonic, and a light but nutritious diet, seem to be most effectual in diminishing the eruption. When it has occurred after long-continued travelling, or any other severe fatigue, and appears to be accompanied with some degree of exhaustion of the powers of the constitution, a course of *Serpentaria*, or *Sarsaparilla*, is exceedingly beneficial. Active and repeated purgation is adverse to the complaint. Simple ablution with tepid water contributes to relieve the smarting and tingling of the parts affected, which do not bear unguents, or any stimulant application.

SPECIES 2. ECZEMA *impetiginodes*, IMPETIGINOUS ECZEMA.

A local Eczema (Plate LV. fig. 2. of BATEMAN ; Pl. 22. of THOMSON'S ATLAS,) is produced by the irritation of various substances, and, when these are habitually applied, it is constantly kept up in a chronic form, differing from the *Impetigo* only in the absence of pustules. Small separate vesicles, containing a transparent fluid, and, like the psudracious pustules, imbedded in the skin, or but slightly elevated, arise, and slowly increase: they are attended with pain, heat, smarting, often with intense itching, "and with swelling of the affected part." When they break, the acrid lymph, that is discharged, irritates and inflames the surrounding cuticle, which becomes thickened, rough, reddish, and cracked, as in the impetiginous state. The alliance, indeed, of this affection with *Impetigo* is further proved by the circumstance, that, in some cases, vesicles, and psudracious pustules are intermixed with each other; and, in different individuals, the same irritant will excite a pustular or a vesicular eruption respectively; the vesicular disease being always the most painful and obstinate. Of this we have an example in the affection of the hands and fingers, produced by the

irritation of sugar, which is commonly called the *grocer's itch*; and which is in some persons vesicular, in others pustular. The acrid stimulus of lime occasions similar eruptions on the hands of *bricklayers*: and one of the most severe cases that I ever witnessed, occurred on the hands of a *file-maker*, being occasioned perhaps by the united irritation of the heat of the forge and the impalpable powder of steel, with which they were constantly covered during his work. In like manner, both vesicular and pustular affections are excited by the local irritation of blisters, stimulating plasters, and cataplasms of Mercury, the Ointment of Tartarized Antimony, the Oil of the Cashew nut, the Indian Varnish, Arsenic, Valerian root, &c.* These often extend to a considerable distance beyond the part to which the irritants were immediately applied, and continue for some time, in a successive series, after the stimulus has been withdrawn, especially in irritable and chachectic habits. Thus, when a blister is applied to the pit of the stomach, an eruption of vesicles, intermixed often with ecthymatous pustules, and inflamed tubercles and boils, extends in some cases over nearly the whole abdomen, or to the top of the sternum; or, if the blister be applied between the shoulders, the whole of the back and loins becomes covered with a similar eruption. These tubercles and boils suppurate very slowly and deeply in some habits, and are ultimately filled with dry, dark scabs, which do not soon fall off; and when the sores are numerous, they produce some degree of feverishness, and much pain on motion. In other respects, the constitution suffers no injury from this tedious eruption; although from its duration, which is sometimes extended to two or three weeks, it occasions more inconvenience than the original applications.

“ When this species of Eczema appears on the

* See Impetigo.

wrists, the back of the hand, and between the fingers, it is often mistaken for itch. The stinging sensation of Eczema, however, is sufficient to distinguish it from itch, were it not otherwise distinguishable : in itch the itching returns in paroxysms ; in Eczema the stinging sensation is continued. It is, also, distinguished by its non-contagious character."

The first step towards the cure of these varieties of Eczema is to remove the irritating cause, where that is obvious. The eruption, however, is not easily removed : but the painful sensations connected with it are greatly alleviated by simple poultices, and by frequently washing the parts with warm gruel, and milk or bran and water, " or with the Emulsion of Bitter Almonds, containing, besides the quantity natural to it, some Hydrocyanic acid, to the extent of at least fʒj to fʒviij of the Emulsion. Cloths, also, moistened with a dilute solution of acetate of Lead, should be applied over the parts, when the vesicles break, and ooze out their serum. A French author, M. Guillemineau, recommends strongly a solution of Nitrate of Silver.* The sulphur baths have been employed ; but are too irritating. Simple warm baths are more beneficial."

Where there is any other evidence of a cachectic condition of the patient, a tonic treatment must be prescribed for the improvement of the general health, as recommended in Ecthyma.† " Diluting, acidulated drinks must be prescribed. Nothing is more useful than diluted Sulphuric Acid, given in Infusion of Roses. — Calomel should be at first given, and afterwards a gentle purgative every morning."

* De l'Emploi du Nitrate d'Argent fonder dans le Traitement de quelques Maladies. 4to. Paris, 1826. T.

† The irritation produced by the attrition of the tight parts of our dress, as about the knees, neck, &c., which commonly produces a mere Intertrigo, occasions, in some persons, an eczematous eruption. Sauvages has hence made two species of Herpes, excited by the garter and the bandages of the neck, which he calls Herpes *periscelis* and *H. collaris*.

SPECIES 3. ECZEMA *rubrum*.* INFLAMED ECZEMA.

Syn. Dartre squameuse humide (*Alibert*): Hydrargyria (*Alley*): Erythema Mercuriale (*Auct. Var.*): Lepra Mercuriale (*Moriarty*.)

The most remarkable variety of the *Eczema rubrum* is that which arises from the irritation of mercury.† (Plate LVIII. of BATEMAN; Pl. 22. of THOMSON'S ATLAS.) But the disease is not exclusively occasioned by this mineral, either in its general or more partial attacks: it "is often associated with gastrointestinal inflammation, without any mercurial preparation having been taken‡;" and it has been observed to follow exposure to cold, and to recur in the same individual, at irregular intervals, sometimes without any obvious or adequate cause.§

The *Eczema rubrum* is preceded by a sense of stiffness, burning heat, and itching, in the part where it commences, which is most frequently the upper and inner surface of the thighs, and about the scrotum in men; but sometimes it appears first in the groins, axillæ, or in the bend of the arms, or about the wrists and hands, or in the neck. These sensations are soon followed by an appearance of redness, and the surface is somewhat rough to the touch. This, how-

* There is, perhaps, a little incongruity in this species of *Eczema* when the generic character is considered; but in every respect, except the surrounding redness, it accords with the genus, differing equally from the mere rash of the *Erythemata*, and from the symptomatic and febrile *Miliaria*.

† Whence the disease has been called *Eczema mercuriale* (see Mr. Pearson's "Obs. on the Effects of var. Articles of the Mat. Med. in Lues Ven." chap. xiii. 2d edit.); — *Erythema mercuriale* (see Dr. Spens and Dr. M'Mullins in the *Edin. Med. and Surg. Journ.* vol. i. and ii.); — *Hydrargyria* (see Dr. Alley's "Obs. on the Hydrargyria, or that vesicular Disease arising from the Exhibition of Mercury," Lond. 1810.); — and *mercurial Lepra* (see a Tract of Dr. Moriarty of Dublin).

‡ See *Medico-Chirurg. Trans.* vol. ii. p. 73. T.

§ See a description of two cases by Dr. Rutter (*Edin. Med. and Surg. Journal*, vol. v. p. 143.), and Dr. Marcet (*Medico-Chirurg. Trans.* vol. ii. art. ix.), under the appellation of *Erythema*, which recurred several times in both the patients to a severe degree. It is worthy of remark, however, that, in both these instances, the *first* attack of the disease occurred after a gonorrhœa; for which, in the one, some mercury had certainly, and in the other had, probably, been administered.

ever, is not a simple Erythema ; for on examining it minutely between the light and the eye, or with a convex glass, the roughness is found to be occasioned by innumerable, minute, and pellucid vesicles, which have been mistaken for papulæ. In two or three days, these vesicles, if they are not ruptured, attain the size of a pin's head ; and the included serum then becoming somewhat opaque and milky, the character of the eruption is obvious. It soon extends itself over the body and limbs in successive large patches, and is accompanied by a considerable swelling of the integuments, such as is seen in smallpox and other eruptive fevers, and by great tenderness of the skin, and much itching. When the vesicles begin to lose their transparency, they generally burst, and discharge, from numerous points, a thin acrid fluid, which seems to irritate the surface over which it passes, and leaves it in a painful, inflamed, and excoriated condition. The quantity of this ichorous discharge is very considerable ; and it gradually becomes thicker and more adhesive, stiffening the linen which absorbs it, and which thus becomes a new source of irritation : it emits, also, a very foetid odour. This process takes place in the successive patches of the eruption, until the whole surface of the body, from head to foot, is sometimes in a state of painful excoriation, with deep fissures in the bends of the joints, and in the folds of the skin of the trunk ; and with partial scaly incrustations, of a yellowish hue, produced by the drying of the humour, by which, also, the irritation is augmented. The extreme pain arising from the pressure of the weight of the body upon an extensive portion of such a raw surface is sufficient to give rise to an acceleration of the pulse, and white tongue ; but the functions of the stomach and of the sensorium commune are not evidently disturbed by this disease.*

* The experience of the Editor obliges him to differ from this opinion of Dr. Bateman. In almost every case, which has come under his notice, there has been evident constitutional derangement, quick

The duration of this excoriation and discharge is uncertain and irregular : when only a small part of

pulse, furred tongue, and impaired appetite, with considerable nervous irritability. Indeed, the latter state has been so frequently present, as to induce the Editor to regard an irritable state of the nervous system, such as produces hysteria in females, to be the predisposing cause of this disease when it occurs during a mercurial course. The following case will illustrate this opinion : —

A young woman was seduced from her parents and brought to London by one of those unprincipled men who sacrifice every moral and social feeling on the altar of self-gratification. Desire and the pleasure of possession having subsided, the wretched victim of unbridled passion was soon deserted, and fell into a course of life, which any deviation from the paths of virtue usually produces in the female sex thus situated. She went upon the town, as the term is, and in that wretched and precarious state of life contracted syphilis, for the cure of which she was placed under a course of mercury. Her father, whose paternal feelings were not destroyed by the stain which the misconduct of his child had affixed on the character of his family, had followed her to town; and in vain had endeavoured to discover her retreat. At length he met her in the street, when she was labouring not only under disease, but when her habit was charged with mercury for its relief; and when she was reduced to a state of extreme indigence. Her eye met that of her parent, and she fled as rapidly as she could from an interview which she dreaded; and although her father closely followed her, yet she secured her retreat to her lodgings for that night. On the following day she was too ill to move from home; her mouth was affected, and the salivation considerable; when late in the evening of that day she heard her father's voice at the door of the house in which she lodged. She instantly left her bed, and escaped into another room as he entered the one in which she had been lying, and ran into the street in a half-naked condition, during a heavy shower of rain. I was requested to see her on the following day. She was then covered in patches with an eruption, which, to the unassisted eye, much resembled that of scarlet fever. She complained of great heat, stiffness, and tingling upon the inner and upper surface of the thigh, and round the neck and waist. In these parts patches of extremely minute vesicles were apparent, gradually extending themselves over the whole body. The stinging and irritation increased to a degree almost insupportable. There was a fever, which in a few days assumed an intermittent character; and a very fetid odour exhaled from the body. The viscid fluid which oozed from the patches dried and crusted, and the cuticle peeled off in large pieces. In this state the disease continued for ten days. The warm bath, anodyne fomentations, liniments of linseed oil and lime-water, were externally applied; whilst saline purgatives, refrigerants, decoction of Cinchona bark, the mineral acids and opium were internally administered, without any beneficial result. In fifteen days from the commencement of the attack, the wretched girl died, in a state of suffering which no language can correctly describe.

In this case, the mental alarm had predisposed the body, under the influence of the mercury, to be excited by the sudden exposure to cold and damp in a peculiar manner; for that it was not cold and damp alone

the body is affected, it may terminate in ten days ; but when the disorder has been universal, the patient seldom completely recovers in less than six weeks, and is often afflicted to the end of eight or ten weeks. By so severe an inflammation the whole epidermis is destroyed in its organisation ; and when the discharge ceases, it lies loose, assuming a pale brown colour, which changes almost to black before it falls off in large flakes. As in other superficial inflammations, however, the new red cuticle that is left is liable to desquamate again, even to the third or fourth time, but in smaller branny scales, of a white colour ; and a roughness sometimes remains for a considerable period, like a slight degree of Psoriasis. In some instances, not only the cuticle, but the hair and nails are also observed to fall off ; and the latter, when renewed, are incurvated, thickened, and furrowed, as in *Lepa*.

The *Eczema rubrum*, however, even from the irritation of Mercury, is often limited to a small space ; and then the discharge is slight, and its whole duration short. Similar local attacks of it occur in irritable constitutions, especially in hot weather, affecting the hands and wrists, the neck and external ear, and other parts, but without any constitutional disorder. Successive crops of the vesicles arise, in irregular patches, with a red blush around them, which produce partial incrustations, as the ichor, that issues, is dried : and by these vesications and desiccations of the matter the affection is kept up for some weeks.

The treatment of this species of *Eczema* may be comprised in few words ; for it is principally palliative.

is probable from the fact that the poor creature had been driven by strong necessity to walk the streets in all states of the weather, during the whole period in which she had been taking mercurials, without suffering, until the nervous system received the shock which has been described. T.

But although medicine may not possess the power of shortening the period of its duration, yet, the omission of the palliative measures will allow an extreme aggravation of the sufferings of the patient to take place, and probably prolong it beyond its natural course, as well as contribute to wear out the vigour of his constitution.

“ The first step is to omit the further use of the Mercury, and to remove the patient from the atmosphere in which the disease was generated, and to soothe every anxiety of the mind as far as possible.”

The misery and exhaustion, resulting from the excessively tender and irritated state of the skin, may be greatly alleviated by frequent ablution or fomentation with warm gruel, or strained bran and water; or by the frequent use of the warm bath, which has the advantage of cleansing the surface, without occasioning any abrasion by friction. A constant application of poultices has produced considerable ease to the patient, when the affection was confined to the extremities. Where the cuticle has exfoliated, Mr. Pearson recommends the application of a mild cerate, consisting of litharge plaster, wax, and oil, spread thickly on linen rollers, and renewed twice a day. With the same view of diminishing the irritation of the surface, the bed and body linen of the patient, which becomes hard and stiff as the discharge dries upon it, should be frequently changed.

Every additional irritation from stimulating food and drink should be avoided; the bowels should be kept open by the administration of occasional laxatives; and some saline diaphoretic, or an antimonial, should be given regularly, to which an opiate may be added, for the purpose of soothing the sensations of the patient. The Sulphuric Acid is grateful and refreshing; and, in the decline of the swelling and discharge, it may be combined advantageously with the liberal exhibition of Cinchona, or the Sulphate of Quinia, and Sarsaparilla.

Books to be consulted on Eczema,

- ALLEY, Observations on the Hydrargyria, 8vo. 1810.
 ———, Essay on an Eruptive Disease arising from Mercury, 8vo. 1804.
 BUTTER'S Treatise on the Venereal Rose, 1799.
 EDINBURGH Med. and Surg. Journ. vol. ii.
 MORIARTY, A Description of Mercurial Lepra, 8vo. 1804.
 MATHIAS, (And.) on the Mercurial Disease, 8vo. 1811.

GENUS VII. APHTHA.

Syn. *Αφθας, (Gr.): Aphtha (*Auct. var.*): Aphthæ (*Vog.*): Aphotæ (*Pinel*): Febris Aphthosa (*Vogel*): Typhus Aphthoidéus (*Young*): Emphlysis Aphtha (*Good*): Pustulæ oris (*Haly Abbas*): Schivammchen, mehlhund, schule, saar; die Mundschwämchen (*Ger.*): Mendepzwar sprouw (*Dutch*): Torsk (*Swed.*): Tröske (*Dan.*): Afte (*Ital.*): Aftas (*Span.*): Achirum, Parititooroo (*Tam.*): Achir (*Duk.*): Achérum (*Tel.*): Mookāpākum (*Sans.*): Ninanwan (*Hind.*): Aphthes, Mugnet, Millet (*F.*): Thrush.

Def. AN ERUPTION OF GRANULAR, PEARL-COLOURED VESICLES*, ON THE INSIDE OF THE CHEEKS, AND OF THE LIPS, EXTENDING OVER THE WHOLE OF THE MOUTH, THE FAUCES, AND INTO THE INTESTINAL CANAL, TERMINATING IN SLOUGHS, OR WHITISH CRUSTS.

* The vesicular character of the aphthous eruption has been pointed out by several accurate observers; especially by Van Swieten, in commenting upon the word *ulcuscula* used by Boerhaave, aph. 978.; by Sauvages, who considers their character as *phlyctænous*; and by Prof. Arnemann, who describes them as small elevations, of a greyish-white colour, "*seroso quodam liquore referti.*" (Comment. de Aphthis, § ii.) See also Welti, Diss. de Exanthem. Fonte Abdominali, § vi.; Callisen, Syst. Chir. Hod. § 834.; and Plenck, Doctr. de Morb. Cutan. class. x., who still more distinctly describes them. "*Incipiunt aphthæ sub forma vesicularum miliarium albarum, quæ in apice foraminulum gerunt, dein collabuntur et aliquantum latescunt.*"—Some English writers have called them "little white specks," (see Underwood, vol. i. p. 62.) little white "specks or sloughs," (Armstrong on the Man. of Children, p. 18.) or merely "a white fur," (Syer, on Man. of Infants, p. ii. chap. 3.) having attended only to the ultimate state of the eruption.

This affection of the mouth, which has been described by medical writers from Hippocrates downwards, has been almost universally noticed as a frequent occurrence during the period of infancy*, and generally ascribed to disorder of the first passages, or considered as the result of gastric and eruptive fevers. In truth, it occurs in connection with various states of disease, both acute and chronic, and at all ages, where great debility is induced. It consists of the following species:—

1. *A. lactantium.*
2. *A. adultorum.*
3. *A. anginosa.*

SPECIES 1. APHTHA *lactantium* †, INFANTILE THRUSH.

Syn. Aphtha infantiles (*Plenck*): Aphtha infantum (*Cullen*): Aphtha lactucimen (*Sawv.*): Emphlysis Aphtha: *α. infantum* (*Good*): *White Thrush.*

Aphthous eruptions are most frequently seen in infants, in whom they sometimes appear without any considerable indisposition; but they are often accompanied by restlessness and slight febrile symptoms, especially when the stomach and bowels are much deranged. The nurse is led to suspect their occurrence by the difficulty and apparent pain with which the infant sucks, and by the heat of its mouth, as perceived by the nipple, which at length becomes inflamed, and even excoriated. The Aphthæ appear first on the edges of the tongue, or at the angles and inside of the lips, and often extend over the whole surface of the tongue, palate, inside of the cheeks, and into the fauces: the surface on which they arise

* Hippoc. aph. 24. sect. iii. &c. — Celsus, lib. ii. cap. 9. and lib. viii. cap. 42. — Aëtius, tetr. ii. serm. iv. cap. 39. — Julius Pollux, Onomast. lib. iv. cap. 24.

† The appellation of *lactumina*, or *lactucimina*, was given to the infantile Aphthæ by Amatus Lucitanus (*Curat. Medic. cent. v.*), upon the supposition that they originated from a vitiated condition of the milk.

is of a red or purplish hue ; the tongue is sometimes slightly tumid, and its papillæ, especially near the extremity, are elongated and inflamed, protruding their red tips above the rest of the surface, nearly as in scarlet fever. The aphthous vesicles are of a white colour, and semiopaque, and speedily put on the appearance of minute fragments of curd, adhering to the surfaces just mentioned. At various periods, from twelve hours to several days, these specks become loose and fall off, leaving the surface smooth and red. Others, however, commonly spring up, and go through a similar course, while at the same time new ones appear on other parts ; so that at length the whole surface of the tongue and mouth is often covered with a sort of whitish granulated crust, formed of the coherent Aphthæ. Sometimes these crops are renewed several successive times ; and not unfrequently the removal and repullation are only partial, and the general crust remains for several weeks. The Aphthæ appear to extend down the œsophagus, and are supposed to affect the internal surface of the stomach, and of the whole intestinal canal, when tenesmus ensues, with a redness and partial excoriation about the anus : these latter symptoms, however, may be occasioned by the irritation of the morbid excretions from the bowels, which are usually discharged under the occurrence of severe aphthous eruptions. The trachea is occasionally affected with the Aphthæ ; but they very rarely extend to the cavity of the nose.*

The Aphthæ of infants are most commonly the result of disorder in the stomach and bowels, combined with debility. Hence they occur in sucking infants, where the supply of milk afforded by the nurse is inadequate, or imperfect in its qualities ; “ a consequence not unfrequently of an over-anxious and irritable temper in a nursing mother,” but still more

* Callisen, loc. cit.

frequently and severely, where a child is brought up, without being suckled, upon unnatural or improper food. In either case, the tendency to Aphthæ is increased by whatever contributes to impair the general health; as want of cleanliness, confined air, neglect of giving exercise, allowing the child to sleep too much under the bedclothes, &c. Indigestion and its consequences, especially acidity, are occasioned by giving the food too thick, too hot, or too sweet, or in any other way widely different from that which the provision of nature suggests.

The Aphthæ of infants, when accompanied with slight general indisposition, or only with acidity at the stomach, and especially when they are few and scattered, are not indicative of danger, nor productive of much inconvenience. But when they are very copious, coalescing into an extensive coating over the tongue, mouth, and throat, or are accompanied with a red, shining appearance of the tongue, with an obstinate and irritating diarrhœa, fever, and restlessness, — or when they supervene on the state of debility and emaciation which is left by measles, Erysipelas, and other acute diseases, or on a chronic marasmus, — they not only betoken a dangerous state of constitutional distress, but contribute, by the inability of taking nourishment which they occasion, to augment that state. They are also unfavourable when they assume a dark hue.

In the milder degrees of *Aphtha lactantium*, just mentioned, slight remedies are sufficient to alleviate or remove the disease. The acidity in the first passages is often readily corrected by some testaceous powder, which, if the bowels be not irritable, may be joined with a little Rhubarb or Magnesia; or by the *Pulvis Contrayervæ compositus*, if they are in the opposite state, and the child weakly. “In the latter case, I have derived more benefit from a mixture of Carbonate of Soda and Calumba in powder, and in doses proportionate to the age of the infant, than

from any other remedy. It is requisite to clear the bowels with a dose of Castor Oil every morning, which prevents diarrhœa. When the alvine discharges are so acrid as to cause heat and soreness round the anus, much comfort is derived from glysters composed of equal quantities of mutton broth and starch." At the same time, the nutriment of the patient should be regulated, by attending to the diet and general health of the nurse, "who should abstain from the use of wine and porter or ale." If the child be not suckled, a wet-nurse should be procured, where that is practicable, which often speedily cures the complaint. "If the infant be suckled by the mother, it is of importance to inquire into the state both of the health of the body and the quietude of the mind of the mother; and, in all cases when the disease does not yield to the usual remedies, and the strength of the infant fails, the nurse, whether mother or a hireling, should be changed; for in many instances little more is required than a sufficient supply of healthy nutriment for the effectual removal of the disease."

Various local applications have been employed for the removal of Aphthæ from the earliest times, of a gently astringent nature; and when they are not made too stimulant, especially in the commencement of the eruption, they not only serve the good purpose of coagulating and removing the mucous and clammy discharge, but also diminish the tendency to resprout in the apthous surfaces. The most effectual detergent of this kind is Borax, recommended by Mr. Gooch, of Norwich*, and now in the hands of every nurse. It is conveniently combined with water, mucilage, syrup, or honey, in the proportion of one twelfth, or even one eighth part of the salt. It is unnecessary to describe the compositions of honey of Roses, syrup of Mulberries, &c. with small propor-

* See his Surg. Observations.

tions of Muriatic or Sulphuric Acid, or of the Sulphate of Zinc, or of some absorbent powder, which different practitioners have preferred. Where the surface is exceedingly tender and excoriated, some mild and lubricating application, such as the compound of cream, with the yolk of eggs and Syrup of Poppies, recommended by Van Swieten*, should be first employed, and the restringents gradually introduced, as the irritability is diminished.

At a later period of infancy, the Aphthæ partake more of the nature of those which appear in adults: they seldom occur, except as symptomatic of some more serious derangement of the organs of nutrition, or as the sequelæ of febrile disease; and are consequently indicative of great danger, and more difficult of cure. If the child have been long at the breast, it is probable that the milk has become deteriorated in quality, or insufficient in quantity; and weaning, or a change of nurse, may be necessary. If a state of marasmus, with emaciation, tumid abdomen, and morbid excretions from the bowels, have supervened, the usual course of absorbents and alteratives, the Hydrargyrus cum Creta, or the grey Oxide with Soda and testaceous powder, must be carefully administered, and followed by mild tonics. Where the Aphthæ assume a brown hue, or appear in the state of debility consequent on acute diseases, the general strength must be supported by light tonics and cordials, with proper diet; such as a weak decoction of Cinchona or Cascarella, or the solution of the Tartrate of Iron and Potassa, with Rhubarb, light animal broths, and preparations of milk with the starches.†

SPECIES 2. APHTHA *adultorum*: THRUSH OF ADULTS.

Syn. Aphtha maligna (*Sauv.*): Emphlysis Aphtha, *ċ. maligna* (*Good*): *Black Thrush*.

* Comment. ad Aph. 990. † Such as Arrow-root, Tapioca, Sago.

In children grown up, and in adult persons, Aphthæ occur under a great variety of circumstances, being symptomatic of numerous diseases, both acute and chronic. They not only occur after Smallpox, Measles, Erysipelas, and Scarlet Fever; but seldom ail to appear, whenever the constitution has been weakened by old age, by long confinement from wounds and accidents, from dropsical, gouty, and dyspeptic complaints, from diarrhœa, chlorosis, consumption, and hectic fever of every kind*; in the latter diseases, indeed, the Aphthæ are usually indications of the approach of dissolution. The particular tendency of autumnal fevers, in cold and damp seasons, to produce Aphthæ, especially when combined with affections of the bowels, or occurring in puerperal women, has been noticed by many writers; as well as the connection between the aphthous and miliary eruptions, under a heating regimen.† The Aphthæ, like the Miliaria, when they supervene in these fevers, never produce any amendment of the symptoms, as the continental writers have stated, but rather seem to aggravate them, and to prolong their duration. They always, indeed, imply a dangerous state of the system, when they accompany other diseases; and especially when they appear first in the pharynx, and ascend from the stomach; when there is much anxiety, pain, and heat of the præcordia, with sickness and hiccup; and when they are among the sequelæ of fevers, the pulse at the same time remaining small and frequent, and the appetite failing to return.

* See Callisen, loc. cit. — “ Neque infrequenter (aphthæ) in adultis metastasi imperfectæ, infidæ, in febribus continuis, exanthematicis, putridis, inflammatoriis, lentis, à suppuratione internâ seu pure resorpto, vel alvifluxu, vires pessundanti inductæ, debentur.” — See also Willan, Reports on Dis. of London, p. 114., and Arnemann, loc. cit. § iii. de Aphthis adutorum.

† See Arnemann and Willan, *ibid.* — Van Swieten ad Aph. 983. — Sydenham, sect. iv. cap. iii. — Stoll, Rat. Med. tom. ii. p. 167. — Huxham, de Aëre et Morb. Epidem. lib. ii. p. 29. — Frank, de curand. Hom. Morbis, lib. iii. § 366.

The principal objects of medicine, in these cases, are to restore the energy of the constitution, and relieve the local complaint. The former indication is to be fulfilled by means of Cinchona and the mineral acids, where the bowels will admit of them, by light but nutritious diet, and by the exercise of gestation, when it can be obtained. For the latter, frequent ablution of the mouth and throat with cold water, and the use of the various linctuses and lotions, before enumerated, must be resorted to.

SPECIES 3. APHTHA *anginosa*, APHTHA OF THE THROAT.

This appellation may be given to a species of sore throat, which is not unfrequently observed during damp and cold autumnal seasons, especially in women and children. It is preceded by slight febrile symptoms, which seldom continue many days: on the second or third day, a roughness and soreness are perceived in the throat, which, on inspection, is found to be tumid, especially the tonsils, uvula, and lower part of the velum pendulum, and considerably inflamed, but of a purplish red colour. The same colour extends along the sides of the tongue, which is covered in the middle with a thin white crust, through which the elongated and inflamed papillæ protrude their red points. Small whitish specks form on these parts, which usually remain distinct, and heal in a few days, but occasionally coalesce, and produce patches of superficial ulceration. The complaint is sometimes continued three weeks or a month, by successive appearances of the Aphtha, but without any constitutional disturbance.

This disease appears to arise from the influence of cold and moisture, unwholesome diet, and acrid effluvia taken into the lungs. In the latter mode, it is produced in persons who attend on patients affected with confluent Smallpox, Scarlatina *anginosa*, or other malignant fevers. Although there is no clear evi-

dence of its propagation by contagion, it is frequently seen to attack several children in the same family about the same time, or in very quick succession.

There appears to be no danger in this affection, and medicine does not materially abbreviate its duration. A light diet, with diluent drinks, and gentle laxatives, where there is a disposition to inactivity in the bowels, constitute the only treatment required for its cure. When the debility is considerable, ammonia should be administered; and more particularly if dentition be proceeding. Leeches and blisters seem to be rather detrimental than advantageous; and Cinchona, with mineral acids, to be useless, until the decline of the disorder, when they contribute to restore the strength.*

Books which may be consulted on Aphtha.

ARNEMANN, Commentis de Aphthis, 1787.

BAILLIE, Series of Engravings, &c. Fasc. iii.

DIEZ, Dissertatio de Aphthis, 8vo. 1771.

DUGES, Dict. de Med. Prat. t. iii. 1829.

HARRIS, de Morbis Acutis Infantum.

HEBERDEN, Commentarii de Morborum, &c. 8vo.

ROBERTSON, Cyclop. of Pract. Med., vol. i. 1832.

UNDERWOOD, Treatise on the Diseases of Children, 8vo. 1828.

WILSON, A Treatise on Febrile Diseases, 8vo. 1804.

* See Dr. Willan's Reports on Dis. in London, p. 111.;— and my Reports of the Public Dispensary, Edin. Med. and Surg. Journal for Jan. 1813.

Order VII.

TUBERCULA.

TUBERCLES.

SYN. Des Knotes (*German*): Bouton, Inflammation Tuberculeuses (*F.*).

Def. SMALL, HARD, SUPERFICIAL TUMOURS, CIRCUMSCRIBED AND PERMANENT, OR SUPPURATING PARTIALLY.

The Order of Tubercles comprehends nine genera: but as some of them require only surgical treatment, some are of rare occurrence, and some are unknown in this country, they will not require a very ample discussion in this place. The following are the Genera of Tubercles: —

- | | |
|---------------|-------------------|
| 1. PHYMA. | 6. LUPUS. |
| 2. MOLLUSCUM. | 7. ELEPHANTIASIS. |
| 3. VITILIGO. | 8. FRAMBOESIA. |
| 4. ACNE. | 9. ICHTHYOSIS.* |
| 5. SYCOSIS. | |

 GENUS I. PHYMA.

Syn. Die Erbsenblattern; Eiter-blasem (*Germ.*): Charbon (*F.*).

Def. IMPERFECTLY SUPPURATING CUTANEOUS OR

* The Editor has left out Verruca from this list, as it cannot be considered in any other light than as a dermal alteration, unconnected in any degree with the condition of the system. He has placed, on the other hand, Ichthyosis in this order, because, although he regards each of the hardened points, or elongated or hardened tubercles, the aggregation of which constitutes the external characteristic of the disease, as so many permanent cuticular excrescences, yet this state is connected with a morbid condition of the system, as much as the other genera classed under the order.

SUBCUTANEOUS TUMOURS : FORMING AN ABSCESS THICKENED AND INDURATED AT THE EDGE, OFTEN WITH A CORE IN THE CENTRE.

Under the genus *PHYMA**, Dr. Willan intended to comprise the Terminus, the Epinyctis, the lesser species of boil (*Furunculus*), and the carbuncle of authors. These tubercular affections are commonly treated of in chirurgical works, and I have nothing to add to the general information on the subject.

GENUS II. MOLLUSCUM.

Syn. Encystis (*Vog. Parr*) : Lupia (*Saw.*) : Steatoma (*Sharp*) : Emphyma encystis (*Good*) : Atheroma (*Auct.*) : *Wen.*

Def. A MOVABLE TUMOUR; LITTLE SENSIBLE; OFTEN ELASTIC TO THE TOUCH.

This form of tubercular disease is noticed rather as a singularity, which occasionally occurs, and of which a few instances are recorded, than as an object of medical treatment. It is characterised by the appearance of numerous tubercles, of slow growth and little sensibility, and of various sizes, from that of a vetch to that of a pigeon's egg. (Plate LX. Fig. 1. of BATEMAN; Pl. 21. of THOMSON'S ATLAS.) These contain an atheromatous matter, and are of various forms, some being sessile, globular, or flattish, and some attached by a neck, and pendulous. The growth of the tubercles is apparently unconnected with any constitutional disorder; they show no tendency to inflammation or ulceration; but continue

* According to Paulus, the term *φυμα* was employed to signify in general a suppurating tumour, but in particular a suppurating tumour in a glandular part. (De Re Med. lib. iv. cap. 22. See also Oribas. de Morb. Cur. lib. iii. c. 34.; and Actuar. Meth. Med. lib. ii. cap. 12.) Hippocrates uses the term in the general sense (aph. 20. § iii. and aph. 82. § iv.), and speaks also of scrofulous phymata, *φυματα χοιρωδεα*, in Prædict. lib. ii. § ii. 77. Foës. See also Celsus, lib. v. cap. 18.

through life, having apparently no natural termination. A very extraordinary instance of this cutaneous deformity, which occurred in a poor man, who was living in good health, at Muhlberg, in 1793, and whose body, face, and extremities were thickly studded with these atheromatous tubercles, has been described by Professor Tilesius, who has given portraits of the naked patient in three positions, in a pamphlet, edited at Leipsic, in that year, by Professor Ludwig.

Since the second edition was printed, a patient was sent to me by a distinguished physician, affected with a singular species of molluscum, which appears to be communicable by contact. (Plate LXI. of BATEMAN; Pl. 21. of THOMSON'S ATLAS.) The face and neck of this young woman were thickly studded with round prominent tubercles, of various sizes, from that of a large pin's head to that of a small bean, which were hard, smooth, and shining on their surface, with a slight degree of transparency, and nearly of the colour of the skin. The tubercles were all sessile, upon a contracted base, without any peduncle. From the larger ones a small quantity of milk-like fluid issued, on pressure, from a minute aperture, such as might be made by a needle's point, and which only became visible on the exit of the fluid. The progress of their growth was very slow: for the first tubercle had appeared on the chin a twelvemonth ago, and only a few of them had attained a large size. Some of the latter had recently become inflamed, and were proceeding to a slow and curdly suppuration; and the cervical glands, lying under those on the neck, were also swollen, and discoloured, as if proceeding to suppurate. The eruption was still increasing much, and not only disfigured her greatly, but had recently impaired her general health, and occasioned a considerable loss of flesh, by the irritation which it produced.

She ascribed the origin of this disease to contact with the face of a child, whom she nursed, on which

a large tubercle of the same sort existed ; and on a subsequent visit she informed me, that two other children of the same family were disfigured by similar tubercles ; and besides, that the parents believed that the first child had received the eruption from a servant, on whose face it was observed. Since my attention was drawn to this species of tubercle, I have seen it in another instance, in an infant brought to me with *Porrigo (Impetigo) larvalis* ; and, on investigation, it was found that she had apparently received it from an older child, who was in the habit of nursing it. In this case the milky fluid issued from the tubercles, and may be presumed to be the medium of the contagion.

Of the best mode of managing this singular *Moluscum* I have not had sufficient experience to speak. Nothing remedial was administered to the children ; but, in the adult patient, I had the satisfaction to find, that, after the liquor arsenicalis had been taken in small doses for a month, the tubercles were universally diminished both in number and magnitude, most of them having gradually subsided : a few, especially on the neck, had suppurated.

GENUS III. VITILIGO.

Syn. *Epichrosis leucasmus (Good).*

Def. WHITE, SHINING, SMOOTH TUBERCLES ARISING IN THE SKIN, ABOUT THE EARS, NECK, AND FACE ; TERMINATING WITHOUT SUPPURATION.

Dr. Willan adopted this generic term from Celsus, but proposed to appropriate it to a disease somewhat different from those to which that classical writer applied it, and which is not of frequent occurrence. There is, indeed, a substantial reason for not adopting the term in the acceptance in which it is used by Celsus ; namely, that he has

comprehended under it three forms of disease, two of which are generically distinct from the third. The two former, *alphos* and *melas*, are superficial, scaly diseases, *i. e.* only slighter varieties of *Lepra* and *Psoriasis*; whereas the last, *Leuce*, deeply affects the skin and subjacent structure, occasioning a loss of sensibility, and ultimately of vitality, in those parts.*

The disease which is here intended to be designated by the term VITILIGO, (Plate LX. Fig. 2. of BATEMAN; Pl. 21. of THOMSON'S ATLAS,) is, as I have already stated, somewhat rare, and perhaps but little known. It is characterised by the appearance of smooth, white, shining tubercles, which rise on the skin, sometimes in particular parts, as about the ears, neck, and face; and sometimes over nearly the whole body, intermixed with shining papulæ. They vary much in their course and progress: in some cases they reach their full size in the space of a week (attaining the magnitude of a large wart), and then begin to subside, becoming flattened to the level of the cuticle in about ten days: in other instances, they advance less rapidly, and the elevation which they require is less considerable; in fact, they are less distinctly tubercular. But in these cases they are more permanent; and as they gradually subside to the level of the surface, they creep along in one direction, as, for example, across the face or along the limbs, chequering the whole superficies with a veal-skin appearance.† All the hairs drop out, where the disease passes, and never sprout again, a smooth shining surface, as if polished, being

* See *Lepra alphoides*, above, p. 41. After having described the characteristics of the three forms of Vitiligo, Celsus thus points out the circumstances which mark the greater severity of the last: "*Alphos et Melas* in quibusdam variis temporibus et oriuntur et desinunt: *Leuce* quem occupavit, non facile dimittit. Priora curationem non difficillimam recipiunt; ultimum vix unquam sanescit; ac siquid ei vitio demptum est, tamen non ex toto sanus color redditur." *De Medicinâ*, lib. v. cap. 28.

† This white and glistening appearance, bearing some resemblance to the flesh of calves (*vituli*), seems to have given rise to the generic term.

left, and the morbid whiteness remaining through life. The eruption never goes on to ulceration.

There is no considerable constitutional disorder combined with this affection ; but it has proved exceedingly unmanageable under the use of both internal and external medicines. The mineral acids internally, and the application of diluted caustic and spirituous substances externally, have been chiefly employed, but with little obvious effect.

Book which may be consulted on Vitiligo.

BLANCKARETT, (E. L.) de Vitiligine, 4to. 1764.

IV. ACNE.*

Syn. Varus (*Auct. var.*): Bauhia (*Linn.*): Gutta rosea (*Sauv. Veg. Darwin*): Phymatosis acne (*Young*): Ionthus varus et corymbifer (*Good*): Dartre pustuleuse (*Alibert*): Phyma faciei (*Swe-deaur*): Vari Ionthi (*Auct.*): Psydracia Acne (*Sauv.*) *Ακνη*, G.): Boutons (*F.*): die Finnen, Rothyesicht (*German*): Vinnen, steenpuistyes (*Dutch*): Acne (*Ital. Span.*): Wheelks, Maggot pimple.

Def. TUBERCULAR TUMOURS; SLOWLY SUPPURATING ; CHIEFLY COMMON TO THE FACE.

This genus, as the definition describes, is characterised by an eruption of distinct, hard, inflamed tubercles, which are sometimes permanent for a considerable length of time, and sometimes suppurate very slowly and partially. They usually appear on the face, especially on the forehead, temples, and chin, and sometimes also on the neck,

* This term is borrowed from Aëtius, who mentions it as a synonyme of *ωρθος*, by which most of the Greek writers designate the disease. Aët. tetrab. ii. serm. iv. cap. 13. The Latins denominated the tubercles *vari*. See Celsus, lib. vi. cap. 5.—Plin. Hist. Nat. lib. xxiii.—Sennert having spoken of the affinity of *vari* with the pustules about the head, called *psydracia* by some writers, Sauvages made the eruption a species of the latter, *Psydracia acne*. Nosol. Meth. class i. ord. ii. gen. 9. See Jul. Pollux, Onomasticon, lib. iv. cap. 25.

shoulders, and upper part of the breast; but never descend to the lower parts of the trunk, or to the extremities. "When they appear on the face, the back, and shoulders are rarely affected, and, on the contrary, the face has rarely any of these tubercles when they are seated on the back." As the progress of each tubercle is slow, and they appear in succession, they are generally seen at the same time in the various stages of growth and decline; and, in the more violent cases, are intermixed likewise with the marks or vestiges of those which have subsided. The eruption occurs almost exclusively in persons of the sanguine temperament, and in the early part of life, from the age of puberty* to thirty or thirty-five; but in those of more exquisite temperament, even later. It is common to both sexes; but the most severe forms of it are seen in young men. †

There are three species of this eruption: —

1. *A. simplex.*
2. *A. indurata.*
- Var. *a. A. punctata.*
3. *A. rosacea.* ‡

SPECIES 1. ACNE *simplex*, SIMPLE PIMPLE.

Syn. Dartre pustuleuse miliaire: Herpes pustulosus miliaris (*Alibert*).

This is an eruption of small vari, which appear singly, and are not very numerous, nor accompanied by much inflammation, nor by any intermediate affection of the skin. They occur chiefly on the

* From this circumstance, both the Greek appellations appear to have originated; *ιωθος*, from its occurring during the growth of the *lanugo*, or first beard, which the word also signifies; — and *ακνη*, quasi *ακμη*, from its appearance at the *acme*, or full growth and evolution of the system. "Ionthis, flores cum papulis circa faciem, *vigoris signum*," is the definition given by Julius Pollux (loc. cit.). And Cassius, in his 33d problem, explains, "Cur in facie vari prodeunt fere in ipso ætatis flore vigoreque (quapropter et *ακμος*, id est, *vigores*, idiotarum vulgus eos nuncupat)?"

† Alibert and Brett regard Acne as a pustular affection: the Editor cannot accord with these distinguished writers: they are slowly suppurating tubercles; and in some cases they never suppurate. T.

‡ Alibert has not figured any specimen of Acne, unless an ill-defined plate (22d), representing what he calls "Dartre pustuleuse miliaire," on the forehead, be intended for Acne simplex.

temples, forehead, shoulders, and upper part of the thorax. (Plate LXII. of BATEMAN; Pl. 23. of THOMSON'S ATLAS.) When it has continued some time, indeed, a little roughness of the face is produced where the larger tubercles have disappeared, in consequence of a slight cracking or disposition to exfoliate in the new cuticle; but these marks are not permanent.

Many of the tubercles do not proceed to suppuration; but gradually rise, become moderately inflamed, and again slowly subside, in the course of eight or ten days, leaving a transient purplish red mark behind. But others go on to a partial suppuration, the whole process of which occupies from a fortnight to three weeks. The tubercles are first felt in the skin, like a small hard seed, about the size of a pin's head, and enlarge for three or four days, when they begin to inflame: about the sixth or seventh day they attain their greatest magnitude, and are then prominent, red, smooth, and shining, and hard and painful to the touch. After two or three days more, a small speck of yellow matter appears on the apices of some of the tubercles; and when these afterwards break, a thinner humour is secreted, which soon dries into a yellowish scab. The inflammation now gradually declines, the size and hardness of the tubercles diminish, and the small scab becomes loosened at the edges, and at length falls off about the third week. "When the tubercles occupy the shoulders the suppuration, although not more rapid, yet is succeeded by a thicker scab, which is soon detached by the friction of the clothes." The individual tubercles, which rise and suppurate in succession, pass through a similar course.

This eruption recurs frequently, at short intervals, in some individuals, who have it partially; but in others, who are more strongly predisposed to it, it is more extensive, and never wholly disappears, but is, at uncertain periods, more or less troublesome. "In

females it is very troublesome at the menstrual periods. It seems closely connected with atony of the secreting function of the uterus, as well as that of the liver." Persons subject to *Acne simplex* often enjoy good health, and cannot refer the cutaneous complaint to any obvious exciting cause; whence Dr. Darwin* has constituted it a distinct species, with the epithet, "hereditary;" which, in fact, is to ascribe it solely to the temperament of the patient, or to consider the predisposition, arising from the great vascularity of the skin in sanguine habits, as adequate to give rise to the eruption, under ordinary stimulation. There appears, however, to be no clear distinction between the *stomachic* and *hereditary* cases of Acne, as Dr. Darwin supposes; for it is only where there is a strong constitutional predisposition, that substances which disorder the stomach excite the eruption of Acne; and in those who are so predisposed, the vari occasionally appear after eating heartily, or drinking an unusual portion of wine, or from any slight cause of indigestion; as well as after any inordinate excitement of the cutaneous circulation from violent exercise in hot weather, or in heated rooms, especially when followed by a copious draught of cold liquor. "Errors and excesses in diet; irritating cosmetics; vexation of mind; gusts of passion, and other strong mental emotions, may also be named amongst the exciting causes of *Acne simplex*." In some cases, a sort of critical eruption of vari has suddenly occurred, after severe indigestion, or continued pains in the stomach, which have been immediately relieved; and in such

* Dr. Darwin names the genus *Gutta Rosea*, of which he says, there are three species: — 1. The *Gutta Rosea hepatica*, connected with diseased liver in drunkards: 2. *G. R. stomatica*, which is occasioned by taking cold drink, eating cold raw turnips, &c. when the body is much heated by exercise; and 3. The *G. R. hereditaria*, or *Puncta Rosea* (the *Acne simplex*), which consists of smaller pimples, that are less liable to suppurate, and which seems to be hereditary, "or at least has no apparent cause, like the others." See *Zoonomia*, class ii. 1. 4. 6.— and class iv. 1, 2. 13. and 14.

instances, there is occasionally also an eruption of lichenous papulæ on the body and limbs.

“ The diagnosis is violent : it somewhat resembles Ecthyma, but the tubercles of Acne differ from phlyzacious pustules of Ecthyma by the indurated base which remains after the suppuration.”

Being generally, however, a local disease, the Acne simplex is to be treated chiefly by external applications. Except in females, indeed, this variety of the eruption seldom calls for the attention of medical men. Celsus observes, that, in his time, the Roman ladies were so solicitous of maintaining their beauty, that he deemed it necessary to mention the remedies for this affection, which otherwise he considered as too trifling for the notice of the physician.*

“ The Editor does not accord with the author in regarding Acne as altogether a local disease. It is evidently a symptomatic eruption, always indicating some morbid affection of the secreting or assimilating functions. Thence the state of the system must be carefully examined before we can expect to cure the eruption. In very plethoric habits small bleedings, with a course of purgatives, will be found beneficial ; especially in females in whom the uterus is in a deranged condition. The blue pill, with pilula Aloës cum Myrrha, is a good aperient ; and at the same time the preparations of Iron, especially the Hydriodate of Iron may be administered, if the patient display a leucophlegmatic aspect. The diet should be light, and of easy digestion. I have found the Liquor Potassæ in full doses useful.”

With regard to topical applications, the ancients agree in recommending a number of stimulant substances, with the view of discussing the “ thick humours ” which were supposed to constitute the

* “ Pene ineptiæ sunt, curare varos, et lenticulas, et ephelidas : sed eripi tamen fœminis cura cultus sui non potest.” De Med. lib. vi. cap. v.

vari. Lotions and liniments containing vinegar and honey, sometimes combined with an emulsion of Bitter Almonds, and sometimes with Turpentine, Resin, Myrrh, and other gums, or with Alum, Soap, and Cimolian earth, or the bruised roots of the Lily, Cyclamen, Narcissus, &c. were the substances which they principally employed.* They were, doubtless, correct as to the principle; as a gentle stimulus to the skin is the most safe and effectual remedy. The apprehensions, which have been strongly expressed by the humoral pathologists, of producing internal disorder by the sudden repulsion, as it has been called, of these cutaneous eruptions, are not altogether hypothetical. Headache, and affections of the stomach and bowels, have sometimes been thus produced, which have ceased on the re-appearance of the eruption: but, on the whole, as far as my observation goes, this alternation of disease is less frequent and obvious in this form of Acne, than in the pustular and crustose eruptions of the face and head.

The stimulant applications, which are most easily proportioned to the irritability of the tubercles, are lotions containing Alcohol, which may be reduced or strengthened, according to circumstances, by the addition of any distilled water. It is not easy to describe the appearances of the eruption, which indicate any certain degree of strength in the lotion; but a little observation will teach this discrimination. If the tubercles are considerably inflamed, and a great number of them pustular, a dilute mixture will be requisite; containing, for example, equal parts of spiritus tenuior, and of Rose or Elder-flower water. The effect of a very acrid lotion, under such circum-

* See Celsus, loc. cit. — Oribas. Synops. lib. viii. cap. 34.; and De Loc. Affect. lib. iv. cap. 51. — Aëtius, tetrab. ii. serm. iv. cap. 13. — Paulus, lib. iii. cap. 25. — Actuarius, lib. iv. cap. 12. By the older modern writers, who were chiefly their copyists, the same applications were prescribed. See Hafenreffer, Nosodochium, lib. ii. cap. 14.

stances, is to multiply the pustulus, to render many of them confluent, and to produce the formation of a crust of some extent, as well as to excite an inflammatory redness in the adjoining skin.* A slight increase of the inflammation, indeed, is sometimes occasioned by the first applications of a weak stimulus; but this is of short duration, and the skin soon bears an augmentation of the stimulant; until at length the pure spirit is borne with advantage, as the inflammatory disposition subsides. Under the latter circumstances, even a considerable additional stimulus is often useful; such as from half a grain to a grain or more of the Muriate of Mercury, in each ounce of the spirit; or a drachm or more of the Liquor Potassæ, or of the Muriatic Acid, in six ounces: "perhaps the best vehicle for either the Chloride of Mercury or the Liquor Potassæ is the Emulsion of Bitter Almonds, containing ten minims of Hydrocyanic acid to each fluid ounce of the Emulsion." Acetous acid, as recommended by the ancients, and the Liquor Ammoniæ Acetatis, afford also an agreeable stimulant, in proper proportions. Sulphur yields a small portion of its substance to boiling water, poured upon it, and allowed to infuse for twelve or fourteen hours, a quart of water being added to about an ounce of broken Sulphur. A lotion of this nature has been found advantageous in slight cases of Acne simplex, and especially in removing the roughness and duskiness of the face connected with it.†

* It must be admitted, however, that the eruption is sometimes materially diminished, after the violent action of an irritating application has subsided. I lately saw a lady, who considered herself much benefited after a severe inflammation, and even excoriation, of the face, which had been produced by a poultice of bruised *parsley*. Dr. Darwin affirms that blistering the whole face, in small portions, successively, is the most effectual remedy for this Acne (loc. cit.). But the "cura cultus sui" generally renders patients of this class unwilling to employ harsh remedies.

† This lotion has been recommended by Dr. Clarke of Dublin, as containing a sufficient impregnation of sulphur for the cure of Scabies in children. See Med. Facts and Observ. vol. viii. p. 275.

SPECIES 2. ACNE *punctata*, MAGGOT PIMPLE.

Syn. *Punctæ mucosæ* (*Darwin*): *Ionthus varus punctatus* (*Good*): *Crimones* (*Underwood*): *Grubs*.

The eruption, in this variety of the disorder, (Plate LXII. of BATEMAN; Pl. 23. of THOMSON'S ATLAS,) consists of a number of black points, surrounded by a very slight raised border of cuticle. These are vulgarly considered as the extremities of small worms or grubs, because, when they are pressed out, a sort of wormlike appendage is found attached to them: but they are, in fact, only concremented mucus or sebaceous matter, moulded in the ducts of the sebaceous glands into this vermicular form, the extremity of which is blackened by contact with the air. In consequence of the distention of the ducts, the glands themselves sometimes inflame, and form small tubercles, with little black points on their surface, which partially suppurate, as in the foregoing species; but many of them remain stationary for a long period, without ever passing into the inflammatory state. Not unfrequently they are intermixed with a few tubercles, in which the puncta have not appeared.

These concretions may be extracted, by pressing on both sides of the specks with the nails, until the hardened mucus is sufficiently elevated to be taken hold of. A blunt curved forceps may be employed with advantage for this purpose.* When the puncta are removed, the disease becomes Acne simplex, and requires the same treatment with the preceding species.

Dr. Underwood has recommended the use of a solution of Carbonate of Potass internally, in these cases †; and Dr. Willan was in the habit of occa-

* Such a forceps has been contrived by a surgeon's instrument-maker, of the name of Hattersley, in South-Molton Street.

† See some observations relative to "*crinones*, or grubs," which, he says, he had often found troublesome, especially in females, about the time of puberty. Treatise on the Dis. of Children, vol. ii. p. 167. 5th edit.

sionally prescribing the Oxymuriatic Acid. One or two tea-spoonfuls of this liquid, taken in a glass of water three times a day for a considerable period, has sometimes appeared to benefit the health, and improve the colour and smoothness of the skin ; but, on the whole, it is not easy to discover any sensible operation of this medicine, and its only effect is, perhaps, that of a tonic to the stomach. Medicines of this nature are more adapted to the subsequent species of the complaint, especially to the *A. rosacea*.*

SPECIES 3. ACNE *indurata*, STONE-POCK.

In this form of Acne (Plate LXIII. of BATEMAN ; Pl. 22. of THOMSON'S ATLAS,) the tubercles are larger, as well as more indurated and permanent, than in *A. simplex*. They rise often in considerable numbers, of a conical, or oblong conoidal form, and are occasionally somewhat acuminate, as if tending to immediate suppuration, being at the same time of a bright roseate hue : yet many of them continue in a hard and elevated state for a great length of time, without any disposition to suppurate. Others, however, pass on very slowly to suppuration, the matter not being completely formed in them for several weeks, and then only a small part of the tubercles are removed by that process. Sometimes two or three coalesce, forming a large irregular tubercle, which occasionally suppurates at the separate apices, and sometimes only at the largest. In whatever mode they proceed, the vivid hue of

* The Editor cannot concur in this opinion of Dr. Bateman : he has seen the skin completely cleared by the use of the following Alkaline Tonic for six weeks ; at the same time regulating the bowels : —

℞ Sulphatis Zinci gr. xxiv.
Liquoris Potassæ fʒij. Solve.
Sumantur guttæ xxx ex cyatho aquæ bis quotidie.

The skin should be well cleaned with soap and hot water, or a solution of pure Potass, or Ox-gall ; and well rubbed with a rough towel, night and morning.

the tubercles gradually becomes more purple or even livid, especially in those which show no tendency to suppurate. Slight crusts form upon the suppurating tubercles, which after some time fall off, leaving small scars, surrounded by hard tumours of the same dark red colour; and these sometimes suppurate again at uncertain periods, and sometimes slowly subside and disappear, leaving a purple or livid discoloration, and occasionally a slight depression, which is long in wearing off.

The tubercles, even when they do not suppurate, but especially while they continue highly red, are always sore and tender to the touch; so that washing, shaving, the friction of the clothes, &c. are somewhat painful. In its most severe form, this eruption nearly covers the face, breasts, shoulders, and top of the back, but does not descend lower than an ordinary tippet in dress: yet this limitation of the disorder is independent of the exposure of those parts; for it occurs equally in men and women. In a few instances in young men, I have seen an extensive eruption of *Acne indurata* affecting these covered parts, while the face remained nearly free from it. By the successive rise and progress of the tumours, the whole surface, within the limits just mentioned, was spotted with the red and livid tubercles, intermixed with the purple discolorations and depressions left by those which had subsided, and variegated with yellow suppurating points and small crusts, so that very little of the natural skin appeared. Sometimes the black puncta of the sebaceous ducts were likewise mixed with the vari and their sequelæ.

The general health does not commonly suffer, even under this aggravated form of the eruption.*

* Forestus, and several other physicians of the sixteenth century, assert that *vari* are the precursors of Elephantiasis, and indicate its approach. Sennertus asserts the same of *vari*, that are accompanied with puffy swelling (*inflatio*) of the face, and hoarseness. But these assertions

If a fever or other severe disease should take place, indeed, the tubercles often subside and disappear ; so that their recurrence, under such circumstances, is to be deemed a sign of returning health. I have seen the erethism of a mercurial course, administered for other purposes, occasion the disappearance of this Acne, which returned with the restoration of flesh and strength, after the omission of the medicine. Many persons, however, who are affected with the eruption, are liable to disorders of the bowels and stomach, to Hæmorrhoids, and some to Phthisis pulmonalis. Its first appearance, too, is commonly ascribed to some irregularity of diet, or to some cold substance swallowed when the person had been overheated, and was in a free perspiration. Hence the first eruption is not unfrequently sudden.

The Acne indurata is often much alleviated “ in the first or inflammatory stage of the eruption by poultices, made with the decoction of Poppy Capsules, boiled until they are quite soft, and then strained by pressure through a cloth. After the tubercles have suppurated and discharged their contents, or have been opened,” the disease is sometimes entirely removed by the steady use of external stimulants, combined with a proper regulation of the diet and exercise. The eruption will bear a more acrid stimulus, even from the beginning, than the inflamed Acne simplex. A spirituous lotion, at first a little diluted, and containing the Oxymercuriate of Mercury, in the proportion of a grain or somewhat less to the ounce of the vehicle, is often extremely beneficial. Gowland’s lotion, an empirical preparation, which is said to contain this mercurial salt in

are obviously either the result of mere hypothesis, founded on the resemblance of the larger vari to the incipient tubercles of Elephantiasis ; or of practical error, in applying the appellation of vari to the early symptoms of the latter disease. See Forest. Obs. Chirurg. lib. v. obs. 7. Sænnert. Med. Pract. lib. v. part ii. cap. 23.

an emulsion of Bitter Almonds *, is popularly used ; and where its strength happens to accord with the degree of irritability in the eruption, and it is not applied to the other varieties of it, it is doubtless beneficial. Many other stimulants, some of which have been already named, may be substituted, of course, with similar effect ; but it is unnecessary to specify them. It will be proper to remark, that, in general, it is requisite to augment the activity of all these applications in the progress of the treatment, partly in consequence of the diminished effect of an accustomed stimulus, and partly on account of the increasing inertness of the tubercles, as the inflammatory state subsides, which must be determined by the appearances.

Frequent purgatives, which are often resorted to in these cases, especially by unprofessional persons, among whom the dregs of the humoral pathology still remain, are of no advantage ; but, on the contrary, often augment the disease in feeble habits. " On the contrary, even where the tongue is furred, and indicates the use of an alterative, a tonic taken in conjunction with five or six grains of Plummer's Pill at bed-time, for ten or twelve successive nights, proves often highly beneficial. As far as my experience has enabled me to decide, the Carbonate of Soda, in doses of a drachm in twelve fluid drachms of Infusion of Cascarella Bark, taken at noon and about four o'clock in the afternoon, daily, is the best tonic in this affection. The irritability of the stomach is allayed at the same time its tonic power is augmented." The copious use of *raw* vegetables in diet, which the misapplication of the term "scurvy" has

* The bitter Almond was a favourite application with all the ancient physicians in inflammatory cutaneous eruptions. Its emulsion is prescribed, as a vehicle of more active substances, in every tract which they have left on these subjects. Yet it is probably a mere agreeable mucilage.

" This note was written before the fact that the Bitter Almond contains a large portion of Hydrocyanic Acid was known." T.

introduced, is to be deprecated, as well as the free use of vegetable acids, especially in constitutions that are predisposed to indigestion. These substances not only afford little nutriment, under such circumstances, but tend to increase the indigestion : and it is a fact, which it may not be easy to explain, that under many modifications of cutaneous inflammation, especially about the head and face, that inflammation is immediately increased in sympathy with the offended stomach, when these substances are eaten. It were totally superfluous to remind professional men of the very opposite nature of inflammatory and suppurating affections of the skin, to that of petechiæ and ecchymoses, the mere effusions of extravasated blood under the cuticle, which belonged to the proper, or, as it has been called, the *putrid* scurvy. And this negative inference at least must be deduced from the fact, that it is almost impossible that these two opposite states of disease should be benefited by the same remedies. The diet, in these cases of Acne, should be good, *i. e.* light and nutritious, but not stimulating ; consisting of animal food, with well-dressed vegetables, and the farinaceæ ; wine and fermented liquors being omitted, or taken with great moderation.

Internally, medicines effect little ; but I have had an opportunity, in several severe cases of *Acne tuberculata*, of witnessing the increased amendment of the disorder, under the external treatment already mentioned, when small doses of Soda, Sulphur, and Antimony were at the same time administered ; by which plan the skin has been totally cleared.

SPECIES 4. *ACNE rosacea* *, ROSY DROP.

Syn. *Bacchia* (*Linn.*) : *Gutta Rosea* (*Sauv. Darwin*) : *Gutta Rosacea* (*Cenopotarum*) (*Plenck*) :

* This is the *Gutta rosea*, or *rosacea* of authors ; some of whom, however, (as Dr. Darwin, to whom I have already referred,) comprehend all the varieties of *vari* under that appellation.

Ionthus Corymbefer (*Good*): Roth-gesicht, Roth-nase Kupferbandel (*German*): Couperose Rougeurs, Goutte Rose (*F.*): *Carbuncled face*.

This form of Acne (Plate LXIV. of BATEMAN ; Pl. 23. of THOMSON'S ATLAS,) differs in several respects from the preceding species. In addition to an eruption of small suppurating tubercles, there is also a shining redness, and an irregular granulated appearance of the skin of that part of the face which is affected. The redness commonly appears first at the end of the nose, and afterwards spreads from both sides of the nose to the cheeks, the whole of which, however, it very seldom covers. In the commencement it is not uniformly vivid ; but is paler in the morning, and readily increased to an intense red after dinner, or at any time if a glass of wine or spirits be taken, or the patient be heated by exercise, or by sitting near a fire. After some continuance in this state, the texture of the cuticle becomes gradually thickened, and its surface uneven or granulated, and variegated by reticulations of enlarged cutaneous veins, with smaller red lines stretching across the cheeks, and sometimes by the intermixture of small suppurating *vari*, which successively arise on different parts of the face.

This species of Acne seldom occurs in early life, except where there is a great hereditary predisposition to it : in general it does not appear before the age of forty ; but it may be produced in any person by the constant immoderate use of wine and spirituous liquors. The greater part of the face, even the forehead and chin, are often affected in these cases ; but the nose especially becomes tumid, and of a fiery red colour ; and, in advanced life, it sometimes enlarges to an enormous size, the nostrils being distended and patulous, or the alæ fissured, as it were, and divided into several separate lobes.* At that period of life, too,

* Sennert mentions a case, in which the enlarging nose made such an approximation in magnitude to Strasburg steeple, as to impede the

the colour of the *Acne rosacea* becomes darker and more livid ; and if suppuration takes place in any of the tubercles, they ulcerate unfavourably, and do not readily assume a healing disposition.

In young persons, however, who are hereditarily predisposed to this complaint, irregular red patches not unfrequently appear in the face, which are often smooth, and free from tubercles, and sometimes throw off slight exfoliations at intervals. These patches may be gradually extended, if great temperance both in food and drink be not observed, until the whole face assume a preternatural redness.

As this eruption is chiefly sympathetic of some derangement of the chylopoietic viscera, or of a peculiar irritability of the stomach, little advantage can be expected from local applications : and, in fact, the stimulants, which are beneficial, under proper regulations, in most of the other forms of *Acne*, are generally prejudicial in this, and aggravate the complaint. The misapplication of the nostrum, before mentioned, to this variety of the eruption, is one among the numerous practical errors which originate from the indiscriminate recommendations of empiricism. On the other hand, all strong sedatives or restringents, if they succeed in repressing the eruption, are liable to aggravate the internal disorder.

The perfect cure of *Acne rosacea* is, in fact, seldom accomplished ; for, whether it originate in a strong hereditary predisposition, or from habitual intemperance, the difficulties in the way of correcting the habit of body are almost insurmount-

exercise of vision, and to require lopping. " Sumunt tubercula ista interdum incrementum, ut facies in æqualis et horrida evadat, et nasus valde augeatur. Vixit superiori adhuc anno, non procul a Dresdâ, vir, cui hoc malo affecto, nasus ita incrementum sumsit, ut eum in legendo impediret ; quod malum ipsum eo adegit, ut anno 1629 particulas quasdam de naso sibi amputari curaret." Pract. Med. lib. v. part. i. cap. 31.

able. The regulation of the diet, in both cases, is important; "the bowels should be kept lax by gentle aperients; for instance, the Hydrargyrum cum Creta, in doses of from ten to twelve grains, may be given every night at bed-time:" and when the stomach or liver is disordered, the symptoms may be sometimes palliated by the Liquor Potassæ, or other antacids, which seem also to have some influence in lessening inflammatory action in the skin. "The Editor is of opinion that much of the difficulty attending the treatment of *Acne rosacea* has arisen from giving the Liquor Potassæ in too small doses: he has seldom seen it fail to relieve the disease when the dose has been gradually carried to sixty or eighty drops three times a day. The best vehicle for giving the Liquor Potassæ in is the Bitter Almond Emulsion." When the habit is weak, the Hydriodate of Iron, in doses of fʒj, which is equal to gr. iij of the Ioduret, will be found useful. The gentlest astringents should be used externally to the patches of reticulated veins; such as very dilute spirituous or acetous lotions, with or without a small proportion of the Acetate of Lead; or simple ointments combined with Alum, Acetate of Lead, &c., in small quantities. The more purely local and primary the eruption appears to be, the more active may be the astringency of the substances applied to it.

GENUS V. — SYCOSIS.

Syn. Ulcus συκωσις (*Celsus*): Sycoma, Ficus, Phymus, Condyloma, Herpes pustulosus (*Auct. Var.*): Montagna (*Plenck*): Sycosis (*Vog. Swed.*): Phyma sycosis (*Good*): Sycose, Montagne, Dartne pustuleuse (*F.*): Feigwarzen (*Ger.*): Vyggezweel (*Dutch*): Pluk (*Scotch*).

Def. AN ERUPTION OF INFLAMED, FLESHY, DARKISH-RED TUBERCLES ON THE BEARDED PORTION OF THE FACE, AND ON THE SCALP; GREGARIOUS; OFTEN COALESCING; DISCHARGE PARTIAL, VISCID, AND SANIOUS.

Although this eruption was not mentioned in the enumeration of Tubercles, on the cover of Dr. Willan's publication, I believe he intended, after the example of the old writers, to introduce it in this place, in consequence of its affinity to Acne. Britt, Rayer, and Alibert regard it as of pustular origin; and the tubercles are arising during the progress of the disease.

Celsus has correctly stated, that some difference takes place in the appearance and progress of the eruption, when it is seated in the chin, and in the scalp; whence it may be divided into two species* :

1. *S. menti.*
2. *S. capillitii.*

It sometimes appears on the pubes.

SPECIES 1. SYCOSIS†*menti*, SYCOSIS OF THE BEARD.
Syn. Sycosis Barbæ (*Celsus*): Mentagra (*Plenck*):

* "Sub eo vero duæ sunt species. Altera ulcus durum et rotundum est; altera humidum et inæquale. Ex duro exiguum quiddam et glutinosum exit: ex humido pus, et mali odoris. Fit utrumque in iis partibus quæ pilis conteguntur: sed id quod callosum et rotundum est maxime in barba; id vero, quod humidum, præcipue in capillo." loc. cit.

† This denomination has been given to the disease, from the granulated and prominent surface of the ulceration which ensues, and which somewhat resembles the soft inside pulp of a fig (*συκον*). "Est etiam ulcus, quod a *fici* similitudine *συκωσις* à Græcis nominatur, quia caro in eo excrescit." Celsus, lib. vi. cap. 3. The later Greeks, however, apply the terms *συκα* and *ογκοι συκωδεις* (*fici*, and *ficose tumours*), to excrescences of the eyelids, as well as to the proper *Sycosis* of Celsus. See Aëtius, tetrab. i. serm. ii. cap. 80. & 190.; — also tetr. ii. serm. iii. cap. 43.; Paul. Ægin. lib. iii. cap. 22.; — and Actuarius, lib. ii. cap. 7. Paul, however, describes the Sycosis of the face as an eruption of "round, red, somewhat hard, painful, and ulcerating tubercles." (Lib. iii. cap. 3.) And Aëtius, in another place, mentions the eruption as "one of the affections of the chin, which," he says, "differs from Acne, in the nature of the humour which it discharges, and in its greater tendency to ulceration." (Tetrab. ii. serm. iv. cap. 14.)

Dartre pustuleuse mentagre; Herpes pustulosus mentagra (*Alibert*): Boutons bilieux (*M. Retz.*): Phyma Sycosis Barbæ (*Good*): der Kieferaustatz (*German*): Pluky chin (*Scotch*).

In this species (Plate LXV. of BATEMAN; Pl. 24. of THOMSON'S ATLAS,) the tubercles, "which are preceded by an irritable state of the skin of the face," arise first on the under lip, or on the prominent part of the chin, in an irregularly circular cluster; but this is speedily followed by other clusters, and by distinct pustular tubercles, each penetrated by a hair, which appear in succession, along the lower part of the cheeks up to the ears, and under the jaw towards the neck as far as the beard grows.* The tubercles are red and smooth, and of a conoidal form, and nearly equal to a pea in magnitude. Many of them continue in this condition for three or four weeks, or even longer, having attained their full size in seven or eight days; but others suppurate very slowly and partially, discharging a small quantity of yellowish-white thick matter, by which the hairs of the beard are matted together, so that shaving becomes impracticable, from the tender and irregular surface of the skin. This condition of the face, rendered rugged by tubercles from both ears round to the point of the chin, together with the partial ulceration and scabbing, and the matting together of the unshaven beard, occasions a considerable degree of deformity; and it is accompanied also with a very troublesome itching. "Sometimes the pustular tubercles extend over the hairy part of the neck."

This form of the Sycosis occurs, of course, chiefly in men; but women are not altogether exempt from it, though it is commonly slight when it appears in them. "Its exciting causes also, namely,

* An indifferent representation of this disease is given by Alibert, plate 20., under the appellation of "Dartre pustuleuse mentagra."

luxuries of the table, and the use of alcoholic liquors, are more likely to occur in men. Persons who are much exposed to fire heat, such as cooks, glassblowers, and such like, are also subject to this eruption : but the most causes of it are diseased conditions of the digestive organs. It has been supposed that the disease is seated in the sebaceous follicles ; but although these may be affected, yet it is by no means certain that they are its original seat. In the minute dissections of M. Gendrin, these follicles were unaffected : the rete mucosum was infiltrated by a yellowish jelly-like substance, exuding from a vascular net-work.* Its duration is very uncertain : it is commonly removed in about a fortnight ; but sometimes the slow suppuration goes on for many weeks ; and sometimes the suppurating tubercles heal, and again begin to discharge. Occasionally the disease disappears for a season, and breaks out again.

SPECIES 2. SYCOSIS *capilliti*†, SYCOSIS OF THE SCALP.

Syn. Sycosis capilli (*Celsus*) : Phyma sycosis capilli (*Good*) : Pian ruboide (*Alibert*).

This species (Plate LXVI. of BATEMAN ; Pl. 23. of THOMSON'S ATLAS,) is seated chiefly about the margin of the hairy scalp, in the occiput, or round the forehead and temples, and near the external ear, which is also liable to be included in the eruption. The tubercles rise in clusters, which affect the circular form ; they are softer and more acuminate than those on the chin ; and they all pass into suppuration in the course of eight or ten days, becoming confluent, and producing an elevated, unequal, ulcerated surface, which often appears granulated, so as to afford some resemblance to the internal pulp of a fig. The ulceration, as Celsus states, is generally humid ; for

* Hist. Anat. des Inflammations, t. i. p. 457.

† M. Alibert has figured a disease of the scalp, under the appellation of "Pian ruboide," in plate 35., which resembles the Sycosis of the scalp, if it be not a case of neglected or mismanaged Porrigo favosa.

there is a considerable discharge of a thin ichorous fluid, which emits an unpleasant rancid odour.

The Sycosis, under its first-mentioned form, may be distinguished from *Acne indurata* by its seat being exclusively on the bearded part of the face, — by the softer, more numerous, and clustered tubercles, — and by the ulceration which they tend to produce. And, under its second form, in which it is somewhat assimilated to the eruption of favous pustules, or *Porrigo favosa*, affecting the face and the borders of the capillitium, it may be discriminated by the tuberculated and elevated base of the suppurating tumours; not to mention the adult age of the patient, and the absence of contagion.

The cure of Sycosis is generally much more easily accomplished than that of *Porrigo favosa*; but the method of treatment required for it is not very different. “With regard to local applications.” when the tubercles are numerous, inflamed, and confluent, and especially when the suppuration is either beginning or considerably advanced, the most speedy benefit is derived from the application of poultices at night, of linseed powder, bread and milk, or other simple ingredients.* In the less severe forms, warm ablutions or fomentations may be substituted: “or the topical vapour bath containing sulphur: and then the parts bathed with the black wash. The tubercles should be punctured, and the hairs extracted.” When the inflammatory symptoms are reduced, and in cases where they are from the first moderate, the healing process is much promoted, and the discharge moderated and restrained, by the application of the *Unguentum Hydrargyri Nitratiss*, diluted with three or four Parts of simple ointment, or by the *Ung. Hydrargyri præcipitati* united with an equal portion of the *Zinc Ointment*, or the *Cerate of Acetate of Lead*, “or lotions of

* *Super utrumque oportet imponere elaterium, aut lini semen contritum et aqua coactum, aut ficum in aqua decoctam. — Celsus. T.*

the Sulphate of Zinc. The ulcerated tubercles may be touched with Sulphate of Copper, or, what is better, Nitrate of Silver. As general remedies, it is useful to prescribe Antimonials, with alterative doses of Mercury, followed by Cinchona, or Serpentaria, and the fixed alkalies, especially where there appears to be any affection of the digestive organs, which, not unfrequently, concurs with this eruption. "In obstinate cases the Arsenical Solution is a useful tonic."

Books which may be consulted on Sycosis.

ALIBERT, *Maladies de la Peau*, fol. 1814.

BIETT, *Dictionnaire de Médecine*, art. *Mentagra*.

PLUMBE (SAM.), *A Practical Treatise of the Diseases of the Skin*, 8vo. 1827.

RAYER, *Traité des Maladies de la Peau*, 8vo. 1826.

SCHEDL et CAZENAVE, *Abregè pratique des Maladies de la Peau*, 1828.

GENUS VI. LUPUS.

Syn. Cancer Lupus (*Sawv.*): Ulcus Tuberculosis (*Good*): Formica corrosiva: Ignis sacer; Noli me tangere (*Auct. Var.*): Dartre rongeante idiopathique, Herpes exedens idiopathicus (*Alibert*): Dartre rongeante (*F.*).

Of this disease I shall not treat at any length; for I can mention no medicine which has been of any essential service in the cure of it, and it requires the constant assistance of the surgeon, in consequence of the spreading ulcerations, in which the original tubercles terminate.* (*Plate LXVII. of BATEMAN.*)

The term was intended by Dr. Willan to com-

* Alibert has two admirable portraits of Lupus in the face, in plates 19 *bis*, and 21; the former of Noli me tangere, which he calls "Dartre rongeante scrophuleuse;" and the latter of a less malignant variety, which he terms "Dartre pustuleuse couperose." His 19th plate is apparently an incipient Lupus of the ala nasi, under the appellation of "Dartre rongeante idiopathique."

prise, together with the "*noli me tangere*" affecting the nose and lips, other slow tubercular affections, especially about the face, commonly ending in ragged ulcerations of the cheeks, forehead, eyelids, and lips, and sometimes occurring in other parts of the body, where they gradually destroy the skin and muscular parts to a considerable depth. Sometimes the disease appears in the cheek circularly, or in the form of a sort of ringworm, destroying the substance, and leaving a deep and deformed cicatrix: and I have seen a similar circular patch of the disease, dilating itself at length to the extent of a hand-breadth or more upon the pectoral muscle. "Alibert mentions having seen instances in which it attacked the loins; and in one case the thigh was the site; and the disease proved fatal."

By surgical means, *i.e.* by the knife or the caustic, a separation has sometimes been made of the morbid from the sound parts, and the progress of the disease arrested. "I have employed the Nitrate of Silver with much advantage in some cases, extending the application beyond the limits of the ulceration. "In one case, in which disease was rapidly cured, the Hydriodate of Iron was internally administered in doses of sixty minims of a solution containing three grains in the drachm, in the Infusion of Quassia: and much of the rapidity of the cure was undoubtedly attributable to the Hydriodate." Mr. Plumbe states that in two cases he applied the Nitric Acid freely, and produced a healthy sore which readily healed.

In some cases, where the ulceration was very slow, and unaccompanied by much inflammation, the internal use of Arsenic has been found beneficial. "M. Dupuytren has lately found that it is a specific when externally applied, in conjunction with Calomel. His formula is the following powder:

R. Hydrargyri submuriatis præcip., partes 199;
 Oxidi Arsenici albi, partem 1:
 Tere optime.

“ If any crust cover the surface, let it first be removed by a poultice or other means ; then sprinkle the sore with the above powder, by means of a little puff. The sore puts on a healthy character and heals under this management. If the powder do not adhere, it may be mixed with Gum Arabic in powder, augmenting the quantity of the Arsenic.” The circumstance that Arsenic cures Lupus has, probably, given rise to the opinion that Cancer has been cured by that mineral. “ In both diseases, much caution is requisite in the application of Arsenious Acid to a denuded or ulcerated surface. The acid is absorbed, and may display its secondary or constitutional influence when least expected ; and be followed by the most dangerous results.” In three or four less severe cases of lupous tubercles in the face, which had made no progress towards ulceration, I have seen the Solution of Muriate of Barytes, taken internally, materially amend the complaint.

Books which may be consulted on Lupus.

PATRIX, l'Art d'appliquer le Caustique Arsenical, 8vo. 1817.

PLUMBE on Diseases of the Skin, 8vo. 1827.

RAYER, Traité des Maladies de la Peau, 8vo. 1826.

GENUS VII. ELEPHANTIASIS.

Syn. Ἐλεφας, ἑλεφαντία, ἑλεφαντίασις, σατυρίασις, λεοντίασις, ἡλάκλειον πάθος (G.): Vitiligo (Celsus): Ulcus universale (Paul. Egin.): Elephantiasis (Sag. Cull. Swed.): Elephantiasis Indica (Sawv.): Elephantia Arabum (Vog.): Elephantiasis Arabica, Lepidosis lepriasis (Good): Lepra Elephantiaca seu Arabica (Auct.): Mal mort, Mal rouge-lepre des jointures (F.): Koostum (Tam.): Ruggit pittee (Duk.): Pedda-ro gum (Tel.): Vhénghum, Koosthum (Sans.): Dzudham (Arab.): Khorah (Hind.): Der Elefan-

tenaussatz, der Aussatz, die Feldsucht (*German*): Fattenbruch, Oilschenkel (*Dutch*): Lazery, olifants zickte (*Dan.*): Spedalshed (*Swed.*): Lebbra, olefantiasi (*Ital.*): Mal de la rosa (*Span.*): Radesyge, Syedalsahed (*Norwegian*): *Black Leprosy*.

As the Elephantiasis is almost unknown in this country, and I have only seen four instances of the disease, I must speak of it principally as it is described in books; and should have omitted the subject altogether, had it not appeared to me that some comment on the mistakes of translators and their followers, as well as on the history of the disease in general, might contribute to put the matter in a clearer light than that in which it now stands,

The Elephantiasis (Plate LXVIII. of BATEMAN) (as described by the Greeks*) is principally characterised by the appearance of shining tubercles, of different sizes, of a dusky red or livid colour, on

* The terms *ἑλεφας* and *ἑλεφαντιασις* were applied to this tubercular disease by Aretæus, and the succeeding Greek writers, partly, perhaps, on account of some resemblance of the diseased skin to that of the elephant; but principally from the formidable severity and duration of the disease. "For it is disgusting to the sight," says Aretæus, "and in all respects terrible, like the beast of similar name." (*De Diuturn. Morb. lib. ii. cap. 13.*) And Aëcius observes, "Elephantiasis quidem à magnitudine et diuturnitate nomen accepit." (*Tetrabibl. iv. serm. i. cap. 120.*) So also the poet:—

"Est lepræ species, elephantiasisque vocatur,
Quæ cunctis morbis major sic esse videtur
Ut major cunctis elephas animantibus exstat."

Macer de Herbar. Virtut.

The same disease was described by the Arabians, under the appellation of Juzam or Judam, and is still designated by similar terms in Arabia and Persia, viz. Dejuddam, and Madsjuddam, according to Niebuhr. (*Description de l'Arabie, tom. iii. p. 119.*) The translators, however, of the works of the Arabian physicians into Latin, committed an extraordinary blunder, in rendering this appellation by the Greek term *Lepra*; by which they misled their brethren (who henceforth called Elephantiasis the Arabian *Leprosy*), and contributed to introduce much confusion both into medical and popular language in the use of the term. The Arabians have not employed the word *Lepra*; but have designated the varieties of scaly and tubercular diseases by appellations in their own language, as distinct and definite as those of the Greeks. (See Avicenna, lib. iv. fen. 3. tract. 3.—Alsaharavius, tract. 31.—Haly Abbas, Theoricæ, lib. viii. cap. 15., and Pract. cap. 14.—Avenzoar, lib. ii.)

the face, ears, and extremities ; together with a thickened and rugous state of the skin, a diminution or total loss of its sensibility, and a falling off of all the hair, except that of the scalp.

The disease " is said seldom to appear in youth ; but the only case of it which the editor ever saw, was that of a boy of fourteen years of age, a native of Jamaica, in whom the disease developed itself two months after he arrived in this country." It is described as very slow in its progress, sometimes continuing for several years, without materially deranging the functions of the patient. During this continuance, however, great deformity is gradually produced. The alæ of the nose become swelled and scabrous, and the nostrils dilate ; the lips are tumid ; the external ears, particularly the lobes, are enlarged and thickened, and beset with tubercles ; the skin of the forehead and cheeks grows thick and tumid, and forms large and prominent rugæ, especially over the eyes : the hair of the eyebrows, the beard, the pubes, axillæ, &c. falls off ; the voice becomes hoarse and obscure ; and the sensibility of the parts affected is obtuse, or totally abolished, so that pinching or puncturing them gives no uneasiness.* This disfiguration of the countenance suggested the idea of the features of a satyr or a wild beast ; whence the disease was by some called *Satyriasis*†, and by others *Leontiasis*.‡

* From an interesting account of the Elephantiasis by Mr. Robinson, a resident in India, it appears that this insensibility occurs only in the *Baras* or *Leuce* ; his description of which will be found in a subsequent page.

† The term *Satyriasis*, or *Satyriasmus*, was also deemed applicable to the disease, on account of the excessive libidinous disposition said to be connected with it. See Aretæus, loc. cit. ; and Aëtius, tetrab. iv. serm. i. cap. 120. But in all the cases which I have seen, they produced the contrary condition, destroying both the power and the appetite. Mr. Robinson, however, says that its first effect is an increase of the venereal passion, which becomes lost during its progress.

‡ The two Greek writers, just quoted, attribute this name to the laxity and wrinkles of the skin of the forehead, which resembles the prominent and flexible front of the *lion*. But the Arabian writers

As the malady proceeds, the tubercles begin to crack, and at length to ulcerate: ulcerations also appear in the throat, and in the nose, which sometimes destroy the palate and the cartilaginous septum; the nose falls; and the breath is intolerably offensive: the thickened and tuberculated skin of the extremities becomes divided by fissures, and ulcerates, or is corroded under dry sordid scabs, so that the fingers and toes gangrene, and separate joint after joint.*

ascribe it to a different source. Haly Abbas says the countenance was called *leonine*, because the white of the eyes becomes livid, and the eyes of a round figure; and Avicenna observes that the epithet was applied to the disease, because it renders the countenance terrible to look at, and somewhat of the form of a lion's visage: loc. cit. These appellations prove that the allusions were entirely metaphorical, and did not refer to any resemblance in the skin of patients to the hide of these beasts.—M. Alibert has figured two varieties of Elephantiasis; viz. in plate 32., under the title of "Lèpre tuberculeuse," where it is incipient on the eyebrows; and, in plate 34., affecting the nose and lips, where it is called "Lèpre leontine." His "Lèpre elephantiasis," plate 33., is the Barbadoes leg.

* Alsharavius thus states the symptoms of the *juzam*, when fully formed:—"The colour of the skin is changed, the voice is lost, the hairs have entirely disappeared; the whole surface of the body is ulcerated, discharging a putrid sanies, with extreme fœtor; the extremities begin to fall off, and the eyes weep profusely." Lib. Practice, tract. 31. cap. 1.

"The accuracy of this description is confirmed by Dr. Kinnis's very minute detail of the symptoms of the disease, as it appears in the Isle of France.* He describes the tubercles as differing in form, being flat, oval, and irregular: larger on the forehead and bridge of the nose, but smaller and more confluent on the cheeks, 'which,' he remarks, 'sometimes hang down from the bones, stretching and depressing the corners of the mouth.' He further says, 'the lips, when affected, were penetrated by hard, whitish bodies, like recently-formed cicatrices.' The tumours are not confined to the external surface, but, according to Dr. Kinnis, are observed in the mouth, on the palate, uvula, fauces, and tonsils, of a yellowish-red or a red colour, smooth, shining, and about the size of a split pea: yet so little inconvenience was experienced by the affected from these tubercles in the mouth, that 'one or two were not even aware of their existence previous to examination.' It is a curious fact, that the palms of the hands and the soles of the feet were seldom tuberculated in those cases which Dr. Kinnis examined. He found the pulse generally weak, 'and above a hundred in a minute.'" T.

† Edinburgh Med. and Surg. Journ. vol. xxii. pp. 286—294.

Aretæus and the ancients in general consider Elephantiasis as an universal *cancer* of the body, and speak of it with terror: they depict its hideous and loathsome character, its contagious qualities, and its unyielding and fatal tendency, in strong metaphorical language, which, indeed, tends to throw some doubt on the fidelity of their description. The very appropriation of the name is poetical; and Aretæus has absurdly enough prefixed to his description of the disease an account of the elephant, in order to point out the analogy between the formidable power of the beast and of the disease. It is probable that his terrors led him to adopt the popular opinion respecting the malady, without the correction of personal observation: for, although his account has been copied by subsequent writers*, and the same popular opinions have been constantly entertained, there is much reason to believe that some of the prominent features of his portrait are incorrectly drawn.

Notwithstanding the care with which the separation and seclusion of lepers have been enforced, in compliance with the ancient opinion, there is great reason to believe that Elephantiasis is *not contagious*.† M. Vidal long ago controverted that opinion, having never observed an instance of its communication from a leprous man to his wife, or *vice versâ*‡,

* It is impossible to read the description of this disease (as said to occur at Barbadoes) by the learned Dr. Hillary, without a conviction that that respectable physician had in his mind the history detailed by the eloquent Greek (Aretæus), and not the phenomena of the disease, as he had himself seen it. See his Obs. on the Air and Dis. of the Island of Barbadoes, p. 322., 2d edit.

† Turner quotes from several ancient authors to prove its contagious nature. — Treatise on Diseases of the Skin, 4th edit. p. 14, 15. T.

‡ See his Recherches et Obs. sur la Lèpre de Martigues, in the Mém. de la Soc. Roy. de Méd. tom. i. p. 169. — Dr. Joannis, a physician at Aix, who investigated the disease in the lazarus-house at Martigues, in 1755, also asserts the rarity of its communication between married persons. See Lond. Med. Obs. and Inquiries, vol. i. p. 204. — Indeed, several able physicians, two centuries before, though bending under the authority of ancient opinion, yet acknowledged their astonishment at the daily commerce of lazarus with the healthy, without any communi-

although cohabiting for a long series of years. Dr. T. Heberden daily observed many examples of the same fact in Madeira, and affirms that "he never heard of any one who contracted the distemper by contact of a leper." Dr. Adams has given his testimony to the same truth, remarking, that none of the nurses in the lazar-house at Funchall have shown any symptoms of the disease; and that individual lazars have remained for years at home, without infecting any part of their family.* "Dr. Whitlaw Ainslie, who saw many cases of the disease in India, is decidedly of this opinion; but he regards it as hereditary. Its non-contagious nature is also confirmed by Dr. Kinnis."

With respect to the *libido inexplebilis*, which is said to be one of the characteristics of Elephantiasis, the evidence is not so satisfactory. Its existence, however, is affirmed by most of the modern writers, with the exception of Dr. Adams "and Dr. Kinnis." MM. Vidal and Joannis mention it among the symptoms of the disease at Martigues.† Dr. Bancroft, senior, states its occurrence in the Elephantiasis of South America‡: and Professor Niebuhr asserts, that it appears in the Dsjuddam of Bagdat.§ But Dr. Adams observed, on the contrary, in the lazars of Madeira, an actual wasting of the generative organs

cation of the disease. See Fernel, de Morb. Occult. lib. i. cap. 12.: Forest. Obs. Chirurg. lib. iv. obs. 7.: also the works of Fabricius, Plater, &c. Fernel, indeed, admits that he never saw an instance which proved the existence of contagion.

* See his Obs. on Morbid Poisons, 2d edit. chap. 18.

† M. Vidal particularises the case of Arnaud, a sailor, who had been afflicted with the tubercular Elephantiasis six months, when he died of putrid fever. "Il n'avoit cessé, presque jusqu'à sa mort, de ressentir les ardeurs d'un assez violent Satyriasis."

‡ "Lepers are notorious for their salacity and longevity." Nat. Hist. of Guiana, p. 385.

§ Loc. cit. The story related by Niebuhr, of a lazar gratifying this propensity by infecting a woman by means of linen sent out of the lazar-house, and thus obtaining her admission, appears, however, to be entitled to little credit.

in men who had been seized with the malady subsequent to the age of puberty, and a want of the usual evolution of them in those who had been attacked previous to that period.* Is the Elephantiasis in Madeira now less virulent than that of former times? has it undergone some change in its character? or is the ancient account of the disease incorrect? "Elephantiasis is very prevalent in the island of Java; and a Dutch physician, on whose authority this is stated, observed that it attacked women more rarely than men."

It is generally affirmed, that the Elephantiasis was extensively prevalent in Europe, in the middle ages, especially subsequent to the crusades; and it is certain that every country abounded with hospitals, established for the exclusive relief of that disease, from the tenth to the sixteenth century †; and that, an order of knighthood, dedicated to an imaginary St. Lazarus, was instituted, the members of which had the care of lepers, and the control of the lazarettoes, assigned to them, and ultimately accumulated immense wealth. From these facts, however, nothing satisfactory is to be collected, respecting the actual prevalence of Elephantiasis at those periods. For although it is obvious, from the nature of the examination instituted by the physicians of those lazarettoes, that the tubercular disease was the object of their inquiry, yet it is also evident that, in consequence of the general application of the term,

* Dr. Kinnis saw no instance of this in the Isle of France, "the testicles in males, and the breasts in females, being constantly of their natural size." T.

† The number of these establishments, however, has been greatly misrepresented, in consequence of an error of quotation from Matt. Paris, which has been echoed by several authors. That historian has been made to assert, that, in the thirteenth century, there were 19,000 lazarettoes in Christendom; whereas he only states that the Knights Hospitaliers were then in possession of so many *manors*. "Habent Hospitalarii novemdecim millia maneriorum in Christianitate," are his words. See his *Hist. Angl. ad ann. 1244*; also Du Cange, *Gloss. voc. Lazari*; Mezeray, *Hist. de France*.

leprosy, to the Elephantiasis, to the leprosy of the Jews*, to the proper scaly *Lepra*, and even to other cutaneous affections, which have no affinity with either of the diseases just mentioned, almost every person, afflicted with any severe eruption or ulceration of the skin, was deemed *leprous*, and was received into the lazarettoes. This fact, indeed, is acknowledged by many of the physicians to these hospitals, in the sixteenth century and subsequently. Gregory Horst, who was one of the appointed examiners at Ulm, towards the close of that century, and who has given a minute detail of his investigations, admits that, "where the tubercles of the face, the thick lips, acuminated ears, flattened nose, round eyes (the essential symptoms of Elephantiasis) are absent; yet if the patients are affected only with a dry and foul Scabies, with pustular eruptions, fissures, and branny exfoliations, which constitute the *Psora* of the Greeks, — or even with great itching, emaciation, ulceration, and exfoliations of thicker scales, which are the *Lepra* of the Greeks, — nevertheless, they are sent to the lazarettoes, if they are poor, for the means of subsistence. Hence it happens," he adds, "that, here and elsewhere, *very few instances of real Elephantiasis* are found in the lazarettoes, while *many* are there affected only with an obstinate

* This appears to have been the *Leuce* of the Greeks, the white *Baras* of the Arabians, and the third species of *Vitiligo* of Celsus. (See Hippocrat, *Περὶ Πιθων*. Avicen. loc. cit. — Cels. de Med. lib. v. cap. 28.) The two characteristic symptoms of the Hebrew leprosy, which are pointed out in the Mosaic account, are the *whiteness of the hair* of the parts affected, and the *depression* of the skin. "And if the *hair* of the plague is *turned white*, and the plague in sight be *deeper* than the skin of his flesh, it is a plague of leprosy," &c. (Leviticus, chap. xiii.) Thus also Avicenna: "There is this difference between the white *Alguada* (*Alphos*) and the white *Baras*; the hairs grow upon the skin affected with the former, and they are of a black or brown colour: but those which grow in the *Baras* are *always white*, and at the same time the skin is *more depressed* or *sunk* than the rest of the surface of the body." (Loc. cit.) And Celsus: "λευκη habet quiddam simile alphi; sed magis albidus est, et altius descendit; in eaque *albi pili* sunt, et lanugini similes."

Psora or Lepra Græcorum.”* Forestus, who held a similar office at Alcmaer and Delft, in the same century, affirms that a very small proportion of the persons who wandered about the Low Countries, as lepers and beggars, were true lepers ; but were merely affected with Scabies, or some external defœdation of the skin. “Nay,” he says, “not one in ten of them is truly a leper, or afflicted with the legitimate Elephantiasis.”† Riedlin makes a similar observation respecting the patients admitted into the leper-hospital at Vienna.‡ Indeed, there is little doubt that every species of cachectic disease, accompanied with ulceration, gangrene, or any superficial derangement, was deemed *leprous*; and hence that, in the dark ages, when the desolation of repeated wars, and the imperfect state of agriculture, subjected Europe to almost constant scarcity of food, the numerous modifications of Scurvy and Ignis sacer, which were epidemic during periods of famine, and endemic wherever there was a local dearth, were in all probability classed among the varieties of leprosy; more especially as the last stage of the Ignis sacer was marked by the occurrence of ulceration and gangrene of the extremities, by which the parts were mutilated, or entirely separated.† “With regard to the causes of this disease, independent of its hereditary taint, nothing satisfactory has been suggested. The Vytians of

* See his Obs. Med. lib. vii. obs. xviii. epist. J. H. Hopfnero.

† See his Obs. Chirurg. lib. iv. obs. vii. schol.

‡ “Sicuti vero non *nisi rarissimè* inveniuntur, quibus Leprosi nomen meritò et reverà attribui posset, uti quidem leprosi à plerisque auctoribus describuntur; sed *plerumque* hisce domibus illi includuntur, qui Scabiæ siccâ, fædâ, et diu jam instante, laborant,” &c. D. V. Riedlin, *Lineæ Med.* vol. iii. Ann. 1697. Mens. Maio.

† It would be foreign to my purpose to enter into any detail here respecting the history and symptoms of the Ignis sacer, which was correctly ascribed by Galen (de Succor. Bonit. et Vitio, cap. 1.—De Natur. Humor. lib. ii. cap. 3., &c.) to the use of unsuitable food. It has been well described by Lucretius, lib. vi. In more recent times, it has been erroneously supposed to originate from various deleterious substances taken with the food, and not from actual deficiency of nutriment. See above, p. 134, 135.

Lower India," says Dr. Ainslie, "reckon eighteen varieties of leprosy, all of which they conceive to be produced by one or other of the following causes: 1. Drinking milk after eating fish to excess; 2. eating flatulent food; 3. eating to excess the grain of the *Dolichos lablab*; 4. drinking cold water after having perspired much; 5. eating to excess the seed of the *Sesamum Orientale*; 6. checking vomiting so as to allow undigested matter to get into the bowels; 7. sensual indulgence in the daytime; 8. habitual costiveness; 9. the bites of a cat, and of certain snakes, a certain lizard, and certain wasps; 10. worms. Such are the absurd causes to which the natives of a country, in which the disease prevails, ascribe Elephantiasis. Dr. Ainslie says, it is more common on the coast than in the interior; and he supposes that this may arise from the natives eating a bad kind of fish; or too much salt fish, of which they are very fond. He adds, that he never knew a native of Great Britain or Ireland to have the disease; but had seen a Swede, two Danes, and a German labouring under it."

Under the head of Elephantiasis, Dr. Winterbottom appears to have described the *Leuce*, and not the Elephantiasis of the Greeks; the *Baras*, and not the *Juzam* of the Arabians. The principal symptoms which he witnessed were the *pale* colour of the skin (in black subjects) and its loss of sensibility, which are distinctly stated as the leading symptoms of *Leuce*, by Celsus, and by the other Roman and Greek physicians, as well as of *Baras* by the Arabians.* Some of the Greeks and Arabians, indeed, seem to consider the *Leuce*, or *Baras*, as possessing an affinity with Elephantiasis, and sometimes terminating in it†; and, if they be not modi-

* See Celsus de Medicina, lib. v. cap. 28. — Aëtius, tetrab. iv. serm. i. cap. 123. — Paul. Æginet. lib. iv. cap. 5. — Actuarius, Meth. Med. lib. ii. cap. 11.

† Avicenna applies the term *Baras*, with the epithet *black*, to the rugged and scaly state of the skin in Elephantiasis (lib. iv. fen. 3.

fications of the same disease, it is probable that some of the symptoms of the one (Leuce), such as the insensibility, and change of the colour and strength of the hair, may have been transferred in description to the other.* The numerous large tubercles of the nose, forehead, and ears, which are deemed characteristic of Elephantiasis, did not appear in the disease seen by Dr. Winterbottom. The swellings or tuberosities of the joints of the hands and feet, which terminate in ulcerations, that occasion the fingers and toes to drop off, appear also to belong to the two diseases in common, and afford another proof of their affinity. Nevertheless, as we have nowhere any account of the regular succession of the tubercular state (Elephantiasis or Juzam) to that of mere discoloration and insensibility (Leuce or Baras), we are not warranted in drawing the conclusion that they are but degrees or stages of the same disease.† Accurate histories of the Elephantiasis, Leuce, and other modifications of the formidable cutaneous diseases that occur in hot climates, and especially where agriculture and the arts of civilisation are imperfectly

tract. 3. cap. i. — and fen. 7. tract. 2. cap. 9.), and Alsaharavius expressly states, that when the disease arises from putrid phlegm, it commences with Baras, or with white Bohak (Alphos of the Greeks), and becomes Juzam in its advanced stage. Lib. Pract. tract. 31. cap. 1. See also Dr. Thomas Heberden's account of Elephantiasis in the Island of Madeira. (Med. Trans. of the Coll. of Physicians, vol. i. p. 27.)

Plenck describes it under the name *Lepra der Aussatz*. Vide *Doct. de Morb. Cutan.*, p. 67.

* This conjecture has been confirmed by Mr. Robinson, in the paper above alluded to.

† It is curious that the Foolas, on the coast of Africa, employ the Arabian terms; but, if Dr. Winterbottom was correctly informed, in an inverted sense. They divide the disease into three species, or rather degrees: 1. the *damadyang*, or mildest leuce, when the skin is merely discoloured and insensible in patches; 2. the *didyam* (sometimes written *sghidam*, *dajuddam*, and *juzam*,) when the joints of the fingers and toes are ulcerated and drop off, the lips are tumid, and the *alæ nasi* swell and ulcerate; and, 3. the *barras*, when these symptoms are increased, and, from ulcerations in the throat and nose, the voice becomes hoarse and guttural. See his Account of the Native Africans in Sierra Leone, vol. ii. chap. 4.

advanced, must be deemed still among the *desiderata* of the pathologist.

While the fifth edition of this work is in the press (Dec. 1818), I have had the satisfaction of perusing a valuable paper, written by Mr. Robinson, a medical practitioner in India, which confirms the accuracy of my description of the tubercular Elephantiasis, and supplies the desideratum above noticed, by furnishing a clear and distinct history of the Baras, or white leprosy, as well as the notice of a remedy adequate to its cure.

This paper will probably appear in the 10th vol. of the Transactions of the Med. and Chirurg. Society of London; but I am permitted to extract the following description: — “ One or two circumscribed patches appear upon the skin, (generally the feet or hands, but sometimes the trunk or face,) rather lighter coloured than the neighbouring skin, neither raised nor depressed, shining and wrinkled, the furrows not coinciding with the lines of the contiguous sound cuticle. The skin thus circumscribed is so entirely insensible, that you may with hot irons burn to the muscle, before the patient feels any pain.* These patches spread slowly until the skin of the whole of the legs, arms, and gradually often the whole body, becomes alike devoid of sense: wherever it is so affected, there is no perspiration; no itching, no pain, and very seldom any swelling. Until this singular apathy has occupied the greater part of the skin, it may rather be considered a blemish than a disease: nevertheless it is most important to mark well these appearances, for they are the invariable commencement of one of the most gigantic and incurable diseases that have succeeded the fall of man; and it is in this state chiefly (though not exclusively) that we

* In the cases of real tubercular Elephantiasis, described by Dr. Kinis, “ the parts affected with the disease were benumbed, or, as the patients sometimes expressed it, ‘ asleep,’ but they had never entirely lost their sensibility.” — Edin. Journ. l. c. T.

are most able to be the means of cure. The next symptoms (which occur in some patients at two months, but in others not till after five or six years) are the first which denote internal disease or derangement of any functions. The pulse becomes very slow (from 50 to 60), not small but heavy, 'as if moving through mud;' the bowels are very costive, the toes and fingers numbed, as with frost, glazed and rather swelled, and nearly inflexible. The mind is at this time sluggish and slow in apprehension, and the patient appears always half asleep. The soles of feet and the palms of the hands then crack into fissures, dry, and hard as the parched soil of the country; and the extremities of the toes and fingers under the nails are encrusted with a furfureous substance, and the nails are gradually lifted up, until absorption and ulceration occur. Still there is little or no pain; the legs and fore-arms swell, and the skin is every where cracked and rough. Contemporarily with the last symptoms, or very soon afterwards, ulcers appear at the inside of the joints of the toes and fingers, directly under the last joint of the metatarsal or metacarpal bones, or they corrode the thick sole under the joint of the os calcis, or os cuboides. There is no previous tumour, suppuration, or pain, but apparently a simple absorption of the integuments, which slough off in successive layers of half an inch in diameter. A sanious discharge comes on; the muscle, pale and flabby, is in turn destroyed; and the joint being penetrated as by an auger, the extremity drops, and at length falls a victim to this cruel, tardy, but certain poison. The wounds then heal, and other joints are attacked in succession, whilst every revolving year bears with it a trophy of this slow march of death. Thus are the limbs deprived one by one of their extremities, till at last they become altogether useless. Even now death comes not to the relief of, nor is it desired by, the patient, who, 'dying by inches,' and a spectacle of

horror to all besides, still cherishes fondly the spark of life remaining, and eats voraciously all he can procure : he will often crawl about with little but his trunk remaining, until old age comes on ; and at last he is carried off by diarrhœa or dysentery, which the enfeebled constitution has no stamina to resist. Throughout the progress of this creeping but inveterate complaint, the health is not much disturbed ; the food is eaten with appetite, and properly, though slowly, digested. A sleepy inertness overpowers every faculty, and seems to benumb, almost annihilate, every passion as well of the soul as of the body, leaving only sufficient sense and activity to crawl through the routine of existence.”

Mr. Robinson adds, that he has never seen this disease attack the larger joints, destroy the nose, nor affect any of the bones, except those of the hands and feet ; and that the tuberculated Elephantiasis, though it sometimes supervenes, is by no means connected with, caused by, or necessarily subsequent to it.

Mr. Robinson affirms, that the cure of this disease may be generally accomplished in the early stage, by the use of a plant which grows abundantly in India, and which appears to possess remedial qualities which entitle it to an introduction into the Pharmacopœias of Europe, namely ; the *asclepias gigantea*, especially in combination with alterative doses of mercury and antimony, and with topical stimulants.

By the surgeons of the present day the appellation of Elephantiasis is appropriated to a disease, altogether different from the malady originally so called by the Greeks ; namely, to an enormously tumid condition of the leg*, arising from a repeated effusion and collection of a lymphatic and gelatinous matter in the cellular membrane under the skin, in consequence of inflammation of the lym-

* *Syn.* — Elephantiasis (*Auct. var.*): Bucnemia (*Good*): Anay kaal (*Tam.*): Huttie kā pāwny (*Duk.*): Yeanugay kāloo (*Tel.*): Ghéjapádhá vāyoo (*Sans.*): Dail fil (*Arab.*): Drusenkrankheit (*German*): Yara-şkin (*Polynes Isles*): Barbadoes leg (*Hillary*): *Cochin leg.*

phatic glands and vessels. The skin itself is much thickened in the protracted stages of this extension, and its vessels become much enlarged; its surface grows dark, rough, and sometimes scaly.* This condition of the surface, together with the huge mis-shapen figure of the limb, bearing some resemblance to the leg of an elephant, suggested the application of the term.† As the effusion first takes place after a febrile paroxysm, in which the inguinal glands of the side about to be affected are inflamed, and the limb is subsequently augmented in bulk by a repetition of these attacks, Dr. Hendy termed the malady “the glandular disease of Barbadoes,” in which island it is endemial.‡ In England it is often called “the Barbadoes leg.”§ Except when these paroxysms occur, the functions and constitution of the patients are not materially injured, and they often live many years, incommoded only by carrying about “such a troublesome load of leg.”||

* See Alibert’s plate of “*Lepra elephantiasis*,” No. 53., where this is well represented.

† The appellation of *elephant*, or *elephant-disease*, was, in fact, applied to this affection by the Arabians, confessedly from this resemblance (see Haly Abbas, *Theor.* lib. viii. cap. 18.;—Avenzoar, lib. ii. cap. 26.;—Alsaharavius, *Pract. tractat.* xxviii. cap. 11., &c.) hence the translators; were puzzled, and misinterpreted *Juzam* by the Greek term *Lepra*. The translator of Haly Abbas was alone correct in rendering the Arabic names: having given the proper classical appellation of *Elephantiasis* to the tubercular *Juzam*, he translates this name (denoting the *elephant-leg* by the term *Elephas* (loc. cit.;—also *Theoricè*, lib. viii. cap. 15.; and *Practicè*, cap. 4.). For, as this disease had not been noticed by the Greek physicians, even by those of the eastern empire, there was no classical term by which it could be rendered.

‡ See his inaugural dissertation, and subsequent treatise on the subject, London, 1784; also Rolle’s “Remarks on the Disease lately described by Dr. Hendy,” &c. 1785.

§ The disease is not exclusively confined to the leg; it sometimes appears in the arms, and even on the ears, breast, scrotum, &c. Hillary on the Diseases of Barbadoes, p. 313.;—Hendy, part. i. sect. 2.

|| See Hillary on the Climate and Dis. of Barbadoes. It is affirmed by Dr. Clarke, however, and by Dr. Winterbottom, that the agility of the patients, who are affected with this unseemly deformity, at Cochín, and on the Gold Coast, is not impaired by it. (See Clarke’s *Obs.* on the Dis. in Long Voyages to Hot Climates; Winterbottom, loc. cit. p. 113.)

In this country the disease is only seen in its inveterate stage, after repeated attacks of the fever and effusion have completely altered the organisation of the integuments of the limb, and rendered it altogether incurable. In this state, the swelling is hard and firm, does not pit on pressure, and is entirely free from pain. The skin is thickened and much hardened; its blood-vessels are enlarged, particularly the external veins, and the lymphatics distended; and the cellular substance is flaccid, and sometimes thickened, and its cells much loaded with a gelatinous fluid. The muscles, tendons, ligaments, and bones, are generally in a sound state. — In this advanced stage, the disease is altogether irremediable; and indeed little success seems to have attended the practice employed in the earlier stages, which has been chiefly directed to alleviate the febrile paroxysms by laxatives and diaphoretics, and subsequently to strengthen the system by Cinchona. Local bleeding has never been employed; for there are no leeches in Barbadoes, according to Dr. Hendy; but after the fever and inflammation have subsided, he strongly recommends the binding of the limb in a tight bandage, as the means of exciting absorption, and of reducing the swelling.*

Dr. Hendy observes that, in consequence of the gradual augmentation of the bulk, patients are not in general sensible of the weight, except when they are debilitated by indisposition.

* While this sheet was in the hands of the compositor, I was favoured by Mr. J. Mason Good, a gentleman distinguished by his knowledge of the oriental languages, with some observations relative to the original Arabic appellations of these diseases, which, while they confirm the views which I had entertained in general, throw additional light on the subject.

“The Leprosy of the Arabs,” he says, “appears to have been called by themselves immemorably, and is still called *juzam* and *juzamlyk*, though vulgarly and more generally *judam* and *judamlyk*, from an Arabic root, which imports erosion, truncation, excision. The term *juzam* has passed from Arabia into India, and is the common name for the same disease among the Cabirajas, or Hindu physicians, who also oc-

In conclusion, then, it will be seen that the terms Elephantiasis and Lepra have been thus confounded. The word Lepra (which should be confined to a *scaly* disease) has been erroneously applied to the proper Elephantiasis (a *tubercular* disease). Elephantiasis again, which is so distinctly described by the Greek writers, has been transferred, by the Latin translators of the Arabian writers, to the local affection of the leg, (the *elephas* of these writers, the *Barbadoes* leg, and the glandular disease of Dr. Hendy,) and is commonly used in that acceptance by practitioners at present. But it has been also misapplied to the white disease of the skin, called by the Greeks, Romans, and Arabians Leuce, Vitiligo, and Baras (or Beras) respectively: and thence, by an easy step, it has

casionally denominate it *Fisâdi khûn*, from its being supposed to infect the entire mass of blood, but more generally *khora*."

I learn also from this communication, that the original Arabic term, which was used to denote the *tumid leg* above mentioned, was *dal fil*, which is literally *elephant disease*; and further, that "*dal fil* is the common name for the *swelled leg* in the present day among the Arabians, who sometimes contract it to *fil* alone, literally *elephas*."

But although the Arabians in general distinguish the *Juzam* from other diseases; yet I have observed that they sometimes mentioned the *baras (leuce)* as having an affinity with it, calling some forms of the *Juzam black baras*. Mr. Good remarks, that "*juzam* itself has occasionally been employed in the same loose manner; and has been made to import leucè or vitiligo, as well as proper or black judam; though in the former case it is commonly distinguished by the epithet *merd*, i. e. *pilis carens*, as *merd-juzam*, *bald juzam*. The proper and more usual name for this last disease is *beras* or *aberas*, sometimes written *alberas*, though less correctly, as this last is *beras*, with a mere prefix of the definite article."

Mr. Good adds, "that one of the most celebrated remedies for this disease (*juzam*) employed by the Căbirajas, or Hindu physicians, is arsenic (*Shuce*. in India *sanc'hya*) mixed in pills with black pepper," six parts of the latter being added to one of the former: the pills are ordered to be of the size of small pulse, and one of them is to be swallowed morning and evening, with some betel leaf.

Since the publication of the former editions, I have had an opportunity of seeing two cases of Elephantiasis, which have been under treatment in London during the greater part of the present year (1814); and in both the arsenic had been fully tried, and proved to be entirely void of any remedial power.

been again transferred, by some unlearned persons, even to the scaly *Lepra*; while the term *Lepra* has been often indiscriminately applied to all these affections. I trust, the foregoing statements may contribute to elucidate this matter. "With regard to the remedial treatment of Elephantiasis, our experience in this country affords us little assistance.

"Among the multifarious remedies proposed and employed by the ancients, one of the most likely to prove useful was Decoction of Elm Bark in the proportion of ζiv of the bark to lbijj , boiled down one half. After bleeding and purging, Willis recommended a Mixture in which the sharp-pointed Dock, *Rumex acutus* (*Oxylapathum*), was the most active ingredient.* This plant was also used along with Bryony, Scabious Mallow, and Chamomile flowers in the formation of a bath; and it also entered a liniment. In India the chief reliance is placed on a powder (termed *mudar*) prepared from the root of the *Esclapias Gigantea* †, a plant described by Dr. Ainslie in the *Mat. Med. of Hindostan*. This author, in a letter to the Editor, says, "I found, when the disease was taken early, that mercurials, judiciously administered in small doses, were almost the only remedy that did good. I thought that in two or three cases, treated in this way, I entirely removed it. Nothing can be done without the frequent use of the tepid bath, so that the skin may be kept in the cleanest state possible."

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* Willis de *Impetigine sive Lepra Græc.* Sect. 3. c. 7. T.

† *Edin. Med. & Chir. Trans.*, vol. i. p. 414. T.

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GENUS VIII. FRAMBŒSIA.

YAWS.

Syn. Frambœsia (*Auct. Var.*): *Lepra fungifera* (*Cartheuserus*): Gattoo, Yaw (*Afric.*): Anthracia rubula (*Good*): Phymatosis frambœsia (*Young*): Thymiosis (*Swedeaur*): Pian (*Native American*): der Schwammförmige Aussatz (*German*): Framboasia (*Ital.*): Frambuesa (*Span.*): Yaws.

Def. IMPERFECTLY SUPPURATING TUMOURS, GRADUALLY INCREASING FROM SPECKS TO THE SIZE OF A RASPBERRY; WITH A FUNGOUS CORE: ONE TUMOUR GENERALLY GROWING LARGER THAN THE OTHERS. FEVER SLIGHT BUT CONTAGIOUS: OCCURRING ONCE ONLY DURING LIFE.

The nature of this disease, which is indigenious in Africa, and has been thence conveyed to the West Indies and America, has been imperfectly investigated by European practitioners; and as it is perhaps

never seen in England, a very brief account of it here will be sufficient.*

The eruption of the Yaws sometimes commences without any precursory symptoms of ill health; but it is generally preceded by a slight febrile state, with languor, debility, and pains of the joints, resembling those of rheumatism.† The whole skin at this period seems as if dusted with flour. After several days, minute protuberances ‡ appear on various parts of the skin, at first smaller than the head of a pin, but gradually enlarging, in some cases to the diameter of a sixpence, and in others even to a greater extent: they are most numerous, and of the largest size, in the face, groins, axillæ, and about the anus and pu-

* Yaws, *sibbens*, raged in Scotland in the 17th century; and even at this period it is occasionally met with in the Shetland Islands. T.

M. Alibert has figured two diseases as examples of Framboesia, under the titles of "*Pian ruboide*," and "*P. fungoide*," which were seen at the hospital St. Louis at Paris; but they are obviously not Yaws. The first of them appears to be a neglected Porrigo, or a Sycosis, of the scalp (plate 35.); and the other a species of wen (plate 36.).

Dr. James Thomson objects to the disease being classed with the Tubercula. The eruption is at first papular, then pustular, and ultimately fungoid. — Edin. Med. and Surg. Journ., vol. xv. p. 322. T.

† The earlier writers on this disease assert, that the general health is not impaired by this eruption during the first stages. But on the authority of Dr. Winterbottom, and of Dr. Dancer, I have stated that a *febricula* is the ordinary precursor of the Yaws. Dr. Winterbottom, indeed, observes that the successive eruptions which occur are also usually preceded by slight febrile paroxysms, sometimes by rigors. See his account of the Nat. Africans of Sierra Leone, vol. ii. chap. 8.; — and Dancer's Medical Assistant.

‡ It is not easy to discover the precise character of this eruption, from the varying language of authors. An anonymous writer, who gave the first explicit account of the disease (see Edin. Med. Essays, vol. v. part. ii. art. 76.), says they are at first "level or smooth with the skin," but soon "become protuberant like pimples." Dr. Hillary, who has copied much from this writer, describes them as "*pimples*," though smooth and level with the skin, but soon becoming "protuberant *pustules*." (On the Dis. of Barbadoes, p. 339.) And Dr. Winterbottom, who has given, on the whole, the most perspicuous description of the disease, calls them "*pustules*" from their first appearance. Again, as to the contents of these eruptions, the anonymous author and Dr. Hillary say that *no pus*, nor any quantity of ichor, is found in them, but speak of a little *ichor* as drying upon the surface; while Dr. Winterbottom says, they are "filled with an opaque whitish fluid," and when they burst, "a thick viscid matter is discharged."

denda. But the crop is not completed at once ; new eruptions appear in different places, while some of the earlier ones dry off. When the cuticle is broken, a foul crust is formed on the surface, from under which, on the larger protuberances, red fungous excrescences often spring up, which attain different magnitudes, from that of a small raspberry to that of a large mulberry, which fruit they somewhat resemble from their granulated surfaces.* “ The period which these shoot is very uncertain ; varying from one month to three months.” When the eruption is most copious, these tubercles are of the smallest size : and when less diffuse, they are largest. “ In debilitated habits they bleed on the slightest touch.” Their duration and progress are various in different constitutions, and at different periods of life. Children suffer less severely than adults, and are more speedily freed from the disease : in them, according to Dr. Winterbottom, the duration of the Yaws is from six to nine months ; while, in adults, it is seldom cured in less than a year, and sometimes continues during two or three. “ The fungous tubercles attain their acme, according to Dr. Thomson, and the anonymous writer already quoted, more rapidly in the well-fed negroes than in those who are ill-fed and thin ; and they likewise acquire a larger size in the former than in the latter.” They are not possessed of much sensibility, and are not the seat of any pain, except when they appear upon the soles of the feet, where they are confined and compressed by the hard and thickened cuticle : in that situation they render the act of walking extremely painful, or altogether impracticable. They never suppurate kindly, Dr. Winterbottom says, but gradually discharge a sordid glutinous fluid, which forms an ugly scab round the edges of the

* Hence both the popular appellation of *Yaw*, which in some African dialect signifies a *raspberry*, and the nosological title, *Framboesia*, from the French *Framboise*, which denotes the same fruit. See Sauvages, Nosol. Méth., class x. ord. iv. gen. 23.

excrescence, and covers the upper part of it, when much elevated, with white sloughs. When they appear on any part of the body covered with hair, this gradually changes in its colour from black to white, independently of the white incrustation from the discharge. "It frequently falls off, and never grows again." They leave no depression of the skin.*

The period, during which the eruption is in progress, varies from a few weeks to eight months. "When no more pustules are thrown out," Dr. Winterbottom observes, "and when those already upon the skin no longer increase in size, the disease is supposed to have reached its acme. About this time it happens, on some part of the body or other, that one of the pustules becomes much larger than the rest, equalling or surpassing the size of a half-crown piece: it assumes the appearance of an ulcer, and, instead of being elevated above the skin like others, it is considerably depressed; the surface is foul and sloughy, and pours out an ill-conditioned ichor, which

* The anonymous writer in the Edin. Med. Essays, and after him Dr. Hillary and others, have deemed the Frambæsia to be the Hebrew leprosy, described by Moses. (Leviticus, chap. xiii.) In some respects, and especially in the appearance of what is called "raw flesh," in the leprous spots, together with *whiteness of the hair*, the description of the leprosy of the Jews is applicable to the Yaws. But the leprosy is described by the great legislator as beginning in several ways, or appearing under several varieties of form, in only one of which this rising of "raw flesh" is mentioned: and the two circumstances, which all these varieties exhibited in common, were a depression of the skin, and whiteness of the hair. Now this change in the colour of the hair is common to the Frambæsia, and to the Leuce, as stated; and it is conjoined, in the latter, with cutaneous depression. It seems pretty obvious, indeed, that the term leprosy was used, in the Scriptures, to denote several diseases of the skin, against which the law of exclusion was enforced, and others, to which it did not apply. An instance of the latter occurs in Gehazi, whom we find still in the employment of Elisha, and even conversing with the king, after the leprosy had been inflicted upon him, "and his seed for ever." (2 Kings, chap. v. & vi. & chap. viii. ver. 4.)

Dr. Hibbert (Edin. Journ. of Med. Science, vol. i. p. 287.) has satisfactorily proved, that the *great Gore, Pox, or Morbus Gallicus* of the 15th century, was Frambæsia. The name Sibbens, by which it is known in Scotland, is a corruption of the Gaelic word Sivvens, wild rash. T.

spreads very much, by corroding the surrounding sound skin : this is what is called the *master*, or *mother-yaw* ;” *Mama-pian*, by the negroes. When arrived at its acme, however, the eruption continues a considerable time without undergoing much alteration, often without very materially injuring the functions ; and it seldom proves dangerous, except from the mischievous interference of ill-directed art.*

The *Frambœsia* is propagated solely by the contagion of the matter, discharged from the eruption, when it is applied to the wounded or broken skin of another person, who has not previously undergone the disease.† “ It may be communicated by using the same spoon, by kissing, and by coition when its seat is in the genital organs, in which case it is often mistaken for syphilis.” Like the febrile eruptions, the *Frambœsia* affects the same person only once during life ; but, unlike them, it is not propagated by effluvia. In Africa it is usually undergone during childhood. The period, which elapses between the reception of the contagion and the commencement of the disease, is nowhere mentioned : but in the case of a Dane, whom Dr. Adams saw at Madeira, the patient had been ten months absent from the West Indies before he felt any indisposition.‡

With respect to the treatment of *Frambœsia*, nothing very satisfactory is to be collected from the writings of the practitioners to whom we are indebted for the history of the disease. The native Africans,

* “ All this time the patient is in good health, does not lose his appetite, and seems to have no other uneasiness but what the nastiness of the sores occasions,” &c. Edin. Med. Essays, vol. v. p. 789. The fact is stated by Hillary in the same words, p. 343.

† The complaint is sometimes inoculated by flies, in those hot countries where the skin both of the diseased and the healthy remains uncovered. Hence, Dr. Bancroft says, “ none ever receive it whose skins are whole; for which reason the whites are rarely infected; but the backs of the negroes being often raw by whipping, and suffered to remain naked, they scarcely ever escape it.” Nat. Hist. of Guiana, p. 385. See also Winterbottom, pp. 141—143.

‡ See Memoirs of the Med. Soc. of London.

according to Dr. Winterbottom, "never attempt to cure it, until it has nearly reached its height, when the fungi have acquired their full size, and no more pustules appear." And the practitioners in the West Indies soon learned by experience, that active evacuations retard the natural progress of the disease; and that mercurials, although they suspended it, and cleared the skin of the eruption, yet left the patient still susceptible of, or rather still impregnated with the virus, which speedily evinced its presence, by a reappearance of the symptoms more severe and tedious than before. In truth, the disease, it would seem, like the pustular and exanthematous fevers of our own climate, will only leave the constitution, after it has completed the various stages of its course, and removed the susceptibility of the individual to future infection; and no medicine, yet discovered, has had any influence in superseding this action, or in accelerating its progress. Unless, therefore, any urgent symptoms should require alleviation (which seldom, if ever, happens), it is advisable to dispense with the administration of medicine, and to be content with restricting the patient to a moderate and temperate regimen, during the first stage of the malady.* When the eruptions begin to dry, or as soon as they cease to multiply and enlarge, the disease appears to require the same management as other slow and superficial ulcerations, accompanied with a cachectic state of the system; viz. a light, but nutritious diet, a dry and wholesome air, warm clothing, moderate exercise, and a course of tonic medicine, especially of Sarsaparilla, or Cinchona, with the mineral acids, or with Antimonials and small doses of Mercury, according to the

* The anonymous writer in the Edin. Essays recommends the following bolus every night until the yaws are at their height.

℞ Florum Sulphuris ℥j.

Camphoræ gr. v.

Theriacæ Andromachi ℥j.

Syrupi Croci q. s. ft. bolus, q. q. nocte horâ somni sumendus. T.

circumstances of the individual habit, with the free use of the compound decoction of Sarsaparilla. The effects of Mercury, however, exhibited so as to excite salivation*, as the early West Indian practitioners recommend, seem to be of a very questionable nature, especially when it is unaccompanied by the vegetable decoctions; and it is certain that patients have, in some cases, soon recovered under the use of the latter, when the mercurials were omitted.† The native Africans employ decoctions of the bark of two or three trees, which are gently purgative, as well as tonic, and likewise wash the sores with them, after carefully removing the crusts.‡ As topical applications Dr. Wright recommends covering the sores, when small, with the leaves of the *Cissus ciccyoides*, or those of the *Jatropha curcas*: when large, with poultices containing sugar and the pulp of the Seville orange roasted. A combination of Carbonate of Iron and Citric acid is also much used in the West Indies, and is said to be very efficacious.

The *master-yaw* sometimes remains large and troublesome, after the rest of the eruption has altogether disappeared. It requires to be treated with gentle escharotics, and soon assumes a healing appearance under these applications. Paring off the cuticle,

* This treatment is often followed by a train of harassing symptoms, called by the negroes the *bone-ach*. "The unhappy sufferer is tormented with deep-seated pains in the bones, especially round the joints, which are occasionally aggravated to a violent degree; the periosteum becomes thickened, inflamed, and painful, and nodes are formed on the bones. When these symptoms have continued for some time, the bones are affected with caries, and even become soft and lose their form."

† See Dr. Winterbottom's "Account," &c. vol. ii. pp. 158, 159.; and Schilling, De *Framboesia*, quoted by him.

‡ In a very short but able account of this disease, which I lately saw in MS., the mercurial treatment was said not only to be unsuccessful, but to aggravate the affection of the skin; and much advantage was ascribed to strong decoctions of the woods of Vervain, wild Senna, &c. when the scabs began to fall off; and to the frequent abluion of the diseased parts with warm water, and to the use of lime-water as a drink previously. These decoctions were also found to relieve "the small eruption, bone-ach, and joint-evil often consequent on the bad treatment, or mere palliation," by Mercury.

and the stronger caustics, are requisite for the cure of the *crab-yaws*, or tedious excrescences, which occur on the soles of the feet.

Books which may be consulted on Frambæsia.

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CULLERIER, Dict. des Sciences Méd., 8vo. 1822.

FRANK, Jas., Prax. Med. Univ., vol. iii. chap. 36. *Taur.* 8vo. 1821.

GRAINGER, J., On West India Diseases, 8vo. 1764.

HILLARY, W., On Diseases of Barbadoes, 8vo. 1761.

HUME, J., Edin. Med. Essays, vol. vi. 12mo. 1744.

MACE, P. M., Sur le Yaw, Pian, ou Frambæsia, 4to. 1804.

PEYRILHE, B., Précis Théorique et Pratique sur le Pian, 8vo. 1783.

THOMSON, J., Edin. Med. and Surg. Journ., xv. xviii. 8vo. 1819-22.

GENUS IX. ICHTHYOSIS.

Syn. Lepra Ichthyosis (*Sawv.*): Lepidosis Ichthyosis (*Young*): Lepidosis Ichthyasis (*Good*): Ichthyose (*F.*): der Fischsckuppen-penansatz (*G.*): *Fish Skin*.

Def. A PAPILLARY, INDURATED, HORNY CONDITION OF THE SKIN TO A GREATER OR LESS EXTENT.

The ICHTHYOSIS, or *fish-skin disease*, is characterised by a thickened, hard, rough, and in some cases almost horny texture of the integuments of the body, with some tendency to scaliness, but without the deciduous exfoliations, the distinct and partial patches, or the constitutional disorder, which belong to Lepra and Psoriasis.

“ The disease appears to be seated in the papillæ of the skin, which elongate into horny cones, and sometimes spread so as to acquire broad irregular tops. Dr. Good supposes that the incrustation, as he terms it, is formed by the cutaneous excretories throwing out an excess of calcareous matter, which is deposited in the cutis, rete mucosum, and cu-

ticle* ; but in our opinion, the disease is in the papillæ, which assume a state nearly resembling that which constitutes the common wart."

There are two species of Ichthyosis :

1. *I. simplex.*
2. *I. cornea.*†

SPECIES 1. ICHTHYOSIS *simplex* : SIMPLE FISH-SKIN.

Syn. Ichthyosis simplex (*Good*): Ichthyose nacrée (*F.*).

In its commencement this disease (Plates XVI. and XVII. of BATEMAN ; Pl. 7. of THOMSON'S ATLAS) exhibits merely a thickened, harsh, and discoloured state of the cuticle, which appears, at a little distance, as if it were soiled with mud. When further advanced, the thickness, hardness, and roughness become much greater, and of a minute warty character, and the colour is nearly black. The roughness, which is so great as to give a sensation to the finger passing over it, like the surface of a file, or the roughest shagreen, is occasioned by innumerable rugged lines and points, into which the surface is divided. These hard prominences, being apparently elevations of the common lozenges of the cuticle, necessarily differ in their form and arrangement in different parts of the body, according to the variations of the cuticular lines, as well as in different stages and cases of the complaint. Some of them appear to be of uniform thickness from their roots upwards ; while others have a short narrow neck, and broad irregular tops. The former occur where the skin, when healthy, is soft and thin ; the latter, where it is coarser, as about the olecranon and patella, and thence along the outside of the arms and thighs. On some parts of the extremities, however, especially about the

* Study of Medicine, vol. iv. p. 598.

† Both Willan and Bateman have erred in placing Ichthyosis in the order *squamæ* : notwithstanding the minuteness of the morbid papillæ, it certainly is more allied to the Tubercula. T.

ankles, and sometimes on the trunk of the body, these excrescences are scaly, flat, and large, and occasionally imbricated, like the scales of carp: "but it is probable that this imbricated state may depend on the pressure of the clothes." In other cases, they have appeared separate, being intersected by whitish furrows.

This unsightly disease appears in large continuous patches, which sometimes cover the greater part of the body, except the flexures of the joints, the inner and upper part of the thighs, and the furrow along the spine. "These patches are sometimes gradually lost in the healthy skin; at other times, they terminate abruptly." The face is seldom severely affected; but in one case, in a young lady, the face was the exclusive seat of the disorder, a large patch covering each cheek, and communicating across the nose. (Plate XVIII. of BATEMAN.*) The mammæ, in females, are some-

* The Editor consulted Dr. Bateman respecting the case of a young lady so exactly similar to that which is represented in the 18th Plate of Bateman's Delineations, that, were he not certain of the contrary, he would imagine that plate to be a representation of the same case. The following are the particulars of the case:—

The patient was about fifteen years of age in the spring of the year 1810, when the disease was first observed. She had previously been subject to headaches, flatulence, disordered bowels, cold feet, and flushing of the cheeks. The first symptom was little more, to use her own words, than a soiled appearance of the cheeks, which was easily washed off with warm water and soap; and it was not until the autumn of 1812, that this soiling began to increase and adhere more firmly; and in the course of a few months it became so considerable, that the parents of the patient consulted the late Dr. James Gregory of Edinburgh. After the use of some acrid applications, which produced inflammation and ulceration, Dr. Gregory succeeded in clearing the skin in ten days. This improvement, however, was of short duration: the disease returned; when Steel and Aloetics, Mercury carried to salivation, warm sea-water baths, shaving off the incrustation, an ointment composed of Carbonate of Soda, Spirit of Turpentine, Sugar, and Resin Ointment; a strong lotion with Oxymuriate of Mercury, and various other means were successively employed to clear the skin, for three years, but without success; when she came to London for further advice.

The eruption at this period extended over both cheeks, and across the bridge of the nose: it was of a dirty olive-brown hue, and greatly disfigured a face which was naturally very beautiful. It had much the appearance and the harshness of shagreen. Under Dr. Bateman's care, the patient took Pitch pills, and employed various internal and external

times encased in this rugged cuticle. The whole skin, indeed, is in an extremely dry and unspirable condition, and on the palms of the hands, and the soles of the feet, it is much thickened and brittle. The disease often commences in childhood, and even in early infancy. "In some instances it is hereditary* : but even when this is the case, the disease does not show itself in all the children of the same family."

This affection has been found to be very little under the control of medicine† : stimulating ointments and plasters have been industriously employed, with no material effect ; and the disorder has been known to continue for several years, with occasional variations. — Dr. Willan trusted to the following palliation by external management : "When a portion of the hard scaly coating is removed," he says, "it is not soon produced again. The easiest mode of removing the scales," says Dr. Willan, "is to pick them off carefully with the nails from any part

remedies, but without any permanent benefit, for six months ; when, becoming tired of medicine, she resolved to return to Scotland uncured. The Editor, however, having persuaded her to remain in the metropolis, after the empirical trial of many remedies, succeeded in completely removing the eruption, by means of a decoction of the root of the sharp-pointed Dock, *Rumex acutus*, taken internally. In eight days the skin acquired its natural texture and appearance ; but, the use of the decoction having been discontinued, at the end of ten days more the eruption re-appeared ; it was again removed by the decoction ; and in this manner it was combated at successive intervals for several months, always returning a short time after the decoction was discontinued. Conceiving that the return of the eruption depended on a habit acquired by the skin from the long continuance of the disease, the face was blistered with the *Cantharides* plaster immediately after the eruption was again cleared off, and the cure became permanent. T.

* Rayer regards *Ichthyosis* as a congenital disease ; and cases confirming this opinion have been published by Dr. Girdlestone (*Med. and Phys. Journ.*, vol. viii.), and Mr. Martin (*Med. Chirurg. Trans.*, vol. ix. p. 52.) T.

† For examples of *Ichthyosis* the reader may refer to Panarolus (*Pentecoste v. obs. 9.*) ; Van der Wiel (*obs. xxxv. cent. 2.*) ; Marcel. Donatus (*Mirabil. lib. i. 3.*) ; or Schenck, *Obs. Medic. Rarior.*, p. 699., where the same case is related ; and *Philos. Transact.*, vol. xiv. no. 160., — and vol. xlv. for 1755. See also the 37th plate of Alibert, in which the *I. simplex* is well represented. His appellation is "*Ichthyose nacrée.*"

of the body, while it is immersed in hot water.—The layer of cuticle, which remains after this operation, is harsh and dry; and the skin did not, in the cases I have noted, recover its usual texture and softness: but the formation of the scales was prevented by a frequent use of the warm-bath, with moderate friction.”

“ In the limited practice of the Editor, this method of proceeding has never proved beneficial; indeed, it is not likely that the removal of the corneous cuticle would be of any use whilst the disease which first produced it remains unsubdued. Blistering has been found serviceable, particularly when the disease is of long standing. Mr. Plumbe relates two cases in which the incrustation, which was confined to the leg, was removed by the application of pressure by means of adhesive straps and bandages, and keeping the part constantly cool with a lotion applied over these. At the end of four or five days the straps were removed, when ‘ the eruption was found liberated from its attachment to the cutis, and came off in large flakes nearly through its whole extent, exposing a white and ill-formed cuticle, which might be scraped off without pain.’ By persevering in this plan the skin gradually acquired a healthy texture.”*

I have known the skin cleared of this harsh eruption by bathing in the sulphureous waters, and rubbing it with a flannel or rough cloth, after it had been softened by the bath; but the cuticle underneath did not recover its usual condition; it remained bright and shining; and the eruption recurred. “ The sulphurous fumigating baths are more certain in clearing the skin, and more permanent in their effects.” Internally the use of pitch has in some instances been beneficial, having occasioned the rough cuticle to crack, and fall off, and left a sound soft skin underneath. This medicine, made into pills with flour, or any farinaceous powder, may

* Practical Treatise on Diseases of the Skin, 1st edit. p. 334.

be taken to a great extent, not only without injury, but with advantage to the general health ; and affords one of the most effectual means of controlling the languid circulation, and the inert and arid condition of the skin.* Upon the same principle, the Arsenical Solution has been employed in Ichthyosis : in one case, in a little girl affected with a moderate degree of the disease on the scalp, shoulders, and arms, this medicine produced a complete change of the condition of the cuticle, which acquired its natural texture ; but in two others no benefit was derived from it. The decoction of the inner bark of the elm has been said to be a specific for Ichthyosis, by Plenck ; but this originated in a misconception as to the use of the term.† “ The most beneficial internal remedy certainly is the decoction of the root of the sharp-pointed Dock, *Rumex acutus*, either alone or conjoined with Arsenic. It is prepared by slicing one ounce of the recent root, and boiling it in two pints of water down to one pint, and then straining. The dose is a wine-glass full three times a day. Sometimes it purges rather too briskly, which should be checked by the addition of a few drops of tincture of Opium to each dose of the decoction.” ‡

SPECIES 2. *ICHTHYOSIS cornea*. HORN Y FISH-SKIN.

* A lady took for a considerable time from three drachms to half an ounce of pitch daily, with the most salutary effect both on her skin and general health. She had commenced with four pills, of five grains each, three times a day, and gradually augmented the dose. — It may be remarked, that the unpleasant pitchy flavour of the pills is materially diminished, if they are kept for some time after being made up.

† The definition of Ichthyosis given by Plenck, as well as the description of “*Leptra ichthyosis*,” by Dr. Lettson, on whose authority Plenck has mentioned this remedy, obviously refers to the *Leptra vulgaris*. See Plenck, *Doctrina de Morb. Cutan.*, p. 89. — Lettson, *Med. Memoirs of the Gen. Dispensary*, sect. iii. p. 152.

‡ A case of Ichthyosis, detailed by Turner under the idea that it was *Leptra Græcorum*, was cured by Mercury, Antimony, and a diet drink, in which this *Rumex acutus* was a principal ingredient. — *Treatise on the Diseases of the Skin*, 4th edit. p. 30. T.

Syn. Ichthyiasis cornigera (*Good*): Cornua cutanea (*Plenck*): Appendices cornés (*Rayer*): Corne, Ichthyose cornée (*F.*).

Several cases of a rigid and horny state of the integuments, sometimes partial, but sometimes extending nearly over the whole body, have been recorded by authors *; and occasionally such a condition of the cuticle has been accompanied with the actual production of excrescences of a horny texture. These, however, are rare occurrences; and all the cases on record have been congenital.

The ordinary formation of horny excrescences in the human body, of which many examples have been described from the time of the Arabians downwards, is, however, unconnected with any general rigidity of the cuticle. These excrescences have been improperly called horns; for they are purely of cuticular growth, having no connection with the bones or other parts beneath, and consisting of a laminated callous substance, contorted and irregular in form, and not unlike isinglass in appearance and texture. † They originate from two or three different diseased conditions of the cuticle; as from warts, encysted tumours, steatomata, &c. Morgagni has mentioned the growth of a horn on the sinciput of an old man, the basis of which was a wart; and other authors have noticed the same fact. ‡ In the most

* See *Philos. Trans.* no. 176. no. 297. and vol. xlviii. pt. ii. p. 580. — Also *Zacut. Lusitan. Prax. Hist. obs.* 188. — *Ephem. Acad. Nat. Cur.* dec. i. p. 89. — Alibert has figured a singular case of “*Ichthyose cornée*” (plate 38.), which resembles the case of the “*porcupine man*,” described by Mr. Baker, *Philos. Trans.*, vol. xlix. p. 1.

† “*Cornua certe, quæ hoc mererentur nomen, nunquam vidi;*” says M. Lorry, “*sed varias excrescentias in corpore et cute humana innascentes, et extra cutem forma singulari succrescentes, quis non vidit?*” *De Morbis Cutan.*, p. 520. Yet our credulous countryman, Turner, declines treating of horns, because, he affirms, “*they are generally much deeper rooted than in the skin, arising from the cartilages or ligaments, or the bones themselves.*” *On Diseases of the Skin*, p. 1. ch. xii. at the end.

‡ Morgagni de *Sedib. et Caus. Morbor.* epist. lxxv. art. 2. — Avicenna, who noticed the growth of horns on the joints, considered them as verrucous. *Canon iv. fen. 7. tract. iii. cap. 14.* See also Lorry, p. 519. — *Plenck de Morb. Cut.*, p. 98.

numerous instances, however, they have arisen from the cavity of encysted tumours, of very slow growth, which were lodged under the cuticle of the scalp, or over the spine, after the discharge of their contained fluid.* In one case, a horn of this sort was the result of inflammation and discharge from a small steatomatous tumour of many years' continuance.† Nearly the whole of these examples have occurred in women of advanced age.

If these excrescences are sawed or broken off, they invariably sprout again. Excision, with the complete destruction of the cyst, or morbid secreting surface, is the only effectual remedy, when they have appeared, and a preventive during the growth of the primary tumour.

Works which may be consulted on Ichthyosis.

ALIBERT, Dis. des Maladies de la Peau, fol. 1806.

ARCHIVES GENERALES de Médecine, tom. v.

FOLLET, Rech. sur l'Ichthyose cornée, 4to. 1815.

GOOD'S Study of Medicine, vol. iv.

JOULHIA (P. G.), Diss. sur l'Ichthyose nacrée, 4to. 1819.

HIST. de la Soc. Roy. de Paris, for 1776.

LORRY, de Morbis Cutaneis, 4to.

MEDICO-CHIRURGICAL Trans. of London, vol. ix.

MEM. della Societa Italiana, tom. xvi.

MEDICAL FACTS and Observations, vol. iii.

PHILOSOPHICAL TRANSACTIONS, vol. xiv. xlviii, xlix. and lxxxi.

RAYER, Traité des Maladies de la Peau, tom. 2.

SCHENCK, Obs. Med. Rarior, p. 699.

WILLAN on Cutaneous Diseases, 4to. 1805.

* See two cases of this sort described by Mr. (now Sir Everard) Home in the Philosophical Transactions, vol. lxxxi. p. 1.; and references to nine other cases of similar origin, in which the horny excrescences were from four or five to twelve inches long: one of them eleven inches in length, and two inches and a half in circumference, is preserved in the British Museum. See also Medical Facts and Observations, vol. iii. — Eph. Acad. Nat. Curios. dec. i. an. i. obs. 30.; and dec. iii. an. v. app. — Hist. de la Soc. Roy. de Méd. de Paris, for 1776, p. 316. — Bartholin. Hist. Anat. Rar. cent. i. 78.

† See Memoirs of the Medical Society of London, vol. iv. app. p. 391. The reader will find other examples of horny excrescences in the works of Ingrassius, de Tumor. præf. Naturam, tom. i. p. 336.: Fabric. Hildan. cent. ii. obs. 25, 26., and many more referred to by Haller, Elem. Physiol. tom. v. p. 30. note. Malpighi has figured similar excrescences, originating from a morbid growth of the nails. Opera Posthuma, p. 99. and tab. xix. fig. 5—6.

Order VIII.

M A C U L Æ.

THIS Order comprises those discolorations of the skin which are permanent, and most of which are the result of an alteration of the natural texture of the part. It comprehends, therefore, several varieties of connate and acquired disfigurations of the skin, some of which are not capable of being removed, and most of them are removable only by surgical means. The various maculæ, that have been described in medical and surgical writings, are included under the terms EPHELIS, NÆVUS, SPILUS, and moles, with other appellations applied to the more anomalous appearances.

There is one affection of the skin, which has hitherto remained permanent, and for which no satisfactory explanation, except one hazarded by the Editor*, has yet been given; namely, the *leaden hue* diffused over the skin, in some individuals to whom the Nitrate of Silver has been internally administered. It does not occur frequently; and it does not seem to depend on the quantity of the medicine which has been taken, but upon some condition of the habit of the patient. It appears to the Editor that, as the Nitrate is taken into the circulation undecomposed, and conveyed in that state to the cuticular capillaries, it is probable that, in those persons in whom the Muriate of Soda is thrown off in greater quantity than usual by these capillaries, the salt is decomposed in the skin, and being converted into Muriate or Chloride of Silver, which is insoluble in the animal juices, it is deposited and permanently retained in the rete mu-

* A. J. Thomson's Elements of Mat. Medica and Therapeutics, 1st ed. 1832.

cosum. We know that the Chloride of Silver acquires a leaden hue, whenever it is in contact with animal matter ; and we also know that insoluble substances, such as charcoal, smalt, vermilion, &c., deposited by puncturing the cuticle, in the manner practised in the Levant, remain there for life. It is probable that the addition of diluted Nitric Acid to the Nitrate, when it is internally prescribed, might tend to prevent this decomposition ; but this is a mere suggestion, which requires to be verified by experience. After the deposition has taken place, no means, hitherto employed, have been able to remove the stain of the skin. Except in point of appearance, no injury is done to the skin, which performs its functions as naturally as before the colouring matter was deposited in it.

GENUS I. EPHELIS.

Syn. Ephelis à sole (*Sauv.*) : Nigredo à sole (*Sennert*) : Epichrosis Ephelis (*Good*) : Sommersprose ; die Leberflecke (*German*) : Håle (*F.*) : *Sun Burn.*

Def. THE CUTICLE SPOTTED WITH DARK FRECKLES, CONFLUENT OF CORYMBOSE ; DISAPPEARING IN THE WINTER.

The term EPHELIS denotes not only the *freckles*, or little yellow *lentigines*, which appear on persons of fair skin, and the larger brown patches, which likewise arise from exposure to the direct rays of the sun, as the name imports ; but also those large dusky patches, which are very similar in appearance, but occur on other parts of the surface, which are constantly covered.* (Plate LXIX. of BATEMAN.) Lory

* "Nomen inditum απο της ηλίου, non quod à sole tantum vitia illa in cute contrahuntur, sed quod à reliquis inducta causis, similem asperitatem et colorem habeant." Gorraei Defin. ad voc. εφηλιν. — This accept-

and some other writers have endeavoured to make distinctions between Lentiginæ and Ephelides ; but there does not appear to be any essential difference between them, and all the ancient writers have properly treated of them together.*

The larger Ephelides, especially those which occur on the sides, abdomen, and other covered parts, sometimes differ little from the Pityriasis versicolor, or actually degenerate into it ; the cuticle becoming rough with minute furfureous scales. The brief description of the Ephelis given by Celsus is, indeed, equally applicable to both. “Nihil est nisi asperitas quædam, et durities, mali coloris.”† I have occasionally known the dingy hue of these maculæ, as well as of the patches of Pityriasis, give rise to a suspicion of syphilitic infection. But independently of the history of the previous symptoms, the paucity of these patches, their want of elevation or depression, their permanency, and their final evanescence, without any tendency to ulceration, or even to inflammation, will enable those, whom a habit of inspecting such appearances has not sufficiently instructed, to discriminate them.

Celsus apologizes, as has been already observed,

ation of the term is sanctioned by the authority of Hippocrates, who gives the same appellation to the spots which sometimes occur in pregnant women, and to those occasioned by the solar rays. “Quæ utero gerunt in facie maculam habent, quam εφηλιν vocant.”—Lib. Περὶ αφορων. Also Περὶ γυναικειων, lib. ii. Sauvages has improperly classed with Ephelis the mottled and dusky red hue of the shins of those who expose their legs constantly to strong fires in the winter ; and also the livid patches of scurvy which arise from extravasation of blood under the cuticle. Nosol. Meth. class. i. gen. iii. spec. 4. & 6.—See also Plenck de Morb. Cut. class. i. spec. 2. ; and Plater has, by an extraordinary mistake, called the pustules of Scabies Ephelides. De Superfic. Corp. Dolore, cap. 17.

* See Oribas. de Loc. Affect. Cur. lib. iv. cap. 52., and Synops. viii. 33.—Aëtius, tetr. ii. serm. iv. cap. 11.—Actuar. Meth. Med. iv. cap. 13.

† De Medicina, lib. vi. cap. 5.—M. Alibert has thought the common freckle and the larger Ephelis worthy of two beautiful engravings ; the former, in plate 26, is called “Ephelide lentiforme ;” and the latter, in plate 27, “Ephelide hepaticque.”

for prescribing the treatment of Ephelides and freckles, and such trifling discolorations of the skin; and the same apology must still be urged: "eripi tamen foeminis cura cultus sui non potest." The uniform practice both of ancient and modern authors has been to apply some gentle astringent and discutient lotion or liniment to the parts affected.* From the time of Hippocrates, bitter almonds have been recommended, as possessed of such discutient properties.† They have probably no virtues, "except those of a sedative nature," which are not possessed by the ptisan, decoctions of Tares, and some other mucilaginous and detergent applications, recommended by the same authors. Some gentle restraining or stimulant is commonly advised, however, by these writers. Celsus employed resin, with a third part of fossil salt, and a little honey; — and Actuarius combined vinegar, honey, and bitter almonds, for the same purpose.‡ Wine was likewise recommended as a vehicle for these and other substances. "Geoffroy praises a combination of bullock's gall, and solution of Potassa (Oleum tartari per deliquium et aqua.)"§ Solutions of White Vitriol and precipitated Sulphur have also been used.

The principle of these applications was correct; but it may be pursued in a more simple and effectual manner by lotions of Alcohol, in its pure state, or diluted with some distilled water, "or with the

* In the remedies adapted to all these superficial and cuticular discolorations, according to Oribasius, "mediocri adstrictione et absterione opus est." Synops. lib. viii. cap. 53. The same observation is stated from Crito, by Aëtius, tetr. ii. serm. iv. cap. 11. See also Actuarius, Meth. Med. lib. iv. cap. 13.

† Hippoc. Περὶ γυναικῶν, lib. ii. Oribasius says, "Amygdalæ amaræ sunt facultatis perspicuè attenuantis, ut ephelin expurgent." De Virtute Simplic. lib. ii. cap. i.

‡ Celsus, loc. cit. — Actuarius, loc. cit. — Dr. Withering recommends an infusion of horseradish in milk, as a cosmetic. See his Botan. Arrang. of Brit. Plants. Of these cosmetic lotions, however, we may say with Celsus, "pene ineptiæ sunt."

§ Mém. de l'Acad. des Sciences.

addition of a few drops of Hydrocyanic Acid," if the skin be irritable ; — by dabbing the spots two or three times a day with the diluted mineral acids, in the proportion of about a drachm of the strong Sulphuric Acid to a pint of water, or the same quantity of Muriatic Acid to half a pint ; by using, in a similar manner, the Liquor Potassæ diluted with about twenty times its quantity of water ; " or, a solution of Perchloride of Mercury (*Corrosive Sublimite*), in the emulsion of bitter almonds, in the proportion of one grain of the salt and six fluid ounces of the emulsion."

GENUS II. NÆVUS, &c.

Syn. Maculæ Maternæ; Nævi, Spili (*Auct. var.*): Metrocelis (*Good*): Khal (*Arab.*): Bak (*Turc.*): Envie; Tache congénitale (*F.*): die Muttermahle (*German*): *Mother Spots*.

Def. CONGENITAL SPOTS AND DISCOLORATIONS OF THE SKIN.

The various congenital excrescences and discolorations of the skin, to which the appellations of *Nævus*, *Spilus*, *moles*, &c. have been applied, may be conveniently treated of together. They exhibit many peculiarities of form, magnitude, colour, and structure, and are seen on almost every part of the surface of the body in different instances. Some of them are merely superficial, or stain-like spots, and appear to consist of a partial thickening of the rete mucosum, sometimes of a yellow, or yellowish-brown, sometimes of a bluish, livid, or nearly black colour. To these the term *Spilus** has been more particularly

* Σπίλος, *macula*. This discoloration seems to be included by Sauvages under his first species, *Nævus sigillum*, and by Plenck, under *N. lenticularis*, spec. i. of his Arrangement. See Sauvages, Nos. Meth. class. 1. gen. 4.; Plenck, *Doctrina de Morb. Cutan.*, p. 37.

appropriated. Others, again, exhibit various degrees of thickening, elevation, and altered structure of the skin itself*, and consist of clusters of enlarged and contorted veins, freely anastomosing, and forming little sacs of blood. These are sometimes spread more or less extensively over the surface, occasionally covering even the whole of an extremity, or one-half of the trunk of the body; and, sometimes, they are elevated into prominences of various form and magnitude. Occasionally, these marks are nearly of the usual colour of the skin; but, most commonly, they are of a purplish-red colour, of varying degrees of intensity, such as the presence of a considerable collection of blood-vessels, situated near the surface, and covered with a thin cuticle, naturally occasions.

The origin, which was anciently assigned to these marks by physicians, and to which they are still ascribed by the vulgar (viz. the influence of the imagination of the mother upon the child in utero), has occasioned their varieties to be compared with the different objects of desire or aversion, which were supposed to operate on the passions of the mother: whence the following Nævi have been described. The flat and purple stains were considered as the representative of claret, or of port wine (Plate LXXI. Fig. 1. of BATEMAN) †; and sometimes of a slice of bacon, or other flesh. Sometimes the stains are regularly formed, like a leaf, with a very red border, and lines, like veins, across from a central rib, forming the Nævus *foliaceus* (Plate LXX. of BATEMAN); and, sometimes, a small red centre with branching lines, like legs, has suggested the idea of a spider, or N. *araneus* ‡ (Plate LXXI. Fig. 2. of BATEMAN). But those Nævi which are prominent have most commonly been

* Sauvages comprehends all these excrescences under Nævus *maternus*, spec. 2.; and Plenck under his four remaining species, N. *flammeus*, *tuberculosus*, *cavernosus*, and *malignus*.

† Nævus *flammeus* (Plenck): Fevertahl (German).

‡ See the Plate of Bateman, fig. 8. x.

compared to different species of fruit, especially to cherries, currants, and grapes, when the surface is smooth and polished; or to mulberries, raspberries, and strawberries, when the surface is granulated: whence the *Nævus cerasus* (Plate LXXI. Fig. 1. of BATEMAN), *ribes*, *morus*, *rubus*, *fragarius*, &c.* (Plate LXXII. of BATEMAN).

Some of these excrescences are raised upon a neck or pedicle; while some are sessile upon a broad base. Some of them again, although vivid for some time after birth, gradually fade and disappear: some remain stationary through life, but commonly vary in intensity of colour at different seasons, and under circumstances easily explained; and others begin to grow and extend, sometimes immediately after birth, and sometimes from incidental causes at a subsequent period, and from small beginnings become large and formidable bloody tumours, readily bursting, and pouring out impetuous and alarming hæmorrhages, which, if they do not prove suddenly fatal, materially injure the health by the frequent depletion of the system.†

* See Bierling *Adversaria Curios.* obs. ix.—Valentin. *Prax. Med.* Infalib. cap. 1.—Strobelberger de *Curand. pueril.* Affect. cap. 17.—Septalius de *Nævis*.

† A most striking case of this kind came under the notice of the Editor about ten years since. The little patient was born without any apparent mark upon the body, nor did any appear for eight days after birth, when a small point, resembling a red minute tubercle, appeared on the forehead, and gradually increased to the size of a crown-piece, when it was showed to the Editor. This spot was surrounded by many small points, at different distances from the main spot; and these gradually enlarging ran into one another, forming larger spots; which again in turn coalesced with others, until they finally were added, as their diameters increased, to the main spot. (ATLAS, pl. xxv.) The extent which the whole occupied, and the eye being also involved in the disease, prevented extirpation from being proposed or attempted; and the only curative measure resorted to was an effort to obliterate the *Nævus*, by exciting ulceration in various parts of it. This partially succeeded; but, before the plan had advanced beyond the second sore, the child was attacked with *Hydrocephalus* and died. A post mortem examination explained satisfactorily the nature of the disease. The arterial system was natural; but the venous was so thin in the coats of the vessels, that there was not sufficient power to return the blood, which of course accu-

(THOMSON'S ATLAS, p. xxv.) Sometimes, however, after having increased to a certain degree, they cease to enlarge, and thenceforth continue stationary, or gradually diminish, till scarcely any vestige remains.*

In some instances, however, these preternatural enlargements and anastomoses, which constitute the Nævi, are not merely cutaneous. A similar morbid structure may take place in other parts: it sometimes occupies the whole substance of the cheek, according to Mr. Abernethy, and has occurred in the orbit of the eye: and Mr. John Bell affirms, that it affects indifferently all parts of the body, even the viscera.†

The origin of these connate deformities is equally inexplicable with that of other anomalous and monstrous productions of nature; but it would be insulting the understanding of the reader to waste one word in refutation of the vulgar hypothesis, which ascribes them to the mental emotions of the mother; an hypothesis totally irreconcilable with the established principles of physiology, and with the demonstrable nature of the connection between the fœtus and the parent, as well as with all sober observation.

It is important, however, to know, that very

mulated in the veins; and those in the vicinity gradually assumed the same diseased state. The most remarkable part of the case, and on account of which it is mentioned in this place, was the extension of the disease to the bones of the cranium. The Editor is not aware of any case of a similar kind being on record: the scull-cap is in the Museum of Anatomy of Dr. Alexander Monro, of Edinburgh, to whom the Editor presented it; and an accurate engraving of it will be found in the Atlas of Plates attached to this edition of the Synopsis. T.

* See Mr. Abernethy's Surgical Works, vol. ii. p. 224. et seq.

† The ordinary Nævi appear to consist of *venous* anastomoses only: but some of them, even when congenital, are of that species of morbid structure which Mr. John Bell has denominated "aneurism by anastomosis," and which, he says, is made up of "a congeries of small and active arteries, absorbing veins, and intermediate cells," somewhat analogous to the structure of the placenta, or of the gills of a turkey-cock. See his Principles of Surgery, vol. i. discourse xi.; also Mr. Abernethy's Surg. Works, loc. cit.

slight causes of irritation, such as a trifling bruise, or a tight hat, will sometimes excite a mere stain-like speck, or a minute livid tubercle, into that diseased action, which occasions its growth. This growth is carried on by a kind of inflammatory action of the surrounding arteries; and the varying intensity of colour arises from the different degrees of activity in the circulation. Thus these marks are of a more vivid red in the spring and summer, not in sympathy with the ripening fruit, but from the more copious determination of blood to the skin, in consequence of the increase of the atmospheric temperature. The same increased determination to the surface is also produced temporarily, and, with it, a temporary augmentation of the florid colour of the Nævi, by other causes of excitement to the circulation; as by active exercise, by heated rooms, or the warmth of the bed, by drinking strong liquors, or high feeding, by emotions of the mind, and, in women, by the erethism of menstruation.

These considerations will serve to suggest the proper means of treating the Nævi and Spili, where any treatment is advisable. When they are merely superficial, without elevation, which would render them liable to accidental rupture, and without any tendency to enlarge and spread, there appears to be no good reason for interfering with them. The applications mentioned by the older writers were doubtless as futile as they were disgusting; such as saliva, the meconium of infants, the lochial blood of women, the hand of a corpse, &c.: and the severe resource of the knife, even if the deformity of a scar were much less than that of the original mark, is scarcely to be recommended.

But when the Nævi evince a tendency to enlarge, or are very prominent excrescences, and either troublesome from their situation*, or liable to be

* A *cherry-nævus* on the lip, for instance, has prevented the act of sucking.

ruptured, some active treatment will then be required. Either their growth must be repressed by sedative applications, or the whole morbid congeries of vessels must be extirpated by the knife. "The latter is the only certain plan of cure. It has been recommended to inclose them with a ligature under the skin; and thus cutting off their supply of blood, destroy their growth; and, where they are sufficiently early attended to, no plan is better: but, if more advanced, there is no security but in the complete extirpation, by dissection, of the diseased part."

All strong stimulants externally must be avoided, as they are liable to produce severe inflammation, and even constitutional disorder.

The consideration of the mode in which these vascular excrescences grow, by a degree of inflammatory action in the surrounding vessels, suggested to Mr. Abernethy the propriety of maintaining a constant sedative influence upon those vessels, by the steady application of cold, by means of folded linen kept constantly wet. This practice has succeeded, in several instances, in repressing the growth of these unnatural structures, which have afterwards shrunk, and disappeared, or ceased to be objects of any importance. — Pressure may, in some instances, be combined with this sedative application, and contribute to diminish the dilatation of the vessels. "I have seen Nævi under parts of the dress, which exerted a constant pressure upon them, completely obliterated by this means;" but in the majority of cases, pressure is the source of great irritation to these maculæ, and cannot be employed. — The temporary enlargement of these prominent Nævi by every species of general excitement, would teach us to enjoin moderation in diet, exercise, &c. during the attempts to subdue them.

The mode of extirpation is within the province of the surgeon; and the proper choice of the mode, under the different circumstances, is directed in sur-

ligature

cold
pressure

gical books. From the days of Fabricius Hildanus*, the propriety of radically removing every part of the diseased tissue of vessels has been inculcated: "and where there is any doubt of this having been effected, the bottom of the wound should be rubbed with Nitrate of Silver, or some other escharotic;" but Mr. John Bell has most satisfactorily stated the grounds of that precept, by explaining the structure of these excrescences, as well as the source of the failure and danger, when they are only cut into or opened by caustic. I shall, therefore, refer the reader to his "Discourse," already quoted.

The varieties of Spilus, or mere thickening and discoloration of the rete mucosum, are sometimes removable by stimulant and restringent applications. A combination of lime and soap is extolled by several writers; and lotions of strong spirit, with the Liquor Potassæ, as recommended for the treatment of the Ephelides and of Pityriasis, certainly sometimes remove these maculæ.

With respect to those brown maculæ, commonly called *Moles*, I have little to observe; for no advantage is obtained by any kind of treatment. It is scarcely safe, indeed, to interfere with them: for when suppuration is induced in them, it is always tedious and painful, the matter emitting at the commencement an extremely fetid odour. When moles are irritated by accident, or rudely treated, so as to produce excoriation, they are liable, it is said, to become gangrenous, and thus to produce sudden fatality.

Moles are not always congenital. I lately saw an instance in a lady of remarkably fair and delicate skin, where a numerous crop of small moles appeared, in slow succession, upon the arms and neck. Congenital moles, indeed, are not always stationary; but they sometimes enlarge, gradually, for a time, and afterwards disappear.

* Fab. Hild. Oper. cent. v. obs. 46.

Order IX.

DERMAL EXCRESCENCES.

Syn. Echphyma (*Good*): Phymatosis (*Young*): Hautgèwache (*G.*).

Dermal Excrescences are permanent, superficial, indolent productions of the cuticular membrane, that are not connected with any peculiar condition of the system; but seem to depend, either upon some peculiar local action of the capillaries that secrete the cuticle, or on the action of extraneous mechanical causes, such as pressure from tight shoes, or the action of hard substances upon different parts of the body. Although these tuberosities of the cuticle are in themselves unaccompanied by any inflammatory action, yet, from their pressure on the neighbouring parts, they frequently produce pain and inflammation.

The order comprehends three genera: —

1. *Verruca.*
2. *Clavus.*
3. *Callus.*

 GENUS I. VERRUCA.

Syn. Verruca (*Auct. var.*): Ecphyma verruca (*Good*): Phyma verrucosa (*Young*): Verrüe (*F.*): Woertze (*G.*): Verruga (*Span.*): Porro (*Ital.*): Shullub (*Arab.*): *Wart.*

Def. SMALL, HARD, INSENSIBLE TUBEROSITIES OF THE CUTICLE, OCCURRING CHIEFLY ON THE HANDS.

Warts are, undoubtedly, at first mere cuticular productions, most probably, depending on some peculiar action of the capillaries secreting the cuticle ; but they gradually become connected with the true skin, by the continued morbid action of the minute vessels which originate them : this connection, however, is only with the base of the wart ; for, in the highest state of sensibility of that part, the apex is always hard and perfectly insensible. The colour of warts varies from a pale white to dull or obscure red ; the latter of which is generally the case when they cluster, and become attached by vascular communication with the true skin.

Warts are destroyed by ligature, the knife, or caustic ; or they are made to separate readily by coagulating the albumen of their centres by means of strong astringent decoctions, especially, that of the root of *Tormentilla erecta*. Those that occur on the penis, as sequelæ of syphilitic affections, are rapidly destroyed by the decoction of *Tormentilla*. The recent milky juices of the indigenous *Euphorbiaceæ* are advantageously used : the yellow juice of *Chelidonium majus* acts also in the same manner. One of the quickest and best modes of destroying them, is to cover the surrounding skin with common adhesive plaister, perforated so as to permit the warts to be uncovered, and then to touch their heads twice a day with strong acetic acid.

GENUS II. CLAVUS.

Syn. Clavus (*Auct. var.*) : *Ecphyma clavus* (*Young, Good*) : *Cer de piés* (*F.*) : *Hünerang* (*G.*) : *Callo* (*S.*) : *Callo nel piede* (*I.*) : *Zekh* (*Pers.*) : *Corn.*

Def. A HARD, ROUNDISH, HORNY SUBSTANCE,

WITH CENTRAL NUCLEUS, SENSIBLE AT THE BASE ; SEATED CHIEFLY ON THE TOES.

Corns originate in compression of the cuticle. They are generally solitary ; but sometimes they are in clusters, especially when they appear on the head. They have been confounded with an extensive variety of Icthyosis, the *cornigera* ; but they differ greatly both in character and origin from the elongated horny papillæ of that curious disease.

Their eradication is the business of the surgeon, who may with care take them out by the root. The pain they occasion is allayed by any soft substance interposed between the corn and the other toe that presses upon it.

GENUS III. CALLUS.

Syn. Calus (*F.*) : Swülle (*G.*) : Nasur (*Arab.*) : Sheghe (*Pers.*) : *Callus*.

Def. A PERMANENT, INSENSIBLE, THICKENING OF THE CUTICLE.

Many things, besides mechanical pressure, indurate the cuticle of the hands and the feet : thence dyers, brass workers, bakers, masons, smiths, and other artisans who employ hammers, are liable to callus : but, unless the callosity be so great as to affect the motion of the joints, or otherwise prove inconvenient or cause pain, it is disregarded. In a case mentioned by Dr. Good, the " fingers were so rigid from the callosity of the cuticle, that, on a forcible endeavour to straighten them, blood started from every pore."

Emollients, and suspending the use of the materials or the labour that have produced the callus, are all that are requisite for causing the exfoliation of the hardened cuticle, and perfecting the cure.

I N D E X.

	Page
A CNE	330
— simplex	331
— punctata	338
— indurata	339
— rosacea	342
Alphos	41. 362
Aphtha	316
— lactantium	317
— adulatorum	321
— anginosa	323
Baras. See Elephantiasis.	
Bullæ	162
Chicken-pox	258
— lenticular	261
— conoidal	262
Courap	177
Cow-pox. See Vaccinia.	
Crusta lactea. See Porrigo larvalis.	
Crystalli. See Chicken-pox.	
Dandriff. See Pityriasis.	
Ecthyma	219
— vulgare	221
— infantile	222
— luridum	223
— cachecticum	226
Eczema	305
— solare	306
— impetiginodes	308
— rubrum	311
— from mercury	<i>ibid.</i>
Elephantiasis	352
Ephelis	385

	Page
Erysipelas	145
— phlegmonodes	147
— œdematodes	148
— gangrænosum	150
— of infants	151
— erraticum	<i>ibid.</i>
Erythema	138
— fugax	140
— læve	<i>ibid.</i>
— marginatum	141
— papulatum	<i>ibid.</i>
— tuberculatum	142
— nodosum	143
— intertrigo	<i>ibid.</i>
Exanthema, what	71
Favus	173. 202
Febris ampullosa. See Pemphigus.	
— bullosa. See the same.	
— vesicularis. See the same.	
Fici. See Sycosis.	
Fish-skin Disease. See Ichthyosis.	
Formica. See Herpes.	
Framboesia	370
Freckle. See Ephelis.	
Furunculus	326
Gum, red. See Strophulus.	
Gutta rosea. See Acne rosacea.	
Hæmorrhœa petechialis. See Purpura.	
Heat, prickly. See Lichen tropicus.	
Herpes	276
— phlyctænodes	279
— zoster	282
— circinatus	287
— labialis	290
— præputialis	291
— Iris	294
Hives. See Chicken-pox.	
Hydrargyria. See Eczema rubrum.	
Ichthyosis	377
— simplex	378
— cornea	382
Ignis sacer	158
— Sancti Anthonii	<i>ibid.</i>
Impetigo	174
— figurata	176
— sparsa	179
— erysipelatodes	200
— scabida	185
— larvalis	107
— favosa	193
— rodens	185

	Page
Intertrigo	301
Ionthos. See Acne.	
Iris. See Herpes Iris.	
Itch. See Scabies.	
Itch. Baker's	59
— Grocer's	181
— Bricklayer's	<i>ibid.</i>
Itch insect	249
Juzam. See Elephantiasis.	
Judam. See the same.	
Kriebel Krankheit	159
Lactucimen. See Aphtha.	
Larvæ mistaken for pediculi	28
Lentigo. See Ephelis.	
Lepra	35
— vulgaris	36
— alphoides	41
— nigricans	42
Leprosy of the middle ages	359
Leuce, probably the Jewish Leprosy	<i>ibid.</i>
— differs from Lepra	<i>ibid.</i>
Lichen	9
— simplex	10
— pilaris	12
— circumscriptus	13
— agrius	15
— lividus	18
— tropicus	<i>ibid.</i>
— urticatus	19
Lupus	350
Maculæ	385
Mal des Ardens	159
Measles	72
Mercurial Rash. See Eczema.	
Miliaria	298
Molluscum	326
Morbilli. See Rubeola.	
Mother-spots. See Nævus.	
Mussels, rash produced by eating	108
Nævus	389
Nettle-rash. See Urticaria.	
— from eating shell-fish, &c.	108
Nirles. See Herpes phlyctænodes.	
Noli me tangere. See Lupus.	
Ophiasis	217
Papulæ	1
Pemphigus	153
Petechiæ sine febre. See Purpura.	

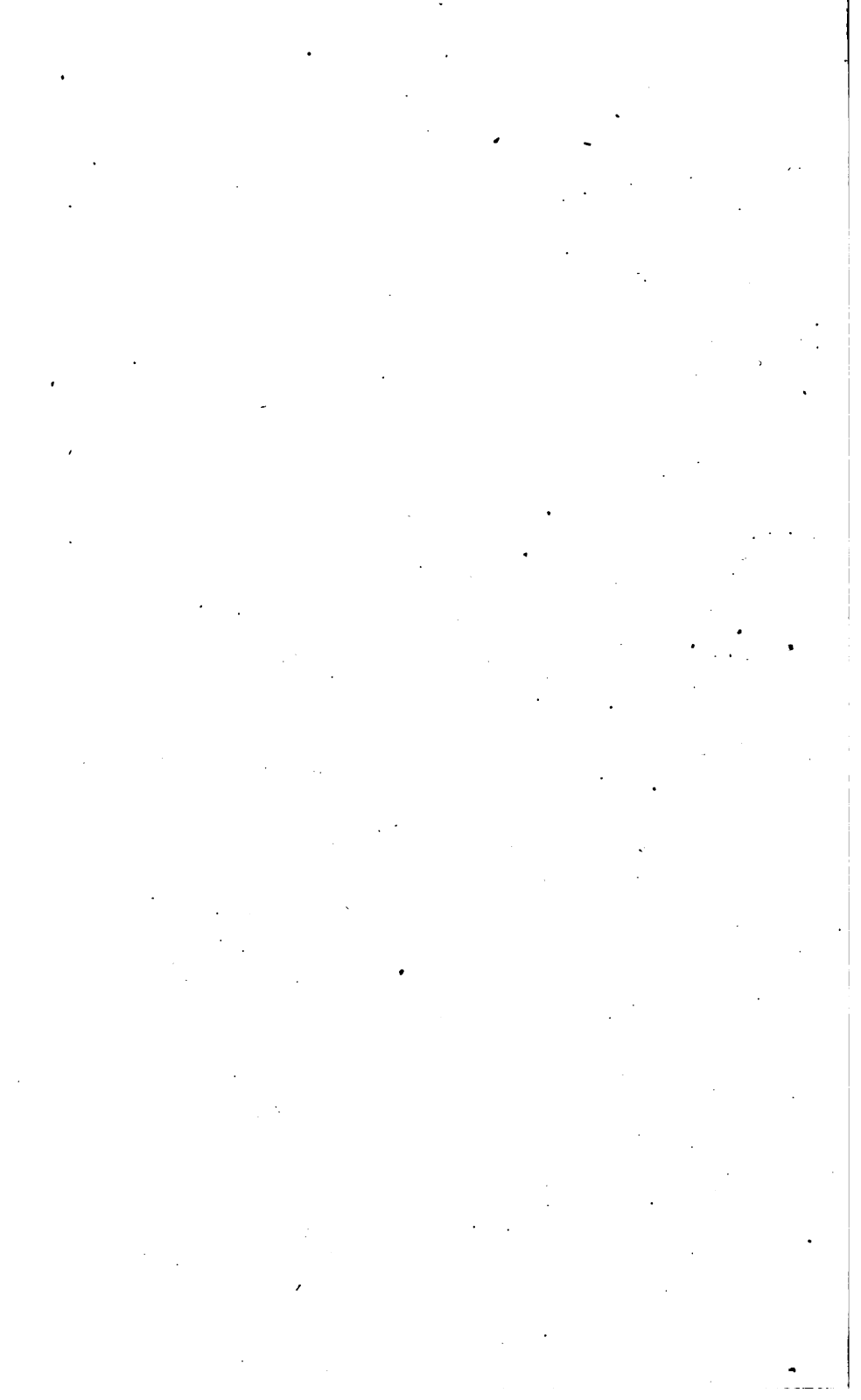
	Page
Plyma	325
Pimples. See <i>Papulae</i> .	
Pityriasis	64
_____ <i>capitis</i>	65
_____ <i>rubra</i>	66
_____ <i>versicolor</i>	<i>ibid.</i>
_____ <i>nigra</i>	69
Pompholyx	166
_____ <i>benignus</i>	167
_____ <i>diutinus</i>	<i>ibid.</i>
_____ <i>solitarius</i>	171
Porrigo	202
_____ <i>furfurans</i>	205
_____ <i>lupinosa</i>	203
_____ <i>scutulata</i>	209
_____ <i>decalvans</i>	217
Prurigo	20
_____ <i>mitis</i>	21
_____ <i>formicans</i>	23
_____ <i>senilis</i>	27
_____ <i>sine papulis</i>	29
_____ <i>præputii</i>	<i>ibid.</i>
_____ <i>pubis</i>	<i>ibid.</i>
_____ <i>urethralis</i>	30
_____ <i>podicis</i>	<i>ibid.</i>
_____ <i>scroti</i>	<i>ibid.</i>
_____ <i>pubendi muliebris</i>	31
Psora. See <i>Psoriasis</i> .	
_____ erroneously applied to <i>Scabies</i>	240
Psoriasis	50
_____ <i>guttata</i>	53
_____ <i>diffusa</i>	54
_____ <i>gyrata</i>	56
_____ <i>inveterata</i>	<i>ibid.</i>
_____ <i>localis</i>	57
_____ <i>labialis</i>	58
_____ <i>lotorum</i>	<i>ibid.</i>
_____ <i>palmaria</i>	<i>ibid.</i>
_____ <i>ophthalmica</i>	59
_____ <i>pistoria</i>	<i>ibid.</i>
_____ <i>præputii</i>	<i>ibid.</i>
_____ <i>scrotalis</i>	<i>ibid.</i>
Psydracia	172
Purpura	123
_____ <i>simplex</i>	124
_____ <i>hæmorrhagica</i>	126
_____ <i>urticans</i>	136
_____ <i>senilis</i>	<i>ibid.</i>
_____ <i>contagiosa</i>	137
Pustules	172
_____ four varieties of	<i>ibid.</i>
Ringworm, various	177. 181. 287
_____ of the Scalp. See <i>Porrigo scutulata</i> .	
Roseola	114
_____ <i>æstiva</i>	115

	Page
Roseola autumnalis	117
— annulata	118
— infantilis	119
— variolosa	120
— vaccina	121
— miliaris	122
Rubeola	72
— vulgaris	74
— sine catarrho	80
— nigra	81
Rupia	296
— simplex	<i>ibid.</i>
— prominens	297
— escharotica	298
Scabies	240
— papuliformis	242
— lymphatica	244
— purulenta	245
— cachectica	247
Scalped head. See Porrigo favosa.	
Scaly diseases	33
Scarlatina	87
— simplex	89
— anginosa	92
— maligna	101
Scarlet-fever. See Scarletina.	
Shingles. See Herpes zoster.	
Small-pox. See Variola.	
Spilus	385
Strophulus	3
— intertinctus	4
— albidus	5
— confertus	6
— volaticus	7
— candidus	8
Swine-pox. See Chicken-pox.	
Sycosis	345
— menti	346
— capillitii	348
Tetter, dry or scaly. See Psoriasis.	
— humid. See Impetigo.	
Tinea. See Porrigo.	
Thrush. See Aphtha.	
Tooth-rash. See Strophulus.	
Tubercula	325
Vaccinia	266
Vari. See Acne.	
Varicella	257
— lentiformis	261
— coniformis	262
— globularis	263
Variola	230

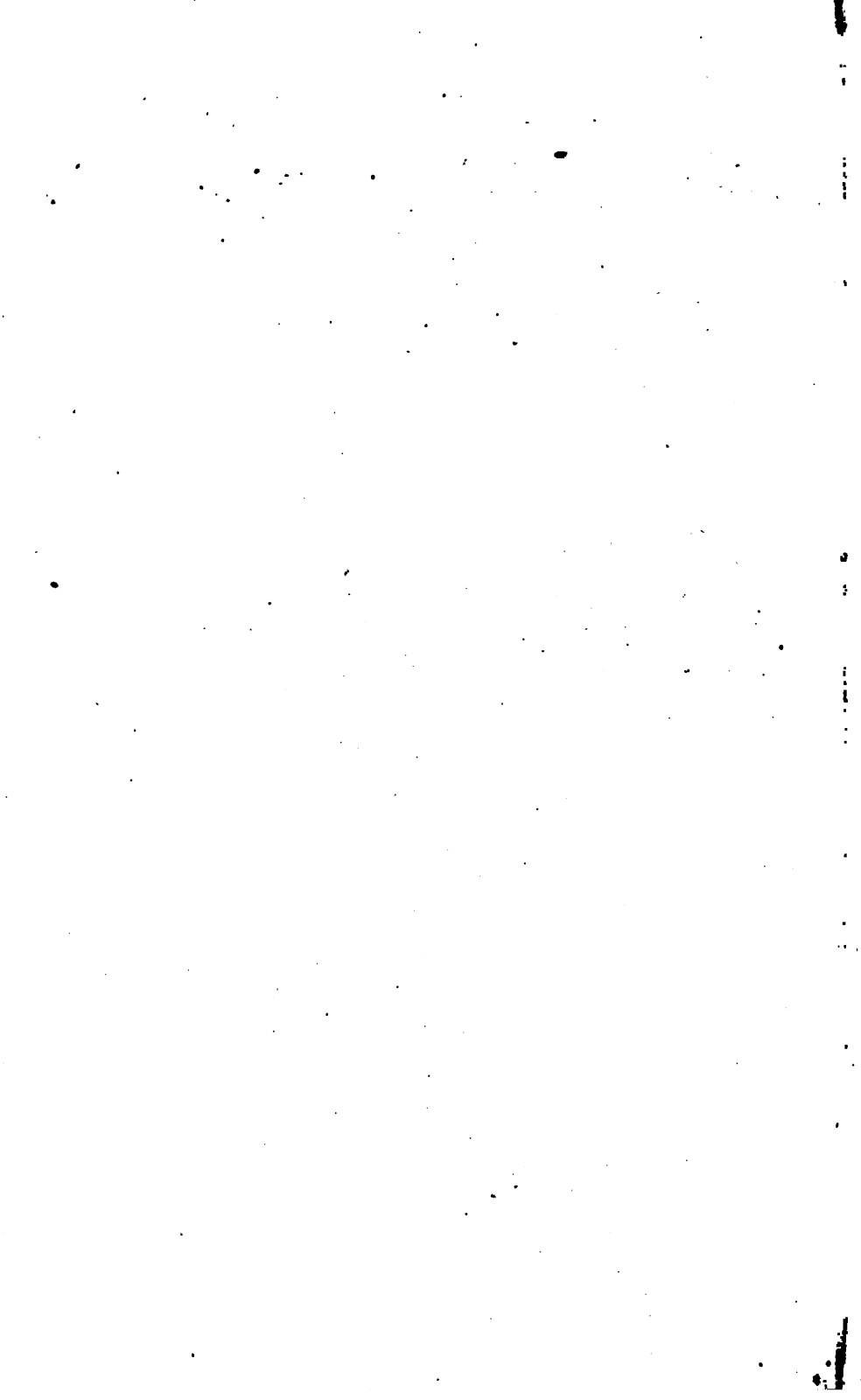
	Page
Variola discreta	232
confluens	234
Vesiculae	257
Verruca	396
Vitiligo	328
Urticaria	106
febrilis	107
evanida	110
perstans	112
conferta	<i>ibid.</i>
subcutanea	118
tuberosa	<i>ibid.</i>
Washerwoman's scall	58
Water-jags. See Chicken-pox.	
Wheals	106
Wheal-worms	337
Yaws. See Framboesia.	
Zona. See Herpes.	
Zoster. See the same.	

THE END.









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