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A

PRACTICAL SYNOPSIS

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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.

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FIRST AMERICAN, FROM THE FOURTH LONDON EDITION.

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ADVERTISEMENT.

THIS edition is a reprint of the last, with the exception of the concluding observations, relative to Syphilitic Eruptions, which have been altogether omitted. The further my experience has extended on the subject of these and the resembling Eruptions, the more complete has been my conviction, that any attempt to give a definite character of them is premature. Some correction appears also to be required on the subject of Pompholyx, which, however, I am not yet enabled to make with sufficient accuracy. Although it is obvious that there is no such disease as the *contagious* fever, accompanied with Bullæ, described by authors under the appellation of Pemphigus; yet some cases, which have been communicated to me, demonstrate the occasional concurrence of severe and even fatal fever with such an eruption, and therefore the necessity of modifying the definition and history of Pompholyx.

T. B.

14, Bloomsbury Square,
Dec. 12th, 1816.

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PREFACE

TO THE FIRST EDITION.

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 inferences 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 phænomena, 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. Secondly, 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 diseases, 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*, *phlzyacium*, &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, Hafenreffer, 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 com-

mencement 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 of

* 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.

the same disease to be considered as so many distinct maladies, and to be arranged in several classes. For example, the *Crustæ* and the *Ulcera cutanea* are equally the result of *Pustules*, *Vesicles*, and *Bullæ*, and sometimes even of *Scales*: hence, while *Smallpox* 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 *Ulcera* 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 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 acceptance; 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" (Porrigo,) 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 *Frambœsia*,—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 Vitiligo, 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 characterized 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 inclosed 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 larger 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.

14, Bloomsbury Square.

May 25, 1813.

EXPLANATION OF THE PLATE.

THE eight compartments of the plate exhibit the eight forms of cutaneous eruptions, and illustrate also some of the genera and species.

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*, distinguished in Def. 5; namely, the *phlyzacia*, as they appear in (h) *Ecthyma vulgare*, and in (i) *Scabies purulenta* upon the hands;—the *psyrdracia*, as they arise in (k) *Impetigo*, and afterwards form a scab;—the *achores*, (l) of *Porriago 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 in (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.

DEFINITIONS.



1. **PAPULA** (*Pimple*); a very small and acuminated elevation of the cuticle, with an inflamed base, very seldom containing a fluid, or suppurating, and commonly terminating in scurf.*

2. **SQUAMA** (*Scale*); a lamina of morbid cuticle, hard, thickened, whitish, and opaque. Scales, when they increase into irregular layers, are denominated crusts.

3. **EXANTHEMA** (*Rash*); superficial red patches, variously figured, and diffused irregularly over the body, leaving interstices of a natural colour, and terminating in cuticular exfoliations.

* 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. 1. Synops. ord. ii. 6. See also 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, including even wheals. (De Med. lib. v. cap. 28. § 15 and 18.) See below, p. 147. note.

4. **BULLA** (*Bleb*); a large portion of the cuticle detached from the skin by the interposition of a transparent watery fluid.

5. **PUSTULA** (*Pustule*); an elevation of the cuticle, with an inflamed base, containing *pus*.

Four varieties of pustules are denominated in this arrangement as follows:

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.*

b. Psydraciūm; a small pustule, often irregularly circumscribed, producing but a slight elevation of the cuticle, and terminating in a laminated scab.† Many

* The derivation of this term, “απο τῆ φλυα, φλυζω, sive φλυσσα, quod *servere* 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, homidum est. Ex pustulis 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, liv. v. cap. 28. § 15.)—See also Ecthyma, below, p. 185.

† 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 guttulæ*,” 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

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.

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 *κρυπιον*, 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, semitransparent, and sometimes cellular scab, like a honey-comb; whence it has obtained its name.

6. *VESICULA (Vesicle)*; a small orbicular elevation of the cuticle, containing lymph, which is sometimes clear and colourless, but often opaque, and whitish or pearl-coloured. It is succeeded either by scurf, or by a laminated scab.

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. 148.

* 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. See also Porrigo, below, p. 162.

7. **TUBERCULUM** (*Tubercle*); a small, hard, superficial tumour, circumscribed and permanent, or suppurating partially.

8. **MACULA** (*Spot*); a permanent discoloration of some portion of the skin, often with a change of its texture.

The following terms are used in their ordinary acceptation; viz.

9. *Wheal*; a rounded or longitudinal elevation of the cuticle, with a white summit, but not permanent, not containing a fluid, nor tending to suppuration.

10. **FURFUR** (*Scurf*); small exfoliations of the cuticle, which occur after slight inflammation of the skin, a new cuticle being formed underneath during the exfoliation.

11. **SCAB**; a hard substance, covering superficial ulcerations, and formed by a concretion of the fluid discharged from them.

12. **STIGMA**; a minute red speck in the skin, without any elevation of the cuticle. When Stigmata coalesce, and assume a dark-red or livid colour, they are termed *Petechiæ*.

The Diseases of the Skin were arranged by Dr. WILLAN in eight orders, according to their external forms above defined, as in the following table.

Order I.			
PAPULÆ.			Page
	Page		
STROPHULUS	1	PORRIGO	162
LICHEN	6	ECTHYMA	185
PRURIGO	14	VARIOLA	193
		SCABIES	194
II.		VI.	
SQUAMÆ.		VESICULÆ.	
LEPRA	25	VARICELLA	212
PSORIASIS	36	VACCINIA	220
PITYRIASIS	45	HERPES	227
ICHTHYOSIS	49	RUPIA	247
		MILIARIA	249
III.		ECZEMA	257
EXANTHEMATA.		APHTHA	268
RUBEOLA	57	VII.	
SCARLATINA	70	TUBERCULA.	
URTICARIA	89	PHYMA	278
ROSEOLA	97	VERRUCA	279
PURPURA	104	MOLLUSCUM	<i>ibid.</i>
ERYTHEMA	119	VITILIGO	281
		ACNE	284
IV.		SYCOSIS	300
BULLÆ.		LUPUS	304
ERYSIPELAS	127	ELEPHANTIASIS	306
PEMPHIGUS	138	FRAMBÆSIA	322
POMPHOLYX	142	VIII.	
V.		MACULÆ.	
PUSTULÆ.		EPHELIS	331
IMPETIGO	148	NÆVUS, SPILUS, ETC.	334

A

PRACTICAL SYNOPSIS
OF
CUTANEOUS DISEASES.

Order I.

PAPULÆ.

PAPULÆ, or Pimples, (Def. I.) appear to originate in an inflammation of the papillæ of the skin, by which these are enlarged, elevated, and indurated, and made to assume more or less of a red colour. Sometimes even a slight effusion of lymph takes place, which gives a vesicular appearance to several of the papulæ; but the fluid is re-absorbed without breaking the cuticle, and they terminate for the most part in scurf.

The varieties of papulous eruptions are comprehended in this arrangement under three genera; namely, STROPHULUS, LICHEN, and PRURIGO.

I. STROPHULUS.

This genus comprises several papular 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 irritation, either in the alimentary canal, the gums, or other parts. As they 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. The following varieties are mentioned by Dr. Willan.

1. *STROPHULUS interlinctus*, (Plate I.) the *red gum* or *gown*, occurs chiefly within the two first months after birth, and is characterized by papulæ of a vivid red colour, situated most commonly on the cheeks, forearms, and back of the hands, but sometimes universally diffused. They are usually distinct from each other; but are intermixed with red dots, or stigmata, (Def. 12.) and often with larger red patches, which have no elevation. Occasionally a few small vesicles appear on the hands and feet; but these soon desiccate, without breaking.

This eruption is often obviously connected 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 equable 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 internal disorder have ensued, a warm bath affords the most speedy relief:—some slight cordial, as a few drops of the spiritus ammoniæ compositis internally, and the stimulus of a blister externally, have also been found beneficial under these circumstances.*

2. *STROPHULUS albidus* (Plate II.) is merely a variety of the preceding species, and is occasionally intermixed with it; the papulæ consisting of minute, hard, whitish specks, a little elevated, and sometimes surrounded by a slight redness, and appearing chiefly on the face, neck, and breast.

3. *STROPHULUS confertus*, (Plate III. Fig. 1.) which is sometimes called the *rank red gum*, and the *tooth-rash*, is distinguished principally by the more extensive crop of papulæ which appears. These are chiefly seat-

* 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 syncöpe or convulsions, ensue.

ed 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, and shoulders, 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. It 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 only be alleviated by the general treatment proper for the state

*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 "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.

of teething, with great attention to cleanliness, and frequent tepid ablution with milk and water.

4. *STROPHULUS volaticus* (Plate III. Fig. 2.) is not a frequent complaint. It is characterized by small circular patches, or clusters of papulæ, 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 disorder of the stomach and bowels, and is alleviated by gentle laxatives; after which the decoction of cinchona, or a slight chalybeate,* is serviceable. No external application is necessary.

5. *STROPHULUS candidus* (Plate III. Fig. 3.) 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,

* 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.

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 *porrigo 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.

II. LICHEN.

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 *impetigô* 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 accu-

* Hippocrates classes the *Λειχνηες* with *prurigo*, *psora*, *lepra*, and *alpos*, without particularizing their characteristic forms. See his *Προρρητικόν*, lib. ii. and his book *Περί Παθών*, 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.

rately with the lichen of Hippocrates.* Whence Dr. Willan decided on affixing the appellation to a papular affection of the following character:

“An extensive eruption of papulæ, affecting adults, connected with internal disorder, usually terminating in scurf, recurrent, not contagious.”

The varieties of this eruption are seven.

1. The LICHEN *simplex* (Plate IV. Fig. 1.) is an eruption of red papulæ, 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 preceded for a few days by slight febrile irritation, which commonly ceases when the eruption appears. This is accompanied with an unpleasant sensation of tingling, especially in the night: it continues nearly stationary about a week, when its colour begins to fade, and the skin soon exhibits numerous scurfy exfoliations, which

* See Fœs. 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 fædationem, in qua summa cutis pustulis siccis admodum prurientibus exasperatur.—Sed 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 *fustula*, 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 furfureous 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.*—Acutar. *lib. ii. cap. 11.*—Celsus de *Medicina, lib. v. cap. 28.*

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 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, the eruption is partial, affecting the face, neck, or arms only; in some, it appears and disappears repeatedly, without leaving any scurf; and in others, successive eruptions and exfoliations prolong the complaint for two or three months.

The *L. simplex* is liable to return every summer in some individuals of irritable constitution. It appears occasionally in those who are subject to severe headache 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 Definitions 1 and 3, and to the course of the symptoms, will enable the observer to avoid such errors. It is sometimes also mistaken for scabies (itch), from which it is not always so easily distinguished.†

* 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 pa-

2. *LICHEN pilaris* (Plate V. Fig. 1.) is merely a modification of the preceding species, 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.

3. *LICHEN circumscriptus* (Plate V. Fig. 3.) is characterized by clusters or patches of papulæ, which have a well defined 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 borders, into large figured forms, which coalesce. As the borders extend, the central areæ become even,

pulæ 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 patientur quam vera et legitima scabies; 5to, quod in furfur abeant notabile; 6to, demum quod remediis sanentur a scabiei curatione alienis." Loc. cit.

* 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 papula 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. præt. Naturam, tract. 1. cap. 1.

but continue slightly red and scurfy. 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 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.

Little medicinal treatment is necessary for these species of Lichen. It is sufficient that patients avoid heating themselves by much exercise or by stimulants, and take a light diet, with diluent drinks, and a gentle laxative occasionally. 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; and some demulcent lotion, as a substitute for this uncleanly expedient, prepared with the white of egg, or emulsion of almonds, will relieve the painful sensations of the patient. Lotions of lime-water, or of liquor ammoniæ acetatis, much diluted, occasionally also afford relief.

4. The *LICHEN agrius* (Plate IV. Fig. 2.) 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 round them to a considerable extent. They are 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,

* 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, *απλως και αγριος*; (Isagogæ, cap. 13. See also Paul. Ægin. de Re Med. lib. iv. cap. 3; and Oribas. ad Eunap. lib. iii. cap. 57.) and Aëtius of rough and of inflamed Lichens, *τρηχεις και φλεγμαινοντες*, (tetra. iv. serm. i. cap. 134.) which appear to express the same varieties.

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, headache, 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 Lichen consists in administering, at first, some moderate laxatives, mercurial or saline, and afterwards, for some time, the diluted sulphuric acid, three times a day, in the infusion of roses, or decoction of cinchona. A simple cooling unguent, as the rose pomatum, or litharge plaster softened with oil of almonds,* allays the troublesome heat or itching. All stimulating applications are, still more than in the preceding species, both painful and injurious.

5. *LICHEN lividus* (Plate V. Fig. 2.) 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

* The formula of a mild ointment of this sort is used at the public dispensary, by Mr. Pearson's recommendation. ℞ Emplast. plumbi ℥ij, ceræ flavæ ℥ss, olei amygdal. dulc. ℥iss. Emplastro cum cera liquefacto adde oleum, dein agita misturam donec penitus refrixerit.

permanent, however, than in the foregoing varieties : and, after their desiccation, the disorder is liable to be prolonged for many weeks by a fresh eruption.

Its affinity with the 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.*

6. *LICHEN tropicus*, or “prickly heat,” as it is called in the West Indies, 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.†

7. There is scarcely any limit to the varieties of these popular affections : but I have observed one form, which is so uniform in its character as to be entitled to notice here. It may be called *LICHEN urticatus* ; as its first appearance 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. While the first wheals

* 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 Medicina Indorum, cap. 18.

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. 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 is commonly ascribed by parents to vaccination. Both the wheals and the papulæ are accompanied with intense itching, which is exceedingly severe in the night, occasioning an almost total interruption of sleep, and considerable loss of flesh.

Frequent tepid bathing, light covering, especially in bed, with the use of small doses of sulphur, or the hydrargyrus sulphuratus niger, internally, appear to relieve the symptoms. 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.

III. PRURIGO.

The characteristic symptoms of this genus are, a severe itching, accompanied by an eruption of papulæ of nearly the same colour with the adjoining cuticle. It af-

fects the whole surface of the skin, under three varieties of form, as well as some parts of the body locally.

1. *PRURIGO mitis* (Plate VI. Fig. 1.) 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 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. The itching is much aggravated both by sudden exposure to the air, 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, and commonly occurs in the spring or 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, although at first this stimu-

* 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.

lus slightly aggravates the eruption.* The internal use of sulphur, alone, or combined with soda or a little nitre, continued for a short time, contributes to lessen the cutaneous irritation ; and may be followed by the exhibition of the mineral acids. Under these remedies, the disorder gradually disappears : but if the washing be neglected, and a system of uncleanliness in the apparel be pursued, it will continue during several months, and may ultimately terminate in the contagious scabies.

2. *PRURIGO formicans*. (Plate VI. Fig. 2.) This affection 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 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 nearly to escape observation.

* 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 prurigo occurs in adults, and is not peculiar to any season. It affects the whole of the trunk 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, sometimes extending, with short intermissions, to two years or more. It is never, however, converted, like the preceding species, into the itch, nor becomes contagious; but it occasionally ends in impetigo.

The causes of the *P. formicans* are not always obvious. In some instances it is distinctly connected with disorder in the stomach; being preceded by sickness, gastrodynia, and headache: and in others, it appears to be the result of particular modes of diet, especially of the use of 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 com-

* 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 cyder?" 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.

plexion, and in those who are affected with visceral obstructions, or reduced by fatigue, watching, and low diet.

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.

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 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 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; antimonials 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 bath of the native or artificial sulphureous waters is still more efficacious in relieving the itching; and 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.

3. *PRURIGO senilis*. (Plate VI. Fig. 3.) The frequent occurrence of prurigo in old age, and the difficulty of curing it, have been the subject of universal observation.*

* See Hippoc. Aph. lib. iii. § iii. 31, where, among other diseases of old age, he mentions *ξυσμοι της σωματος ὄλου*.—Its obstinacy has been particularly noticed by the later Greeks. “Prurimum in

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 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 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, the liquor ammoniæ acetatis, or alcohol, are productive of great relief, and occasionally render the condition of the patient comparatively comfortable, or even remove the disease.* When

senectute contingentem perfecte sanare non datur, verum subscriptionis 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.

* 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. 23.)

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 is present. 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.*

This is true, perhaps, as far as it regards the unbroken or papulated skin: but itching often accompanies chops 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 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 external 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,

The local pruriginous affections above mentioned have scarcely any affinity with the prurigo just described, except in the itching which accompanies them, not being in general papular diseases. The *P. præputii* is occasioned by an altered or augmented secretion about the carona glandis, and is cured by frequent simple ablution of the parts, or by a saturnine lotion. The *P. pubis* arises solely from the presence of morpiones, or pediculi pubis, which are readily destroyed by mercurial ointment. And the *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.

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 muscæ domesticarum copia continuo ad lectum advoarent, 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.

Two forms of local prurigo, namely, *P. podicis*, and *pudendi muliebris*, are more frequently the objects of medical treatment. 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 connexion with an altered secretion from the part, and sometimes with constitutional debility. This complaint is apt to extend to the scrotum, especially in old men, 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. A troublesome prurigo *scroti* is also 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 mercurial ointments, especially the unguentum hydrargyri nitratis diluted, are the most successful applications.—Internally, small doses of calomel, with an antimonial, such as the pilula hydrargyri submuriatis of the New Pharmacopœia, seem to be advantageous in correcting the morbid secretion; and the vegetable or mineral tonics should be administered in enfeebled habits. Great temperance should be inculcated in the case of

P. podicis; since stimulant diet invariably aggravates the complaint.

The *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 vaginæ 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, sometimes by inflamed papulæ, and sometimes by aphthæ. Saturnine and saline lotions, lime-water, lime-water with calomel, vinegar, and oily liniments prepared with soda or potass, are beneficial, especially in the milder cases: but the most active remedy is a solution of the oxymuriate of mercury in lime-water, in the proportion of two grains, or a little more, to the ounce. As in the cases before mentioned, however, the presence of rhagades or excoriations will require palliation, before it can be employed.

Order II.

SQUAMÆ.

SCALY DISEASES.

THOSE opaque and thickened laminæ of the cuticle, which are called Scales (Def. 2.) are commonly produced by some degree of inflammation of the true skin, over which they are formed; but occasionally, as in the slighter forms of pityriasis, the cuticle alone, or with the rete mucosum, appears to be in a morbid condition. If the definition be carefully attended to, scales will not be confounded with the scabs succeeding confluent pustules and vesicles, or superficial ulcerations.

The four genera of scaly diseases are, **LEPRA**, **PSORIASIS**, **PITYRIASIS**, and **ICHTHYOSIS**.

 I. LEPRA.

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 by “scaly patches, of different sizes, but having always nearly a circular form.”*

* 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

1. *LEPRA vulgaris*,* (Plate VII.) the ordinary species of the disease 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 gradually, sometimes rapidly, dilate to the size of half-a-crown, still retaining their oval or circular form, and are covered with shining scales, and encircled by a dry, red, and slightly elevated border. In some cases, these scales accumulate, so as to form thick prominent crusts. If the scales or crusts

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 alphos; 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.

* The "Dartre furfuracée arrondie" of Alibert, represented in plate 12 of his large work, livraison iii.

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.

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 in many cases the hairy scalp; 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 when the patient is heated by exercise, or becomes warm in bed; and a little occasional tingling in certain states of the atmo-

sphere.* When it is generally diffused, however, and there is a considerable degree of inflammation in the skin, it 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 no 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.

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 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 ende-

* Hippocrates remarks that some *Lepra* itch before rain: lib. *Περί Χυμών*.

† 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.

mic 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, which was 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 : and vinegar, oatmeal, and other species of food, to which it has been ascribed, have probably given rise to it occasionally : but these are all anomalies, and are only referrible to peculiar idiosyncrasy.* In some cases it has commenced after violent and continued exercise, by which the body had been much heated and fatigued.

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

* 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.

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. On the whole, the causes of this disease are involved in much obscurity. There is obviously an hereditary predisposition to it in some individuals.

2. *LEPRA alphoides*.* (Plate VIII. Fig. 1.) This is a less severe form of the disease than the preceding. It differs chiefly in the small size of the patches, which sel-

* 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. “*Αλφος* 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. 28.) Celsus nowhere employs the term *Lepra*.

This scaly *Alphos*, which was deemed by Hippocrates a blemish rather than a disease (*Περί Πλευρω*, 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. Προρρητικ.* lib. ii.) Celsus, although point-

dom 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. This variety of Lepra is most common in children. It is tedious and difficult of cure, like the former, and requires similar treatment.

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

ing out this distinction, includes the leuce and the alphas 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 alphas, *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. Horstii 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. 341.

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.

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, exhibits, 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. A frequent use of the warm bath, with which a moderate degree of friction may be combined, contributes to remove the scales, and to soften the skin ; or, if the eruption be confined to the extremities, local ablution may be sufficient. These cases are benefited by the use of the sulphur waters of Harrowgate, Leamington, Crofton, and other well known springs, both internally and externally, 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.

But if the scales adhere tenaciously, or are accumulated into thick crusts (see Def. 2.,) 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 potass, 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. 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 lotions containing a small proportion of the oxymuriate of mercury may be substituted. The ointments should be applied at night, and washed off in the morning with warm water, or a slight saponaceous lotion. 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 always been permanent.

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. For this purpose the arsenical solution,* recommended by Dr. Fowler, is often extremely beneficial, in doses of four or five drops, which may be slowly increased to eight, and

* 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 Lepra.

persevered in for a month or more.* Pitch, administered in the form of pills, is productive of a similar good effect, where the cutaneous circulation is very inert; but both these medicines are liable to aggravate the eruption, where it is connected with much irritability of the skin. The solution of oxymuriate of mercury has appeared to have some efficacy in these inert states; and by thin and delicate girls, of relaxed habit, affected with the *Lepra alphoides*, the *vinum ferri*, or the tartrite before mentioned, has been taken with much advantage.†

One of the most effectual remedies for *Lepra*, however, under all its varieties, is the decoction of the leaves and twigs of the *solanum dulcamara*, which was introduced to the notice of British practitioners by Dr. Crichton.‡ This medicine is at first administered in doses of two or three ounces thrice every day, which are gradually aug-

* 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.

† 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 Cutan. Diseases*, p. 145.) His formula has been adopted by the College in the late edition of the *Pharmacopœia*.

mented, 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.

Where an irritable state of the disease exists, indeed, (and it is the most frequent,) nothing more stimulating than tepid water or thin gruel 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 the internal employment of sulphur, with soda or nitre, or the hydrarg. sulphuratus niger with an antimonial, especially when conjoined with the decoction of dulcamara. The caustic potass, or liquor potassæ of the L. 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 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. 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.

3. *LEPRA nigricans* (Plate VIII. Fig. 2.) is a more rare variety of the disease, differing externally from the *L. vulgaris* chiefly in the dark and livid hue 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 more easily detached in this form of *Lepra*, and the surface remains longer tender, and is often excoriated, discharging bloody serum, till a new incrustation is formed.

This variety of *Lepra* occurs 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, followed by the use of the bark, mineral acids, and sea-bathing.

II. PSORIASIS.

The *PSORIASIS*, or *scaly tetter*,† occurs under a considerable variety of forms, exhibiting, in common with

*The *melas* of the ancients was deemed a superficial affection, resembling the alphas, except in its colour. “*Μελας* 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. 3.

† The scaly tetter was denominated *psora* by the Greeks, or sometimes rough and leprous psora. (See Aëlius, tetr. iv. l. cap. 130, &c.) But, the same generic term, with the epithet *ulcer-*

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 elevated 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 commonly accompanied by some constitutional disorder, and is liable to cease and return at certain seasons.†

The causes of Psoriasis are nearly as obscure as those of lepra. It is not contagious; with the exception

ating, or *fustular*, Ψωρα ἐλλωδης, 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 the former being orbicular. “ Δεπρα per profunditatem corporum cutem depascitur orbiculatiore modo, et squamas 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; rësio major est; celerius ac latius procedit, certioribusque, quam prior, temporibus, et fit, et desinit: Rubra cognominatur.” (lib v. cap. 28.)

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 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 over-heated 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.

* 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. Meth. class. x. ord. 5.—Linn. Gen. Morbor. class. x. ord. 4. Cullen, Nosol. class. iii. ord. 3. gen. 88.

Dr. Willan has given names to eleven varieties of Psoriasis, several of which are local, and require but a brief notice.

1. The *PSORIASIS guttata* (Plate IX. Fig. 1.) is a sort of connecting link between this genus 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 appear 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. This eruption is most common in the spring, at which season it is liable to recur for several years. It is preceded by general pains, and slight feverishness. In children it often spreads rapidly over the body in two or three days; but in adults its progress is gradual and slow.

2. The *PSORIASIS diffusa** (Plate IX. Fig. 2. X, XII. Fig. 1.) presents a considerable variety of appearances. In most cases it consists of large patches, which are irregularly circumscribed, and exhibit a rough, red, and chopped 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

* Good specimens 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.

exposure to the direct rays of the sun; 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 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. 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.

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 also occur from local irritation; as in

the *baker's itch* (Plate XI.) when the back of the hand is gradually covered with the rough scaly patches, interspersed with rhagades, and somewhat tumified;—and in the hands and wrists of washerwomen, from the irritation of soap. In the latter variety, (Plate X. Fig. 2.) a diffuse inflammation surrounds the hands, wrists, and fingers, and from the whole of the affected surface the brittle cuticle separates in large irregular flakes in rapid succession. In infants, from two months to two years of age, this Psoriasis occasionally occurs in a severe degree, insomuch that Dr. Willan constituted the *P. infantilis* a distinct species.

3. In the *PSORIASIS gyrata* (Plate XII.) the patches are in stripes of a tortuous or serpentine form, resembling worms or leeches, or sometimes bending into rings. It is apt to be confounded with the vesicular and pustular ring-worm (*herpes and impetigo*).

4. The *PSORIASIS inveterata* (Plate XIII. Fig. 2.) 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 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, with a discharge of their lymph, followed by a hard, dry cuticle, which separates in large pieces. In this extreme degree, it approaches very closely to the inveterate degree 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*.

The more local varieties of *Psoriasis* are the *P. labialis*, affecting 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 *P. palmaria*,* (Plate XIV.) an obstinate tetter, confined to the palm of the hand and wrist, which are rough, hot, and itchy, of a dirty hue, and cleft by deep furrows, which bleed when the fingers are stretched;—*P. ophthalmica*, when the scaliness occurs chiefly about the angles of the eyes, producing an itching, inflammation, and thickening of the eyelids, with a watery discharge;†—the *P. præputii*, which often accompanies the *P. palmaria*, is characterized by painful fissures and thickening of the part, and is usually attended with phymosis;—and the *P. scrotalis*, in which 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

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

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

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 are injurious; and the vegetable juices, which an absurd notion of the *scorbutic* nature of the Psoriasis suggested, appear to be totally inefficacious. 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 the commencement of the eruption, when it appears suddenly, and the constitution is obviously disordered, a moderate antiphlogistic treatment must be pursued. A gentle purgative should be administered, 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 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.

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.

But the more local, and less inflammatory eruptions of Psoriasis are considerably alleviated by local expedients. The *P. palmaria* is deprived of its dryness and itching by exposure to the vapour of hot water, by the use of gloves made of oiled silk, and by the application of the unguentum hydrargyri nitratis, diluted with the ungu. cetacei or ceræ, according to the degree of irritation in the skin. 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 ungu. 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 *P.* 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 con-

stant 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.

III. PITYRIASIS.

The PITYRIASIS is a very superficial affection, characterized by irregular patches of thin scales, which repeatedly exfoliate and recur, but which never form crusts, nor are accompanied with excoriations. It is not contagious.*

It occurs under three or four varieties of form.

1. The PITYRIASIS *capitis* (Plate XV. Fig. 1.) which in infants is called *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

* These negative characters distinguish this eruption, especially when it affects the scalp, from the furfuraceous porrigo; 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 Πιτυριασις by the word *porrigo*; 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 porrigo, 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."

the scalp with 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 porrigo.

2. The *PITYRIASIS rubra* 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 unperspiring 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. Where the irritability of the skin is not very great, a gently restraining lotion or ointment, containing a portion of borax or alum, and super-acetate of lead, may be applied to the parts affected with advantage.

3. The *PITYRIASIS versicolor* (Plate XV. Fig. 2.) is most remarkable for the chequered and variegated dis-

coloration 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.

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 dis-

* 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*,” latinizing 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.

tressing, 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 symptom. 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 sea-faring 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 the 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, I think, is possessed of some efficacy; 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 dis-

* See below, page 53.

order is often removed; as by lotions of strong spirit, containing the muriatic acid, or the caustic potass; one drachm of the former, or two or three of the liquor potassæ, may be added to half a pint of distilled water. Sea-bathing 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.

4. PITYRIASIS *nigra*. 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 furfureous exfoliations. It sometimes affected half a limb, as the arm or leg; sometimes the fingers and toes.*

IV. ICHTHYOSIS.

The ICHTHYOSIS, or *fish-skin disease*, is characterized 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

* M. Alibert has figured an eruption on the hand, which seems referable to this species, and which he denominates a "scorbatic 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.

exfoliations, the distinct and partial patches, or the constitutional disorder, which belong to lepra and psoriasis.

1. *ICHTHYOSIS simplex*. (Plates XVI, XVII.) In its commencement this disease 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 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 ankles, and sometimes on the trunk of the body, these excrescences are scaly, flat, and large, and occasionally imbricated, like the scales of carp. 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. 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.) The mammae, in females, are sometimes encased in this rugged cuticle. The whole skin, indeed, is in an extremely dry and unperspirable condition, and in the palms of the hands and soles of the feet it is much thickened, and brittle. The disease often commences in childhood, and even in early infancy.

This affection has been found to be very little under the control of medicine.* stimulating ointments and plasters have been industriously applied, 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

* For examples of Ichthyosis the reader may refer to Panarolus (Petecoste 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. xlix. for 1755. See also the 37th plate of Alibert, in which the *I. simplex* is well represented. His appellation is "Ichthyose nacrée."

easiest mode of removing the scales is to pick them off carefully with the nails from any part 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."

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. Internally the use of pitch has in some instances been beneficial, having occasioned the rough cuticle to crack and fall off, and leave a sound soft skin underneath. This medicine, made into pills with flour, or any farinaceous powder, may 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

* 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 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.*

2. *ICHTHYOSIS cornea.* 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.

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,

* The definition of ichthyosis given by Plenck, as well as the description of "lepra ichthyosis," by Dr. Lettsom, on whose authority Plenck has mentioned this remedy, obviously refers to the lepra vulgaris. See Plenck, *Doctrina de Morb. Cutan.* p. 89.—Lettsom, *Med. Memoirs of the Gen. Dispensary*, sect. iii. p. 152.

† See *Philos. Trans.* no. 176, no. 297, and vol. xlviii. p. 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.

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 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

* “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. i. chap. 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.

‡ See two cases of this sort described by Mr. (now Sir Everard) Home in the Philosophical Transactions, vol. lxxxv. p. 1; and references to nine other cases of similar origin, in which the horny

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.

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 1676, 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 Ingrassias, de Tumor. præt. 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. 3—6.

Order III.

EXANTHEMATA.

RASHES.

THE term EXANTHEMA, *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; (see Def. 3.) 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 con-

* 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. Fœs.—Epidem. lib. 7. p. 359. 28. &c.) He speaks also of τα αμυχώδεα εξανθισματά, or excoriations (Coac. Prænot. 444;) and applies the verb even to ulcers;—εξανθει ελκεια ες την κεφαλην (de Morbo Sacro, § iii. p. 88.) He has likewise εξανθησεις ελκωδες, (aph. 20. lib. iii.)

tagion, or to the duration and progress of the complaint. The first two genera of this order are contagious; the others are not.

I. RUBEOLA*.

MEASLES.

The rash, in the *measles*, appear usually on the fourth, but sometimes on the third, fifth, or sixth day of a febrile disorder, 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, and appears under three varieties of form.

1. RUBEOLA *vulgaris*. (Plate XIX.) The precursory fever of the measles 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, together with a serous discharge both from the eyes and nostrils, which excites sneezing. There is likewise a frequent dry cough, with some degree

* 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 Rubcola, 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.

of hoarseness and difficulty of breathing, and often with a roughness or slight soreness of the throat. These symptoms are generally more severe in children than in adults, and are sometimes accompanied with slight delirium in the night.

The rash, on the fourth day, begins to appear about the forehead and chin, and then 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. During this day the efflorescence in the face is most vivid; but on the following (the sixth) day it begins to fade and subside, while the patches on the body are highly red. But these in like manner, 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 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.

It is important, with a view to diagnosis, to attend accurately to the form of the rash. 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 are inter-

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

† This observation, which is peculiar to Dr. Willan, is impor-

mixed with the single circular dots, and with interstices of the natural colour of the skin: on the face, they are slightly raised, so as to give the sensation of inequality of surface to the finger passed over the cuticle. 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 smallpox:* but on the other parts of the body they are not sensibly elevated. In many persons, however, as Dr. Willan has remarked, miliary vesicles appear, during the height of the efflorescence, on the neck, breast, and arms; and papulæ often occur on the wrists, hands, and fingers.

The catarrhal symptoms, and even the fever, are somewhat augmented on the appearance of the eruption; but the latter usually ceases, when the eruption declines. At this period, a diarrhœa commonly supervenes, if it had 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 pneu-

tant; 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. 6 3.

monia, on which hectic sometimes supervenes, and ultimately hydrothorax, spitting of blood, or 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.

The eruptive stage of measles, being seldom attended with danger, requires little medicinal treatment. It is chiefly necessary to open the bowels, to confine the patient to a light vegetable diet, with cold, subacid aqueous drinks, and to maintain a cool regular temperature of the room. 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 pa-

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

tient, contributes to repress present fever, restlessness, and delirium, and to diminish the inflammatory tendency of the disease in the lungs, eyes, &c. on the decline of the eruption.*

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

* 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 affusion* 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.

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." But Dr. Willan has placed this matter in the most judicious 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 be safely left to the natural termination, even in adults. But, on the other hand, when the eruption has disappeared, and these symptoms, together with difficulty of breathing, become severe, bleeding and cupping may be repeatedly necessary, aided by blisters, and demulcents, with anodynes.

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 pa-

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

tient will require the support of light but nutritious diet, and cordials.

2. *RUBEOLA sine catarrho.* (Plate XX.) This is a peculiarity, 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 and appearance of the eruption are 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.*

* 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.* § i. 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 smallpox, and other contagious diseases, which in general affect individuals but once during life. Since my first edition was printed, I have met with two

3. RUBEOLA *nigra*. (Plate XXI.) 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. It is devoid of inconvenience or danger, and is removed in a week or ten days by the mineral acids.

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 one 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

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.

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 smallpox. “*Quibus per febres continuas φλυζακία 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

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

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,

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

than if few, &c.”—“Moreover,” he remarks, “those which are extremely red are of the worst kind; but those 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 of 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 *especially 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

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

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

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 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

* *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.

|| 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.

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.



II. SCARLATINA.*

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.

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

* 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.

† 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

commences after a shorter interval from exposure to the contagion than the disorders just mentioned; namely, on the third, fourth, or fifth day.* Adults, however, are not very susceptible of the contagion; and, in them, the disease does not always appear so soon. Many medical practitioners, who have attended great numbers of patients affected with it, have never experienced any of its effects.

The Scarlatina appears under four varieties, in three of which the efflorescence occurs on the skin; *viz.* the *S. simplex*, *anginosa*, and *maligna*; and in the fourth, only in the mouth and throat; to which, therefore, the appellation of Scarlatina has never been applied.

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 smallpox and measles.

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.)

1. The *SCARLATINA simplex* (Plate XXII.) consists merely of the rash, with a moderate degree of fever. The day after the slight febrile symptoms have appeared, the efflorescence begins to show 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 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, and several papulæ are scattered on these parts. On the following (the fourth) day the eruption remains at its acme; 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

* 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

indistinct, and is wholly gone before the end of the seventh. On the eighth and ninth 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 without any fever, almost without indisposition.

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

latæ, *ut in principio*, apparent, &c." (De Febribus, lib. iv. cap. xii.) See also Etmuller. Opera, tom. ii. p. 416, where this circumstance is accurately stated.

* "Nimiâ medici diligentia." Sydenham, § vi. cap. 2.

cool drinks, and of light diet, without animal food. Moderate laxatives are also to be recommended.

2. *SCARLATINA anginosa*. (Plate XXIII. Fig. 2.) In this variety of Scarlatina, 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 headache, great restlessness, and delirium; and the pulse is frequent, but feeble: there is also an extreme languor and faintness. The tongue, as well as 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.)

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

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. Sometimes too it 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 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 hands and 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 later. 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.* But there is one affection peculiar 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.†

The principles, by which the treatment of Scarlatina anginosa should be regulated, have been satisfactorily established within the last few years; especially since

* See above, p. 59.—Also Herberden, Comment. cap. vii. p. 20.

† 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. 1.) 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.)

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 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 antiphlogistic 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 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

* See Dr. Withering's Treatise before quoted.

this active employment of them 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 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 be-

* 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.

‡ See his Treatise on Purgative Med.

ginning 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 diarrhœa came on in this fever.” But so far from producing injury, he was afterwards satisfied, that the laxatives actually tended to prevent the diarrhœa which he dreaded.†

* 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 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 treat-

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

ment 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. Albans,” 1749, p. 16.)

“safe” or effectual “method” of producing it (which was a desideratum with Dr. Withering) consists in *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 economy 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. This expedient combines in itself all the medicinal properties which are indicated in this state of disease, and which we should scarcely *a 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

* Dr. Hancoke, 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.

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 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

* 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 superintendance of the fever institution for the last twelve 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.

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.*

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;

* 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 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.

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 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

* 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 quinsies.

symptoms of malignancy and putrescency, to obviate which the bark and wine have 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.

3. *SCARLATINA maligna*. This form of Scarlatina, 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, and the mouth is in-

crusted with a black or brown fur. 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 discharge also distils from the nostrils, producing soreness, chaps, and even blisters. 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.

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

The treatment of *Scarlatina maligna* must necessarily be different from that prescribed for the preceding species, and is unfortunately much less efficient. 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; and blisters 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 restringent 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*. 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 vapour, Dr. Willan states, often supersedes the necessity of gargles.

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 warm vinegar and spirits, has been attended with benefit.

4. 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 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.

III. URTICARIA, OR NETTLE-RASH.

The *nettle-rash* is distinguished by those elevations of the cuticle, which are usually denominated wheals. (Def. 9.) They have a white top, but are often surrounded by diffuse redness. Dr. Willan particularly noticed six varieties of the complaint. It is not contagious.

1. URTICARIA *febrilis*.* (Plate XXIV. Fig. 2.) The rash, in this variety of Urticaria, is preceded for two days or more by feverish symptoms, with headache, pain and sickness at the stomach, and considerable languor, anxiety, and drowsiness, and sometimes even by syncope. The wheals appear in the midst of irregular patches of

* 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. vi. obs. 96; and Schacht, Inst. Med. Pract. cap. xi. § vi.) Sydenham has likewise described it, under the title of "Febris erysipelatosā; (Obs. Med. § v. cap. 6.) and Suavages, as a variety of scarlatina, 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 Exanthemate urticato," tom. ii. cap. 5; and Frank, "de curand. Hom. Morb." lib. iii. § 306.

a vivid red efflorescence, sometimes nearly of a crimson colour, and are 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 most parts of the body, and 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; is often connected with teething or disordered bowels in children; and among adults, affects persons of full habit, who indulge in the gratifications of the table.

Modifications of the febrile nettle-rash, indeed, are

* "Illud enim singulare habent, quod in frigido magis emergant, et in calido evanescant." Vogel. See also Berserius, § 96; and Frank, § 309.

† See Sydenham; and Frank, § 307.

‡ "Febris primo septenario inter sudores decedit." Vogel.

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 muscles.* In a few individuals, in consequence of a peculiar idiosyncrasy, other substances, when eaten, are followed by the same immediate affection of the skin; such as 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. The eruption, however, is not always accompanied with

* On some parts of the coast of Yorkshire, where muscles 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 mentioned by Ammans, and Valentinus, in which a man died so suddenly after eating muscles, that suspicion of having administered poison fell upon his wife. (See Behrens, "Diss. de Affectionibus a comestis Mytillis.")

† 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, § 310.

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

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, followed by a gentle laxative, with light and cooling diet, (with total abstinence from fermented liquors, and from sudorific medicines,) 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 sulphuric acid, is beneficial.

2. The *URTICARIA evanida* (Plate XXIV. Fig. 1.) 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

* "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 arcessiverunt." 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.

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 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 headache, 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 or some peculiar idiosyncrasy, of the stomach; so when it continues long, Dr. Willan justly suggests the probability, that it originates from some article of diet, which

* I knew a young lady, enjoying good health, who could, at any time, instantaneously excite long white and elevated wheals on her skin, by drawing the nails along it with some degree of pressure: but they 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.

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 have found the soda or the caustic potass, combined with aromatic bitters, such as cascarilla, afford relief.

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.

3. *URTICARIA perstans* differs from the preceding variety, 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 sub-

side, leaving a reddish spot for some days. The treatment, directed for the foregoing species, is beneficial.

4. In the *URTICARIA conferta*, 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 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.

5. The *URTICARIA subcutanea* is a sort of lurking nettle-rash, that is marked by a violent and almost constant tingling in the skin, 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.

6. The *URTICARIA tuberosa* (so called by Dr. Frank) is marked by a rapid increase of some of the wheals to a large size,* forming 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 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

* “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. § 309. tom. iii. p. 108.

† 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 intus exulceratio mucosa.”

gentle laxatives, where the organs of digestion appear to be deranged.*

IV. ROSEOLA.

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 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 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.

The Roseola is a rose-coloured efflorescence, va-

* Frank, loc. cit. § 312.

† 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. 56, *note*.)

riously figured, without wheals, or papulæ, and not contagious. The principal varieties of it are comprised under the seven following heads.

1. The *ROSEOLA æstiva* (Plate XXV. Fig. 1.) is sometimes preceded for a few days by slight febrile indisposition. It appears first on the 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, but larger and of more irregular forms 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. 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, headache, 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 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.

2. The *ROSEOLA autumnalis* (Plate XXV. Fig. 2.) 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.

3. The *ROSEOLA annulata* (Plate XXVI. Fig. 1.) 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 symp-

toms, 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 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 pains 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.

4. The *ROSEOLA infantilis* (Plate XXVI. Fig. 2.) is a closer rash, 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 mea-

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

sles and scarlatina. Whence it is necessary that practitioners should be acquainted with it; although it requires no specific treatment, but is alleviated by the remedies adapted to the bowel-complaints, painful dentition, and other febrile affections, with which it is connected.

5. *ROSEOLA variolosa*. (Plate XXVII. Fig. 1, 2.)

This rash occurs previous to the eruption both of the natural and inoculated smallpox, 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 extremities. Its distribution is various: sometimes in oblong irregular patches, sometimes diffused with numerous interstices; 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.

This rash is generally deemed, by inoculators, a certain prognostic of a small and favourable eruption of the smallpox.* It is not easily repelled by cold air or cold

* Dr. R. Walker, indeed, speaking of the natural smallpox, says,

“ In every bad kind of smallpox, the eruption is ushered in by a

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.

6. *ROSEOLA vaccini*. (Plate XXVII. Fig. 3.) An efflorescence, 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 from 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.

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 Morton de Variol. et Morb. p. 186.

7. *ROSEOLA miliaris*. 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 aestiva* 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 humeris. 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.

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

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 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.

V. PURPURA.

This term is appropriated by Dr. Willan to “an efflorescence consisting of small, distinct purple specks and patches, attended with general debility, but not always with fever.” The specks and patches, here mentioned, 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. The Purpura,* in this arrange-

* 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: 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 *hæmorrhæa petechialis*, which was given to the chronic

ment, 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.

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 his 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 “*sincera*.” (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 febre*;” (Curat. Med. cent. iii. obs. 70) as had Cusson, who called it “*Purpura apyreta*.”—Pezoldus (obs. 6) and Zwingerus (Pædoiatreia Pract. p. 622) treated it under the appellation of “*maculæ nigræ sine febre*.”

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.

1. In the *PURPURA simplex* (Plate XXVIII. Fig. 1.) 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 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 flea-bite, and commonly circular. They may be distinguished from recent flea-bites, partly by their more livid or purple colour, and partly because, in the latter, there is a distinct central puncture, the redness around which disappears on pressure. There is no itching, or other sensation attending the petechiæ.

2. The *PURPURA hæmorrhagica*.* (Plate XXVIII. Fig. 2.) is considerably more severe; the petechiæ are

* 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 *phænigmus petechialis*, class. x. gen. 32.

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: 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.

* See Reil, *Memorab. Clinic.* vol. i.—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. 125.

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 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 ex-

* 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 ura cum facie, labiis, et lingua, ubi mane adsurgeret, numerosissimis maculis lividis et nigerrimis obsitum fuit, &c."—Similar cases are de-

treme debility and depression of spirits: the pulse is commonly feeble, and sometimes quickened; and 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, and 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 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

scribed by Zwingorus, in the Act. Nat. Cur. vol. ii. obs. 79. and by Werlhoff, in the Commerc. Liter. Norimberg. ann. 1735, hebd. 7 & 2. In all these instances, the eruption was discovered on rising in the morning, having taken place during the night.

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

* 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.

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 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 circum-

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

† 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 Suavages, class. iii. gen. vi. spec. 3.

stances existed: for instance, in young persons living in the country, and previously enjoying good health, with all the necessaries and comforts of life. .

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 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

* I mean the true *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.

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 hæmorrhagies 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, and which occurred in a boy under the inspection of my friend and colleague Dr. Laird, the spleen, which had been distinctly felt during

* 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.

life protruding itself downwards and forwards to near the spine of the ilium, was found enormously enlarged. 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

* 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.

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.

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

* 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.

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 accompanied 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.† If the pains are severe and

* 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.

† While these sheets were in the press, I received a valuable communication from my friend Dr. Harty, of Dublin, detailing the

fixed, and if the marks of febrile irritation are considerable, and the spontaneous hæmorrhage not profuse, local or general blood-letting may, doubtless, be employed with great benefit, especially in robust adults.

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, and the decoction of cinchona, or cascarilla, or some preparation of iron, together with moderate exercise, and nutritious diet.

3. The PURPURA *urticans* (Plate XXIX.) 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, with-

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 hæmorrhages 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.

in 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.

The same rules of treatment apply to this, as to the preceding varieties of the disease.

4. *PURPURA senilis*. (Plate XXX.) I give this appellation to a variety of the complaint 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 arms was left of a brown colour. The health did not appear to suffer; nor did purgatives, bloodletting, (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.

5. *PURPURA contagiosa** 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 merely 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.

VI. ERYTHEMA.

The *ERYTHEMA*, like the roseola, is commonly symptomatic, and occurs with much variety in its form: yet sometimes, like the same efflorescence, it is the most

* *Purpura maligna* of Suavages, spec. 3.

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

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, for example, to the *Ecze-ma* produced by the irritation of mercury.

In this arrangement, *Erythema* signifies “a nearly continuous redness of some portion of the skin, attended with disorder of the constitution, but not contagious.” Dr. Willan has described six varieties, which will include all the ordinary forms of the efflorescence. In some of them, as will appear from their titles, the surface is more or less elevated at some period of its course, approximating to the papular or tubercular tumours: but these are obscurely formed, and soon subside, leaving the redness undiminished.

* The word *ερυθριμα*, 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 efflorescence (Def. 3.) 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 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.* § 483.

1. *ERYTHEMA fugax* 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 diarrhœa, generally denoting, as Hippocrates and the ancients have observed, a tedious and dangerous disease. They sometimes occur in chronic affections, especially those in which the primæ viæ are deranged; as in dyspepsia, hysteria, hemicrania, &c.

2. The *ERYTHEMA læve* 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, and 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 a weak spirituous lotion applied to the surface.

It sometimes occurs, without œdema, when the bowels have been much disordered, and occasionally, in women, at the menstrual periods.

3. *ERYTHEMA marginatum* (Plate XXXII. Fig. 2.) 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, and their occurrence is to be deemed unfavourable.

4. The *ERYTHEMA papulatum* (Plate XXXI. Fig. 1.) occurs chiefly on the arms, neck, and breast, in extensive irregular patches, 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 hue, especially in the central parts of the patches. I have seen this eruption attended with great disorder of the constitution; especially with a frequent, small pulse, total anorexia, 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.

5. *ERYTHEMA tuberculatum* (Plate XXXI. Fig. 2.) resembles the last variety in the large irregular patches of red efflorescence, which it exhibits; but there are small slightly elevated tumours interspersed through the patches, which subside in about a week, 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 symptoms, or to prevent the subsequent hectic. I have not seen any instance of it.

6. The *ERYTHEMA nodosum*, (Plate XXXII. Fig. 1.) which is a more common and milder complaint, seems to affect females only, and 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

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

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 laxatives, followed by the mineral acids, and other tonics.

Under the head of Erythema Dr. Willan 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. Sometimes it is accompanied by a glairy fetid 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

* 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.)

the acrid secretion, where it occurs, and tends to prevent excoriation. If this takes place any simple ointment, or mild absorbent powder, will be applied with relief.

*Order IV.***BULLÆ.**

IN the 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* (Def. 4.) 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 sometimes is converted into an ulcer, which does not readily heal.

* 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. 230, with an engraving of the herpes zoster.

I. ERYSIPELAS.

The ERYSIPELAS is a febrile disease, in which some part of the body is affected externally with heat, redness, swelling, and vesications. The tumour is soft, diffuse, and irregularly circumscribed, and not accompanied by throbbing or acute pain.

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 phenomenon, 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.

The varieties of Erysipelas may be classed under four heads, namely, phlegmonous, œdematous, gangrenous, and erratic.†

* See Galen Meth. Med. cap. xiv. and Comment. in aph. 20, lib. vi. ; 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,

1. *ERYSIPELAS phlegmonodes*. 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, affecting usually one side of it only; sometimes it seizes one of the extremities; and in both cases it is ushered in by a smart feverish attack. The colour is higher than in the other species, and the burning heat and tingling in the part are exceedingly distressing. The swelling generally appears on the second night, or third day of the fever; the vesications rise on the fourth and fifth, and break or subside on the fifth or sixth, 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 separated, and 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,

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.

* Dr. Cullen has given an excellent history of the disease. First Lines. 1696.

and the desquamation may not be completed before the fourteenth day. The vesications, in the latter instances, 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.

2. The ERYSIPELAS *œdematodes* 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.* Vesications, which are smaller, less elevated, and more numerous than in the former species, appear 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 unapt-

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

ly compared by Dr. Willan to that of a bladder distended with water.

This species of 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, takes place about the height of the disorder, and often terminate fatally on the seventh or eighth day; 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 persons of debilitated 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. 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.

3. The ERYSIPELAS *gangrænosum* 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 accompanied with symptoms of low fever, and with delirium, which is soon followed by coma, which remains through the sub-

sequent 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, which frequently terminate in 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.† 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 is not speedily cut off, nearly destroys some of the fingers, or toes, or even the genitals. In the milder cases, when the extremities alone

* See Underwood on the Dis. of Children, vol. i. p. 31. (5th edit.)—and an ample account of it by Dr. Gartshore, 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.

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.

4. In the *ERYSIPELAS erraticum* 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.* It 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 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. Erysipelas is likewise symptomatic of wounds and punctures, especially when the periosteum is injured, and of the local application of poisons, the stings of insects, &c.†

* 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.

† An erysipelatous affection, which has even proved fatal, has occasionally come on two or three days after inoculation, both va-

It has been the subject of some discussion, whether Erysipelas is not sometimes propagated by contagion. 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.* But such cases are, at all events, extremely rare, and perhaps never happened in well-ventilated and cleanly houses. From the Royal Infirmary, at Edinburgh, this disease, like the puerperal fever, was banished by ventilation, white-washing, and other means of purification; and it has not 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 child-bed, ulcerated sore-throat, &c. The simple phlegmonous Erysipelas, at all events, was never seen to spread like an infectious disease.

The method of treatment must necessarily be widely

riolous and vaccine, in children of irritable habits. See some cases in the *Med. and Phys. Journal*, for 1801.

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

† See Dr. Harty's *Observations on Dysentery*.

different in the phlegmonous, from that which the other forms of the disease require. 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 enjoining repose of body and mind, and a cool apartment. Saline and other diaphoretic medicines may be employed, as auxiliaries of secondary importance. Blood-letting, which has been much recommended as the principal remedy for the acute Erysipelas, is seldom requisite; and, unless there is considerable tendency to delirium or coma, cannot be repeated with advantage, at least in London, and other large towns.* Local bleeding and blistering may be substituted, in such cases, but not upon, or very near the diseased surface. The administration of cinchona 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 the Erysipelas *œdematodes*, and *erraticum*, the two last-mentioned remedies 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

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

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.

In the *Erysipelas gangrænosum*, even in infants,* the bark is necessary, in considerable doses, through the whole course of the disease: Opium also, camphor, the mineral acids, with wine, 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.† 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 sur-

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

† "Externa remedia resolventia, emollientia, adstringentia, vel calida, vel frigida,—uti quoque pulveres varii, parum vel nihil in erysipelate prosunt; nec omnis noxæ suspicionem, experientiâ teste, effugiunt." Callisen.

face*. 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 ammoniæ acetatis, has appeared to me to afford considerable relief.

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; (not of bullæ,) and possesses all the other characteristics of herpes. See below, 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 S^u Antonii, mal des ardens, ergot, kriebel krankheit, &c. &c. according to its various modifications and degrees of severity, or according to the supposed cause of it.† The erysipela-

* Mr. Pearson, § 331.

† 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 gangrænâ in eo,

tous 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

quod lentius procedat, cum dolore rodente et stupore, et in mumiam abeat; gangræna contra mollescat, phlyctænas elevet, 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 Necrossis 1749-50, spasmi artuum cum doloribus vagis; post 2 vel 3 septimanas stupor, fremitus obscurus, artus cum frigore glaciali, contracturis, et anæsthesiâ; tandem livor partis, nigredo, flavedo, phlyctænæ, 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 Hessa 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

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 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 the space of seven or nine days:* a circumstance, which the amply supply of food in those religious houses may probably satisfactorily explain. It would be foreign to my purpose to pursue the subject here.

II. PEMPHIGUS.

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 Pempigus.† Subsequent nosologists have given definitions of the disease, upon the same authority, as an idiopathic, contagious, and malignant fever, in the course of which

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)

* Mezeray, *Ab:égé Chronologique*. See the articles Ergot, and Ignis Sacer, in Dr. Rees's *Cyclopædia*.

† From *π:μφιξ*, *bulia*, *phlyetæna*. See his *Nosol. Method. class.* iii. gen. 5.

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 of the accuracy of the original writers. The case related by Seliger,† on which Suavages 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 Suavages, 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 (see page 119,) in typhoid fevers. Again, as to the *Pemphigus Helveticus* (spec. 3) of Suavages, which is borrowed

* 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*, characterizes 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 Suavages.

‡ See his *Médecine Expérimentale*, p. 134. Par. 1755.

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, 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 symptoma-

* 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, 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 acuminate, warty, dry, hornpock,) which is, in fact, smallpox.

tic;* or to the following genus, pompholyx, in which they are unconnected with fever.

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 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 shrivelled 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.†

* 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.

† Consistently with the opinion that all these bullæ are symptomatic, and that the existence of a peculiar eruptive fever, characterized 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.

III. POMPHOLYX.

To an eruption of bullæ, appearing “without any inflammation around them, and without fever,” and therefore differing most materially from the pemphigus described by nosologists, Dr. Willan applied the appellation of Pompholyx,* of which he has described three varieties.

1. The POMPHOLYX *benignus* 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.

2. The POMPHOLYX *diutinus* (Plate XXXIII.) is a tedious and painful disorder, and is usually preceded for some weeks by languor and lassitude, headache, sickness, and pains in the limbs. Numerous red pimple-like ele-

* Foësius observes (Œconom. Hippoc. ad voc. *πομφοι*) that Hippocrates uses that word to denote wheals, or those eminences which resemble the eruption produced by nettles, (lib. ii. *Περὶ Πιθων*) and that *πομφολυγες* are the bubbles of air, which appear upon water: but that Galen explains the *πομφη*, as eminences of the cuticle, containing a fluid; in exegesi, lib. ii. de Mulier.— See also Gorræus, Def. Med.

vations of the cuticle appear, with a sensation of tingling, which 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, with 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 con-

tinued, remittent, and intermitent type, as well as arthritic, and other secondary fevers.*

It is sufficiently clear, from the statements of the writers just referred to, that the Pompholyx is never communicated by contagion; and that 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.

* 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. 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 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 the 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.*

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: 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

* 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.

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 internally, and linseed poultices, followed by light dressings to the sores externally, were employed with advantage in three cases seen by Dr. Willan.

Order V.

PUSTULÆ.

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 (Def. 5.) 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. They often terminate in a scabby incrustation, varying in

* 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 even wheals and papulæ, “quæ ex urtica, vel ex sudore nascuntur;” and he deems it synonymous with εἴανθημα of the Greeks, which was in fact the general term for every species of *eruption*. (Celsus de Med. lib. v. cap. 28, § 15.—See above, page 55, note.) The Greek physicians appear to have comprehended both pustules and vesicles under the term φλυκταιναι, which their translators have rendered by the word, *pus tula*; 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 *suffurentur* vel in *pus* abeant.” (Commentar. de Aphthis, Gott. 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; and sometimes in superficial ulceration. The five genera of pustular diseases, comprehended in this order, have nothing in common in their character, except the appearance of pustules in some stage of their progress: for some are contagious, and others not; some are acute, and others chronic.



I. IMPETIGO.

HUMID OR RUNNING TETTER.

This eruption is characterized by the appearance of the small pustules, denominated *Psydracia* (Def. 5. *b*). It is not accompanied by fever, not contagious, nor communicable by inoculation. It chiefly occurs on the extremities, and under the following forms.*

1. The IMPETIGO *figarata* (Plate XXXIV.) is the most common variety of the moist tetter. It appears in circumscribed patches, of various figure and magnitude, which are usually smaller and more circular on the

* Celsus has described four species of Impetigo, the first of which is a pustular disease, terminating in excoriation, and corresponds with the affections 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 (*ψώρα ἐλκωδης*) of the Greeks was apparently the same affection with the Impetigo of Celsus.

upper, and larger, 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 or 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 yellowish or greenish scabs; but still continues to ooze from under the scab, which it forms. 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 psudracious pustules reappear, 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 phænomena, 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 mean time, 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 pustules are intermixed with transparent vesicles, resembling the

* This impetiginous *ring-worm* 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 *couraf*. (De Med. Indorum, cap. 17.)

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 forefinger and thumb is usually the seat of one of the blotches. The vesicles are slower in their progress than the *psyrdracia*: 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 *psyrdracia*. 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, serpentia, dysepuleta.*” *Nosol. gen.* 147. And Prof. Callisen’s brief description of herpes, in one of its varieties, is an accurate delineation of this Impetigo.

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.

2. The *IMPETIGO sparsa* (Plate XXXV.) 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 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

“*Herpes pustulosus, crustosus, serpigo*, quem constituunt papulæ peiores corrosivæ, quæ congestæ aream circularem constituunt, acutè pungentem, valdè pruriginosam, deinde 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.

and obstinate. 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 headache. 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. The *I. sparsa*, especially on the lower extremities, is apt to return with regularity 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 in the spring; of both which I have witnessed several examples.* The accession of the eruption has, in other instances, been

* 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 interposito tempore quasi squamulæ solvuntur; certioribusque hæc temporibus revertitur."

ascribed to violent exercise, intemperance, cold, and sudden depressing passions, especially fear and grief.*

Local tetter is produced by the action of particular irritants on the cuticle, which soon disappear, when the source of irritation is withdrawn. The 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. 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 to the skin by friction, and in some cases of the application of blisters, and other stimulating plasters. These pustules are liable to

* 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.)

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 contagious circles of *porrigo*, inasmuch as they seldom affect children,—occur principally on the extremities,—and 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 this form of *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 psydracia, they are filled with a thick yellow pus, and are more considerably inflamed round their base.

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 nitre or crystals of tartar may be advantageously combined with it. The Impetigo sparsa commonly yields to these medicines, 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 alkalis, 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.

The external applications adapted to these forms of Impetigo, especially to the figured species, are the mild desiccative unguents: 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 ointment of the nitrate of mercury, much diluted, as with five or six parts of simple ointment will be beneficial. From the too active employment of this unguent, and still more of that of the nitrico-oxide of mercury, 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.

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 were 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.

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.

3. *IMPETIGO erysipelatodes*. 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 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 concreate 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 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.

4. *IMPETIGO scabida*. (Plate XXXVI.) In this more rare and severe form of the disease, 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

* Sauvages observes that this affection is called *dartres encrou-tées* 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.

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. 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 fourth or fifth part of the mercurial,) or simply the oxide of zinc, or calamine in powder, must be interposed.

5. The *IMPETIGO rodens* 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,

* See *lepra*, above, p. 27.

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.



II. PORRIGO.

RINGWORM OF THE SCALP, SCALL'D HEAD, ETC.

The **PORRIGO*** is a contagious disease, principally

* 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. liv. 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, Chi-

characterized by an eruption of the pustules, denominated *favi* and *achores* (Def. 5. *c, d,*) unaccompanied by fever. The several appearances which the disorder assumes are reducible to five or six specific forms.*

1. The **PORRIGO larvalis**,† (Plate XXXVII.) or *Crusta lactea* of authors, is almost exclusively a disease of infancy. It commonly appears first on the forehead and cheeks, in an eruption of numerous minute and whitish *achores*, which are crowded together, upon a red surface. These pustules soon break, and discharge a 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 and nose alone remaining exempt from the in-

rurg. p. i. lib. 5. cap. x.—Tilingius, *Lilium curiosum*, cap. 17.—Vogel, *de cognos. et cur. Hom. Morb. class. viii.* § 713.—Stoll, *Rat. Med. i.* 49.

* It must be remarked, however, that the first species appears to differ essentially from the rest; inasmuch as it arises independently of contagion, is perhaps never communicated by contact, and is connected principally with the period of lactation. In some respects it bears an affinity with impetigo.

† The "teigne muqueuse" of Alibert, and pretty well delineated in his 5th plate.—*Liv. i.*

crustation.* The eruption is liable, however, to considerable variation in its course; the discharge being sometimes profuse; and the surface red and excoriated,—and at other times, 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, inasmuch as it does not crack into deep fissures.

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, in young infants, often greatly diminish the natural sleep, and disturb the digestion. Whence 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 become inflamed; and marasmus, with diarrhœa and hectic, cut off the patient.

Most commonly, however, the disease terminates

* “ Imo quandoque frontem occupant, et totam faciem, exceptis palpebris, *larvâ* tegunt.” Plenck, p. 77.

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. It is remarkable, however, 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.*

In the commencement of the *Porrigo 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 zinci*, or a combination of this with a saturnine cerate. The latter will be useful to obviate excoriation, while the surface remains red and tender, after the discharge has ceased.

The removal of the disease is much accelerated by the use of alterative doses of mercurial purgatives, (especially where the biliary secretion is defective, the

* See his *Dis. de Crusta lactea infantum, et ejusdem specifico remedio*:—also *Lond. Med. Journal*, vol. ii. p. 187.

abdomen tumid, or the mesenteric glands enlarged,) which should be continued for three weeks or longer, according to circumstances. Small doses of the submuriate 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 creta, 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.

When the state of irritation is removed, and the crusts are dry and falling off, the unguentum hydr. nitrati, much diluted, may be applied with advantage. And now some gentle tonic should be administered; such as the decoction of cinchona, or the chalybeates, (which are more readily taken by children,) especially the saturated solution of the tartrite, or the vinem ferri.

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

* 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.

begin to fall off, and the skin underneath appears clean. Prof. Selle, however, has affirmed, that this plant is either noxious, in this complaint, or wholly inert.*

2. *PORRIGO furfurans*.† (Plate XXXVIII.) In this form of the disease, which commences with an eruption of small *achores*, the discharge from the pustules is small 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

* *Medicina Clinica*, i. 185.

† This is the *tinea furfuracea* of Sennertus, the *tinea porriginosa* of Astruc and Sauvages, the *Porrigo furfuracea* of Plenck, and the “*teigne furfuracée*” of Alibert. (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. amfantacée*” of this writer (plate 4) appears to be a variety of *P. furfurans*.) It is, in fact, to a *furfuraceous* disease alone that the translators of the Greek physicians, and many modern Latin writers, apply the term *porrigo*, deeming it synonymous with the Greek *πιτυριασις*. From the authority of Celsus, however, it is obvious that this is a misapplication of the term; and it is improper to comprehend the simple dandriff, and the contagious scall, under the same generic appellation. See *Pityriasis*, above, page 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.

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 confined; and 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 swelled and painful.

The *P. furfurans* occurs principally in adults, especially in females, in whom it is not always easily distinguished from the scaly diseases, pityriasis, psoriasis, or lepra, affecting the capillitium. 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.

In the treatment of the *P. furfurans*, it is absolutely necessary to keep the scalp closely shaven. The branny scabs should then be removed by gentle washing, 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 in-

flamed, the zinc ointment should be applied; or, what has been said to be more beneficial, an ointment prepared with the cocculus Indicus, in the proportion of two drachms of the powdered berry to an ounce of lard. But when the scalp becomes dry and inirritable, 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 nitrati, ung. hydrargyri nitrico-oxydi, the tar and sulphur ointments, or the ung. 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.

3. The *PORRIGO lupinosa* is characterized by the formation of dry, circular scabs, of a yellowish-white colour, set deeply in the skin, with elevated edges and

* 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 fœnugreek, 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.

a central indentation or depression, sometimes containing a white scaly powder, and resembling, on the whole, the seeds of lupines.* These scabs are formed upon small separate clusters of *achores*, by the concretion of the 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 cap. The disease, however, is not exclusively confined to the head; but sometimes appears on the extremities, where the little white and indented scabs do not exceed two lines in diameter. This variety of *Porrigo* is liable to increase much, if neglected; and is usually tedious and of long duration.

The first object in the management of the *P. lupinosa*, is to remove the crusts and little indented scabs, by a diligent application of soap and water, or other emollient applications. If the scalp be the seat of the disease, the previous removal of the hair will be necessary. If

* 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. It is the *tinea lupina* of Astruc and Sauvages; and the *Porrigo lupina*, and *scabies capitis lupina*, of Plenck, (loc. cit.) The "*teigne faveuse*" of Alibert appears to be the *Porrigo lupinosa*. (plate 1.)

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, in a diluted state, may be employed. When the surface is cleared, 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.

4. The *PORRIGO scutulata*, (Plate XXXIX.) popularly termed the *ringworm of the scalp*, appears in distinct and even distant patches, of an irregular 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 incrus-

* 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.

† The “*teigne granulée*” of Alibert (plate 2) appears to be a variety of *P. scutulata*.

tations 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 at length there remains uninjured only a narrow border of hair round the head.

This very unmanageable form of *Porri* 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 exfoliations 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 habit, or in a state approaching to *marasmus*, who are ill-fed, uncleanly, and not sufficiently exercised: but it is principally propagated by contagion; *i. e.* by the actual conveyance of the matter from the diseased to the healthy, 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 superintendants can afford a sufficient security.

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 some emollient fomentation.* Even the operation of shaving, which is necessary to be repeated at intervals of eight or

* 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.

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.

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 again the pustular eruption breaks out, 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, with the submuriate of mercury, the 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 ointments, with the milder mercurial ones, such

as the unguentum hydrargyri præcipitati, or the ointment of calomel, or a lotion of lime-water with calomel, 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 præcipitati, hyd. nitricooxydi, and especially of the hydrargyrus nitratus, are often effectual remedies: and those prepared with sulphur, tar, hellebore, and turpentine, the unguentum elemi, &c. separately or in combination, occasionally succeed; as well as preparations of mustard,* stavesacre, black pepper,† capsicum, galls, rue, and other acrid vegetable substances.‡ Lotions containing the sulphates of zinc and copper, or the oxymuriate of mercury, in solution, are likewise occasionally beneficial.

* 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, atramentum 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.

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 muriated tincture of iron, or with any of the mineral acids, slightly diluted, in some cases removes the morbid cuticle, and the new one assumes a healthy action.* The application of a 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 ring-worm of the scalp, as "quite different from the scalled head," affirms, in a late publication, 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.†

* Mr. P. Fernandez mentioned to me an instance of speedy recovery, which followed a single application of the strong sulphuric acid, which was instantaneously washed off. A new and healthy cuticle succeeded.

† See his "Hints on the Management of Children."—The acrid ointment of Banyer consists of ceruss. ℥ss, litharg. aur. ℥ij. alum. ust. ℥iss, mercur. sublim. ℥iss, sevi porcin. ℔ij, terebinth. Ven. ℔ss. See his Pharmacopœia Pauperum. I have used this

These various applications are enumerated, because not one of them is always successful, singly, 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 to be deprecated, as often inflicting great injury to the scalp, and retarding, rather than expediting, the progress to recovery.

I have said nothing respecting the administration of internal medicine in the *Porriigo scutulata*; because it 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.

5. *PORRIGO decalvans*. (Plate XL.) This singular variety of the disease presents no appearance whatever, except patches of simple baldness, of a more or less circular form, on which not a single hair remains, while

ointment, somewhat diluted, in a few cases of this disease, since the first edition of this Synopsis was published; and I have found it, like other applications, sometimes successful, but frequently inert and useless.

that which surrounds the patches is as thick as usual. The surface of the scalp, within these areæ, is smooth, shining, and remarkably white.* It is probable, though not ascertained, that there may be an eruption of minute achores 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 areæ 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 gray.

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

* 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.

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 Barbadense, camphor, turpentine, &c. are more efficacious.

6. *PORRIGO favosa*. (Plate XLI.) This species of the disorder consists of an eruption of the large, soft, straw-coloured pustules, denominated *favi* (Def. 5. d.).† 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, and sometimes on the face, or on the trunk and

* 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 illi-
nunt adurentia ex oleo, maximeque chartam combustam: 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 frequentum pilum nasci apparuerit. Id autem, quod subinde raditur, illini atramento sutorio satis est." Loc. cit.

† This has been called *tinea favosa* by Haly Abbas, Astruc, and Sauvages,—and *scabies capitis favosa* by Plenck.

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.

The pustules, especially on the scalp, appear at 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. 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. Under the last-mentioned circumstances, pediculi are often generated in great numbers, and aggravate the itching and irritation of the disease. On the face, too, a similar aggravation of the symptoms is occasioned, in children, by an incessant picking and scratching about

* Sauvages and several other writers have given a new title to the eruption, when it thus spreads from one part to another; such as *tinea volaticæ*, *ignis volaticus*, &c.

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 honey comb, 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, 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 arm and breast of the nurse are also liable to receive the eruption in the same manner; but it is not so readily communicated to adults as to children.

The duration of this form of Porrigo is very uncertain; but it is, on the whole, much more manageable than the *P. 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.

The Porrigo favosa requires the exhibition of the same alteratives internally, which have been recommended for the cure of the *P. larvalis*, in doses proportioned to the age and strength of the patients. The diet and exercise should also be regulated with care: all crude

* It has been supposed that the similarity of the odour of this discharge to that of garlic (*porrum*) gave rise to the appellation of Porrigo.

vegetables and fruits on the one hand, and stimulating substances, whether solid or fluid, on the other, should be avoided; and milk, puddings, and a little plain animal food or broths, should be alone recommended. If the patient be of a squalid habit, or the glandular affections severe, the bark and chalybeates, or the solution of muriate of barytes united with the former, will contribute materially to the restoration of health.

There is commonly some degree of inflammation present, which contraindicates the use of active stimulants externally. The unguentum zinci, or the ung. hydrargyri præcipitati, 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. 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.

It may be mentioned, in conclusion, that an eruption of *favi* is sometimes seen on the face, (Plate XLII.) ears, neck, and occiput, in adults,* in whom it is preceded and accompanied by considerable derangement of the constitution, headache, 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 syçosis, to which also the disease also bears some affinity. A cathartic, followed by the pilula hydrargyri submuriatis of the last pharmacopœia, or Dr. Plummer's pill, and a vegetable tonic, 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 *Porrigo 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 se-

* Of this form of *Porrigo favosa* on the cheeks, the 16th plate of M. Alibert appears to be a representation. He calls it "Dar-tre crustacée flavescence."

vere 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 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.

III. ECTHYMA.

The ECTHYMA* is an eruption of the inflamed pustules, termed *Phlyzacia* (Def. 5. a.). They are usually

* The term *εκθυμα* seems to have been used by the Greeks in a general sense, and nearly synonymous with *εξανθημα*, 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 *εκθυσιν*, “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

distinct, arising at a distance from each other, seldom very numerous, unaccompanied by fever, and not contagious.

This eruption 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. It shows itself under three or four varieties, and is usually attributed to long continued exertion and fatigue, to much watching, to imperfect nutriment, to the influence of cold, 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 over the whole body, face, and scalp. The diagnosis of this eruption from the contagious pustular diseases, as well as from some of the secondary appearances of syphilis, is of consider-

voc. *εκθυματα*. 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 *εκθυματα*, pustulas extumescentes, morbillos autem *εξανθηματα* 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.

able importance in practice, which renders it necessary to notice this genus.

1. The *ECTHYMA vulgare* (Plate XLIII. Fig. 1.) 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. In a week more, the soreness and inflammation subside, and the scabs soon afterwards fall off, leaving no mark behind.

This eruption commonly supervenes on a state of languor, of some continuance, with loss of appetite, irregularity of the alvine evacuations, and pains in the stomach or limbs. Young persons are principally subject to it, and children are sometimes affected with it, especially in the spring or summer, after being overheated, or fatigued, or 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, and of the decoction of cinchona, after the maturation of the pustules, appears to comprehend all that is requisite in regard to medicine.

2. The *ECTHYMA infantile* occurs in weakly infants, during the period of lactation, when an insufficient nutriment is afforded them. 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 in the fourth species of *Ecthyma*. Hence also the duration of the eruption is much greater than in the preceding species, being sometimes 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.

The principal means of cure will be found in changing the nurse: and the advantages of better aliment will be aided by proper clothing and exercise, as well as by moderate alteratives, and by the cinchona, or chalybeates.

3. *ECTHYMA luridum*. (Plate XLIII. Fig. 2.) The most obvious peculiarity of this variety of the phlyzacious pustules is the dark red colour of their base, which

is likewise hard and elevated. But they differ also from the two preceding varieties, in being of a larger size; and from the first, in the slow but long succession in which they arise, and in the extent of surface over which they spread, the face alone being exempt from their occurrence. 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 spirits, and night-watching; and it is most severe in the winter season.

Under these 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.

The treatment of this Ecthyma must be chiefly directed to the amendment of the constitution, by means of good diet, by the occasional use of the warm bath, and by the bark, and vegetable decoctions, internally.

A *symptomatic* Ecthyma, which bears a considerable analogy to the *E. luridum*, sometimes comes on during

the cachectic state which follows the measles, and occasionally after the scarlet fever and smallpox. 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. 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 bark, where it can be so administered, both shortens and alleviates the disease.

4. *ECTHYMA cachecticum*. (Plate XLIV.) An extensive eruption of phlyzacious pustules not unfrequently occurs, in connexion 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 pustules go through their stages of inflammation, suppuration, 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; by headache 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 morbid condition which gives rise to it. The administration of mercury is not necessary to its cure, nor does it appear to accelerate recovery.

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.*

* 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.

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 of thin scabs, it should perhaps have been referred to eczema.



IV. VARIOLA.

SMALLPOX.

In the completion of this arrangement, the smallpox should be the subject of investigation in this place; but I am induced, by several considerations, to omit the inquiry at present. While, on the one hand, the disease is universally known, and has been amply described by medical writers, from Rhazes downwards; it affords, on the other, a topic too copious to be satisfactorily disposed of in a single chapter. It might, indeed, have been hoped that the general diffusion of vaccination would, ere now, have rendered a critical knowledge of the varieties of this pestilential malady less necessary to practitioners: and I still confidently anticipate the arrival of the period, when the just estimation of the value of Dr. Jenner's discovery, by all ranks of people, will supersede the necessity of making smallpox an object of our study. At all events, the diagnosis of the disease, where it is sufficiently severe to demand the assistance of medicine, is seldom obscure, and one of the principal objects of

this treatise is the discrimination of cutaneous symptoms. I am, besides, anxious to limit both the bulk and the price of this volume within moderate bounds. I shall, therefore, proceed to the remaining disease of the pustular order, which, common and vulgar as it is, occasionally baffles the best attempts both to distinguish and to cure it.

V. SCABIES.*

ITCH.

This troublesome disease, which, from its affinity with three orders of eruptive appearances, pustules, ve-

* 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 6, *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 *ελεωδης*, 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.)

sicles, and papulæ, almost bids defiance to any attempt to reduce it to an artificial classification, is not easily characterized 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*, is an eruption of pustules, or of small vesicles, which are subsequently intermixed with, or terminate in, pustules; it is accompanied by constant and importunate itching, but not with fever; and is in all its varieties contagious. It appears occasionally on every part of the body, the face only excepted; but most abundantly about the wrists and fingers, the fossa of the nates, and the flexures of the joints.†

* See Celsus, lib. v. cap. 28; Plater, de Superfic. Corp. Dolorib. cap. 17; Hafsenreffer, Nosodoch. lib. i. cap. 15; Willis, Pharmac. Rational, part i. § iii. cap. 6.

† "*Scabies est pustularum furulentarum, vel saniosarum, vel papularum siccarum, ex duriore et rubicundiore cute, eruptio,—*

Among the varieties 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 of *Scabies papuliformis*, *lymphatica*, *purulenta*, and *cachectica*. The characteristics of these varieties, 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.

1. The *SCABIES papuliformis*, or *rank itch*, consists of an extensive eruption of minute itching vesicles, which are slightly inflamed and acuminated, 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

pruritum, sæpe quoque dolorem, creans,—interdum totum corpus, facie excepâ. invadens,—sæpissimè tamen solos artus externos, digitorum imprimis interstitia, occupans." Callisen, Syst. Chirurg. Hodiern. i. § 824.

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 congregate 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 remove 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 (see page 13,) 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,—and the ultimate formation of a minute globular brown scab, which is set firmly in the apex of each elevation, will serve as diagnostic marks.

2. The SCABIES *lymphatica*, or *watery itch*, (Plate XLV.) is distinguished by an eruption of transparent

* See the quotation from M. Lorry, *supra*, p. 8, *note*.

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 each other: 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.

3. The *SCABIES purulenta*, or *pocky itch*, (Plate XLVI. Fig. 1.) is, I believe, often mistaken by those, who confine their notion of the disease to the ordinary small and ichorous vesicles 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, espe-

cially 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 matured pustules of smallpox,* (and not from 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 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.

* "Licet interdum majusculæ sint, cum fundamento rubro, et pure impleantur, fere *tanquam variolæ*." Heberden, Com. de Morb. Hist. et Curat. cap. 23. See the Plate, fig. 5. *i*.

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 the porrigo 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, and more permanent scab, which succeeds, instead of the soft, elevated semi-transparent 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

* 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 separate distribution of them,—will afford the means of discrimination; to which the incessant itching, and the contagious property of Scabies, may be added.

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 debilitated by some previous acute disease:* and, however it is produced, it is liable to return at intervals, especially in the

* 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.

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 gives a more dark and sordid hue to the skin than the ordinary Scabies; and 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 con-

* “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 Medicina 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 denominated *courafi*, 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.

tact of dogs, cats, hogs, and other animals, affected with *mange*. (Plate XLVI. Fig. 2.) 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; 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, jails, 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

* 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.

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 described in the twelfth century by Abinzoar, and subsequently by Ingrassias of Naples, by Gabucinus, Laurence Joubert, and other 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; 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 were accurately

* Nosol. Method, loc. cit. spec. 11.

† See his "Theatrum Insectorum," printed in 1634, cap. 24
"de Syronibus, Acaris, Tineisque Animalium."

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, 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, therefore, 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.

Among the remedies appropriated to the cure of Scabies, sulphur has long been deemed, both by the

* See his Letter to Redi:—also Miscel. Nat. Curios. ann. x. dec. 2.

† See Philosoph. Transact. vol. xxiii. for 1702.

‡ 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, Memoires pour servir à l'Hist. des Insectes.

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.† 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.‡ And 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.

* 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.

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 ointment, 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 Crolius, mixed with lard, and applied by external friction, has also

* 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 ℥i
 Hydrarg. sulphurati rubri ℥i
 Olei essent. bergamot. ℥ss
 Sulphuris-sublimati
 Adipis suillæ āā ℥ix. Miscæ secundum artem.

† This salt, together with hellebore, is said to constitute a part of a celebrated nostrum for Scabies, called the Edinburgh Ointment.

been employed,* and it certainly possessed 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 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 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

* 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. But subsequent experience has not confirmed his report.

† 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*.

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 oil.† From a few trials of this ointment, I am disposed to believe that it is possessed of considerable efficacy.

* See Mémoires de la Soc. Roy. de Médecine de Paris, tom. iii. ; also Lond. Med. Journal, vol. v.

† See Plenck, Doctr. de Morbis Cutaneis, p. 42 ; Callisen, Syst. Chirurg. Hodiern.

Order VI.

VESICULÆ.

THE Order of Vesicles (see Definition 6) comprehends seven genera.

 I. VARICELLA.

CHICKEN-POX, SWINE-POX, ETC.

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;† yet most of the

* 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.

systematic writers, down to the latter part of the eighteenth century, seem to have looked upon it as a variety of smallpox. D. Heberden, in the year 1767, pointed out the distinction with his accustomed perspicuity.* Perhaps, however, as this learned physician, in his posthumous work, continues to designate the disease by the term Variola,† the employment of the same term by the systematic writers above alluded to, with the epithets

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 *Windboecten* (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 *Veirolette*. See his *Prax. Med.* cap. ii. In Italy it was called *Ravaglione*. *Ibid.*—See also Diemerbroeck, *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 adventur'd to think," he says, "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.

† "*Variolæ fusillæ*." See his *Comment. de Morbis*, cap. 96.

*volaticæ, spuria,** &c. cannot be deemed evidence, that they actually considered the disease as generically the same with smallpox.

The three principal varieties of chicken-pox were well known a century ago, and were distinguished in the north of England, and in some counties in 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, lenticular, conoidal, and globate.†

1. The *lenticular* VARICELLA (Plate XLVII—VIII.) appears, on the first day of the eruption, in the form of small red protuberances, not exactly circular, but tending to an oblong figure, having a nearly flat and shining surface, in the centre of which a minute transparent vesicle is speedily formed. This, on the second day, is filled with a whitish lymph, and is about the tenth of an inch in diameter. On the third day the vesicles have undergone no change, except that the lymph is straw-coloured. On the fourth day, those which have not been broken begin to subside, and are puckered at their

* 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*.

† 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.

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 confine a little opaque lymph within the puckered margins. 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 gradually 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.

2. In the *conoidal* VARICELLA, the vesicles rise suddenly, and have a somewhat hard and inflamed border: they are, on the first day of their appearance, acuminate, and contain a bright transparent lymph. 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 contain on this day 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; the last formed scabs, therefore, are not separated till the eleventh or twelfth day.

3. In the *swine-pox* or *hives* (for in the south, the former appellation is applied both to the second and third species) the vesicles are large and *globated*, 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 *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

* 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.

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 suppuration,—sufficiently distinguish the eruption 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 globated 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 chicken-pox is in a great degree interrupted.* But the experiments have not been sufficiently numerous to warrant the accuracy of these general conclusions.

II. VACCINIA.

As the subject of *Cow-pox* has been amply treated of, in publications that are in every body's hands, it will be unnecessary for me to enter into a minute detail upon it here. It is now well known, that the characteristic of this eruption (the discovery of which, as a preventive of the pestilential smallpox, has conferred immortality on the name of JENNER) is a semi-transparent, pearl-coloured vesicle, with a circular or somewhat oval base, its upper surface, until the end of the eighth day, being more elevated at the margin than in the centre, and the margin itself being turgid, shining, and rounded, so as often to extend a little over the line of the base.† This vesicle is filled with clear lymph, contained in numerous little cells, that communicate with each other. 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,

* See Dr. Willan's Treatise on Vaccination, pp. 97—103.

† See the Plate, fig. 6 *g*.

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. 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, effectually and permanently secures the individual from the danger, and almost universally from the contagion of smallpox.†

* See Dr. Willan's Treatise on Vaccination, p. 9.

† At the end of the sixteenth year from the promulgation of the discovery, this truth remains in full force: 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.

It is requisite, therefore, 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.

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 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

* 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 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.

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 smallpox,” 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 globate 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 *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, radiat-

* This premature advancement was pointed out by Dr. Jenner as a characteristic of the irregular pox, 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 “*furulent* 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.*

ed, 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

* 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 whole "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.

effete or corrupted virus, and the other the presence of certain cutaneous eruptions, acute and chronic.

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, 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.

The most frequent cause of these imperfections, however, seems to be 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

* Dr. Willan, loc. cit.

† See his letter to Dr. Marcet, Med. and Phys. Journ. for May, 1803; also the same Journal for Aug. 1804.

capitis. In the more accurate 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.

Finally, the 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.*

* Dr. Willan, loc. cit.

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."*

III. HERPES.†

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 vesicles arise in distinct but irregular clusters, which commonly appear in quick succession, and they are set near

* Paper of Instructions, before quoted.

† 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, quòd semper, priore sanata, propinqua ejus vitium excipiat; non secus quam *ignis* qui proxima quæque depascitur, ubi ea quæ prius accensa erant, deficiente jam materiâ idoneâ, prius quoque extinguuntur." Meth. Med. lib. ii. cap. 12.—From this creeping progress, the disease was called *Formica* by the Arabians.

together, upon an inflamed base, which extends a little way beyond the margin of each cluster. 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, in 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. 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 no where minutely described it: hence their followers have not agreed in their acceptation of the term.*

* 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 *phlyctenæ*, as characteristic of the eruption. (See Galen de Tumoribus præter. 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 *ἑρπῆρα* dicunt.” See Scribon. de Compos. Medicam. cap. 13. In describing the appearances of this disease, under the appellation of Ignis sacer, Celsus has properly characterized it by the numerous and congregated eruption, the small and nearly equal size of the vesicles, and the situations which it most frequently occupies, &c. “Exasperatumque per pusulas continuas, quarum nulla alterâ

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, 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*, (κεγγριαις,) *vesicular* (φλυκταίνωδης,) 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

major est, sed plurimæ perexiguæ: in his semper fere pus, et sæpe rubor cum calore est: serpitque id nonnunquam sanescente eo quod primum viliatum 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. 28. § 4.

* See Dr. Cullen's definition of Herpes. Nosol. Method. gen. 147.

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-conditioned ulcerations of the skin.* The various appearances of Herpes may be comprehended under the six following heads.

1. *HERPES phlyctænodes.* (Plate XLIX.) This species of the eruption, including the miliary variety above mentioned, is commonly preceded by a slight febrile attack for two or three days. The small transparent vesicles then appear, in irregular clusters,† sometimes

* 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. θηριωμα et ἐρπητις) sicut omnis cancer, fit maxime in senibus, vel iis quorum corpora mali habitus sunt." Celsus, de Medicina, lib. v. cap. 28. —See also Sennert. Pract. lib. v. part. i. cap. 17.

† 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

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; and occasionally it begins on the neck and breast, and gradually extends over 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. 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

other form of Herpes. To this variety of the eruption more particularly the popular appellation of *nirles* has been given.

* 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 phlyctenoide confluyente." See his plate 23.

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 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. 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 chylopoetic organs.

The same treatment is requisite for this as for the following species.

2. *HERPES zoster*.* (Plate L.) This form of the eruption, which is sufficiently known to have obtained

* 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

a popular appellation, the *shingles*,* is very uniform in its appearances, 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, rigours, headache, sickness, and a 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 irregu-

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. and 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. and 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. xxxi. spec. 2.)

M. Alibert has given an indifferent representation of Herpes *zoster*, plate 24, under the title of "Dartre phlyctenoide 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 *hemicrania*; except that the latter had received a previous corruption by the French, in *esquinancie* and *migraine*, from which we doubtless took our words.

lar form, at a little distance from each other, 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 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.*

* "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. Russel (De Tabæ glandulari, hist. 35.) and Tulpius (Obs. Med. lib. iii. cap. 44.) also contradict the affirmation of Pliny.

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 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.

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.

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 con-

nected 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.

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

* 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. Burserius has, however, observed, “*Zoster acutus et brevis* ut plurimum morbus est; nam, quamquam 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.

much debility: in the 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 scarcely necessary to speak of the treatment of a disorder, the course of which scarcely requires 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

* 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, Hälæ, 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.)

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 are founded entirely upon the prejudices of the humoral pathology.

In general, no external application to the clustered vesicles is necessary: but 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 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.

3. *HERPES circinatus*. (Plate LI. Fig. 1.) This form of the Herpes is vulgarly termed a *ringworm*, and is, in

* See Turner on Dis. of the Skin, chap. 5.

† “Illa autem ut inspicio,” says Dr. Russel, “vesiculis depressis, et minimè tumentibus, at livescentibus inducta esse, (the natural decline of the eruption) atque acrem quandam ichorem sub stare cerno, proinde secantur vesiculæ, et præcipitato rubro, cum unguento aur. et cerato, ut medicamenta fixa atque immota emanerent, curantur.” De Tabæ glandulari, hist. 33.

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.*

The itching and tingling 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.

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.

* See *Porrigo scutulata*, above, p. 171.

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 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.*

4. *HERPES labialis*. A vesicular eruption upon the edge of the upper and under lip, and at the angle of the mouth, sometimes forming a semi-circle, 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

* 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; mediumque sanescit, extremis procedentibus; ac sæpe id, quod jam sanum videbatur, iterum exulceratur," &c. loc. cit. § 4.

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, headache, 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 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.*

5. *HERPES præputialis*. (Plate LI. Fig. 2.) This local variety of Herpes 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

* See Huxham, *De Aëre et Morb. Epid.* vol. ii. p. 56.—Plenck, *Doct. de Morb. Cutan.* p. 83.

† As a similar description of this eruption will be found under the article Herpes, in Dr. Rees's *New Cyclopaedia*, 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.

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, 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.

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.* Whence-soever it may originate, it is liable to recur in the same individual, and often at intervals of six or eight weeks.

6. *HERPES Iris.* (Plate LII.) This rare and singular morbid appearance, 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

* Soon after the publication of the 2d 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.

† Having at first seen it only in its incipient stage, Dr. Willan

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 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 iris has been observed only in young people, and was not connected 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.

announced the Iris, on the cover of his second part, as a genus of the exanthematic order.

No internal medicine is requisite in the treatment of the different species of Herpes, except when the constitution is disordered, (and then the general antiplogistic plan must be adopted;) for, like the other eruptive diseases, which go through a regular and limited course, they cannot be interrupted, or accelerated in their progress, by any medicinal expedient; but their termination may be retarded by improper treatment.

IV. RUPIA.

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 characterized 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

* This term is arbitrarily formed from *ῥυπος*, *sordes*, as indicative of the ill smell and sordid condition of the diseased parts.

thin and superficial scabs, that are easily rubbed off, and presently regenerated.* It appears under some varieties of form, which may be included under the following heads:

1. *RUPIA simplex* (Plate LIII.) consists of little vesications, containing, on their first appearance, a clear lymph, and appearing on many parts of the body. In a short time, the fluid included in them begins to thicken, and becomes at length opake 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.

2. *RUPIA prominens* (Plate LIV.) 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 shell of a small limpet. This scab is quite

* 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.

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.

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, light, nutritious diet, and by the use of alterative and tonic medicines; such as Plummer's pill, cinchona, and sarsaparilla.

3. *RUPIA escharotica* 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.

V. MILIARIA.

An eruption of miliary vesicles (Plate LV. Fig. 1.) 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, *Epist. 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;—Suavages, *Nosol. Meth. class. iii. gen. 5*;—Burserius, *Inst. Med.* vol. ii. p. ii. 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 prototype 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, *Hirst. Purpuræ Miliaris albæ*, *ibid.* § 176.

The MILIARIA, of which we here speak, is characterized 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

* 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

tongue is furred, and of a dark red colour at the edges, and its papillæ are considerably elongated; and not unusually 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,

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*.

* Blackmore, loc. cit.—Brooklesby, in the Med. Obs. and Inquir. vol. iv. p. 30.

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, 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

* 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 (τρηνχισματα κεγχρωδεια) appeared on the skin, and continued till the crisis. See also the book of Prognostics, where he speaks of miliary sweats (ιδρωτες κεγχρωειδες.)

† 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 suâ sponte nonnunquam ingruant, sæpius tamen *lecti calore et cardiacis* extorquentur.” See his Sched. de Nov. Febris Ingressu.

Haen, in Germany, and by Mr. White, of Manchester, Dr. Cullen, and others, in this country.*

Among the various circumstances under which the miliaria was formerly excited, the *puerperal state* appears to have been most frequently the source of it; inasmuch 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 tea-pot: but to her room, heated by a crowd of visitors and a fire, all access of air was denied, even through a key-hole. From these causes, fever was al-

* 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.

most 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

* 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 milleni 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 Febrium Divis.

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 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 fre-

* Mr. White, *loc. cit.*

† See Fordyce (*loc. cit.*) “Nonnunquam bullæ insignes, apice digiti 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 ex-

quent 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 contra-indicate the use of them, are advantageous.



VI. ECZEMA.

The ECZEMA* is characterized by an eruption of small vesicles, on various parts of the skin, usually set close or crowded together, with little or no inflammation round their bases, and unattended by fever. It is not contagious.

hausted 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 drank 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.

* Aëtius observes, that an eruption of hot and smarting phlyc-

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: even in the most violent cases, the functions of the sensorium and of the stomach are seldom disturbed. When limited to the fingers, hand, and part of the forearm, it is not unfrequently mistaken for scabies: but it may be distinguished by the appearance of its acuminated 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. One of the most common species is the

1. *ECZEMA solare*, (Plate LVI.) which occurs in the

tænxæ arises in all parts of the body, without proceeding to ulceration. "Eas εκζέματα, 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 περιζέματα, and περιζέσματα, "quasi *vehementer ferventia*." See Goræus, Defin. Med.; and Sennert. Pract. Med. lib. v. part i. cap. 2.

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 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

* 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 (page 200) will contribute to aid the diagnosis.

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 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.

2. ECZEMA *impetiginodes*. (Plate LV. Fig. 2.) A local Eczema 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, and often with intense itching. 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 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 *filemaker*, 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, 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 cachectic 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

* See *impetigo*, above, p. 154.

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.

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. Where there is any other evidence of a cachectic condition of the patient, similar treatment must be prescribed for the improvement of the general health, as is recommended in ecthyma.*

3. ECZEMA *rubrum*.† (Plate LVII.) The most remarkable variety of the Eczema rubrum, is that which

* 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 (see p. 124,) 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*.

† 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.

arises from the irritation of mercury.* (Plate LVIII.) But the disease is not exclusively occasioned by this mineral, either in its general or more partial attacks: 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

* 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 a description of two cases by Dr. Rutter (Edin. Med. and Surg. Journal, vol. v. p. 143.) and Dr. Marcet (Medico-Chirurgical Trans. vol. ii. art. ix.) under the appellation of erythema, which occurred several times in both 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.

rough to the touch. This, however, 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 fetid 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 aug-

mented. 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 duration of this excoriation and discharge is uncertain and irregular: when only a small part of 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 organization; 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 lepra.

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. 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 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 re-

* See above, page 12, *note*.

newed 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 and sarsaparilla.

VII. APHTHA.

THRUSH.

The Aphthæ are small, whitish, or pearl-coloured vesicles,* appearing on the tongue, the lips, and the inte-

* 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

rior surface of the mouth and throat, generally in considerable numbers, proceeding to superficial ulceration, and terminating by an exfoliation of whitish crusts.

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; but for practical convenience, it may be treated of under the following heads.

1. APHTHA *lactantium*.† Aphthous eruptions are most frequently seen in infants, in whom they some-

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.

* Hippoc. aph. 24. sec. 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 Aphthæ infantiles of Plenck, spec. 1. See also Sauvages, cl. iii. gen. x. Aphtha *lactucimen*, spec. 1. The appellation of *lactumina* or *lactucimina*, was given to the infantile Aphthæ by

times 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 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 semi-opaque, 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

Amatus Lusitanus (*Curat. Medic. cent. v.*) upon the supposition that they originated from a vitiated condition of the milk.

of the coherent Aphthæ. Sometimes these crops are renewed several successive times; and not unfrequently the removal and repullulation 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; but still more 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 bed-clothes, &c. Indigestion and its consequences, especially acidity, are occasioned by giving the food too thick, too

* Callisen, *loc. cit.*

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 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 comp.* if they are in the opposite state, and the child weakly. At the same time, the nutriment of the patient should be regulated, by attending to the diet and general health of the nurse; or, if the child be not suckled, by procuring a wet nurse, where that is practicable, which often speedily cures the complaint.

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 re-sprout in the aphthous surfaces. The most effectual detergent of this kind is the 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 proportions 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 réstringents 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 sequ-

* See his Surg. Observations. † Comment. ad Aph. 990.

læ 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 assumes 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 cascarilla, or the solution of the tartrate of iron, with rhubarb, light animal broths, and preparations of milk with the vegetable starches.

2. *APHTHA adultorum.* 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 fail 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 hec-

tic fever of every kind;* in the latter diseases, indeed, the Aphthæ are usually indications of the approach of dissolution. The peculiar 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 apthous 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 (Apthæ) 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 adulatorum.

† See Arnemann and Willan, *ibid.*—Van Swieten ad Aph. 983. Sydenham, sect. iv. cap. 3.—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 to 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.

3. *APHTHA anginosa*. 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 Aphthæ, 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 evidence 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. 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.*

* See Dr. Willan's Reports on Dis. in London, p. 111;—and my Reports of the Public Dispensary, Edin. Med. and Surg. Journal, for January 1813.

Order VII.

TUBERCULA.

THE Order of Tubercles (Def. 7.) comprehends eight 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.

 I. PHYMA.

Under the genus, PHYMA,* Dr. Willan intended to comprise the terminthus, 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.

* 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.

II. VERRUCA.

The same considerations induce me to omit all detail relative to the varieties of VERRUCA, which is here understood in its ordinary sense, denoting the cuticular excrescences, called *warts*.

III. MOLLUSCUM.

This form of tubercular disease (Plate LX. Fig. 1.) 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 characterized 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. 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 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 Prof. Tilesius, who has given portraits of

* See the plate, fig. 7. v.

the naked patient in three positions, in a pamphlet, edited at Leipsic, in that year, by Prof. 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.) 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 a 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 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 *Molluscum*, 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.

IV. VITILIGO.

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 acceptation 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.) is, as I have already stated, somewhat rare, and perhaps but little known. It is characterized 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

* See lepra *alphoides*, above, p. 30. 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 Medicina, lib. v. cap. 28.

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 acquire 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 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.

* This white and glistening appearance, bearing some resemblance to the flesh of calves (*vituli*,) seems to have given rise to the generic term.

V. ACNE.*

This genus is characterized 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, shoulders, and upper part of the breast; but never descend to the lower parts of the trunk, or to the extremities. 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

* This term is borrowed from Aëtius, who mentions it as a synonym of *ισθός*, 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 *ψυδρακία* 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.

† From this circumstance, both the Greek appellations appear to have originated; *ισθός*, from its occurring during the growth

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 four varieties of this eruption, which may be designated by the titles of *Acne simplex*, *punctata*, *indurata*, and *rosacea*.*

1. The *ACNE simplex* (Plate LXII.) 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. 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,

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. “*Ionthi, 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 ακμας, id est vigores, idiotarum vulgus eos nuncupat?)*”

* 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*.

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. 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. Such persons 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 epi-

* 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 oc-

thet, "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. 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 instances, there is occasionally also an eruption of lichenous papulæ on the body and limbs.

casioned by taking cold drink, eating cold raw turnips, &c. when the body is much heated by exercise; and 3. The *G. rosea 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.

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 ancients agree in recommending a number of stimulant applications, with the view of discussing the “thick humours” which were supposed to constitute the *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 hu-

* “Pene ineptiæ sunt, curare varos, et lenticulas, et ephelidas: sed eripi tamen fœminis cura cultus sui non potest.” De Med. lib. vi. cap. v.

† 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.

moral pathologists, of producing internal disorder by the sudden repulsion, as it has been called, of these cutaneous eruptions, are not altogether hypothetical. Head-ache, 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 circumstances, is to multiply the pustules, 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,

* It must be admitted, however, that the eruption is sometimes materially diminished, after the violent action of an irritating ap-

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. 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.*

plication 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*.^o 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.

2. *ACNE punctata*. (Plate LXII.) The eruption, in this variety of the disorder, 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 concreted 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 solu-

* Such a forceps has been contrived by a surgeon's instrument-maker, of the name of Hattersley, in South Molton-street.

tion of carbonate of potass internally, in these cases;* and Dr. Willan was in the habit of occasionally prescribing the oxymuriate 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*.

3. *ACNE indurata*. (Plate LXIII.) In this form of Acne, 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

* 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.

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 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, breast, 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.* 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

* 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 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. Sennert. Med. Pract. lib. v. part. ii. cap. 23.

had been overheated, and was in a free perspiration. Hence the first eruption is not unfrequently sudden.

The *Acne indurata* is often much alleviated, and 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 oxymuriate 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 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

* 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.

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. The copious use of *raw* vegetables in diet, which the misapplication of the term "scurvy" has introduced, is likewise 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 belong 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

* See above, p. 17, *note*.

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 very 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.

4. ACNE rosacea.* (Plate LXIV.) This form of Acne 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

* 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.

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*.

* Sennert mentions a case, in which the enlarging nose made such an approximation in magnitude to Strasburg steeple, as to impede the exercise of vision, and to require lopping. “Sumunt tubercula ista interdum incrementum, ut facies inæqualis 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 eò adegit, ut anno 1629 particulas quasdam de naso sibi amputari curaret.” Pract. Med. lib. v. part. i. cap. 31.

At that period of life too, the colour of the *Acne rosacea* becomes darker and more livid; and if suppuration take 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 chylopoetic 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 insurmountable. The regulation of the diet, in both cases, is important: and when the stomach or liver is disordered, in the latter, 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 gentlest restringents 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.

VI. SYCOSIS.

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.

The *Sycosis** consists of an eruption of inflamed but

* 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 *συκων* à Græcis nominatur, quia caro in eo excrescit." Celsus, lib. vi. cap. 3. The

not very hard tubercles, occurring on the bearded portion of the face and on the scalp, in adults, and usually clustering together, in irregular patches. 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 he divides it into two species.*

1. In the *Sycosis menti*, (Plate LXV.) the tubercles 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 tubercles, which appear in succession, along the lower part of the cheeks up to the ears, and under the jaw

later Greeks, however, apply the terms *συκα*, and *ογκοι συκαοειδεις*, (*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.)

* “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 plus, et mali odoris. Fit utrumque in iis partibus quæ pilis conteguntur: sed id quod callosum et rotundum est maximè in barbâ; id vero, quod humidum, præcipue in capillo.” loc. cit.

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 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.

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 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.

* An indifferent representation of this disease is given by Alibert, plate 20, under the appellation of "dartre pustuleuse mentagre."

2. The *SYCOSIS capilliti** (Plate LXVI.) 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 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.

* 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*.

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. 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. 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 nitrati, diluted with three or four parts of simple ointment, or by the ung. hydrarg. præcipitat. united with an equal portion of the zinc ointment, or the cerate of acetate of lead. At the same time it is useful to prescribe antimonials, with alterative doses of mercury, followed by cinchona, or serpentaria, and the fixed alkalis, especially where there appears to be any affection of the digestive organs, which not unfrequently concurs with this eruption.



VII. LUPUS.

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 con-

stant assistance of the surgeon, in consequence of the spreading ulcerations, in which the original tubercles terminate.* (Plate LXVII.)

The term was intended by Dr. Willan to comprise, 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 ring-worm, 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.

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. And in some cases, where the ulceration was very slow, and unaccompanied by much inflammation, the internal use of arsenic has been found beneficial; a circumstance which has probably given rise to the opinion, that can-

* 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*."

cer has been cured by that mineral. 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.

VIII. ELEPHANTIASIS.

As the ELEPHANTIASIS (Plate LXVIII.) is almost unknown in this country, and I have only seen two 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 (as described by the Greeks*) is

* The terms *ελεφας* and *ελεφαντιασις* 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 Aëtius 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.

principally characterized by the appearance of shining tubercles, of different sizes, of a dusky red, or livid colour, on 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 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

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. Dsjuddam, 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, Theorice, lib. viii. cap. 15. and Pract. cap. 14.—Avenzoar, lib. ii.)

large and prominent rugæ, especially over the eyes: the hair of the eye-brows, 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*.†

As the malady proceeds, the tubercles begin to crack, and at length to ulcerate: ulcerations also appear in the

* The term *satyriasis*, or *satyriesmos*, 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.

† 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 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 the 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 "Lepre tuberculeuse," where it is incipient on the eye-brows; and in plate 34, affecting the nose and lips, where it is called "Lepre leontine." His "Lepre Elephantiasis," plate 33, is the Barbadoes leg.

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.*

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

*Al-saharavius 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.

† It is impossible to read the description of this disease, (as said to occur at Barbadoes) by the learned Dr. Hillary, without a con-

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,* 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." And Dr. Adams has more recently 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

viction that that respectable physician had in his mind a history detailed by the eloquent Greek (Aretæus,) and not the phænomena 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.

* See his *Recherches et Obs. sur la Lepre 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 lazar-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 lazars

that individual lazars have remained for years at home, without infecting any part of their family.*

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. 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 Prof. 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 in the men, who had been seized with the malady subsequent to the age of puberty, and a want of the usual evolution of them, in

with the healthy, without any communication of the disease. See Fernel, de Morb. Occult. lib. i. c. 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 particularizes the case of Arnaud, a sailor, who had been afflicted with the tubercular Elephantiasis six months, when he died of a 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.

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?

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 knight-hood, 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

* 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 Hospitalers were then in possession of so many *manors*. "Habent Hospitalarii novemdecim millia maneriorum in Christianitate," are his words. See his *Histor. Angl. ad ann. 1244*; also Du Cange, *Gloss. voc. Lazari*; Mezeray, *Hist. de France*.

object of their inquiry, yet it is also evident that, in consequence of the general application of the term, *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. Greg. 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

* 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. *Περί Παθών*. Avicenn. 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 *alghada* (*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 albida est, et altius descendit; in eaque *albi pili* sunt, et lanugini similes."

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 psora or lepra Græcorum.”* Forestus, who held a similar office at Alcaer 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.‡ In-

* See his Obs. Med. lib. vii. ob. 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 scabie siccâ, fœdâ, et diu jam instante, laborant, &c.” D. V. Riedlin, Linnæ Med. vol. iii. Ann. 1697. Mens. Maio.

deed 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.*

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

* 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. 135.

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 modifications 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 no where any account of the regular succes-

* 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. 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.)

sion 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 civilization are imperfectly advanced, must be deemed still among the *desiderata* of the pathologist.

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 lymphatic glands and vessels. The skin it-

* 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*, *dsjuddam*, 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 *baras*, 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.

self 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 Barba-

* See Alibert’s plate of “Lepre Elephantiasis,” No. 33, 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 *ju-zam* 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 *ju-zam*, 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 Rollo’s “Remarks on the Disease lately described by Dr. Hendy, &c.” 1785.

does 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."[†]

In this country the disease is only seen in its inveterate stage, after repeated attacks of the fever an effusion have completely altered the organization 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.—

* The disease is not exclusively confined to the leg; it sometimes appears in the arms, and even on the ears, breasts, 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. Clark, however, and by Dr. Winterbottom, that the agility of the patients, who are affected with this unseemly deformity, at Cochin, and on the Gold Coast, is not impaired by it. (See Clark's Obs. on the Dis. in long Voyages to hot Climates; Winterbottom, loc. cit. p. 113.) 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.

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.*

* 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 immemorially, 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 occasionally denominate it *fisádi khún*, 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

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 Ara- among the Arabians, who sometimes contract it to *fil* alone, literally *elephas*."

But although the Arabians in general distinguished 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. *filis 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 Cabirajas, 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.

bian 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 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.



IX. FRAMBŒSIA.

YAWS.

The nature of this disease, which is indigenous 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.*

* M. Alibert has figured two diseases as examples of Frambœsia, 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.)

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.* 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

* 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 *fustules*." (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 "*fustules*" 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 opake whitish fluid," and when they burst, "a thick viscid matter is discharged."

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 pudenda. 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.* When the eruption is most copious, these tubercles are of the smallest size; and when fewer, they are largest. 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 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

* Hence both the popular appellation of *Yaw*, which in some African dialect signifies a *raspberry*, and the nosological title *Frambasia*, from the French *Framboise*, which denotes the same fruit. See Sauvages, Nosol. Meth. class. x. ord. iv. gen. 23.

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 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. They leave no depression of the skin.*

* The anonymous writer in the Edin. Med. Essays, and after him Dr. Hillary, and others, have deemed the Frambœsia 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 Frambœsia, 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

The period during which the eruption is in progress, varies from a few weeks to several months. "When no more pustules are thrown out," Dr. Winterbottom observes, "and when those already upon the skin no longer increase in size, the diseased 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 spreads very much, by corroding the surrounding sound skin: this is what is called the *master*, or *mother-yaw*." 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 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. and vi. and chap. viii. ver. 4.)

* "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.

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.* For, like the febrile eruptions, the Framboesia 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 no where 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 Framboesia, 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, 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

* 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 scarce ever escape it." Nat. Hist. of Guiana, p. 385. See also Winterbottom, pp. 141—3.

† See Memoirs of the Med. Soc. of London.

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 circumstances of the individual habit. 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.‡

The *master-yaw* sometimes remains large and trou-

* This treatment is often followed by a train of harassing symptoms, called by the negroes, the *bone-ache*. "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." ii. p. 158-9; and Schilling, de *Frambæsia*, 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 ablution 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-ache, and joint-evil often consequent on the bad treatment, or mere palliation," by mercury.

blesome, 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. Stronger caustics are requisite for the cure of the *crab-yaws*, or tedious excrescences, which occur on the soles of the feet.

Order VIII.

MACULÆ.

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.

I. EPHELIS.

The term EPHELIS (Plate LXIX.) 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.* Lorry and some other writers have

* "Nomen inditum απο τῆς ἡλίου, non quod à sole tantum vitia illa in cute contrahuntur, sed quod à reliquiis inducta causis, simi-

endeavoured to make distinctions between lentigines 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 furfuraceous scales. The brief description of the Ephelis given by Celsus is, indeed, equally applicable to both. “Nihil est nisi asperitas quædem, et durities, mali coloris.”† I have occasionally known the dingy

lem asperitatem et colorem habeant.” Gorræi Defin. ad voc. εφηλιν. —This acceptance 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

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, 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 fœminis 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 active virtues, which are not possessed by the ptisan, decoc-

engravings; the former, in plate 26, is called "Ephelide lenti-forme," and the latter, in plate 27, "Ephelide hepaticque."

* In the remedies adapted to all these superficial and cuticular discolorations, according to Oribasius, "mediocri adstrictione et abstersione opus est." Synops. lib. viii. cap. 33. The same observation is stated from Crito, by Aëtius, tetr. ii. serm. iv. cap. 11. See also Actuarius, Meth. Med. lib. iv. cap. 13.

† Hippo. *Περὶ γυναικείων*, lib. ii. Oribasius says, "Amygdalæ amaræ sunt facultatis perspicuè attenuantis, ut ephelin expurgent." De Virtute Simplific. lib. ii. cap. i.

tions of tares, and some other mucilaginous and detergent applications, recommended by the same authors. Some gentle restringent 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.

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, 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;—or by using, in a similar manner, the liquor potassæ diluted with about twenty times its quantity of water.

II. NÆVUS, ETC.

The various congenital excrescences and discolorations of the skin, to which the appellations of Nævus†

* Celsus, loc. cit.—Actuarius, loc. cit.—Dr. Withering recommends an infusion of horse-radish 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.”

† In consequence of the old notion, that these spots were impressed upon the fœtus by the emotions of the mother, the term

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 blueish, livid, or nearly black colour. To these the term *Spilus** has been more particularly 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. Oc-

Nævus is commonly associated with the epithet *maternus*, and the appellations of *mutter-mahl*, *mother-spots*, *fancy-marks*, &c., have been given to them in different languages. See Turner on Diseases of the Skin, chap. xii.

* Σπιλος, *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.

† Sauvages comprehends all these excrescences under *Nævus maternus*, spec. 2; and Plenck under his four remaining species, *N. flammeus*, *tuberculosus*, *cavernosus*, and *malignus*.

asionally 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. ;) 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. Fig. 1. :) 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.) But those Nævi which are prominent have most commonly been 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 sur-

* See the Plate, fig. 8. x.

face is granulated: whence the *Nævus cerasus*, (Plate LXX. Fig. 2.) *ribes*, *morus*, *rubus*, *fragarius*, &c.* (Plate LXXII.)

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. 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

* See Bierling *Adversaria Curios.* obs. ix.—Valentin. *Prax. Med. Infallib.* cap. 1.—Strobelberger de *Curand. pueril. Affect.* cap. 17.—Septalius de *Nævis*.

† See Mr. Abernethy's *Surgical Works*, vol. ii. p. 224 et seq.

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 foetus and the parent, as well as with all sober observation.

It is important, however, to know, that very 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 dif-

* 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 arterics, 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.

ferent 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 trouble-

some from their situation,* or liable to be 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.

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: 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.

* A *cherry-nævus* on the lip, for instance, has prevented the act of sucking.

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 surgical books. From the days of Fabricius Hildanus,* the propriety of radically removing every part of the diseased tissue of vessels has been inculcated: 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.

* Fab. Hild. Oper. cent. v. obs. 46.

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.

THE END.

INDEX.

	Page.
ACARUS scabiei	206
Achores	163
Acne	284
— simplex	285
— punctata	291
— indurata	292
— rosacea	297
Albaras	31
Albohak	<i>ib.</i>
Alopecia	178
Alphos	30. 282
Aphtha	268
— lactantium	269
— adultorum	274
— anginosa	276
Area	178
Baras.	See Elephantiasis.
Blister, followed by Eczema	262
Bullæ	126
Chicken-pox	212
— lenticular	214
— conoidal	215
— globated	216
Courap	150
Cow-pox.	See Vaccinia.
Crusta lactea.	See Porrigo larvalis.
Crystalli.	See Chicken-pox.
Dandriff.	See Pityriasis.
Ecthyma	185
— vulgare	187
— infantile	188
— luridum	<i>ibid.</i>
— cachecticum	190
Eczema	257
— solare	258
— impetiginodes	261
— rubrum	263
— from mercury	264

	Page.
Elephantiasis	306
Ephelis	331
Epinyctis	96. 278
Ergot	136
Erysipelas	127
_____ phlegmonodes	128
_____ œdematodes	129
_____ gangrænosum	130
_____ erraticum	132
_____ of infants	131
Erythema	119
_____ fugax	121
_____ læve	ib.
_____ marginatum	122
_____ papulatum	ibid.
_____ tuberculatum	123
_____ nodosum	ibid.
Exanthema, what	56
Favus	163
Febris ampullosa. See Pemphigus.	
_____ bullosa. See the same.	
_____ vesicularis. See the same.	
Fevers, eruptive, known to the ancients	64
Fici. See Sycosis.	
Fish-skin Disease. See Ichthyosis.	
Formica. See Herpes.	
Frambœsia	322
Freckle. See Ephelis.	
Furunculus	278
Gum, red. See Strophulus.	
Gutta rosea. See Acne rosacea.	
Hæmorrhœa petechialis. See Purpura.	
Heat, <i>putrida</i> . See Lichen tropicus.	
Herodotus, described febrile eruptions	66
Herpes	227
_____ phlyctænodes	230
_____ zoster	232
_____ circinatus	38
_____ labialis	1
_____ præputialis	23
_____ Iris	24
Hives. See Chicken-pox.	
Horns, nature and origin of	53
Hydrargyria. See Eczema rubrum.	
Ichthyosis	49
_____ simplex	50
_____ cornea	53
Ignis sacer	136. 315

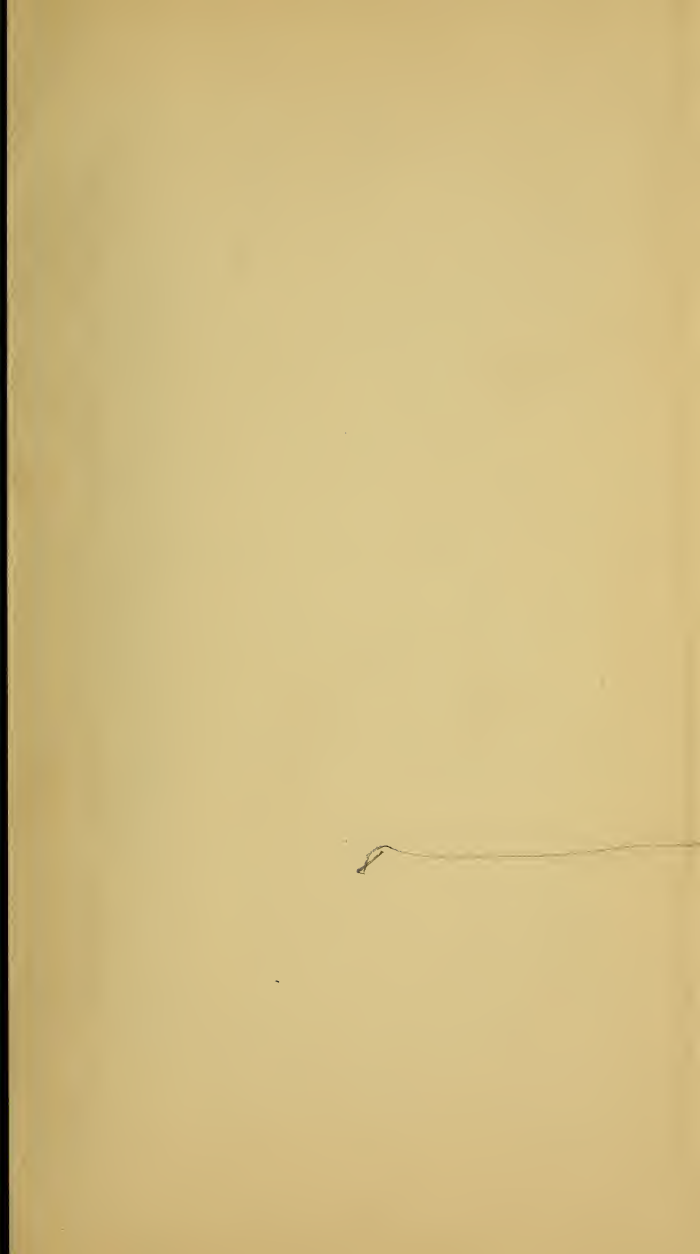
	Page.
Ignis Sancti Anthonii	136
Impetigo	148
— figurata	<i>ibid.</i>
— sparsa	152
— erysipelatodes	158
— scabida	160
— rodens	161
Intertrigo	124
Ionthos. See Acne.	
Iris. See Herpes Iris.	
Itch. See Scabies.	
Itch, Baker's	41
— Grocer's	154, 262
— Bricklayer's	<i>ibid. ibid.</i>
Itch insect	205
Judam. See Elephantiasis.	
Juzam. See the same.	
Kriebel Krankheit	136
Lactucinien. See Aphtha.	
Larvæ mistaken for pediculi	21
Lentigo. See Ephelis.	
Lepra	25
— vulgaris	26
— alphoides	30
— nigricans	36
— Arabum, a mistake	26
Leprosy of the middle ages	312
Leuce, probably the Jewish Leprosy	31
— differs from Lepra	30, 282
Lice	21
Lichen	6
— simplex	7
— pilaris	9
— circumscriptus	<i>ibid.</i>
— agrius	10
— lividus	12
— tropicus	13
— urticatus	<i>ibid.</i>
Lupus	304
Maculæ	331
— hepaticæ	48
Mal des Ardens	136
Measles	57
— antiquity of	65
Mercurial rash. See Eczema.	
Miliaria	249

	Page.
Molluscum	279
Morbilli. See Rubeola.	
Morphæa	26. 31
Mother-spots. See Nævus.	
Muscles, rash produced by eating	91
Nævus	334
Necrosis	136
Nettle-rash. See Urticaria.	
———— from eating shell-fish, &c.	91
Nirles. See Herpes phlyctænodes.	
Noli me tangere. See Lupus.	
Ophiasis	178
Papulæ	1
Pemphigus	138
———— probably no such disease	<i>ibid.</i>
Petechiæ sine febre. See Purpura.	
Phlyzacia	185
Phyma	278
Pimples. See Papulæ.	
Pitch, internally	34. 52
Pityriasis	45
———— capitis	<i>ibid.</i>
———— rubra	46
———— versicolor	<i>ibid.</i>
———— nigra	49
Pompholyx	142
———— benignus	<i>ibid.</i>
———— diutinus	<i>ibid.</i>
———— solitarius	145
Porrigo	162
———— larvalis	163
———— furfurans	167
———— lupinosa	169
———— scutulata	171
———— decalvans	177
———— favosa	179
Prurigo	14
———— mitis	15
———— formicans	16
———— senilis	19
———— local varieties of	22. 24
Psora. See Psoriasis.	
———— erroneously applied to Scabies	194
Psoriasis	36
———— guttata	39
———— diffusa	<i>ibid.</i>
———— gyrata	41

	Page.
Psoriasis inveterata	41
—— local varieties	42
Psydracia	148
Purpura	104
—— simplex	106
—— hæmorrhagica	<i>ibid.</i>
—— urticans	117
—— senilis	118
—— contagiosa	119
Pustules	147
—— four varieties of	xxi
Rashes	56
Ringworm, various	150. 155. 238
—— of the Scalp.	See Porrigo scutulata.
Roseola	97
—— æstiva	98
—— autumnalis	99
—— annulata	<i>ibid.</i>
—— infantilis	100
—— variolosa	101
—— vaccina	102
—— miliaris	103
Rubeola	57
—— vulgaris	<i>ibid.</i>
—— sine catarrho	63
—— nigra	64
Rupia	247
—— simplex	248
—— prominens	<i>ibid.</i>
—— escharotica	249
Scabies	194
—— papuliformis	196
—— lymphatica	198
—— purulenta	200
—— cachectica	203
Scales, how produced	25
Scalped head.	See Porrigo favosa.
Scarlatina	70
—— simplex	72
—— anginosa	74
—— maligna	85
Scarlet-fever.	See Scarlatina.
Scelotyrbæ	137
Scurvy, a misapplied term	17. 296
Shingles.	See Herpes zoster.
Small-pox.	See Variola.
—— probably known to the ancients	64

	Page.
Spilus - - - - -	335
Strophulus - - - - -	1
intertinctus - - - - -	2
albidus - - - - -	3
confertus - - - - -	<i>ib.</i>
volaticus - - - - -	5
candidus - - - - -	<i>ib.</i>
Swine-pox. See Chicken-pox.	
Sycosis - - - - -	300
menti - - - - -	301
capillitii - - - - -	302
Tetter, dry or scaly. See Psoriasis.	
humid. See Impetigo.	
Tinea. See Porrigo.	
Thrush. See Aphtha.	
Tooth rash. See Strophulus.	
Vaccinia - - - - -	220
Vari. See Acne.	
Varicella - - - - -	212
Variola - - - - -	193
Verruca - - - - -	279
Vitiligo - - - - -	281
Urticaria - - - - -	89
febrilis - - - - -	<i>ib.</i>
evanida - - - - -	92
perstans - - - - -	94
conferta - - - - -	95
subcutanea - - - - -	<i>ib.</i>
tuberosa - - - - -	96
Water-jags. See Chicken-pox.	
Wheals - - - - -	89
Wheal-worms - - - - -	206
Yaws. See Frambœsia.	
Zona. See Herpes.	
Zoster. See the same.	





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