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ON
CUTANEOUS DISEASES.

VOLUME I.

CONTAINING

ORD. I. PAPULÆ.
ORD. II. SQUAMÆ.

||

ORD. III. EXANTHEMATA.
ORD. IV. BULLÆ.

Geo H Hubbard
1868

BY ROBERT WILLAN, M. D. F. A. S.

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INTRODUCTION.

A SYSTEMATICAL account of Cutaneous Diseases will, I flatter myself, be acceptable to the public, since it is generally acknowledged that the arrangement, description, and treatment of them, form a part of medical science which has not been sufficiently cultivated. Few of the writers after Avicenna have given any information, on this subject, from their own observation and experience. They appear chiefly solicitous to ascertain the affinities between the Cutaneous complaints described by the Greek, Roman, and Arabian physicians, whose accounts, being often brief and indefinite, admit of different interpretations. We are, however, indebted to ancient authors for the nomenclature of diseases, and for a valuable stock of pathological observations: I think it therefore proper to give a summary view of what they have done, before I communicate my own ideas on the subject.

The Greek physicians afford a tolerably distinct account of Phlegmone, Erysipelas, Herpes, and their varieties; and of the local tumours denominated Phyma, Anthrax, Phygethlon, Dothien, Epinyctis, Terminthus,

Ionthos, &c. Respecting the formidable disease termed Elephantiasis, they have given a minute and elaborate statement. The Alphos, Leuce, and Melas, are sometimes described by them in connexion with Elephantiasis, and sometimes considered to be distinct diseases. By the terms Cnesmos, Lichenes, Psora, and Lepra, they denote another series of complaints more strictly cutaneous, which, though dissimilar in their form and progress, are arranged under the same genus, from a theoretical view of their cause. The Greeks have been very particular in describing external diseases of the head; but they mislead us, by applying new names to the same disease in different situations, or in different stages of its progress. This will appear, from comparing their accounts of Pityriasis, Ceria, Achores, Meliceris, Melitagra; Exanthemata, Helcydria and Psydracia Capitis; Sycose and Lychenose tubercles of the chin; Madarosis, Milphosis, Ptilosis, Alopecia, and Ophiasis. Of the diseases of the eyes, teeth, and gums; of Aphthæ, and other affections of the tongue; of Polypi, Ozæna, &c. their descriptions are accurate. They have also paid attention to the cutaneous blemishes, termed Phaci, Ephelides, Chalazia, Thymia, Peliomata, Celides, Rhagades, Tyli, Myrmeciæ, Acrochordones, &c.

The following deficiencies are observable in the accounts given by these authors :

1. They do not fully describe Pustular diseases, which are the most numerous and most important of all Cutaneous complaints; nor do they constantly distinguish Pustules from Papulæ and Exanthemata.
2. They give no regular history of the Exanthemata, or Rashes, but are satisfied with comparing their ap-

pearances to the effects produced upon the skin by nettles, and other stinging plants, or by the bites of fleas, gnats, bugs, &c. The only observations made by them, which seem worthy of notice, are, that some forms of the Exanthemata are permanent, while others appear and disappear at uncertain times, and that those of a purple or black colour are highly dangerous.

3. They sometimes employ the same word to express different diseases. Thus the denomination Psora is applied to a scaly incrustation variously figured; to an eruption of Pustules terminating in extensive superficial ulceration; and to a disease of the eyes or eyelids.

4. Of Chærades, or Struma, their account is very slight and partial.

Celsus, Pliny, Marcellus, and other Roman authors, in copying the Greek accounts of Cutaneous Disorders, have only changed some of their terms, without materially improving the subject. Under Impetigo, as a generic title, Celsus appears to comprize the ulcerated Psora, the scaly Psora, and perhaps the Lepra of the Greeks, with some other dissimilar affections. He constitutes a genus Vitiligo, including the Alphas, Leuce, and Melas. Under the titles of Papula, and Ignis sacer, he has described the Lichenes and Herpes of the Greek writers; and he includes their Alopecia and Ophiasis under the general term Area. Of the Scabies he has given a more particular account than what we find in preceding writers.

The Arabian physicians are somewhat more diffuse in their accounts of Cutaneous Diseases than either the Greeks or Romans. It may not be amiss to remark, that the Latin translations of their works are extremely

erroneous.* They divide the external complaints of the head into Alraba (Crusta lactea) Alavirati (Pityriasis) Alsahara, or the dry Sahafati (Porrigo) and Al-sirengghi, the moist or ulcerated Sahafati (Cerion) of infants. Balkyati and Alvatin they represent as obstinate forms of the Sahafati, extending to other parts of the body. They have also particularly described the diseases of the hair, and several species of baldness. Their Alguada or Alauzah, Albohak, and white Albaras, are the Alphos, Melas, and Leuce of the Greeks. Aljuddam or Aljuzam is the Elephantiasis. Ysagro and Alkouba are the Scaly Tetter and Ringworm. The title black Albaras sometimes denotes the rough, thickened state of the skin in Elephantiasis, but is, on other occasions, applied to the Scaly Tetter, and *Lepa Græcorum*. Some of the Arabian writers are further of opinion that the Ysagro, Alkouba, and black Albaras, do not materially differ from the dry Sahafati.

These authors are the first who describe the measles (Blactie and Alhasbat) and the nettle-rash, two varieties of which are denominated by them Essera, and Benat Al-Leili, or Daughters of the Night. They have also given the first account of the Small-pox (Aljidri.) Under the title Jerab, they describe a complaint similar to the Scabies of Celsus, distinguishing it from Haket, which answers to the Lichen and Cnesmos mentioned in Greek authors. Al-Hasef seems to comprehend Miliary eruptions, and the Prickly Heat. It may be observed that the Arabian term Bothor does not only denote Pustules, but also Wheals, Papulæ, Bullæ, Vesicles, and Tubercles.

* Dr. Robert Jackson, who is well versed in the Arabic language, has favoured me with a correct English translation of all the Chapters in Avicenna relating to Cutaneous Diseases.

The Arabians have exactly copied the Greek accounts of the Anthrax (Jemret) and Erysipelas. They term the last Almesire, and distinguish it with great accuracy from Phlegmon. To the species of Herpes (Nemlet, or the Ant) they add the Nar Al-Parsi, or Persian Fire; and they have comprized the Phyma, Phygethlon, Bubon, and Terminthus of the Greeks, under a generic term, Althouin. The affection denominated Sare seems to be the Epinyctis. Aldemenul is the Greek Dothien, or Boil. Of the Scrophula they have given a more enlarged account than the Greek writers; and they mention the swelling of the throat, which arises from an enlargement of the thyroid gland, under the title Botium.

They have also noticed a variety of local appearances, which it will be sufficient at present to mention; Nemish (Ephelis) Barassen (Lentiginæ) Alguassem (Livores) Alcola (Aphthæ) Alesirati (Rhagades) Alhasaph (Intertrigo) Asec (Tubera) Alcoalib and Lutesula (Verrucæ) Mismar (Clavus) Alcahas (Paronychia) Asalha (Lupia) and Albedssanem, which comprehends red spots of the face, and ulcerations, from cold, on the extremities.

It is not here necessary to review the modern writers on Cutaneous Diseases, as I shall make frequent references to them in the course of this work. They not only give various interpretations of the accounts left us by the ancients, but have perverted the sense of many passages, especially in the Greek authors. They employ the same terms in very different significations. They also make artificial, and often inconsistent arrangements, some reducing all the diseases under two or three genera, while others, too studious of amplification, apply

new names to different stages or appearances of the same complaint. Those who attempt to theorize on the subject are seldom clear and satisfactory; but, even should the praise of ingenuity be due to some of their speculations, little approbation would, I apprehend, be given to plans of classifying diseases founded on hypothesis, not on symptoms or characteristic appearances.

In a systematical Treatise on Cutaneous Diseases, we should endeavour,

1. To fix the sense of the terms employed, by proper definitions.

2. To constitute general divisions or orders of the diseases, from leading and peculiar circumstances in their appearance; to arrange them into distinct genera; and to describe at large their specific forms, or varieties.

3. To class and give names to such as have not been hitherto sufficiently distinguished.

4. To specify the mode of treatment for each disease.

To complete adequately a plan so extensive must be considered an undertaking of much difficulty; and perhaps exceeding the powers of any individual. My own observations are principally founded on the Cutaneous Diseases occurring in London, and its vicinity. I intend, however, to compare them with the accounts of similar complaints in ancient and modern writers.

It is proper here to mention that an outline of my plan for the arrangement and description of Cutaneous Diseases, formerly presented to the Medical Society of London, was honoured with the Fothergillian Gold Medal for the year 1790. I beg leave to express my obligation to the Society for this distinguished testimony of their favour; and shall think myself happy,

if the more enlarged view which I shall now endeavour to give of the subject should afford satisfaction to them, and to the public.

Consistently with the principles above laid down, I proceed, in the first place, to define the sense of several technical terms employed in the following pages.

DEFINITIONS.

I. **SCURF** (*Furfura*) small exfoliations of the cuticle, which take place after slight inflammation or irritation of the skin, a new cuticle being formed underneath during the exfoliation.

II. **SCALE** (*Squama*) a lamina of morbid cuticle, hard, thickened, whitish and opaque. Scales have at first the figure and extent of the cuticular lozenges, but they afterwards often increase into irregular layers, denominated **CRUSTS**. Both Scales and Crusts repeatedly fall off, and are reproduced in a short time.

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

IV. **STIGMA**; a small bright red speck in the skin, without any elevation of the cuticle. Stigmata are generally distinct or apart from each other. When they coalesce, and assume a dark red, or lived colour, they are termed **PETECHIÆ**.

V. **PAPULA**; a very small and acuminate elevation of the cuticle, with an inflamed base, not containing a fluid, nor tending to suppuration. The duration

of Papulæ is uncertain, but they terminate for the most part in Scurf.

VI. RASH (Exanthema) consists of red patches on the skin, variously figured, in general confluent, and diffused irregularly over the body, leaving interstices of a natural colour. Portions of the cuticle are often elevated in a rash, so as to give the sensation of an uneven surface. The eruption is usually accompanied with disorder of the constitution, and terminates, in a few days, by cuticular exfoliations.

VII. MACULA; a permanent discolouration of some portion of the skin, often with a change of its texture, but not connected with any disorder of the constitution.

VIII. TUBERCLE; a small, hard, superficial tumor, circumscribed, and permanent, or proceeding very slowly to suppuration.

IX. WHEAL; a rounded, or longitudinal elevation of the cuticle, with a white summit, hard, but not permanent, not containing a fluid, nor tending to suppuration.

X. VESICLE (Vesicula) a small, orbicular elevation of the cuticle, containing lymph, which is sometimes clear and colourless, but often opaque, and whitish, or pearl-coloured. Vesicles are succeeded either by Scurf, or laminated Scabs.

XI. BLEB (Bulla) a large portion of the cuticle detached from the skin by the interposition of a transparent watery fluid. Soon after the water is discharged, the excoriated surface is covered with a flat, yellow, or blackish Scab, which remains till a new cuticle is formed underneath. Both Vesicles and Blebs, when they have a dark red, or lived base, are by medical and chirurgical writers denominatèd PHLICTÆNÆ.

XII. **PUSTULE**; an elevation of the cuticle, with an inflamed base, containing Pus. Pustules are various in their size, but the diameter of the largest seldom exceeds two lines.

Some forms of Pustules have been distinguished by specific appellations; as

1. **PHLYZACIUM**; a Pustule, raised on a hard circular base, of a vivid red colour. It is succeeded by a thick, hard, dark coloured Scab.

2. **PSYDRACIUM**; a minute Pustule, irregularly circumscribed, producing but a slight elevation of the cuticle, and terminating in a laminated Scab. Many of these pustules usually appear together, and become confluent. After the discharge of Pus, a thin watery humour exudes, which often forms an irregular incrustation.

3. **ACHOR**; an acuminate Pustule, of intermediate size between the two foregoing, which contains a straw-coloured matter, having the appearance, and nearly the consistence of strained honey. It appears most frequently about the head, and is succeeded by a thin brown or yellowish scab.

4. **CERION**, or **FAVUS**; this pustule is somewhat larger than the Achor, and contains a more viscid matter; its base is but slightly inflamed, and it is succeeded by a yellow, semi-transparent, and sometimes cellular Scab, like a honeycomb.

I propose to arrange Cutaneous Diseases in eight Orders, to be characterised by the different appearances of Papulæ, Scales, Rashes, Bullæ, Vesicles, Pustules, Tubercles, and Maculæ. By comparing together the 2d, 5th, 6th, 7th, 8th, 10th, 11th, and 12th Definitions, the distinguishing characters of each Order may be readily understood. They will also be further illustrated in treating of the Orders respectively.

ORDER I....PAPULÆ.

PAPULÆ are generally considered to be enlargements of the Papillæ of the skin, made by a strong determination of blood to them, with some degree of inflammation. Medical writers, however, use the word Papula in various significations. By Marcellus,* and Scribonius Largus, herpetic vesicles, achores, and vari, are termed Papulæ. Pliny† includes under this title, wheals, miliary eruptions, and petechiæ. Professor Lorry, and others, apply it to wheals, superficial tubercles, and pustules.‡ Plenck, in his *Doctrina de Morbis Cutaneis*, Class V, has defined Papulæ as follows; “Sunt tumores exigui sed duri, qui vel resolvuntur, vel ex apice quid humidi ejiciunt, et dein desquamantur:” yet he comprehends in the class several diseases, which do

* Marcell. de Medic. c. 4 & 19. Scribon. De Comp. Med. cap. 23 & 98.

† Hist. Nat. LIB. XX. cap. 20. L. XXVI. c. 11. L. XXVIII. c. 17, &c.

‡ Compare Manard. Ep. Med. 7. Fernel. Pathol. L. VII. C. 1. Tagault. Chirurg. L. I. Cap. 2. Lommii Med. Obs. L. II. Senert. Pract. Med. L. V. Part 1. Cap. 21. Plater. de Superf. Corpor. dolorib. Cap. 17. Hafenreffer de Cutis Affectib. I. I. Cap. 15. Theod. Corbeii Patholog. I. II. Sect. 5.

not agree with the definition, and which are little related to each other, as Vari, Grutum seu Miliun, Herpes, Cutis anserina, Tuberculum, Phygethlon, Lepra, Elephantiasis. Some limitation of the sense of the term Papula is therefore necessary. In defining it (def. v.) I have followed Sauvages and Linnæus,* to whose definitions, if we strictly adhere, the present Order will only comprise the three genera, Strophulus, Lichen, and Prurigo.

I. The STROPHULUS is a papulous eruption, peculiar to infants, and exhibiting a variety of forms, which may be described under the titles of Strophulus intertinctus, Strophulus albidus, Strophulus confertus, Strophulus volaticus, Strophulus candidus.

1. STROPHULUS INTERTINCTUS, usually called The RED GUM, and by the French, EFFLORESCENCE BENIGNE. The Papulæ characterising this affection rise sensibly above the level of the cuticle, are of a vivid red colour, and usually distinct from each other. Their number and extent is very different in different cases. They appear, mostly, on the cheeks, fore-arm, and back of the hand, but they are sometimes diffused over the whole body. The Papulæ are, in many places, intermixed with Stigmata, and often with red patches of a larger size,†

* Papula: Phyma parvulum, desquamari solitum. Sauvages's Nosol. Method.

Papula est tuberculum farctum, coloratum, vix suppurandum. Linn. Nosolog. See Celsus de Medicin. Lib. V. Cap. 27. § 18.

† Infantum cutis plerumque eruptione quâdam inducitur, nutricibus nostris dictâ, the Red Gum, rubrum gummi. Et hic quidem morbus, qui infantulorum proprius est, per glandulas quæ miliares nominantur, se largè profert, modo latis pustulis. modo mirè exiguus, rubroque colore conspicuis. Russel Œconom. Natur. in

which do not, however, occasion any elevation of the cuticle. A child's skin, thus variegated, somewhat resembles a piece of red printed linen; and hence this eruption was formerly denominated the RED-GOWN,* a term which is still retained in several counties of England, and may be found in old Dictionaries. Medical writers have changed the original word for one of a similar sound, but not more significant.

In the *Strophulus intertinctus* a few small Vesicles, containing straw-coloured lymph, may be occasionally observed on the wrist or back of the hand, but they scarcely merit attention, as the fluid disappears in a short time, without breaking the cuticle. The eruption usually terminates in Scurf, though not at any certain period: the *Papulæ*, and red patches, in some cases, remain for a considerable time, without any obvious alteration; in other cases, they disappear and come out again daily: but, for the most part, one eruption of them succeeds another, at longer intervals, and with more regularity.

This complaint occurs chiefly within the two first months after birth. It is not always accompanied with, or preceded by, any disorder† of the constitution, but often takes place in the strongest and most healthy chil-

Morb. Gland. Page 42. Compare Etmuller *Valetudinar. Infantil.* cap. 2. § 2. G. W. Wedel de *Morb. Infant. purpurat.* *Wirtzung, Prax. Med. univers. P. I. Cap. 1. § 3.* Brouzet sur l'Education des *Enfans*, P. 187. Allen's *Synops. Medicin. Vol. II.* Page 285, and Fuller on *Eruptive Fevers.* Page 128.

* Redde-Gowne, *Strophulus*; a sickness of young children. Hulcæt's *Dictionary*, 1572. See also Rider's *Dictionary*, Oxf. 1589; Holyoke's and Littleton's *Dictionaries*, Lond. 1606 and 1678.

† I am inclined to think that the Red Gum is generally preceded by sickness at stomach; but this is so common to new-born infants,

dren. Some authors connect it with the aphthous* ulcerations peculiar to infancy, supposing them to be a part of the same disease, diffused along the internal surface of the mouth and intestines: The fact however is, that the two affections alternate with each other; for those infants who have the papulous eruption on the skin are less liable to Aphthæ; and when the Aphthæ take place extensively, the skin becomes pale and free from eruption.

The *Strophulus intertinctus* is, by most writers, said to originate from an acidity, or acrimonious quality of the milk in a child's stomach, which is communicated afterwards to the blood, and stimulates the cutaneous excretories. This opinion might, without difficulty, be proved to have little foundation; but in a work of this kind I do not think it so necessary to theorize concerning diseases, as to deliver a faithful account of their symptoms, and external appearances. I shall therefore only observe, that the predisposition to the complaint may be deduced from the delicate and tender state of the skin, and from the strong determination of blood to the surface, which evidently takes place in infants; and that the papulous eruption is, in many cases, connected with a weak, irritable state of the alimentary

that little notice is taken of it by the nurses. Where the sickness has been more considerable, I have generally found it followed and removed by a copious eruption of the Red Gum." Dr. John Sims.

* Actuar. Meth. Med. L. IV. C. 14. Myreps. De Compos. Med. § 38. Cap. 119, 120.

Infantulorum Aphthæ ejusdem opinor sunt naturæ cum illis eruptionibus quæ vocantur the Red Gum; et in hac re solum discrepant, quod ut alter morbus cutem, ita hic glandulas internas infestat. Russel *Œconom. Natur. in Morbis Glandular.* Page 57.

canal, and consequent indigestion. For if it be by any means suddenly repelled from the surface, diarrhœa, vomiting, spasmodic affections of the bowels, and often general disturbance of the constitution, succeed: but on its re-appearance, those internal complaints immediately cease. Dr. Armstrong and others* have particularly noticed this reciprocation, which makes the Red Gum, contrary to the opinion generally entertained respecting it, sometimes a very dangerous complaint. On these remarks a necessary caution is founded, not to expose infants, with the eruption upon them, to a stream of very cold air, nor to plunge them into a cold bath, the most violent symptoms, and even fatal consequences, having occasionally resulted from such imprudent conduct.

The usual mild appearance of the *Strophulus intertinctus*, being consistent with a healthy state of all the functions of the body, requires but little attention from medical practitioners. They should, however, direct nurses to keep a child's skin clean, and to promote equal perspiration, by daily ablutions with tepid water, which are useful in most Cutaneous disorders, and which will

* Armstrong on the Diseases of Children, p. 30. Smellie Coll. 47. vol. III. Dr. Underwood, vol. i. p. 82. Cum secretiones quæ post aures et per inguina, &c. perficiuntur, cumque eruptio dicta the Red Gum ex toto evanescit, tum secretiones per glandulas tubi alimentarii quotidie augeri incipiunt. Infans acidis ructibus affligitur, cibum vomendo rejicit; intestina flatibus distenduntur: strangulationes in gutture, ut in mulieribus hystericis percipiuntur; sonitu quovis inopinato contremiscit. In maribus, vestimentis exutis, tam circa testiculos, quam oculos quoque et os, color tanquam plumbeus cernitur; dormienti penis erigitur; e somno sæpe contractis foriter pugnis excitatur; oculos uno in loco figit, intenditque; et si quidem alvus durior sit, sæpe motibus epilepticis, sæpe convulsivis corripitur. Russel *Œconom. Natur.* p. 45.

be found, in other respects, of material importance to the health of infants.*

Some further considerations are requisite, where the eruption is more obviously connected with a morbid state of the stomach and bowels.† In this case very much depends on proportioning the aliment to the digestive powers;‡ and with a view to invigorate them, such modes of exercise must be employed, as can be conveniently borne by infants. When the eruption has been repelled from the skin by the application of cold water, by astringent lotions, or by an improper exposure to cold air, and when violent internal disorder is the consequence, a warm bath proves the most effectual remedy: it presently relieves the urgent symptoms, and often brings back the eruption.§

2. In the *STROPHULUS ALBIDUS*, which is by some termed the White Gum,|| the eruption consists of numerous, minute, hard, whitish specks, a little elevated, and surrounded by a very slight redness. These specks, or Papulæ, when their tops are removed, do not discharge any fluid: it is, however, probable, that they are originally formed by the deposition of a fluid, which afterwards concretes under the cuticle. They appear

* Aet. Tetr. I. Serm. 4, cap. 3.

† See Russel *Æconom. Nat.* p. 46.

‡ Paul *Ægin. L. I. cap. 5.*

§ Dr. Armstrong observes, "In this complaint I have seen the warm bath of essential service, and very good effects from a blister." He has exemplified the practice by a very striking case.

|| Dr. Underwood, vol. i. p. 81.

chiefly on the face, neck, and breast, and continue a long time.

The *Strophulus albidus* sometimes takes place without any disorder of the constitution; but it is at other times attended with the symptoms before enumerated, and requires the medical treatment there recommended. Although a distinctive name has been applied to this eruption, when occurring alone, I have observed, in a great number of cases, that red patches and *Papulæ* were intermixed with it, a circumstance which establishes its affinity with the *Strophulus intertinctus*.

3. *STROPHULUS CONFERTUS*. An eruption of numerous *Papulæ*, varying in their size, appears on different parts of the body in infants, during dentition,* and has thence been denominated the Tooth Rash. It is sometimes also termed the Rank Red Gum.

About the fourth or fifth month after birth, an eruption of this kind takes place, in most infants, on the cheeks, and sides of the nose, extending sometimes to the forehead and arms, sometimes, though less frequently, to the trunk of the body. The *Papulæ* on the face are smaller, and set more closely together, than in the Red Gum. Their colour is not so vivid, but they are more permanent. They terminate at length in Scurf; yet, perhaps some days afterward, a fresh eruption appears in the same places. The *Papulæ* on the back or loins are much larger, and more distant from each other, than those on the face. They are often surrounded by

* Multi sunt infantes quibus ad singulas dentitionis periodos irritatio lichenas (i. e. papulas) exterius protrudit. Lorry de Morb. Cutan. p. 245. See also Etmuller Dissert. 10. § 32. It is to be observed, that Dr. Armstrong applies the denomination of Tooth Rash to the *Crusta lactea*. On the diseases of Children, page 34.

an extensive circle of inflammation ; and a few of them contain a semi-pellucid watery fluid, which is absorbed when the inflammation subsides.

In the seventh or eighth month the *Strophulus confertus* often exhibits one, two, or three, large irregular clusters of *Papulæ*, which are inflamed, hard, of a considerable size, and set so close together, that all the intervening skin is of a high red colour. The fore-arm is the usual seat of this eruption, the *Papulæ* rising first on the back of the hand, and gradually extending upwards along the arm. Sometimes, however, the clusters appear on the shoulder, or neck ; and, at other times, the eruption commences at the elbow, and proceeds a little way, both upward and downward, on the outside of the arm : It arrives at its height in about a fortnight ; the *Papulæ* then begin to fade, and become flat at the top : afterward the cuticle exfoliates from the part affected, which remains discoloured, rough, and irregular, for a week or two longer.

A very obstinate and painful modification of this disorder occasionally takes place on the lower extremities. The *papulæ* spread from the calves of the legs to the thighs, nates, loins, and round the body, as high as the navel : being very numerous and close together, they produce a continuous redness over all the parts above mentioned. The cuticle presently becomes shrivelled, cracks in various places, and finally separates from the skin in large pieces. During this process a new cuticle is formed, notwithstanding which the complaint recurs in a short time, and goes through the same course as before. In this manner successive eruptions take place, during the course of three or four months ; and perhaps do not cease till the child is one year old, or somewhat

more.* Children necessarily suffer great uneasiness from the heat and irritation occasioned by so extensive an eruption; yet, while they are affected with it, they often remain free from any internal or febrile complaint. This appearance should be distinguished from the Intertrigo of infants, which exhibits an uniform, red, smooth, shining surface, without papulæ; and which affects only the lower part of the nates and inside of the thighs, being produced by the stimulus of the urine, &c. with which the child's clothes are almost constantly wetted.†

When the *Strophulus confertus* appears in a healthy child, it is mostly ascribed to a state of indigestion, or some feverish complaint, in the mother or nurse: I have, however, frequently seen the eruption, where no such cause for it was evident. It may, with more propriety, be ranked among the numerous symptoms of irritation, arising from the inflamed and painful state of the gums in dentition, since it always occurs during that process, and disappears soon after the first teeth have cut through the gums. On this view, the eruption requires no consideration in medical practice, beyond the general treatment proper for the state of teething. Great attention to cleanliness is, however, requisite, and I would recommend that the parts affected should be often washed with warm milk and water, or thin gruel. I may observe

* Compare Dr. Underwood. vol. i. p. 98.

† Nurses or servants, in order to avoid the trouble of washing, hastily dry the cloths wetted with urine, and apply them again while rough and impregnated with the urinary salts. These cloths are very irritating to the skin, and greatly aggravate any eruptive complaint with which the child, who wears them, may be affected. Medical practitioners should caution young mothers against the above slovenly practice in nurseries.

further, that we should carefully distinguish the *Strophulus confertus* from the measles, or *Searlatina*; and that we should not be too hasty in ordering a child to be weaned, at the commencement of the eruption, on a supposition of ill health in the mother or nurse.

4. The *STROPHULUS VOLATICUS* is characterized by small, circular patches, or clusters, of *Papulæ*, which appear successively on different parts of the body. The number of *Papulæ* in each cluster is from three to ten, or twelve: both the *Papulæ* and their interstices are of a high red colour. These patches continue red, with a little heat or itching, for about four days, when they turn brown, and begin to exfoliate. The eruption is, in many cases, limited to two or three patches on the arms or cheeks. In some instances, however, as one patch declines, another appears at a small distance from it, and in this manner the complaint spreads gradually over the face, body, and limbs, not terminating in less than three or four weeks. During that time the child has usually a quick pulse, and a white tongue, and is uneasy and fretful.

The above complaint has been, by some writers, denominated *Ignis volaticus infantum*;* I think it, how-

* Sauvage's account of the *Ignis volaticus*, or *Erythema volaticum*, though very incorrect, is deserving of notice. *Nosol. Med.* Tom. I. p. 139. *ERYTHEMA VOLATICUM*; *MACULÆ VOLATICÆ Sennerti*; *ÆSTUS VOLATICUS*; vulgo *FEU VOLAGE*. *Pueri lactentes non rarò erythemata habent in facie, pertinacia, constantia, intensè rubra, uniformia, circularia, monetæ minoris magnitudine, circa genas, labia; in maculæ centro non rarò vidi foramen fuscum, siccum.*

Si hæ maculæ evadant crustosæ, an sunt quid diversum a *Crustâ lacteâ*? *Sennertus* se nunquam vidisse fatetur, atque maculas orio- culis, auribus vicinas, pro lethalibus habendas profert, quod a vero aberrare docet *Verducus*. Hujus desideratur accurata historia: si

ever, proper to remark, that, under this title, Astruc * and Lorry † have described one of the forms of the *Crusta lactea*, in which a successive eruption of *Pustules* takes place on the same part, mostly about the eyes, or mouth, in children, at different ages, and sometimes in adults. The *Maculæ volaticæ infantum*, mentioned by Wittichius, Sennertus, ‡ and Sebizius §, agree in some respects with the *Strophulus volaticus*; but they are described by other German physicians as a species of *Erysipelas*, or as irregular efflorescences affecting the genitals of infants, and often proving fatal.

The *Strophulus volaticus* is not, as many authors have stated, an unusual complaint. Those children are liable to it, who have a fair and irritable skin. I have sometimes observed it between the third and sixth month, but, I think, more frequently at a later period

calore, dolore careat, ad guttam roseam attinet. Quas vidi crustosæ non erant, unde a *Crustâ lacteâ* differebant.

Sauvages has not mentioned the papulous elevations in the patches. The *foramina, fusca, sicca*, observed by him, may be accounted for as follows: when the tops of the *Papulæ* are abraded, by rubbing or scratching them, a discharge of lymph takes place from the small openings, which presently concretes into brown or blackish concave scabs.

* Astruc de Morb. Inf. page 44.

† Lorry, Part I. Sect. 2. Art 3. de Morb. Cutan. Compare Sauvages de *Tineâ volatica, vel Igne volatico*: Nosol. Med. Tom. II. p. 579.

‡ L. V. p. 3. Sect. 1. cap. 6. See also Act. Nat. Cur. Tom. IV. & VIII.

§ Spec. Med. Pract. Part V. cap. 32.

of dentition. In one instance, it occurred about ten days after birth, and continued three weeks, being gradually diffused from the cheeks and forehead to the scalp, afterwards to the trunk of the body, and to the extremities: when the patches exfoliated, a red surface was left, with a slight border of detached cuticle.

This eruption being sometimes connected with a disorder of the stomach and bowels, it becomes requisite to administer a gentle emetic, or some laxative medicine: after which the decoction of Peruvian Bark will be found useful. No external application seems necessary.

5. *STROPHULUS CANDIDUS*. In this form of Strophulus the Papulæ are larger than in any of the foregoing species. They have no inflammation round their base, and their surface is very smooth and shining, so that they appear to be of a lighter colour than the adjoining cuticle. They are diffused, at a considerable distance from each other, over the loins, shoulders, and upper part of the arms: I have not observed them in any other situation.

This eruption affects infants above a year old, in the latter periods of dentition: it likewise occurs during the state of convalescence after fevers, and inflammation of the bowels or lungs. The Papulæ continue hard and elevated for about a week, then gradually subside and disappear.

Papulæ of this kind sometimes appear on the loins of children, with an eruption of the Strophulus confertus in the form before described.

Few observations have been left, by the ancients, respecting the papulous eruptions above described.

Most of the Greek physicians comprehend Strophulus, and the Crusta lactea, with some other Cutaneous Diseases peculiar to infants, under the denomination of *Εξαιδημάλια παιδιῶν*. Aëtius has distinguished the *Εξαιδημάλια*, or Papulous eruptions, from Vesicles and Pustules;* and has laid down the mode of treatment proper for them respectively. He recommends that a child, affected with Papulæ, should be washed with a decoction of roses, tamarisk, pomegranate-rind, or myrtle, giving a caution against the use of salt-water and urine, which were, at that time, favourite remedies in eruptive complaints.

The different forms of Strophulus, and some other Cutaneous Disorders, are comprized by the Arabian writers under the general title Bothor of Infants.† These eruptions are, in their opinion, of the same nature, and referable to the same causes,‡ as Aphthæ, which they term Bothor of the Mouth. The method of treatment prescribed by them, in such cases, is singular. As soon as any Papulæ appear, they direct that the child should

* *Μοχθηρα τροφη χρησαμενα τα νηπια διαφοροις περιπιπτει υσθημασι, ὡσε
συναλλοις κας εξαιδημάλια, κας φυκλιανας, κα: κηθυρα ἔλκη καλα την επιφανειαν
γινηθαι α καλοσι βαβαιικα, καε ετερα παρωλησια.*

† *Hujusmodi Bothor aliæ sunt albæ, aliæ rubræ, aliæ nigræ, aliæ magnæ, aliæ parvæ, et multæ, et paucæ; aliæ fortis et acuti doloris, et mortiferæ. Rhazes de Morbis Infantum, cap. 19, et Alsharav. Pract. cap. 25.*

Est eum in corpore infantum accidunt Bothor; sed quod ex eis ulcerosum est et nigrum, est mortale. Quod autem est album, est sanius, et similiter rubeum. Avicen. L. I. Fen. 2. Doctr. 3. cap. 3.

‡ *Causæ vero in universum sunt, corruptio lactis, cum ejusdem malitiâ; vel vex eo quod non digeratur lac in ventriculo. Alsharav. cap. 25.*

be exposed to the steam of a vessel full of boiling water, with a view to drive the morbid humour to the surface of the body.*

* *Curatio universalis est ut rectificetur lac nutricis ; et ponatur sub puero olla plena aquâ calidâ, in principio apparitionis pustularum, ut attrahat superfluum humorem ab interioribus ad corporis superficiem. Rhazes de Morb. Infant. cap. 19, et Alsaharav. loc. cit.*

ORDER I...II. LICHEN.

IN the writings of Hippocrates, the term Lichen, or Lichenes, is employed to express an eruption of Papulæ. According to Foesius, *Œconom. Hippoc.* Λειχην est summæ cutis vitium, ut ψώρα et λεπρά, cum asperitate et levi pruritu; deterius quidem Pruritu, Psorâ autem et Leprâ levius. Lichenes inter exanthemata recensentur, Hipp. Prorrh. 2. ut et cutis fœditates et vitia censentur potius quam morbi (Lib. περι παθων;) neque absimili modo Lichenes corporis profundum vitiosis humoribus in cutem erumpentibus expurgant; Aph. 20. L. III. Sic etiam πα λειχηνωδεια εξαιρομενα, Lichenes tuberosi, turgentibus, et in tumorem sublatis, hoc est, cum pustulis et papulis dicuntur. L. IV. Epidem.

The later Greek authors extend the use of this term farther, comprehending under it, besides the simple and the rank* Lichen, a pustular affection of the face sometimes called Sycosis,† and likewise the Mentagra,‡ a con-

* Λειχην απλως και αλερος. Galen. *Introduct.*

† Λειχηνωδων ογκων παθος. Aet. *Tetrab.* II. 4. 16. Oribas. *Lib.* III. C. 57. or *συκωσις*, according to Galen, *de Comp. Med.* sec. loc. *Lib.* V.

‡ *Actuar.* L. VI. C. 6. Aet. *Tetrab.* ii. 4. 16. Marcellus *de Medicinâ*; C. 19. *Plin. Hist. Nat.* L. XXVI. *Plin. de Re Medic.* II. 56.

tagious disease, which is said not to have appeared in Europe before the reign of Claudius Cæsar.

Celsus, under the denomination *Papula*, has comprized the *Lichen agrius*, and another form of *Lichen*. *De Medicinâ*, Lib. V. Cap. 28.*

Pliny, in one passage (*Nat. Hist. L. XX. Cap. 1.*) seems to use the term *Lichen* as synonymous with the *Impetigo* of the Latins. He is, however, inconsistent with himself, since, in other places, he employs these terms to express different diseases. The only author to whom we can refer for a definition of *Impetigo* is Celsus; and his account of it does not, in any respect, correspond to that which the Greeks have given of the *Lichenes*.† All the translators of the Greek medical writers have, nevertheless, used *Impetigo* as synonymous with the original term *Lichen*; and their example has been followed by many respectable authors on the subject of Cutaneous Disorders.‡

The *Lichen* has also been arranged under other genera of disease, with which it has still less affinity than with

* See Gorræi *Defin. Med.* p. 361 *Ingrassias de Tumor. Tr. I. C. 1.* Tagaultii *Inst. Chirurgiæ*, Lib. I. Cap. 2. Bonacursius *de Malis extern.* cap. 36.

† The real relation between the *Lichen* or *Papula*, and *Impetigo*, is stated by Celsus, *L. V. C. 28*, where he says, “that the *Papula agria*, through neglect or improper treatment, is often changed into *Impetigo*.” This observation is confirmed by experience; but it does not authorise us to confound those two diseases, nor to employ the terms expressing them indiscriminately.

‡ Joubarti *interpretatio Dictionum Guidonis de Cauliaco*, p. 26. *Amat. Lusitan. Curat. Med.* p. 155. *Fernel. Patholog.* VII. 6. *Marnard. Ep. Med.* 7. *Plater tom. III* p. 675. *Lommius in Obs. Med. II. Fœs. Œcon. Hippoc. Plenck de Morb. Cutan.* p. 86.

Impetigo. Thus Sauvages* describes it under the title of *Herpes farinosus*; and Lorry† confounds both *Lichen* and *Impetigo* with *Herpes*. Platerus, Corbey, and Hafenreffer ‡ arrange *Lichen* under the genus *Scabies*. Some others apply this term solely to express the *Mentagra* of the Latins §. Mercurialis, || who denies the affinity of that disease with the *Lichenes*, represents the latter as a pustular complaint, similar to the *Scabies* described by Celsus, or to the *Al-kouba* of the Arabians.

Amidst so much confusion, it becomes difficult to fix the proper signification of the word *Lichen*. I have before observed that Hippocrates employs it to denote an eruption of *Papulæ ¶* on the skin. He certainly did

* *Nosol. Method. De Herpete*. See also *Bertrandi, Opere Anatomiche. T. IV. Articulo 11.*

† *Tertia [Lichenum] species sæpe cum fundo miscetur herpetico, unde sublatis qui primo apparuerant Lichenibus, in verum Herpetem mutatur. Lorry de Morb. Cut. p. 150, 244, and 349. Compare Heurnius Comm. in Hipp. Cap. 20. L. III. Etmuller. Colleg. Pract. page 525.*

‡ *Plater. Praxis III. 17. Hafenreff. de Cut. Affect. I. 15. Corbeii Pathol. Lib. II.*

§ *Gab. Fallop. de Ulcerib. Cap. 25. Shenkii Obs. 417, &c.*

|| *Mercurialis de Morb. Cut. L. II. Cap. 6.*

¶ *Lichenum nomen apud Hippocratem universaliter sumitur pro endemicâ cutis efflorescentiâ, unde mirum videtur et parum diligens, ab interpretibus nomen illud per Impetiginem reddi. Sed in hisce morbis magnam nominum confusionem reperimus. Unde Lichenes a Græcis ipsis parum intellectos, ab Arabibus, ut mihi saltem videtur, prætermisissos pro depuratione cutis particulari ha-*

not include under this denomination any pustular disease, since, in the twentieth Aphorism of the third book, he mentions, distinctively, Lichenes, and *Εξαιθησεις ελκωδεις*, or ulcerating efflorescences, conjointly with some other diseases peculiar to the spring season.

I think, therefore, we may establish an useful distinction in Cutaneous Disorders, if, in conformity to the original sense of the word, the Lichen be defined, an extensive eruption of Papulæ affecting adults, connected with internal disorder, usually terminating in Scurf; recurrent; not contagious.

The varieties of this eruptive disease, which have occurred to my observation, I propose to describe under the titles, Lichen simplex, Lichen pilaris, Lichen circumscriptus, Lichen agrius, Lichen lividus, and Lichen tropicus.

1. The **LICHEN SIMPLEX** usually commences with head-ache, flushing of the face, loss of appetite, general languor, and a quick, unequal pulse. Distinct red Papulæ, with but little inflammation round their base, arise first about the cheeks and chin, or on the arms; in the course of three or four days a diffuse eruption of similar Papulæ takes place on the neck, body, and lower extremities, attended with an unpleasant sensation of tingling, which is somewhat aggravated during the night. In about a week the colour of the eruption fades; and the

bebimus, cujus nobis ideam exhibere possunt eruptiones illæ quæ Gallis dicuntur, Dartres farineuses. Lorry de Morb. Cutis, p. 243. See Poupart Traité des Dartres, p. 5.

M. Lorry's observation with regard to the Arabian physicians is not correct. The Lichen is noticed by Serapion, Breviar. Tract. V. cap. 2 et 4. where he has literally translated the observations of Paulus Ægineta on Lichen, Psora, and Lepra.

cuticle separates in Scurf. All the surface of the body remains, for a long time, rough and scurfy, but the roughness is most observable in the flexures of the joints. The duration of the complaint is seldom in any two cases alike : fourteen, seventeen, twenty, or sometimes thirty days intervene, betwixt the eruption and the renovation of the cuticle.

The febrile state, or rather the state of irritation, at the beginning of this disorder, is seldom considerable enough to confine the patient to the house : after remaining five or six days, it is generally relieved on the appearance of the eruption.

Some difference is observable in the form of the Papulæ, on different parts of the surface of the body. On the face they are large, and rounded, and more permanent than in other situations : they are small, acuminate, and of a vivid colour, on the neck, breast, and extremities : on the hands they have the least redness, and sometimes resemble obscure watery vesicles, but they exfoliate without any discharge of fluid.

This, as well as some other species of the Lichen, occurs annually about the beginning of summer, or in autumn, in persons of a very weak and irritable constitution. Delicate women, subject to violent pains in the stomach and head, are often relieved from these complaints during several months, after an eruption of the Lichen simplex.*

* A case of this kind is recorded by Hoffman, tom. iv. part 5. p. 411. but under the title of *Purpura chronica scorbutica*.

Honesta fœmina, tenera ac macilenta. L. et aliquot annos nata, naturæ sensibilioris, animique ad exandescentiam proclivis, per octo circiter annos, semel vel bis in anno, Purpurâ corripî suevit chronicâ, ita ut nonnunquam per unius vel duorum mensium spatium eâdem laboraverit. Enimverò quoties novus imminebat insultus, per intervalla, alia atque alia jungebantur symptomata, ut ferè

It is likewise a sequel, or crisis, of some acute diseases, particularly Fever, and Catarrhal, or Peritoneal inflammation. The instances collected by Sauvages, Nosol. Method. Class. X. Ord. 5. under the article *Scabies critica*, are deserving of attention.

I have had occasion to notice the following deviations from the usual form and course of the *Lichen simplex*.

1. The *Papulæ*, in some instances, appear and disappear repeatedly, without producing Scurf.

2. The eruption is often partial, affecting only the arms, neck, or face.*

3. There are, in many cases, successive eruptions and exfoliations of the *Papulæ*, by which the duration of the complaint is prolonged for two or three months.

4. The febrile symptoms preceding it differ in degree in different cases: and sometimes the eruption appears suddenly, without any manifest disorder of the constitution.

This species of *Lichen* is often mistaken for the Measles, *Scarlatina*, or other diseases of the Order Rashes.

sunt virium imbecillitas, capitis dolor cum aurium tinnitu, anxietas præcordiorum cum spirandi difficultate, somnus parvus et interruptus, pulsuum cum celeritate juncta debilitas, alternans cum frigore æstus, ei insignis extremorum pruritus. Quam primum vero materia purpuracea, cum aspredine cutis, et papulis, ab interioribus ad exteriora erat propulsa, invicem ista placabantur symptomata, quandoque tamen, licet mitiùs, repetebant

Compare Act. Nat. Cur. tom. viii. p. 349.

* Poupart, *Traité de Dartres*, p. 234. Quelquefois ce ne sont que des inégalités qui paroissent de différentes grandeurs sur la peau, tantôt a un endroit, tantôt a l'autre. Quelquefois ces inégalités sont accompagnées ou produites par de très-petits boutons rouges, qui blanchissent souvent en peu de jours, et qui font tomber l'épiderme en petites écailles blanches.

By attending to the fifth and sixth Definitions, and to the course of the symptoms, such errors may be avoided. It is not so easy to distinguish Lichen from Scabies (the Itch;) but I shall endeavour to point out their characteristics, when I treat of the latter disorder.

The *Strophulus intertinctus* differs from this affection by the vivid redness of its Papulæ, by the internixture of diffuse red patches among them, and by being peculiar to infants, whereas the Lichen mostly occurs in adults. The other species of *Strophulus* are distinguishable from it by the colour of the Papulæ, and by the mode of their distribution.

2. *LICHEN PILARIS*. This is only a modification of the foregoing species, and, like it, often alternates with complaints of the head or stomach, in irritable habits. The peculiarity of the eruption consists in this, that the small tubercles or asperities appear only at the roots of the hairs of the skin, being probably occasioned by an enlargement of their bulbs, or an unusual fulness of the blood-vessels distributed through them. This affection may be distinguished from the *cutis anserina* by its permanency, by its red Papulæ, and by the troublesome itching or tingling which attends it. If a part thus affected be violently rubbed, some of the Papulæ enlarge to the size of Wheals, but the tumour very soon subsides. The eruption continues more or less vivid for about ten days, and then terminates by small cuticular exfoliations round the hairs of the skin. The *Lichen pilaris* is connected with disorders of the stomach and bowels; I have often seen it in persons accustomed to drink largely of spirituous liquors undiluted.

3. In the *LICHEN CIRCUMSCRIPTUS* the Papulæ are arranged in clusters, or patches, which are of an irre-

gular form, but with a well-defined margin. The patches appear, in succession, on the limbs, or trunk of the body. Some of them which are small, and nearly circular, remain a week, or two, without much alteration; others extend gradually, with a papulated border, into large oval and sometimes angular forms, till they coalesce, or intersect each other. The surface within the borders of the dilating patches soon becomes even, but appears slightly red and scurfy. In some cases, before the Scurf is removed, a new series of Papulæ arises, and terminates in new exfoliations. Thus, by repeated eruptions, the complaint may be continued for six or eight weeks. It is at first attended with slight febrile symptoms, which, however, cease in a day or two, and no uneasiness remains but an occasional itching in the patches.

The *Lichen circumscriptus* is excited both by internal and external causes of irritation: it sometimes appears in adults, during the progress of *Vaccine Inoculation*, and may be considered as a proof that the virus has sufficiently acted on the constitution.

Cassius Felix, and *Ingrassias*,* have described this annulated form of the *Lichen* as follows; “*Nascuntur Lichenes, rotundo schemate, in superficie cutis, cum ingenti pruritu et asperitate; atque ubi ad malum serpere incipit Serpigo dicitur.*”

4. The *LICHEN AGRIUS* is preceded by nausea, pain in the stomach, head-ache, loss of strength, and deep-seated pains in the limbs, with fits of coldness and shivering; which symptoms continue several days, and are sometimes relieved by the papulous eruption. The *Papulæ* are distributed, in great numbers, without

* *De Tumorib. præt. nat. Tract. i. Cap. 1.* Compare *Celsus, de Medic. L. V. Cap. 28.*

any certain order, chiefly on the arms, the upper part of the breast, the neck, face, back, and sides of the abdomen: they have a high red colour, and are surrounded by extensive inflammation, or redness of the skin, attended with itching, heat, and painful tingling. When the patient becomes warm in bed, the redness increases; and there is a strong sensation of burning and smarting, for an hour or more, as if the parts had been severely scalded. The same effect is produced at any time by washing, especially if soap be used; also by violent exercise, or by drinking wine. In the morning, the *Papulæ* subside, the inflammation in a great measure disappears, and no uneasiness is felt till after dinner, unless it be excited by the above-mentioned, or by other similar causes. Some small vesicles, filled with a straw-coloured fluid, are occasionally intermixed with the *Papulæ*. These arise dispersedly on the arms, about the roots of the hair, on the forehead or temples, and often on the fingers, but they soon dry and exfoliate. By a long continuance, or by frequent returns, of the heat and redness, the skin is at length altered in its texture, becoming harsh, thickened, choppy, and exquisitely painful, on being rubbed or handled.

The duration of this complaint, and the modes of its termination, are very uncertain. It sometimes continues four or five weeks, without any material change in its appearance: sometimes it has an earlier termination by slight exfoliations of the cuticle: but in most instances, the eruption appears and disappears repeatedly, before the disease is removed. It may also, by improper applications, be suddenly repelled from the surface of the body. This incident is always succeeded by violent disorder of the constitution. I have observed, in one or two cases,

where it was occasioned by imprudent exposure to cold, that an acute disease ensued, with great heat and thirst, an accelerated pulse, frequent vomiting, pains in the bowels, head-ache, and delirium. After these symptoms had continued ten days, or somewhat longer, the patients recovered, though the eruption did not return. The uneasy sensation of itching and tingling, at the commencement of the disorder, leads many persons to rub the affected parts too harshly, and thereby to produce fissures, or excoriations, with a considerable discharge of watery fluid. At an advanced period of the eruption, similar effects take place from the violence of the cutaneous inflammation, without external injury. The ulcerated surface cannot, in either case, be readily healed by medicinal applications.*

The diffuse redness connecting the Papulæ, and the tendency to excoriation, distinguish the Lichen agrius, from the Lichen simplex, and from the other varieties of Lichen, in which the inflammation does not extend beyond the bases of the Papulæ, and which terminate in Scurf or Scales.

A female, about thirty-six years of age, having a dark complexion, dark hair, and a coarse skin, was affected with the Lichen agrius. During the year 1793, she had often complained of pains in the head and stomach, with a sense of depression and faintness. These symptoms were occasionally troublesome to her till the spring of 1794, when they were suddenly relieved by an appearance of numerous red, tingling Papulæ on the arms and wrists. A similar eruption ap-

* Thus Jul. Poll. Onomasticon. *Λεειχην αγριος, τραχυς, δυσιαλος, αταμαλος.*

peared, about six weeks afterward, on the upper part of the breast, and on the back, extending to the loins. In all these situations, if any of the *Papulæ* subsided, and became scurfy, fresh ones presently appeared : they were always most red, and tingling at night : in the morning, they were less inflamed, and less troublesome. The redness or inflammation round the *Papulæ* was greatest, and most diffuse, in the flexures of the elbows, where the skin was also intersected with rhagades, or chops. After taking powders composed of cinnabar and nitre, with an infusion of the tops of juniper, for two or three weeks, the eruption wholly disappeared. It returned, however, on the arms, within a month ; and in autumn some person persuaded her to undergo a mercurial course, which kept her in a state of salivation for a considerable time. During this process her skin was free from the eruption : but as soon as the effects of the mercury had ceased, her arm was again covered with numerous *Papulæ*, more painful and tingling than before. At the beginning of the year 1795, in a severe frost, the eruption assumed a pustular form. The Pustules were small, hard, inflamed, and in many places confluent. The ulcerations succeeding them were partially covered with blackish scabs, but continued to discharge a watery fluid for several months, and did not wholly heal till the end of the year. Since that time she has been much affected with pains of the limbs, head-ache, languor, and indigestion. These complaints are from time to time removed in consequence of the appearance of *Papulæ* on the arms, and other parts of the body : but the eruption does not return at any stated periods, nor is it so permanent as formerly.

It may be observed that women are much more liable

than men to the Lichen agrius; and that it especially affects those who have undergone long continued fatigue, watching, and anxiety. In men the complaint often originates from the intemperate use of spirituous liquors.

According to Galen, "The Lichen is a roughness of the skin, attended with much itching."* He has noticed two forms of the disease; but his description applies rather to their final appearances, than to the primary eruption.† All the Greek Physicians mention the frequent transition of the Lichen into Psora and Lepra. According to my own observation, the Lichen simplex, Lichen pilaris, and Lichen circumscriptus, occasionally terminate in the Scaly Tetter or Psora, but the Lichen agrius, after repeated attacks, terminates in a chronic pustular disease, analogous to the ulcerated Psora, or to the pustular form of Impetigo, mentioned by Celsus, lib. v. 28.

Paulus Ægineta, and Oribasius, remark that the Lichenes agrii only differ from the simple Lichen in violence, the former not being relieved, but rather aggravated, by the applications usually made to the latter.‡ Aetius mentions an orbicular form of the Lichen,§ and he

* *Definitiones Medicæ.*

† Διττον δε εις ος λειχηνος, ο μιν ήμερος ή πρβαυτερος ο δε αγριος ή χαλεπτερος. Αφισαινται δε επι τάλων ή λιπιδας τε διεργμαλος, ή ο υπο τας λιπιδας τοπος ενεργυθερος, και εγγυς ήλικαρενι φαινεσται. *Isagoge, Cap. 13. Compare Gal. De Comp. Med. sec. loc. L. V. C. 4. Oribas Synops. vii. 49. Paul. Ægin. iv. 3. Actuar. Med. L. ii. C. 2.*

‡ Αγριος δε καλεσσι λήχηνας, τας υπο των μείριως ξηραινομένων κδεν ονιναμετας, υπο δε των σφοδρας, παροξυνοστας.

Paul. Æg. de Re Med. L. iv. Cap. 3. Oribas. ad Eunap. L. iii. C. 57.

§ *Tetrab. iv. Serm i. Cap. 134.*

has distinguished the rough Lichenes (*Δειχνηες τεηχεις*) from the inflamed Lichenes (*Δειχνηες φλεγμαινοντες*.*) The inflamed sort agrees with the Lichenes agrii of Paulus and Oribasius, and with the complaint to which I have given the same denomination.†

Celsus, under the title Papula, has described, with precision, the Lichen circumscriptus, and Lichen agrius: “Papularum verò duo genera sunt. Alterum est in quo per minimas pustulas cutis exasperatur, et rubet, leviterque roditur; medium habet pauxillò levius; tardè serpit; idque vitium maximè rotundum incipit, eâque ratione in orbem procedit. Alterum est quam *αργειαν* Græci appellant; in quâ similiter quidem, sed magis, cutis exasperatur, exulceraturque, ac vehementiùs et roditur, et rubet, et interdùm etiam pilos remittit. Quæ minus rotunda est difficiliùs sanescit; nisi sublata est in Impetiginem vertitur.”‡

Those who are affected with the Lichen simplex, Lichen pilaris, and Lichen circumscriptus, should avoid heating themselves by much exercise, or by stimulants, and should take light nutriment, mild cooling liquors, and occasionally some gentle laxative. Washing with warm water, or thin gruel, relieves the itching and irritation of the skin.

The ancients recommend that the parts affected should be rubbed every day with the saliva of a person

* Act. Tetrab. i. Serm. i. Compare Oribas. Med. L. V. C. 10.

† See Leonicen. de Morbo Gallico; Ingrassias de Tumor. pr. nat. Tr. i. Cap. 1. Amat. Lusit. Cur. 29. Cent. III. et Sennertus, Pract. Med. L. V. i. 30.

‡ Cels. de Medicinâ, lib. v. cap. 28. sec. 18.

fasting,* which contributes to allay the painful sensation of tingling. All strong external applications are improper. In some cases, where the Lichen was mistaken for the Itch, I have seen disagreeable consequences produced by applying sulphureous and mercurial ointments, or astringent lotions.

In the Lichen agrius it is useful to give, at intervals, two or three moderate doses of calomel, as a purgative, and afterwards, for some weeks, the vitriolic acid, three times a day, in the infusion of roses, or with a decoction of Peruvian bark. Any sharp or stimulating application made to the skin, when rough, inflamed, and chappy, very much aggravates the complaint, and produces an intolerable smarting. The troublesome heat, and itching, may be alleviated by mild, cooling ointments, as by litharge-plaster softened with oil of almonds, the unguentum rosatum* (Ph. Lond. vet.) or the white-rose pomatum sold by perfumers. If this complaint has terminated in obstinate superficial ulcerations, a different plan becomes requisite, the particulars of which will be hereafter delivered, under the article Impetigo.

5. **LICHEN LIVIDUS.** The Papulæ in this eruption are of a dark red, or lived huc, and somewhat more permanent than in the foregoing species of Lichen. They appear chiefly on the arms, and legs, but sometimes extend to other parts of the body. They are finally

* Galen. de nat. fac. L. iii. Aet. Tetr. i. Serm. 2. Cap. 109. P. Æg. L. vii. Cels. L. V. 28. See also, Mercurial. ii. 17. Sennert. V. i, 30. Plater. iii. 17.

* See Quincy's Dispensatory. The best rose pomatum is imported from Paris, and is made with the petals of the white rose.

succeeded, though at very uncertain periods, by slight exfoliations of the cuticle; after which a fresh eruption usually takes place, and in this manner the complaint is prolonged for several months. The eruption is not attended with fever. It principally affects persons of a weak constitution, who live on a poor diet, and are engaged in laborious occupations. Young persons, and even children, residing in confined situations; or using little exercise, are also subject to the *Lichen lividus*; and in them the *Papulæ* are intermixed with *Petechiæ*, or with larger purple patches, and *Vibices*. This circumstance points out the affinity of the *Lichen lividus* with the *Purpura*,* or

* *Amatus Lusitanus* (*Cur. Med.* 22. *Cent.* ii.) has given the case of an old man affected with an eruption of livid *Papulæ* on the arms, hands, and legs, arising, in his opinion, from a putrescent state of the blood. “*Senex Abenasar, 65 annos natus, boni habitus, et sanguineus, quum Maii tempore veste pellibus fulcitâ vestiretur, et coturnis ac ocreis ex suberis cortice paratis calciatus incederet, scabiosus ille aeris ac vestium calditate, de pedum nimio calore querebatur, itâ ut intra crepidas eos continere non posse sæpe inculcaret. Huic igitur calore extraneo affecto, et jecur supra modum calefactum habenti, repente papulæ quædam nigerrimæ manus precipuè, et brachialia, ac pedum astragulam inficientes supervenere, quæ naturâ suâ pruriebant, et carnem corrodebant, ut potè ex sanguine superassato et atrabiliario reddito ortum trahentes; cui malo occurrens, depositis per balanum sæcibus, sanguinis uncias sex è dextrâ basilicâ fluere fecimus, qui in totum ater, ac putredine affectus erat; quâ de causâ vesperi ex sinistro brachio sanguinis extractio ad uncias octo repetita fuit: sed ad jecoris, et membrorum interiorum rectificationem syrupum indies bibebat. Cæterum papulas quia ex excedentium erat genere, scarificari fecimus, ex quibus sanguis ater effluxit, quas tunc aquâ marinâ lavari fecimus; nam in herpetas devenire timor erat. Sed postea ichores citrini cum quâdam nigritie indè exhibant; quare linimentum admove-re fecimus, quo papulæ predictæ exsiccatae fuerunt; et ipse leni pharmaco epoto, intra paucos dies benè habuit.”*

Land-scurvy; and the connection is further proved by the similarity of exciting causes. The same method of treatment is likewise successful in both cases. They are presently cured by nourishing food, moderate exercise in the open air, with the use of Peruvian bark, and vitriolic acid, or the tincture of muriated iron.

An eruption similar to the *Lichen lividus* often occurs as one of the secondary appearances of the *Lues Vénerea*, and requires a separate consideration. It may be distinguished from the scorbutic form of the *Lichen lividus* by the following circumstances. 1. The *Papulæ* are smaller, and appear in irregular clusters diffused over the surface of the body. 2. When the eruption has continued for some time, the tops of the *Papulæ* are often depressed. 3. The Syphilitic *Lichen* seldom becomes scurfy. It does not, like the other species, disappear spontaneously, nor is altered by any change in the patient's diet, but, if left to itself, has a peculiar termination: the *Papulæ*, in several clusters, assume a pustular form, and, after suppuration, are succeeded by spreading ulcers, which can only be healed by a proper mercurial course. 4. This complaint is usually attended with an eruption, on the face, of irregular pimples, which are at first pale, and shining, but which afterwards enlarge, and become reddish, and often confluent.

6. *LICHEN TROPICUS*. By this term I mean to express what is usually denominated the *PRICKLY HEAT*, a papulous eruption affecting Europeans settled in tropical climates. I have been favoured with the following accurate account of it by Dr. T. M. Winterbottom, formerly physician to the colony at Free Town, Sierra Leone. "The Prickly-heat appears without any preceding disorder of the constitution. It consists of numerous *Papulæ*, about the size of a small pin's head, and eleva-

ted so as to produce a considerable roughness of the skin. The Papulæ are of a vivid red colour, and often exhibit an irregular form, two or three of them being in many places united together : but no redness or inflammation extends to the skin in the interstices of the Papulæ.

“ The eruption is diffused over those parts of the body which are usually covered, as the neck, breast, arms, legs, and inside of the thighs. It does not appear on the face, excepting on the upper part of the forehead contiguous to the hair ; neither is it ever found in the palms of the hands, soles of the feet, nor on the hairy scalp. The number of the Papulæ is much increased by wearing flannel, or clothes too warm and thick for the climate. When perspiration is very copious, small vesicles containing a limpid humour, are often intermixed with the Prickly-heat, more especially on the breast, and about the wrists ; but they terminate in scales, having no disposition to ulcerate, though violently scratched.

“ A troublesome itching attends the Prickly-heat, and prevents sleep during the night. There is likewise a frequent sensation of pricking, as if a number of pins was piercing the skin. This often takes place suddenly, after drinking a dish of tea, or any warm liquor, so as to cause the person affected to start from his seat.

“ The eruption is in general stationary, and appears equally vivid in the day, and in the night. It does not leave one part, and arise on another, unless the former be much exposed to cold, and the latter be heated by additional clothing, or by friction. An increase of heat indeed, in all cases, produces a greater number of Papulæ. They sometimes disappear on a sudden, and return again as suddenly, without any obvious cause ; but whenever the eruption continues for a length of time, the Papulæ throw off minute scales, and

are succeeded by a fresh crop, no vestiges being left in the skin.

“ Persons of a fair complexion, with red hair and a soft skin, are most liable to this eruption, and have the greatest quantity of it. Those who are of a dark complexion either remain wholly free from the eruption, or are affected with it very slightly.

“ As soon as settlers are habituated to the climate, this complaint becomes less frequent and troublesome ; and at length entirely disappears.

“ The Prickly-heat is, in general, considered as a salutary eruption, whence we are cautioned not to repel it from the skin by cold, or other external applications. Such a repulsion cannot, however, be easily effected : it is certainly not produced by bathing, which has been hitherto thought highly prejudicial. A vivid eruption of the Prickly-heat is a proof that the person affected with it is in a good state of health, although its absence does not always indicate the contrary. The sudden disappearance of it, which frequently happens, is rather an effect than a cause of internal disorder, as of fever, or any slight complaint of the stomach : in the latter case, a temporary stimulus applied to the stomach, as by spirits, tea, or other warm liquids, has the power of restoring the eruption. Its appearance on the skin of persons in a state of convalescence from fevers, &c. is always a favourable sign, indicating the return of health and vigour.

“ Various means have been employed to alleviate the itching and tingling of the Prickly-heat ; the favourite remedy at Sierra Leone is the juice of limes rubbed on the skin, which, however, has no considerable effect. I have found it of most advantage to use a light, cool dress, and to avoid the drinking of warm liquors.

“The black natives are subject to this eruption, though in a less degree than Europeans. In them the small Papulæ are of a dull white colour, and therefore less striking to the eye, than distinguishable by the touch, from the roughness they produce in the skin.”

Bontius, in his treatise *De Medicina Indorum*, cap. 18. has noticed this complaint.

“Quas Latinus Hippocrates Cornelius Celsus Papulas, Plinius Sudamina vocat, nostrates Belgæ Rootvont, hic ita crebra sunt, ut ego adhuc hisce in locis neminem noverim qui molestias has effugerit, non magis, quam morsus culicum, quos Lusitani Mosquitas vocant. Sunt autem hæc Papulæ rubentes, ac asperæ aliquantum, per sudorem in cutem ejectionæ; plerùmque a capite ad calcem usque, cum summo pruritu, ac assiduo scalpendi desiderio erumpentes. Hæc exanthemata magis afficiunt recens advenientes, ut et mosquitarum puncturæ, quam eos qui aliquandiu hic morati sunt: ita ut deridiculi ergò hic inter nostrates dicterium enatum sit, eum qui hoc modo affectus sit, esse Orang-Barou, quod novitium hominem significat, et propterea culices, ac Papulas sibi tributum, e lacte, e butyro, quod eum devoraverint, petere: nam qui hic diùtius hæserunt, se Orang Lamme, id est, veteranos gloriosè nominant. Hæc porrò molestia, cum a natura expellente fiat, inter affectus cutaneos tantùm recensenda venit: sed tamen temerè habita, ut et culicum morsus, unguibus scilicet cute apertâ, ulcera sæpe cacoethæ ac maligna oriuntur, difficilia sanè sanatu:

“Sic neglecta solent incendia sumere vires.

“Ut itaque pruritu isti molestissimo occurramus, acetum cum aquâ misceri jubeo, addito nitro, seu sale prunellæ, eoque corpus linteolo immerso tingi: vel si acrius desideres, addendus limonum succus recenter ex-

pressus. Quæ quamvis primo acrem dolorem inferant, tamen is citò evanescit, et multò magis tolerabilis est, quam pruritis iste insignis. Hoc denique medicos et chirurgos obiter monitos volo, ne in his Papulis purgationes, quantumvis leves, instituant, ne materia acris, ac biliosa, ad intestina delata dysenteriam creet : sed vel potius naturæ hæc sananda relinquunt, vel sudorificis excretionem hanc adjuvent ; nam ego per incuriam, ac imprudentiam quorundam, hæc infortunia evenire non semel vidi.”

Dr. Hillary describes the Prickly-heat, in Barbadoes, as usually intermixed with an eruption of a different kind. “The Europeans, and North Americans from the colder parts of it, and especially the Britons, when they first come to this or the other West India islands, are, by the great increased heat of the climate, usually not long after their arrival there seized with either a Fever, or with a sort of Efflorescences, which most commonly first appear on the legs, in pretty large hard lumps, of a reddish colour, which are sometimes as large, or larger than a shilling, but of an irregular figure, and itch violently, especially towards night, if they are either rubbed or scratched ; and from doing which it is difficult to refrain, though doing either much increases both the itching, and their swelling, and often either rubs the cuticle off, or causes little blisters to rise, and a saltish yellow serum to ooze out, which makes them smart ; after which a scurf or scab ensues, which after a few days falls off. These lumps commonly rise on the hands, arms, legs, thighs, neck, and face ; and usually continue three, four, or five days, then turn to a yellowish colour, and soon after disappear ; but are soon succeeded by others in or near to the same places, and so continue successively for several

weeks, or months, in most strangers who come into this hot climate.

“ These exanthematous eruptions are vulgarly, but erroneously, ascribed to the stinging or biting of mosquitoes. It is certain that these insects do bite, and that little lumps or swellings will rise where they bite, but these are neither so large, nor do they usually continue so many hours, as the other lumps do days : these being only the bite of a small insect, which is not more offensive than the bite of the midge in England ; whereas the others are efflorescences cast out by nature, or the *vis vitæ*, and proceed from the great increased heat of the climate.

Whilst these efflorescences continue, there are also other but smaller eruptive pustulæ, or little red pimples, which arise from the same cause, and often come out all over the rest of the body, called *Ισπρωα* by the Greeks, *Es-sera* by the Arabians, *Sudamina* by the Romans, and the *Prickly-heat* by the English, which cause great itching and pricking, as if with small needles : this usually continues several weeks, and in some persons for months, and then declines, causing the cuticle to fall gradually off in small white scales. This *Prickly-heat* seizes most of the inhabitants, both natives and strangers, either in a greater or lesser degree, every year, during the hot summer months. It seldom causes any sickness, or disorder ; except the troublesome itching and pricking ; but every one goes about his business with it, as if he were well, unless it be imprudently repelled, and struck suddenly in, either by rubbing it with lime-juice, vinegar, camphorated spirit, or by washing the body with cold water, which some are so imprudent as to use, to take that troublesome itching and pricking heat off, whereby they have repelled

those acrid saline humours into the blood again, when kind nature had thus cast them out ; and so have produced a fever, which has sometimes been attended with bad consequences. For going into a cold bath, or the sea, is not so bad or dangerous in this case, as washing the body with cold water is : for though the humour may be repelled whilst they are in the cold bath, yet the glowing heat which usually follows it strikes it more effectually out again after, which washing with cold water does not. The best method is to live temperately, use moderate exercise, and encourage the eruption by taking small warm liquids and nourishments, as gruel, tea, coffee, wine-whey, broth, and plain meats; and to avoid suddenly exposing themselves, when warm, to a current of cold air, night dews, and damp wet places, and the too freely drinking spirituous liquors, as they increase this as well as inflammatory diseases.*

According to Dr. Clark, "the Prickly-heat consists of numerous pimples, or red spots, breaking out on various parts of the body, and occasioning an intolerable itching. Interspersed with this eruption, especially upon the hands, small eminences, white tubercles, or wheals, frequently appear, resembling the sting of nettles, which greatly add to the itching, and are increased by scratching. The Prickly-heat is not attended with any febrile commotion. When severe, it is mitigated by a cool and spare diet, and gentle laxatives. But whilst it continues out, no inconvenience arises, except the itching; and after a few weeks it either disappears, or ceases to give much trouble. The retrocession of this eruption is always at-

* On the Air and Diseases of Barbadoes, p. 3. Introd.

tended with head-ache, lassitude, and often by a feverish state.*

Dr. Mosely† observes, that “the small red pimples of the Prickly-heat are most numerous on parts which are kept hottest by the clothes, or where there is the greatest irritation and friction. It causes such an intolerable itching, or heat and pricking in the skin, that human resolution cannot refrain from scratching until the skin be sometimes excoriated. Many people have it more or less during the hottest months. It generally goes off in a few weeks, leaving the cuticle scurfy, which falls off in small white scales. Sometimes it continues very obstinate; and where people live heated by intemperance, or have any serpiginous humour in their habit, it fixes on the surface of the body in troublesome Ring-worms.”‡

A vivid eruption of Papulæ, somewhat analogous to the Prickly-heat, sometimes appears, in our own climate, on the arms, hands, face, and neck of labourers, and other persons, who use violent exercise during the hot months of the summer. It rather produces a sensation of tingling and smarting than of itching, and disappears in a short time, without any particular consequences. The Summer Rash, or Prickly-heat, mentioned by Dr. Cleghorn as frequently occurring in the island of Minor-

* Observations on the Diseases of Seamen in long Voyages, vol. i. p. 34.

† On the Diseases of Tropical Climates, p. 20.

‡ The same observation is made by Towne, of the Diseases of the West Indies, p. 177.

ca, seems to be nearly of the same kind.* Its symptoms, according to his account, are by no means so violent and distressing as those of the Lichen tropicus.

“The cutaneous eruption which we call the Rash, or Prickly-heat, is the Sudamina, or Papulæ Sudoris, of the Romans, and the ἰδρωα of Hippocrates, who justly places it among the summer diseases; it being so frequent in warm countries, that few people escape having more or less of it during the hot weather; though children are more affected by it than others. It consists of numerous minute pimples, or rather small, round, red spots, just perceivable by the touch as a kind of roughness on the skin, which break out on different parts of the body, especially after exercise, or drinking cold water.

This eruption is commonly looked upon as a sign of health; and indeed while it continues fresh on the skin no inconveniency arises from it, except a frequent itching: but if accidentally the pimples are driven in, by catching cold, bathing in the sea, or any errors in the non-naturals, the case too often becomes dangerous. And I have constantly observed that those, who had a great deal of this eruption in the summer, were subject either to fluxes, hæmorrhages from the nose, or fevers, upon the alteration of the weather about the autumnal equinox. Wherefore I commonly advised them, as soon as the slightest signs of a retrocession appeared, such as sickness, headache, and præternatural heat, to lose some blood immediately, and make use of mild cathartics, vegetable food, and cool acescent liquors: by which means the bad conse-

* On the Diseases of Minorca, Ch. 4. Compare Ingrassia's account of the Brussoli, or Migliarino at Naples, De Tum. Præt. Nat. Tr. i. Cap. 1.

quences above-mentioned, if I am not greatly deceived, have been frequently prevented, notwithstanding the vulgar prejudices against evacuations in this and other similar cases.”

The Greek physicians generally use the term *Hidroa* to signify an eruption of miliary vesicles :* they sometimes perhaps may have employed it, as Dr. Cleghorn has observed, to express the Summer Rash, or Prickly-heat ; but I think their more appropriate titles for that disorder are *Lichen*, and *Eczesma*.†

Among the Arabian writers *Essera* is a generic denomination, comprizing, besides the Prickly-heat, the Prurigo, the Nettle-Rash, and some other eruptions on the skin. According to Haly Abba,‡ “ *Sere autem sunt Papulæ (Bothor) aliæ parvæ, aliæ magnæ, extensæ, et lati capitis, quæ cum prurigine incipiunt magna, et quum scalpuntur, humiditas ab eis exit rubiginosa. Fiunt autem hæ primo, a sanguine cholericò, et est color earum rubeus, tumultuantque magis diei tempore ; et fit patienti simul calor et æstus, fitque illi pulsus magnus in eis et velox. Secundo autem, ex humiditatis phlegmaticæ et salsæ cum sanguine tenui admistione, et est harum color albidus ; et hæ magis noctu tumultuant. Nonnunquam autem ex harum trium fiunt adunatione causarum, nec est multum earum color rubeus.*”

In describing the varieties of the *Lichen*, I have only differed from one or two of the ancient writers, who, without a strict analogy, apply the title *Lichenes agrii* to the *Mentagra*, a contagious disease, affecting the face, neck,

* Hippoc. Aphor. 21. Lib. iii. et Galen. Comment.

† See Aet. Tetrab. iv. 1. 128.

‡ Theorice, Lib. viii. Compare Alsaharav. Pract. Tr. xxxi. cap. 8.

and hands, according to Pliny's expression, "fædo cutis furfure."* Before I conclude the consideration of the present genus, it may not be amiss to observe, that there has been some difference of opinion respecting the reason of application of the term Lichen to diseases of the human body. The resemblance of the eruptions on the skin, above described, to some of the spotty and tuberculated Lichens, which grow upon stones, shrubs, or the bark of trees, is, however, so striking, that the application of the same term to express both these appearances seems obvious and natural. On this point Gorræus observes, "Videntur autem Lichenes appellari, non quod lincturâ salivæ humanæ curentur, ut quidam opinati sunt, cùm tamen res se non ità nisi in admodum levibus habeat; sed λειχασ, απο τσ id est, lambo, ut inquit grammatici, quod scilicet lambendo serpent, sicut etiam in petris Lichen herba folet."†

* Nat. Hist. Lib. xxvi. cap. 1.

* Definitiones Medicæ, page 361.

Pliny seems to think the disease was termed Lichen, from the name of the plant which was the most certain remedy for it. Lichen herba omnibus præfertur, indè nomine invento. Cap. 5.

ORDER I...III. PRURIGO.

THE symptom of itching is common, in a greater or less degree, to many diseases of the skin. There are, however, some cases where it occurs as the leading circumstance, and where it is accompanied with an eruption of Papulæ, the colour of which does not much differ from that of the adjoining cuticle, and with other appearances, sufficiently particular to constitute a distinct and independent genus of disease.* To this therefore I shall apply the denomination of PRURIGO, a term already employed, in the same sense, by medical writers.†

This disease, from its supposed affinities, has been ranked with Scabies, Lepra, or Impetigo.‡ Not being,

* Etsi pruritus cum aliis affectibus pluribus conjugatur, ut Scabie, Impetigine, Leprâ, et similibus. eorumque ablatione et ipse tollatur; aliquandò tamen solus homines vexat, et adedè molestus est ut etiam medici auxilium implorare cogat. Sennertus Practicæ Medicinæ, lib. v. p. 3. sect. 1. cap. 8. Compare Vid. Vidii Chirurg. l. vi. cap. 9.

† See Plin. Nat. Hist. l. xx. cap. 17. l. xxiii. cap. 1. et l. xxvii. cap. 4. where a distinction is made between the Prurigo, Scabies and Psora. The authority of Pliny, in this respect, is followed by Ingrassias, Mercurialis, Hafenreffer, and others.

‡ See Plater. de Super. Corp. Dolore, page 674. Manard. Ep. Med. 7. Fernel. de externis corp. affectibus. l. vii. cap 4. Lommii Obs. Med. l. ii.

however, characterised, during its first stages, by an eruption of Pustules,* nor by scaly Crusts,† it must be separated from the above affections, in an arrangement made according to external appearances. The primary state of Prurigo requires that it should be classed among the papulous diseases of the skin. In this order it is somewhat analogous to the Lichenes, but differs from them in the appearance of its Papulæ, and in the concomitant symptoms.

The prurigo, as it arises from different causes, or at different periods of life, exhibits some varieties in its form, which may be described under the titles of Prurigo mitis, Prurigo formicans, and Prurigo senilis. In these the whole surface of the skin is usually affected : but there are likewise many cases of partial ‡ Prurigo,

* Scabies differt a pruritu in hoc, quod cum Pruritu non sunt bothor (Pustulæ) sicut in Scabie. Avicenn. lib. iv. Fen. 7. Tract. 3. cap. 6.

† Oportet ante alia adnotare, quòd omnes illi affectus, quibus jungitur pruritus. differentes sunt ab hoc Pruritu ; quia in illis vel tumor, vel exulceratio, vel excoriatio aliqua apparet, in Pruritu nihil horum. Videntur carnes parum mutatae, asperiores quidem aliquo pacto, sed sine tumore insigni, exulceratione aut excoriatione. Præterea in aliis affectibus qui junctum habent pruritus, a cute semper emanat aliqua sanies : in Pruritu nihil emanat, nisi, ut ait Avicenna, quædam corpora furfuracea, atque neque hæc emanant nisi cutis unguibus dilanietur. Mercurialis, de Morb. Cutis. lib. ii. cap. 3.

‡ Pruritus (Græcis κνησμος) est tristis sensatio, desiderium scalpendi excitans, sine cutis asperitate, vel exulceratione. Occupat autem quandoque universum corpus, quandoque certam aliquam partem.

Hafenreffer de Cutis affectibus, l. i. cap. 14.

which will be afterwards noticed according to their respective situations.

1. The PRURIGO MITIS appears without any previous indisposition, generally in spring, or in the beginning of summer. It is characterised by soft and smooth Papulæ, somewhat larger than those of the Lichen, from which they also differ by having nearly the same colour as the skin; for they seldom appear red, or much inflamed, except from violent friction. They are not, as in the Lichen, accompanied with tingling, but with an almost incessant itching: this is, however, felt more particularly on undressing, and it often prevents rest for some hours after getting into bed. When the tops of the Papulæ are removed by rubbing or scratching, a clear fluid* oozes out from them, and gradually concretes into thin, black Scabs. Notwithstanding this change, the itching does not abate; and by the constant friction which it demands, inflamed Pustules, resembling Phlyzacia are sometimes produced. These Pustules, when they appear early in the complaint, must be considered as incidental, and not as proper to the disease.

This species of Prurigo chiefly affects young persons: its cause may, I think, in general be referred to sordes collected on the skin, producing some degree of irritation, and preventing the free discharge of the cutaneous exhalation, † the disagreeable consequences of which must necessarily be felt at that season of the year when perspiration is most copious. Those who have originally a delicate or irritable skin must like-

* Actuar. Meth. Med. L. ii. cap. 11.

† See Galen de Sympt. causis, Lib. ii. cap. 6. and Actuar. L. ii. cap. 23. Meth. Med.

wise, in the same circumstances, be the greatest sufferers.

The eruption extends to the arms, breast, back, and thighs, and often continues during two or three months of the summer, if not relieved by proper treatment. When persons affected with it neglect to wash the skin, or are uncleanly in their apparel, the eruption grows more inveterate, and at length, changing its form, often terminates in the itch,* when Pustules and Vesicles arise among the Papulæ, the *Acarus Scabiei* begins to breed in the furrows of the cuticle, and the disorder becomes contagious.

In the first stage of the *Prurigo mitis*, I have in general prescribed sulphur internally, every morning and evening, for about a fortnight. The dose may be from ten to sixty grains, according to the age, and constitution of the patient. In some cases, the sulphuric acid may be taken with advantage, after the sulphur is discontinued. The parts affected should be often washed with tepid water, and the washing should be frequently repeated, even though some aggravation of the symptoms may at first arise from it.† By these means the skin is cleansed and softened, the perspiration is freely discharged, the itching is removed, and the eruption gradually disappears.

If the complaint, through neglect of cleanliness, has lost its original characteristics, and has assumed the pustular form, other external applications, and the treatment proper for the itch, will be found necessary.

* *Pruritus, si inveterascet, rarum est quin in Scabiem tandem degeneret.* Mercurialis, de Morb. Cut. Lib. ii. Cap. 3. *Pruritus, plerumque Scabiei futuræ prodromus est.* Sennert. Medicin. Pract. v. 3. 18. Compare Actuar. Med. Lib. i. Cap. 123. Eustach. Rud. de Symptomat. Extern. Lib. i. Cap. 6.

† *Alsaharav. Pract. Tr. xxxi. Cap. 5.*

2. The PRURIGO FORMICANS is a much more obstinate and troublesome disease than the foregoing. It usually affects persons of adult age, commencing at all seasons of the year indifferently, and its duration is from four months to two or three years, with occasional short intermissions. The Papulæ are sometimes larger, sometimes more obscure, than in the preceding species; but they are, under every form, attended with an incessant and almost intolerable itching. They are diffused over the whole body, except the face, feet, and palms of the hands; they appear however in the greatest number on those parts, which, from the ordinary mode of dress, are subjected to tight ligatures, as the neck, loins, and thighs.

Itching is not the only source of uneasiness in this disorder. Patients have sometimes a sensation, as if small insects were creeping on the skin, sometimes as if stung all over by ants, sometimes as if hot needles were piercing the skin in different places.* Their distress is much increased on undressing, or on standing before a fire; but they suffer most after getting into bed, and are often unable to sleep during the greater part of the night. When any part of the skin is strongly rubbed, it becomes red; and large tubercles or wheals are excited, which however subside as soon as the friction ceases. The cuticle being abraded by the different means employed to allay the irritation on the skin, the surface of the body is at length spotted all over with small thin scabs. This is

* Signum Pruritus ex humore cholericò acuto est fortis corrosio, eum mordicatione, et ustione et scissurâ: et quando concordant regimen, cibaria fortia et acuta, complexio, ætas, et tempus, erunt signa fortiora. Serapion, Pract. Tr. v. lib. 6. Alsaharav. Tract. xxxi. cap. 5. See a case of this complaint, Hoffman, tom. iv. part 5. page 413.

in many cases the only appearance which the disease exhibits to the eye, the Papulæ being nearly of the same colour with the skin, and often indistinct from their minuteness.

Where the Papulæ are of a large size, their appearance is preceded by head-ache, sickness, and pains in the stomach; and if the eruption be suddenly repelled from the surface, the same symptoms return in a violent degree. In other cases, the affection of the skin is not so obviously connected with complaints in the stomach: nevertheless, this species of Prurigo is very generally the effect of some constitutional disease; for those persons are most liable to suffer frequently from it, who are of a sallow complexion, who are weak and somewhat emaciated, or who labour under obstructions of the viscera.* The same conclusion may be deduced from the nature of the exciting causes, which are, grief, watching, fatigue, and low diet. As all persons are not equally affected by the operation of these causes, something must be referred to the original texture of the skin, or state of the cutaneous glands. With respect to this predisposition, I have only been able to remark, that most of the patients I have seen had a more than usual coarseness or roughness of the skin, which seemed often to have been communicated hereditarily; and that when the itching and Papulæ disappeared, at the termination of the disease, the cuticle was left dry, scaly, and thickened. This observation is also made by Galen, de Loc. affect. l. ii. c. 7.

* Multoties quidem corruptio digestionis facit accidere Prurimum. Avicenna, vol. i. p. 275, 6. See vol. ii. p. 250.

The universal itching of the skin, which takes place in the jaundice, is frequently attended with an eruption of yellowish Papulæ, and with the sensations peculiar to the Prurigo formicans.

To the occasional causes above mentioned, I may add the want of proper cleanliness, to which the appearance of this disorder in the lower class of people is often referable. Certain modes of diet* have likewise a considerable effect in aggravating or exciting the Prurigo formicans. Many persons are affected with it, who, in the summer season, live much upon fish and stimulating animal food, and at the same time drink freely of wine or spirituous liquors. Some white wines excite, in particular habits, an eruption of itching† Papulæ, which is excessively troublesome for many hours, but which ceases when the use of white wine is discontinued.

The Prurigo formicans sometimes terminates in a pustular affection, not contagious, but constituting one of the species of Impetigo. That the disease, in its primary state, is not contagious, nor allied to the Itch, I am convinced from the following observations. 1. The eruption is usually connected with internal disorder, and arises often where no source of infection can be traced. 2. Persons affected by it may have constant intercourse with several others, and yet not communicate the disease.

* Galen observes "that a general itching of the skin (Cnesmos) is excited by certain substances applied externally, as nettles, squill, brine, &c. but that it also frequently arises from causes within the body; since those are particularly liable to it, who live on food of a bad quality, who labour under indigestion from overcharging the stomach, and who neglect cleanliness." De Symp. Caus. ii. 6. See Haly Abbas, l. viii. cap. 17.

Dulcia generant Prurimum. Avicenn. iv. 7. 3. 6. & Constantinus Africanus. lib. vii. cap. 26.

† Lorry de Morb. Cut. page 27. Introductio.

Sæpe vinum meracius haustum subito colores faciei afflat, et pruritus in partibus dissitis protinus concitare visum est; immò et dolores ad articulos, qui ad cutem non referuntur quidem, sed cum illâ intimè connectuntur.

3. Several individuals of one family sometimes have the Prurigo formicans, at certain seasons of the year, although they reside at considerable distances from each other. In these instances the disease must be referred to a common predisposition.

An eruption often takes place in children who handle dogs or cats affected with the mange, also in men who wash mangy hogs. If this disease in quadrupeds be, according to the general opinion, produced by animalcula, and through them be communicated to the human species, we shall have reason to conclude that the Prurigo formicans is, in other cases, owing to the irritation of Acari, or other minute insects, on the skin.

When the Prurigo formicans appears to originate from general debility, or from some disorder of the abdominal viscera, we can only hope to remove the eruption by proper diet, exercise, and medicines calculated to improve the state of the constitution. In cases not apparently connected with any internal complaint, I have experienced many disappointments, from the inefficacy of medicines recommended on the best authority. Neutral salts, antimonials, and other remedies administered as diaphoretics, generally aggravate the complaint. Mercurials, whether alone, or combined with antimony, sulphur, &c. do not appear beneficial. The diet-drinks employed in this, and some other Cutaneous Diseases, contribute to allay the troublesome sensation of itching; but as little difference is perceptible in their respective effects, perhaps more may be attributed to the watery vehicle than to the virtues of the impregnating ingredients. Most of the writers* on Prurigo recommend strong pur-

* See Mercurialis de Morb. Cutis. lib. ii. cap. 3 Sennert. Pract. Med. lib. v. cap. 3. Hafsenreffer de Cut. Affectib. lib. i. cap. 4.

gatives, as well as alterative medicines, in order to expel from the blood and cutaneous glands the vitiated humours, from which, as they suppose, the complaint originates. Their theory is probably erroneous, and the practice founded upon it, though very ancient, does not bear the test of experience. I have, in general, found that purgatives frequently repeated are injurious in this complaint, as might indeed be expected from a previous consideration of its occasional causes.

Fixed alkali is of some advantage in the Prurigo formicans, but sulphur, taken internally, is a more certain remedy than any other with which I am acquainted. I have usually prescribed the sulphur præcipitatum, and combined it with fossil alkali (Natron præparat. Ph. L.) at the same time directing an infusion of saffras, or the tops of juniper, to be drunk freely. Under this course, the symptoms are, in many cases, gradually alleviated, and the complaint disappears in a month, or six weeks.

The external application of sulphureous and mercurial ointments, and of lotions made with white vitriol, lime-water, or muriated quicksilver, affords but little relief in this species of Prurigo. I have not observed much benefit from the decoction of white hellebore, which has been strongly recommended by the ancients.*

* Their practice in this disease was confined wholly to external washes, and liniments or unguents. The former were prepared with a variety of emollient and aromatic herbs: the latter consisted of sulphur, nitre, sandarach, cimolia, or burnt snails' shells, frankincense, stavesacre, dock, hellebore, and powder of beans and lupines, mixed in different proportions with oil, honey, brine, or vinegar. Avicenna mentions some other applications of a different nature: *Pellis recens ovis est conveniens Scabiei et Pruritui.* tom. i. p. 373. *Urina hominis abstergit Pruritum.* tom. i. p. 330 Ed. Venet. *Myrrhâ ex muliebri lacte cutem oblnito.* Ditto. *Fiat inunctio cum oleis frigidis appposito succo opii.* tom. ii. p. 251. De Me-

A decoction of the seeds of stavesacre seems to be more efficacious than that of hellebore, especially when the disorder is aggravated by the irritation of Acari, or other insects, on the skin. It is in every case necessary to keep the skin clean, and perspiring, by frequent ablutions with warm water.* The itching, however, is not always to be allayed by these means; hence I have been induced to employ some of the medicated baths recommended by authors, and have had opportunities of ascertaining the utility of those prepared with alkaliized sulphur.† Sea bathing has also, in some cases, entirely removed the complaint.‡

Very copious instructions concerning the diet of persons affected with the Prurigo have been given by the Greek and Arabian physicians,§ and transcribed by the

dicamentis levibus hoc est, Papaver tritus cum aceto; et aloe cum aqua endiviæ. Et de medicinis fortibus est ceratum in quo ponitur opium, quo cum inungatur corpus, et quiescet Pruritus. tom. ii. page 251.

* Paul. Æg. l. iv. c. 4. Oribas. Collectan. lib. x. 1. and Mercurial. de Pruritu.

† Aetius Tetrab. i. 3. 168. Balnea sulphurenta purgant cutem, et propterea conferunt Lepræ, Psoræ, Lichenibus et Pruritu.

‡ Balnea vero Pruritûs et Scabiei sunt aqua maris calefacta. Avic. vol. ii. p. 252. a.

According to the medical poet, Q. Serenus Samonicus,
Pruritus autem salsos levat humor aceti;
Sive maris rabidi sudor, cochleæque minutæ,
Quarum contactu perimetur acerba libido.

Præcepta, cap. 7.

§ Ab acrium usu abstinendum est et præsertim ab oleribus mali succi. Quæ vero exhibentur bono succo prædita sint, qualis est lactis assiduus potus, ptisana, alicæ, ova gallinarum, porcellorum

moderns. Any light and easily digestible food may be taken, as the patient's taste directs, but he should avoid all heating or stimulating substances, and drinks, especially white wines and spirituous liquors. Asses' milk, whey, * milk and water, and goat's milk, † may, as recommended by the ancients, constitute a part of the regimen.

3. PRURIGO SENILIS. This affection does not differ much in its symptoms and external appearances from the Prurigo formicans; but it has been thought by medical writers to merit a distinct consideration, ‡ on account of its peculiar inveteracy. The Prurigo is perhaps aggravated, or becomes more permanent, in old age, from the dry, condensed state of the skin and cuticle, which often takes place at that period. § It is also most frequent

extremitates, et ventricula; vinum tenue, dilutius et album. Aet. Tetrab. iv. ii. 20. Avicenna iv. 7. 3. 7. Avenzoar. Coll. Med. 3.

* Galen de Simp. Med. fac. l. x.

† Sanantur illi quibus accidunt Scabies et Pruritus, bibitione lactis. Avicen. tom. i. p. 347. a.

Curatio autem Pruritus, est ut des lac vaccinum acetosum. Cibus autem habentium Pruritus sit ex eis quæ humectant, et generant sanguinem laudabilem, et quæ ad frigiditatem declivia sunt. Avicenna iv. 7. 3. 7.

Cibi laborantium pruritu debent esse sorbiles. Theodor. Priscian. l. i. de Medicinâ. See Mercurialis, Sennertus, Platerus, et Hafenerffer de Pruritu: and Histor. Morb. Vratislavens. 1699.

‡ Τοις δὲ πρεσβύτησι συμβαίνει δυσπνοίαι, τραχυγερταί, ἀρθρῶν πονοί, κλιγγοί, καχιζίαι, ξυσμοί τε σωματικῶς ολε, &c. &c. Hip. Aphor. iii. 31.

See Paul. Ægin. de Re Med. l. iv. c. 4. Serapion, Pract. Tr. v. cap. 6. Alsharav. Tr. xxxi. 5. Haly Abbas Disp. Reg. l. viii. cap. 17.

§ Actuar. Meth. Med. l. ii. c. 11. et Avicenna, l. iv. fen. 7. 3. 6.

in the melancholic or mixed temperaments,* and appears to be generally connected with a languid state of circulation, and of the digestive power. I have known many persons, of both sexes, so incessantly tormented with a violent and universal itching, that they were rendered uncomfortable for the remainder of life. The Papulæ are for the most part large, though not inflamed. Sometimes the whole surface has a shining appearance, and is irregular, or granulated, without an eruption of distinct Papulæ. This state of the skin is succeeded by Scurf, or Scales, which, from their repeated separation and renewal, prove an additional cause of irritation. Some alleviation is produced by scratching or rubbing the skin, which however is but of short duration; for when the cuticle is, by these means, extensively abraded, the mingled sensation of itching and smarting becomes almost intolerable.

The remedies mentioned under the article Prurigo formicans are not of much advantage in the present complaint. A warm bath† is the only application which allays the itching and irritation: its effects, however, are not permanent. Somewhat more relief is experienced from baths of warm sea water, or of some mineral waters. The sulphur water at Harrogate, employed externally

* In siccâ autem scabie quam potissimùm senes macilenti et qui temperamento pollent melancholico-cholerico, experiuntur, minoris molis pustulæ paucò ichore seroso sunt refertæ, quæ tenuissimas nervorum fibrillas sub cuticulâ irritando. ardorem et prurimum inferunt intolerabilem. Hoffman, tom iv. part 5. cap. 5. See Lorry de Morb. Cutan. page 241.

† Avicenna, tom. ii. Fiat balneatio cum aquâ tepidâ. P. 251, he adds, Senes juvantur in curatione Pruritus qui accidit eis, si liniantur ex fæce vini cum aliquanto anetho humido.

See also Aet. Tetrab. i. Serm. 3. cap. 157.

and internally, is perhaps the most efficacious remedy in this disease.

In one case of the Prurigo senilis, I accidentally discovered, on the patient's skin and linen, a number of insects, so minute, and so quick in their motions, as not to be discernible without considerable attention. I at first took them for small Pediculi, but when viewed through a magnifier they appeared to belong to the genus Pulex, though not to any of the species described by Linnæus. Although this patient had a wife and family, none of them were affected in a similar manner; nor could any of the insects be found upon them by the strictest examination. No general conclusion should be drawn from a solitary instance; the present case, however, tends to confirm the supposition that the Prurigo senilis, and Prurigo formicans, may be generally owing to cutaneous insects. With a view to ascertain this point, I have since paid close attention to every case that occurred, but have not hitherto been successful in the research.

The external remedies employed to relieve the patient above mentioned were decoctions of tobacco, or of cocculus Indicus, and a strong solution of muriated quicksilver. The latter was most efficacious in alleviating the symptoms, yet it did not wholly destroy the small insects: when the lotion was omitted, they always appeared again within three weeks, and produced the same inconvenience as before. The patient was therefore obliged to have frequent recourse to the solution, and was thus enabled to keep himself tolerably easy.

The state of the skin in the Prurigo senilis is favourable to the production of another insect, the

Pediculus humanus, more especially to that variety of it which is usually termed the Body-louse, *Pediculus vestimentorum*, Linn.* Linnæus does not make any distinction between the *Pediculus capitis*, and *Pediculus vestimentorum*, but we should probably be correct in establishing a specific difference between them. The *Pediculi capitis* lay single nits, or eggs, on the hairs of the head, and do not spontaneously quit the scalp or its natural covering. The *Pediculi vestimentorum*, which are large, flat, and whitish, seldom appear on the head, but reside on the trunk of the body, on the limbs, and on the clothes. Their nits are conglomerate, and usually deposited in the folds of linen, or in other articles of dress. Both of these species, or varieties, of the *Pediculus humanus*, are generally bred among the inhabitants of sordid dwellings,† of jails, workhouses, &c. in which situations they prey upon persons of all ages indiscriminately. When Body-lice appear in cases of *Prurigo senilis*, they seldom fasten upon the attendants, but, notwithstanding every attention to cleanliness or regimen, they multiply so rapidly about the patient, that he undergoes perpetual irritation and distress. In these cases, however, the *Pediculi* are only found on the skin, or on the linen; and not under the cuticle, as

* Syst. Nat. p. 1016.

† *Causa antecedens est mala victus ratio, mala cultura capitis et totius corporis, tarda vestimentorum mutatio, neglectus balneorum, postpositio mundificationis et lotionis camisiarum. Hinc milites, pauperes, minoritæ, clarissæ, Pediculis scatent, hominesque ferales, qui corporis culturam spernunt. Foresti Obs. Med. 14. lib. viii.*

See also *Mercurialis*, lib. i. cap. 7. and Hafenreffer, page 72.

some authors have represented.* Many wonderful stories are related by Fœrestus, Schenckius, and others,† respecting lice bred under the skin, and discharged in swarms from abscesses, strumous ulcers, and vesications. The mode in which Pediculi are generated being now fully ascertained, no credit can be given to these accounts: It is probable, however, that the authors of them had mistaken for lice some other species of insects, which are frequently found in putrescent sores: See Prof. Murray's treatise *De Vermibus in Lepra obviis*. In the same manner may be explained the accounts given by Aristotle, Pliny, Cælius, and Josephus, of the deaths of Pherecydes, Alcmaëon, Ennius, Antiochus, and Herod.

The cases of Phthiriasis in Amatus Lusitanus seem correct and credible. *Venetus vir bonus Anconæ pediculis per universum corpus scatens, ità ipsis lancinabatur, fœdabaturque, ut parùm fuerit ne ex hoc decederet morbo. Novimus etiam nos Olysiptonæ hominem quendam non ignobilem ex hoc morbo miserè obiisse: ità enim per universum ejus corpus scatebant pediculi abundabantque, ut duo ejus servi Æthiopes, nihil aliud curæ haberent, quam ex ejus corpore pediculorum cophinos plenos ad mare, quod prædictam civitatem præterlabitur, portare. Cur. Med. Cent. iii. 58.*

In connection with the foregoing series of complaints it is proper to mention some pruriginous affections, which

* See Aristotle, *Hist. Animal. lib. v. cap. 32*. Galen. *de Comp. Med. sec. loc. l. i. cap. 8 et 9*. Cæl. Aurelian. *de Phthiriasi*.

Serapion says, *Jam enim scitur quod causa generans pediculos est in concavitate cutis, ubi est possibile ut generetur animal. Pract. Tract. i. cap. 5.*

† See Manget. *Bibliothec. de Morb. Pilorum: Heurnius de Morb. Capitis, c. 4.* and Sauvages *de Phthiriasi.*

are merely local. I shall confine my observations to the most troublesome of these, seated in the podex, præputium, urethra, pubes, scrotum, and pudendum muliebre. Itching of the nostrils, eye-lids, lips, or of the external ear, being generally symptomatic of other diseases, do not require a particular consideration.

1. PRURIGO PODICIS. Ascarides in the rectum excite a frequent itching and irritation about the sphincter ani, which ceases on the application of proper medicines. A similar complaint often arises,* independently of worms, hæmorrhoidal tumors, or other obvious causes: it affects persons engaged in sedentary occupations, and may be referred to a morbid secretion in the parts, sometimes connected with a state of general debility. The itching is sometimes accompanied with an eruption of Papulæ or Tubercles: it is not very troublesome during the day-time, but it returns every night, soon after getting into bed, and prevents rest for several hours. In this manner it continues three or four months, and then ceases for a time, but is produced again by hot weather, fatigue, watching, or some irregularity in diet.

This complaint occurs in the decline of life, under a variety of circumstances: Dr. Lettsom thinks it may be considered "as frequently a preventative of other diseases, having observed many persons, after various long indispositions, relieved by its appearance. A gentleman, sixty-eight years of age, who had long laboured under a disorder of the chest, attended with a weak and intermitting pulse, &c. was perfectly relieved from these symptoms by the Prurigo podicis. A favourable termination of the same kind happened in the case of a person who had been for upwards of three months affected with

* Oribas. de Loc. affect. curat. lib. iv. c. 94. Mesue Op. pag. 116.

Vertigo, and other strong symptoms of an approaching Apoplexy. Another patient was relieved in the same manner, after having been much debilitated by frequent fits of the gout : he imprudently however endeavoured to allay the troublesome sensation of itching by a strong saturnine solution ; and after using this application for a few days, he suddenly expired in his chair.*

Women, after the cessation of the catamenia, are often affected with this species of Prurigo, more especially in summer or autumn. The skin between the nates is rough and papulated, sometimes scaly ; and a little humour is discharged after any considerable friction. Along with this complaint, there is often an eruption of itching Papulæ on the neck, breast, and back, a swelling, with inflammation, of one or both ears, and a discharge of matter from behind them, and from the external meatus auditorius.

It is not so easy to allay the Prurigo podicis as might be expected : the repeated application of warm or cold water, of lime-water, or of washes made with preparations of lead, have little effect upon it. Vinegar† alone is preferable to any of these remedies, but the advantages derived from its application are not permanent. The same may be said of oils, tinctures or solutions of opium, and of the tar ointment.‡ Mercurial ointments are generally the most efficacious ; and of these, the unguentum hydragryri nitratum answers best. The ancient

* Memoirs of the Medical Society, vol. iii. page 348.

† Heister's Cases, p. 549.

‡ Hafenreffer, lib. i. c. 14.

See also Oribas. De Loc. Affect. curat. l. iv. c. 93, and Galen de Comp. Med. sec. loc. l. ix. cap. 6.

practice of applying human urine is now sometimes successfully adopted.

Calomel, given internally, is said to have the power of correcting a morbid state of secreting surfaces. I have found calomel, joined with sulphur of antimony, beneficial in the present complaint. In weak and relaxed habits, which are most subject to it, the Peruvian bark, and chalybeate medicines, facilitate the cure. Since this species of Prurigo is always much aggravated by intemperance, it becomes requisite to enjoin a light, cooling diet, great moderation in the use of wine, and a total abstinence from spirituous liquors.

The Prurigo podicis sometimes occurs as a symptom of the Lues Venerea. If it be neglected on its first appearance, an ichorous discharge ensues, and an excoriation of the contiguous surfaces, extending from the posterior to the anterior perinæum, and of the inner part of the thighs in contact with the scrotum. The parts affected have a whitish appearance, and are covered with a thick, sebaceous matter, resembling that which is seen on the venereal ulcer of the tonsil. This complaint being attended with great pain and soreness, confines the patient to bed, and interrupts his rest: the ulcerations are, however, slight or superficial, not penetrating into the cellular membrane. A mercurial course alone is not sufficient for the cure of this malady; it also requires some external application. The Vegeto-mineral water with an addition of laudanum may be applied cold every hour, and the sore may be dressed with equal parts of the ungu. cerussæ acetatæ, and ceratum lapidis calaminaris.

2. The PRURIGO PRÆPUTII arises from an altered state of secretion on the glans penis, and inner surface of the præputium.* During the heat of summer, there is

* See Turner on Diseases of the skin, page 218.

also, in some persons, an unusual discharge of mucus, which becomes acrimonious, and produces a troublesome itching, and often an excoriation of those parts. By washing them, from time to time, with water, or soap and water, the complaint may be gradually removed. The washing should be continued long after the inconvenience has ceased. If the fluid be secreted in too large a quantity under the præputium, that excess may be restrained, by lotions made with extract of lead, or by applying the unguentum cerussæ acetatæ.

3. PRURIGO URETHRALIS. A very troublesome itching sometimes takes place at the extremity of the urethra in females, without any manifest cause. It occurs in young women, as well as in those who are of an advanced age.

On examination, no stricture, nor tumor can be found along the course of the urethra. Probably, however, the itching may be occasioned by a morbid state of the neck of the bladder, since it is, in some instances, connected with pain and difficulty in making water. The use of bougies was recommended for this complaint by the late Dr. Hunter,* and has generally proved successful.

An itching at the extremity of the urethra in men is produced by calculi, and by some diseases of the bladder. In cases of stricture an itching is also felt near the place where the stricture is situated. It may be remarked that small, broken hairs, drawn in from the pubes, between the præputium and glans, and afterwards becoming fixed in the entrance of the urethra, sometimes occasion an itching, or slight stinging, particularly troublesome during exercise. My friend Mr. Pearson, Surgeon of the Lock Hospital, has seen five cases of this kind, in which he gave immediate relief, by extracting the small hair from the urethra.

* See his Lectures.

4. PRURIGO PUBIS. Itching Papulæ often arise on the pubes, and become extremely sore, if their tops be removed by scratching. They are occasioned sometimes by neglect of cleanliness, but more commonly by a species of *Pediculus*, which perforates the cuticle, and thus derives its nourishment, remaining fixed in the same situation. These insects are described by Linnæus and others,* and termed *Pediculi pubis*: they do not, however, affect the pubes only, but often adhere to the eye-brows, eye-lids, and axillæ: they are also found on the breast, abdomen, thighs, and legs, in persons of the sanguine temperament, who have those parts covered with strong hairs. It is remarkable, that they seldom or never fix upon the hairy scalp. The great irritation produced by them on the skin† solicits constant scratching, by which they are torn from their attachments: and painful tubercles arise at the places where they had adhered. When the *Pediculi* are diffused over the greater part of the surface of the body, the patient's

* *Alterum pediculorum genus, sub axillis, et in pectine, nec non ciliis et superciliis, ut plurimum resident: sunt lati, et cuti ita adhærent, ut unguibus vix avelli queant; Latinis, Plactulæ, quibusdam Morpiones, nonnullis Petalæ, aliis Pessolatæ, Italis Piattoni, Germanis Filts Lause, in Canibus Bacten. Hafenreffer, de Cutis Affectibus, l. i. c. 10.*

Compare *Aet. Tetrab. ii. 3. 64. Actuar. Med. ii. 7. Celsus de Medicina, l. vi. c. 6. Mercurialis de Morb. Cut. l. i. cap. 17. Pechlin Obs. Med. 24.*

Linnæus has given the following characteristics of this insect: *Antennæ articulis, v. 5. Abdomen porticè emarginatum, pilosumque. Pedes 2 et 3 habent calcar, et digitum cheliformem, quibus arcè adhæret. Sys. Nat. ii. page 1017. Compare Fabricii Species Insector. ii. 477.*

* Turner on Diseases of the Skin, page 159, 162. Tulpius, *Obs. Med. 40. lib. iii. Foresti Op. page 244.*

linen often appears as if sprinkled with drops of blood.

In attempting to exterminate the *Pediculi pubis*, it may be occasionally necessary to clear the surface, in order to make the applications to it with more convenience. I have used several washes and liniments with success, but always found strong mercurial* ointment the most speedy and efficacious remedy.

5. *PRURIGO SCROTI*.† The scrotum is often affected with a troublesome and constant itching from *ascarides* within the rectum, or from friction by violent exercise in hot weather, and very usually from the *Pediculi pubis*. Another and more important form of the complaint appears in old men, sometimes connected with the *Prurigo podicis*, and referable to a morbid state of the skin or superficial glands of the part. The scrotum, in this case, assumes a brown colour, often also becoming thick, scaly, and wrinkled. The itching extends to the skin covering the penis,‡ more especially along the course of the urethra; and is very troublesome both by day and night.

The medicines recommended in the *Prurigo podicis* are likewise applicable § to the present disease. Its

* See Lorry de Morb. Cut. page 570.

† Aet. Tetrabibl. iv. 2. 20.

‡ Avicenna, vol. i. page 918. cap. 23. Serapion, Tract. v. Haly Pract. viii. 4. Plater Observat. in Sup. Corp. dolor. lib. ii. page 501. Forest. Obs. Med. 8 & 9. lib. xxvi.

§ See Aet. Tetrab. iv. 2. 20. Si Psorâ sanatâ pruritus restat aut augetur, aut scrotum humore destillat, nitrum cum staphide agresti et alumine liquido, rosaceo, et aceto dilutum in balneo illinire jubemus: et e balneo ovi candidum cum melle imponere. Si verò ve-

obstinacy is however in some cases too great to be easily palliated; and the application of more powerful remedies becomes requisite. A lotion prepared with corrosive sublimate, or red precipitate dissolved in lime-water, has generally a good effect: If considerable excoriations have been produced from scratching, or otherwise, it is proper to apply previously some mild unguent, till the cuticle be consolidated.

6. The PRURIGO PUDENDI MULIEBRIS is somewhat analogous to the Prurigo seroti in men.* It is often symptomatic in the Lichen, Lepra, and Scaly tetter: it likewise originates from ascarides irritating the rectum, and it is, in some cases, connected with the fluor albus.

A similar affection arises in consequence of the change of state in the genital organs at the time of puberty, attended with a series of most distressing sensations. I shall, however, confine my attention to one case of the disorder, which may be considered as idiopathic, and which usually affects women soon after the cessation of

hemens et intolerabilis est scori pruritus, fac aceti sicca cum vino madefacta adhibetur, eodem modo velut præcedens medicamentum; illito etiam postea ovi albumine. Quod si amplius adhuc vim ejus augere voles, ustam facem accipies. Idem præstat alumen cum melle probe coctum.

Compare Oribas. iv. 94. Paul. Ægin. de Re Med. lib. iii. c. 54. Avicenna, vol. ii. p. 2516. Alsaharav. Tr. xxii. 4.

The following prescription is, in the Book of Secrets, attributed to Galen: R. cerussæ drachmas vi. sulphuris citrini drachmas ii. opii drachmam i. Terantur omnia cum aceto vini aquâ permixto, et appone tribus vicibus.

* De Gynæciis lib. Galeno attribut. Compare Serapion, Tr. v cap. 6. Mesue, cap. 12. page 134. Alsaharav. Tr. xxiii. cap. 6. Pechlini Obs. 24.

the catamenia. It chiefly occurs in those who are of the phlegmatic temperament, and inclined to corpulency. Its seat is the labia pudendi and entrance of the vagina: it is often accompanied with an appearance of tension or fullness in those parts, and sometimes with inflamed itching Papulæ on the labia and mons veneris. In this disease, the itching is perpetual and almost intolerable, and induces the necessity of constant friction, with cooling applications, so that the patients are compelled to forego the pleasures of society, and to live in solitude. An excitement of venereal desires also takes place from the constant direction of the mind to the parts affected, as well as from the means employed to procure alleviation. The complicated distress thus arising renders existence almost insupportable, and often produces a state of mind bordering on frenzy.

Professor Lorry, under the article *Intertrigo*,* has described this calamitous situation in very strong terms:

Pruritus illi tum in maribus tum in fœminis jungitur ardor in venerem inexplebilis. Mores et præcepta repugnant, coercet virtus vivax; at manus indocilis in has partes fertur, scalpendoque malum irritatur; et animus ipse in partem operis venit cum artuum tremore et palpitatione. Sedatur vulgò per plurimas horas malum, tuncque omnia tranquilla apparent; at recrudescit per paroxysmos, noctu potissimùm afficiens.

Progrediente malo, partes ad aspectum maculosæ, maculis flavis vix suprâ cutem extantibus, distinctæ sunt: Scrotum omnino rugosum (ut et labia pudendorum in fœminis) et tempore paroxysmi prorsus retractum. Erectio penis, et libidinis ardens cupido mentem incendunt. Partes illæ non eruptione Lichenibus simili afficiuntur;

* *De Morb. Cutan.* p. 450. See Avicenna, l. 3. Fen. 21. Tract. 3. c. 15.

sed epidermis rugosa olet, et alluitur liquore unctuosissimo, non linthea maculante, non digitis adhærente, sed ad sensum lubrico. Longus diuturnusque morbus est, et licet juvenibus castisque aliquo modo sæpiùs accidat; non tamen rarò illum observasse contigit in vetulis et anibus; unde utrique sexui pariter propudiosa renovabatur in extremâ illâ ætate, circâ partes ulcerosas, flagrans libido, non durabilis, non effectibus prædita, sed tam violentâ vi nervos concutiens, ut inde acies ipsa mentis obscuraretur, et in deliramenta conjicerentur miserimi senes, ridentibus ministris delapsam in cineres facem.

These unpleasant circumstances do not however occur in every case of the disorder; and Sennertus has properly distinguished it from the Furor uterinus.* Differt furor uterinus a pruritu uteri seu pudendi: Pruritus enim iste in senioribus etiam ortus, sine libidine, et veneris appetitu esse potest, si sit in pudendis non eo loco qui veneris appetitus primaria sedes est: at si sit conjunctus cum appetitu venereo, saltem salacitatem parat, et fœminas libidinosas facit sine furore. Lib. iv. p. 2. sect. 3. c. 5.

Deep ulcerations of the parts seldom take place in the Prurigo pudendi; but the appearance of Aphthæ on the labia and nymphæ is not unusual. From intercourse with females under these circumstances, men are liable to be affected with aphthous ulcerations on the glands, and inside of the præputium, which prove troublesome for a length of time, and often excite an alarm, being mistaken for chancres. They may however be removed by frequently washing the parts with milk and water; and by applying at bed-time the unguentum ccrussæ acetatæ.

* See also Sauvages de Nymphomaniâ pruriginosâ. Etmuller, de Morb. Mulier. tom. i. page 562. Foresti Op. tom. ii. page 704. and Schenckii Obs. Med. lib. iv. page 552.

Women, after the fourth month of pregnancy, often suffer greatly from the Prurigo pudendi, attended with Aphthæ. These, in a few cases, have been succeeded by extensive ulcerations, which destroyed the nymphæ, and produced a fatal hectic: such instances are however extremely rare. The complaint has, in general, some intervals or remissions; and the Aphthæ usually disappear soon after delivery, whether at the full time, or by a miscarriage.

Saturnine lotions afford relief in the slighter cases of the Prurigo pudendi, but cannot generally be depended upon. Saline solutions,* lime-water, vinegar, and oily emulsions, prepared with fixed alkali, have also a temporary good effect. The most certain remedy is a solution of corrosive sublimate in lime-water, made by adding half a scruple of the former to eight ounces of the latter. The repeated application of it every day has, in some cases, wholly removed the complaint. Its use must however be postponed, when there are rhagades or painful fissures of the skin, which often occur, and require some immediate palliation. On this head most of the chirurgical writers have given very copious instructions.

Professor Lorry thinks the Prurigo pudendi may be most effectually relieved by the warm bath,† or by an application of the steam of hot water. He adds some

* *Alumen fixum confert pruritibus intrinsicis in vulvâ et ano: ponatur super pannum. Avicen. 4. 7. 3. 7.*

† *Nihil melius est balneis tepidis atque diluentibus cutem fovere: Si verò universali eorum usui aliquid obstiterit, saltem semicupia adhibere fas est, aut sedilia cava arte facta, quæ quâ et emollientibus herbis impleveris, undè longâ sessione pars humectetur penitùs, et magna acrimoniæ pars cicuretur De Morb. Cutan. page 574. See Serapion, Pract. Tr. v. cap. 7. Alsaharav. Tr. xxii. cap. 4.*

proper cautions against the use of wine, or strong condiments; as also against soft seats, and down beds, which are the means of exciting too great a heat in the parts affected.

I have employed in this complaint the regimen and internal medicines formerly mentioned under the articles Prurigo formicans and Prurigo podicis, sometimes with success: but I am sorry to add, that the disease has, in several instances, proved so inveterate, as to resist every plan hitherto recommended by medical authors.

The following observations respecting the Prurigo pudendi muliebris were communicated to me by Dr. John Sims.

“ Having had frequent opportunities of seeing this complaint, I shall briefly state the different sources from which I have observed it to arise. As the itching, in some cases, affects only the parts external to the labia, and in other instances is wholly confined to the internal pudendum, it seems not improper to make a distinction between the external and internal Prurigo.

“ The external Prurigo arises from

“ 1. Want of cleanliness; which, in gross and corpulent women, occasions a chafing in the groins, or wherever the folds of the skin rub on each other. An acrimonious and highly fetid discharge takes place from the excoriated parts, which have a livid appearance, and are surrounded by an eruption of inflamed Papulæ. This complaint, though apparently formidable, is easily cured by frequent washing with water, or soap and water; and by sprinkling on the excoriations fuller’s-earth or cerufs powder.

“ 2. Pediculi pubis are more frequently the cause of this species of Prurigo than might be supposed, for they

bury themselves in the skin, and being almost unknown among decent persons, may remain for a long time unsuspected, since even an examination for the purpose will scarcely detect them. They are chiefly discoverable by their nits, which may be seen attached to the bases of the hairs, the insects themselves appearing only like discolourations of the skin. Calomel mixed with starch-powder, and applied by a down puff, speedily destroys these insects. The same application continued will prevent the nits from becoming afterwards troublesome.

“ 3. Varices of the veins of the pubes. This obstinate and painful complaint does not seem to have been noticed by any writer. It produces a constant itching, great tenderness or soreness of the part, and sometimes deep ulcerations. In several cases, the itching has been much relieved, and the ulcerations healed, by an unguent composed of spermaceti liniment, with a small addition of nitrated quicksilver.* Astringent lotions, applied with a view of strengthening the coats of the veins, did not seem to produce any considerable effect.

“ 4. An eruption of small, red pimples, with a highly inflamed base. The eruption is accompanied with, or succeeded by, a dryness of the cuticle, which cracks, and discharges an acrimonious ichor. This form of the external Prurigo is the most frequent and troublesome of any. After trying a variety of applications, I have found nothing to answer so well as the liniment above-mentioned. Along with it, I have in general prescribed small doses of calomel and precipitated sulphur of antimony, and sometimes the decoction of sarsaparilla.

* The proportion was twenty or thirty grains of the hydrargyrus nitratus ruber to an ounce of the linimentum sperm. ceti.

“ The internal Prurigo arises from

“ 1. Ascarides. I have frequently known these worms lodged in the vagina as well as the rectum, and produce much uneasiness. Mercurial and aloetic purgatives, with injections containing calomel, or corrosive sublimate, appear to be the most effectual means of removing them.

“ 2. Venereal warts and ulcers. When the itching is found to arise from a syphilitic affection, our attention must necessarily be directed to the cure of the primary disease. I have, however, observed small, hard, distinct tumours within the labia, which ulcerated, and discharged a very fetid matter, being not distinguishable from chancres; yet the event, as well as the character of the parties, has proved that the ulcerations were not venereal. It is therefore improper to decide too hastily on such appearances, since, through want of caution in this respect, the peace of many worthy families may be unnecessarily disturbed.

“ 3. Aphthæ. An eruption of small, white specks, exactly resembling the Aphthæ in the mouths of infants, often extends over all the skin within the labia pudendi, and produces much uneasiness. I have observed this complaint, chiefly in pregnant women; and have in general removed it by bleeding, and the use of saline purgatives.

“ 4. Fungous excrescences. In some cases of intolerable itching, I have discovered a little fungous excrescence growing within the meatus urinarius, on the removal of which by the lunar caustic, the complaint has been presently cured. They were probably cases of this kind which the late Dr. Hunter cured by the application of bougies. I have observed a similar fungous appearance about the entrance of the vagina, owing perhaps to a dis-

ease of the *carunculæ myrtiformes*. It produced an extreme soreness of the part, as well as a troublesome itching, and proved, in some instances, extremely obstinate. The slighter cases of it were relieved by diligent washing with soap and water; and by applying the *sperma ceti* liniment, with about a sixteenth part of red nitrated quicksilver.

“5. Piles. The piles occasion a violent itching about the fundament, which frequently extends to the internal pudendum, and in many cases a similar varicose state of the veins is found in the vagina. In this case, I have prescribed with advantage the use of sulphur internally, and, at the same time, injections containing vitriolated zinc.

“6. Scirrhus. The *Prurigo pudendi* is not a constant symptom of scirrhus in the womb, but I have known it, in some instances, accompany that calamitous malady.

“7. In the above-mentioned instances the causes of the disease are easily ascertained by examination, but cases sometimes occur, in which, without any manifest change in the parts, there is a violent itching, accompanied with so high a degree of sensibility, as to render the slightest touch exquisitely painful. In these cases relief may be obtained by a decoction of white poppy heads or elder flowers, or by lotions containing a large proportion of opium. Anodyne elysters at bed-time are likewise useful. All cold and astringent applications prove injurious.”

ORDER II.

SCALY DISEASES OF THE SKIN.

THE second Order of Cutaneous Diseases includes those affections, which are characterized by an appearance of Scales, arising from a morbid state of the cuticle, as specified in the second Definition. The cuticle is not, however, the only seat of these complaints: they often originate from indurated Papulæ, or larger elevations of the true skin, which, by pressure or distension, injure the texture of the cuticle, and produce thickened, irregular layers of it. The Scales or Crusts, thus formed, have not always been distinguished from Scabs succeeding confluent Pustules, or superficial Ulcerations, whence we find, in medical writers, several dissimilar diseases connected together. I shall endeavour to avoid such inaccuracies, by strictly observing the second and third Definitions.

The generic diseases of this Order are Lepra, Psoriasis, Pityriasis and Ichthyosis.

I. By the term LEPRA, I mean to express the complaint so denominated by the most accurate of the Greek physicians. It is characterized by scaly patches, of different sizes, but having nearly a circular form. I have observed, in this country, three varieties of the disease,

which may be described under the titles of *Lepra vulgaris*, *Lepra alphoides*, and *Lepra nigricans*.

1. The *LEPRA VULGARIS* at first exhibits small, distinct elevations of the cuticle, which are redish, and shining, but never contain any fluid. Their surface, when examined through a magnifying glass, appears tense and smooth; within twenty-four hours, however, thin white scales form on their tops.* After three or four days the small elevations are flattened, and at the same time dilated, by an extension of their bases, to the size of a silver penny. These patches continue to enlarge gradually, till they become nearly of the size of a crown piece. They always retain a circular, or oval form, are covered with dry scales, and surrounded by a red border. The scales accumulate on them, so as to form a thick, prominent crust, which is quickly reproduced, whether it fall off spontaneously, or have been forcibly detached.† On its removal, the sur-

* Nullus est qui non viderit in hominibus, præsertim quos sua ad spurcitiem vitæ redegit inopia, similes in cute nasci, sine humoris exitu, tumores, parvos primum, atque pruriginosos, et tactui asperos. Lorry, de Morb. Cut. p. 366. Compare Willis Pharmaceut. Rational. cap. vii. sect. 3. et Blancard. Instit. Chirurg. c. 16.

† Increscunt sensim et sæpe attolluntur in molem lemæ leprosæ. Si nimia vi fuerint evulsæ, sanguinem ad basim fundunt, carnemque (ut cum veteribus loquar) seu potius basim cutis sanam et rubellam ostendunt, ex quâ tamen novæ crustæ mox succrescunt. Lorry, de Morb. Cutan. p. 366. See Dr. Falconer's Account of the *Lepra Græcorum*; Memoirs of the Medical Society of London, vol. iii. p. 369.

It is to be observed, that in Dr. Falconer's description of the *Lepra*, a pustular disease (*Impetigo*) is also comprised, which is said "to appear on different parts of the body, in the form of itchy pimples, containing matter." These, after breaking, discharge a thin

face appears, through a magnifier, to be porous, and irregular, or wrinkled, but the furrows do not coincide with the lines of the contiguous sound cuticle. The eruption is not attended with any pain, or uneasiness, excepting a slight degree of itching, felt when the person affected becomes warm in bed, and a sensation of tingling, upon any sudden change in the temperature of the atmosphere.

This species of *Lepra* sometimes appears first at the elbow, or on the fore arm, but more generally about the knee. In the latter case, the primary patch forms immediately below the patella. Within a few weeks, several other scaly circles appear along the fore parts of the leg and thigh, increasing by degrees till they come nearly into contact. The disease is then often stationary for a considerable length of time. If it does advance further, its progress is towards the hip, and loins, afterwards to the sides, back, and shoulders, and about the same time to the arms and hands. In a great number of cases, the hairy scalp is the part last affected: * although the circles formed on it remain for some time distinct, yet they finally unite, and cover the whole surface on which the hair grows with a white, scaly incrustation. This appearance is attended, more especially in hot weather, with a troublesome itching, and, when any part of the crust is detached, a watery discharge takes place, and continues for several hours. The pubes in adults is sometimes affected in the same manner as the head: and

corrosive humour, by which the parts are sometimes incrustated over as with a rough scaly coat, not unlike the bark of a decayed tree." Page 371.

* In one or two instances, the disease began at the occiput, and spread from thence over the scalp, afterwards gradually extending to the arms, body, and lower extremities.

if the subject be a female, there is usually an internal *Pruritus pudendi*, as has been already observed. In some cases of the disorder, the nails, both of the fingers and toes, are thickened, and deeply indented longitudinally. Either the whole, or some part of each nail is harder, and more prominent, than usual. Under several of them also may be observed one, two, or three, round yellowish specks, which, on advancing to the end of the fingers, in consequence of the growth of the nail, will be found to have originated from a deposition of curdly, sebaceous matter, having an extremely fetid smell.

When the *Lepra* extends to all the parts above-mentioned, it becomes highly disgusting in its appearance,* and inconvenient, from the stiffness and torpor occasioned by it in the limbs. The disease, however, is seldom disposed to terminate spontaneously. It continues nearly in the same state for several years,† or sometimes during

* *Sejuncti sunt atque separati omnes isti tumores, sed etsi sparsim apparent, si magno numero cutim occupant, certe monstroso aspectu terrent. Pruritus enormis basim et intervalla crustarum ita occupat, ut noctem insomnem ducere iis necesse sit, aut a somno expergefacticis e lecto prosilire.* Lorry.

Dr. Falconer remarks, "It is often very uneasy to the feeling, and ever rather painful; but this seems to arise principally, if not altogether, from the hardness and stiffness of the skin, which renders motion troublesome. The same circumstances cause the outside of the skin to be insensible to slight impressions of the finger: but no real insensibility of the part affected, or of those adjacent to it, has been observed." Page 370.

The violent itching and irritation, noticed by M. Lorry, does not take place in our temperate climate, but is, perhaps, severely felt in hot countries.

† In toto morbo, longissimo quidem, vix variationem aliquam accipiunt phænomena, ita ut per longam annorum seriem in eodem statu remaneant, donec multiplicatâ materiâ obstruantur glandulæ

the whole life of the person affected, not being apparently connected with any disorder of the constitution.*

A regular diet, with an appropriate course of medicine, acts very slowly on the *Lepra*, yet will at length accomplish its cure. The steps by which it proceeds to a termination are as follows. First, the incrustation separates from about the centres of the patches, and is no longer reproduced. The scales being farther and farther removed, a circle of red, shining cuticle, deeply indented, appears within the original patch, which still retains a broad, hard, scaly ring, or border. This border continues till the cuticle within it assume the usual colour and texture. It then gradually softens, and the cuticular lines being extended over it, every vestige of the disease is erased.

There are some other circumstances, in this form of *Lepra*, which merit attention.

1. The scaly patches are generally situated where the bone is nearest to the surface, as, along the shin, about the elbow, and upon the ulna in the fore-arm; on the scalp, and along the spine, os ilium, and shoulder-blades. They rarely appear on the calf of the leg, on the fleshy part of the arm and thigh, or within the flexures of the joints.

Lymphaticæ, cachecticæ tandem atque hydropici moriantur, aut tabe pulmonali absumantur ægrotantes: sed pluribus, sine aliquo incommodo, ad senectutem usque propagatur morbus, saltem in pauperiore hominum genere, quibus ipsa facit inopia ut auxilia negligent, dietam aspernentur, et nullam bonis artibus fiduciam adhibeant. Lorry, page 367.

† “The appetite, sleep, and strength of the patients have not been apparently affected; and there is very rarely any thirst, or fever, attending it.” Dr. Falconer, page 370.

2. The Lepra almost constantly affects both sides, appearing at each elbow or at each knee about the same time, and extending from thence along the limbs, in a similar manner.

3. Though fresh patches arise, from time to time, in different situations, there is no alteration in the state of the parts first affected, as happens in some other Cutaneous Diseases; but when the complaint is about to terminate, all the patches assume a favourable appearance at the same time, those nearest the extremities going off somewhat later than the rest.

4. The incrustation of the scalp encroaches a little on the forehead and temples: but I have never yet observed any of the scaly patches on the cheeks, or chin, on the nose, or near the eye-brows.

5. When the extremities, back, loins, and head, are all at the same time covered with dry crusts, it might be expected that the obstruction of the perspiration on so large a surface would produce disagreeable consequences, which, however, is not found to be the case.

The translators of the Arabian physicians constantly apply the term Lepra to the Elephantiasis of the Greeks, whence several modern authors have been led to confound those two diseases. It seems, therefore, proper to mention the symptoms which have been inaccurately transferred, in their writings, from Elephantiasis to the Lepra Græcorum. These are, baldness of the head, discolouration or destruction of the small hairs of the skin, deep ulcerations,* fetid sweats,† and loss of sensation in

* Amat. Lusitan. cent. ii. Turner, ch. 1 and 2. Bartoldi Prax. Clin. p. 3. cap. 1. Hafenreffer, l. 15. Caroli Musitani de Tumorib. cap. 22. Bertrandi Opere Anatomiche, t. iv. articolo 11.

Jul. Pol. cap. 25. Sennertus, lib. v. p. 1. cap. 28.

the parts affected.* Several writers have said that the *Lepra* usually terminates in *Elephantiasis*,† and that it is an incurable malady,‡ assertions contradicted by experience.

The Latin authors have not given an accurate description of this species of *Lepra*: Celsus probably comprehends it under the generical denomination *Impetigo*, not having any where employed the term *Lepra*.

Hippocrates speaks of *Lepra* as an affection merely superficial, and thinks it should be ranked among external blemishes, rather than among diseases.§ He was further of opinion that it affects some internal surfaces of the body, particularly that of the bladder,|| but he had perhaps mistaken for leprous scales a flaky sediment in the urine, which sometimes appears in diseases of the bladder.

The descriptions of *Lepra* in Paulus Ægineta, and Actuarius, nearly answer to the account I have given of it above. The former exhibits a comparative view of *Lepra*, and *Psora*, as follows. “Both these disorders are

* Sauvages, Nosolog. Med. de Leprâ.

† Mercurialis, de Morb. Cutis, lib. ii. cap. 5. Dolæi Encyclopæd. Chirurg. lib. v. cap. 9. Hollerii Prax. &c.

‡ Fernellii Patholog. lib. vii. cap. 4. Nullis hæc cedit remediis; et de ejus curatione vulgus divos implorare solet. Compare Lommii Obs. Med. lib. ii.

§ Εσι δε τριαντα αισχος μαλλον η νοσημασια. Lib. Περι παθων. Pag. 525. Ed. Fæs. See Galen, εισαγωγη, cap. 17.

|| Lib. v. Epidem. sect. 3. p. 1146. G. Fæs. Compare Galen. Definit. Med.

characterized by a roughness of the surface, with itching, and a deliquescence of the body, which originates from a melancholic humour. But Lepra affects the skin deeply, in circular patches, and throws off scales like those of large fishes; whereas Psora is more superficial, and variously figured, and throws off bran-like substances.”*

Actuarius, under the head of External Affections, observes, “A less violent disease than the Elephantiasis is Lepra, slighter than which is Psora, and slightest of all the Lichenes. But the Lepra penetrates deep, producing circular eruptions, and a colliquescence of the flesh, and throws off scales (lepides) from whence it also derives its name, whereas the Psora is more superficial, assumes different forms, and only throws off certain bran-like substances: a roughness and itching of the skin is common to both.”†

* Τῶτων τῶν παθῶν ἑκατέρῳ τραχυσμός τις ἐπιφανείας ἐστίν, μέλα κνησμός κ' ἀπολήξεως σωματός, ἐκ μελαγχολικῆς χυμῆς τὴν γίνεσθαι ἔχων. Ἀλλ' ἢ μὲν Λεπρὰ διὰ βάθος ἐπινομήται τὸ δέσμα κυκλοσέως, μέλα τε φολιδοειδεῖς ἀφίεναι λιπιδας· ἢ δὲ Ψώρα ἐπιπολαίωθρα ἐστίν, κ' ποικίλωε σχηματισμένη, κ' πίλυρωθῆ ἀφίεναι σωματία. Ed. Aldi. IV. 2.

† Ἡπὸν δ' εἰς κακίαν μέλα τὸν Ἐλεφαντία Λεπρὰ ἐστίν, μεθ' ἣν Ψώρα, εἴσα Λοιχίνες· Ἀλλ' ἢ μὲν Λεπρὰ διὰ τὸ βάθος χρωρεῖ, κ' κυκλόσθῃ ἐξανθημάτα ποιεῖ, κ' τινὰς συνήξεις σαρκός, λιπιδας τε ἀφίεναι, ἀφ' αὐτῆς κ' τεινὸν εἰληχεῖ, μεθ' ἧς διὰ βάθος τῆς Ψώρας χρωρεσθῆς, κ' διαφορῶς σχηματίζουμένης, ἢ πίλυρωθῆ τινὰ ἀφίεναι σωματία. Κοινὸν δὲ ἀμφὸν ὅτι τραχυσμός, κ' ὁ κνησμός τῆς δερμάτος. Actuar. de Meth. Med. ii. 11.

It is not easy to give in a translation the precise meaning of the terms ἀπολήξεως σωματός, and συνήξεις σαρκός. Both these expressions seem to be merely hypothetical. The former is supposed to denote a gradual separation, or deliquescence, of the morbid humour from every part of the body, and its future deposition, in the form of scales, upon the surface. The latter perhaps extends the idea still farther, and implies that a portion of the substance of the flesh is dissolved and carried off with the melancholic humour. Galen

Archigenes and Aetius likewise observe that *Lepra* is rough to the touch, and attended with itching; that the skin alone is affected by it, whence, upon excoriation, the flesh underneath is always found in a healthy state; that *Lepra* produces large scales; whereas in *Psora* there is only an appearance of bran-like substances on the skin. *Aet. Tetrab. i. Serm. iv.*

It is, however, to be observed, that several of the Greek physicians use the term *Lepra* in a more extended sense, to express every Cutaneous Disease, which, in its progress, exhibits any appearance of Scurf, Scales, or thin Scabs: thus they comprehend under it the Lichenes, and *Psora*, and even some forms of the Elephantiasis, giving to it the same extent of signification as the Romans have done to the word *Impetigo*. Galen (*De Tumor. Præ. Nat. Cap. 13.*) implies an affinity between *Lepra* and Elephantiasis, where he says, "that *Lepra* is properly an affection of the skin alone, so that, if it extend to the flesh and to the veins, it should be denominated *Carcinus*."* He mentions also two cases, in which Elephantiasis was changed into *Lepra*† by a particular mode of treatment.

makes a similar allusion, in speaking of the Lichenes, which he supposes to originate from salt phlegm and yellow bile. "Hence," he says, "the scales are formed on the skin, as happens in vessels containing brine," referring to the incrustation made by the chrysalized salt.

* *Τινείαι δὲ τὸ πάθος ὑποφλεγμάτων ἀλμυρῶν, καὶ χολῆς ξανθῆς, ἐθὲν ὡς ἐπιτῶν ἄλμων τῶν κίραμιων, ἀφίστανται τοῦ δερμάτος αἰ λεπίδες.* *Isagoge, c. 13.*

Compare *Aet. Tetrab. ii. Serm. i. cap. 90. περὶ συντηξέως.* *Oribas. Synops. vii. 30.* and *Paul. Æg. de Re Medica, lib. ii. cap. 41.*

* Elephantiasis is by all the Greek physicians considered as *καρκίνος ἐν ὅλτῳ σώματι*, a *carcinus*, or cancer existing in the whole body. Compare *Paul. Ægin. iv. 1. Actuar. Med. ii. 11.*

† *Galen. de Simplic. Med. facult. lib. xi. and lib. De Subfiguratione Empiricâ.* These passages relate to the conversion of one

I. F. Serapion, the Arabian (Breviar. Tr. v. cap. 4.) includes under a generic title, Alkouba, the Lichen, Psora, and Lepra of the Greeks. He employs a specific term, Albaras nigra, to express the Lepra, which he describes, and distinguishes from Psora, in nearly the same terms as Paulus Ægineta has done. Compare Haly Abbas, Theorice, lib. viii. cap. 16. Rhazes, lib. vi. cap. 31. Avicenna, lib. ii. Fen. 7. Tr. 3. cap. 3.

Avicenna uses the term Albaras nigra in a somewhat different sense, employing it frequently to denote the rugged and scaly state of the skin in Elephantiasis, lib. iv. Fen. 3. Tr. 3. cap. 1. and Fen. 7. Tr. 2. cap. 9. He observes, however, in describing the Alkouba, which, in his writings, answers to the Psora, and Lepra of the Greeks, that “there is a Kouba incrusted from excessive dryness, and unusual depth, which is like the black Barras, and like eschars.” See also Alsaharav. Pract. Tr. xxxi. cap. 2.

Of modern writers, some arrange this disease under Impetigo,* some under Scabies, † or Psora; and several of them ‡ follow the nomenclature established by the Laform of Elephantiasis into another, in which, according to Celsus, Summa cutis inæqualiter crassa, tenuis, dura, mollisque, quasi squamis quibusdam exasperatur. Lib. iii. cap. 25.

* Fernelius, Sennertus, Langius, Carolus, Musitanus, Hoffman, Willis, Blancard, Lommius, &c.

† Fabr. Hildanus, Platerus, Hafenreffer, Corbeius, Heurnius, &c.

Dr. Mead, under the denomination of Lepra, comprehends the Leucè of the Greek writers, although they have carefully pointed out the difference of those two diseases.

‡ Johan. de Gaddesden, Arnaldus de Villa Nova, Gordonius, Gilbertus, Guido de Cauliaco, Alphonso, Paracelsus, Schenkus, Et-muller, &c.

tin translators of Arabick, who, as was before observed, make *Lepra* and *Barras* or *Elephantiasis* synonymous. We may avoid this confusion in language, by always using the term *Lepra* to signify the complaint so denominated by the best Greek writers, which has a more distinct form, and character, than any other Cutaneous Disease.

The *Lepra* is, by some writers, said to be both contagious and hereditary. *Mercurialis* in particular maintains that *Lepra*, as well as *Elephantiasis*, is propagated by contagion, having probably adopted the opinion respecting the affinity of these two diseases.* I am convinced, by closely attending to a great number of cases, that the *Lepra vulgaris* is not contagious: but that an hereditary predisposition to it exists I can readily admit, having in several instances observed it to be thus transmitted. A slow pulse, or a languid circulation of the blood, and, what must generally be connected with it, a harsh dry, impermeable state of the skin and cuticle, appear to constitute a fundamental part of the predisposition. The morbid effects of such a state of the integuments are most likely to be felt in the decline of life: accordingly, the disease is of more frequent occurrence, and proves more inveterate, after the age of forty, than at any earlier period, an observation made long ago by Hippocrates and Galen.†

The secondary causes which contribute to produce this

Guido absurdly derives the word *Lepra* a *Lupo*, vel a *Lepôre nasi*. Tract. vi. Doctr. 1. cap. 2.

* *Lepra omnis tam Græcorum quam Arabum contagiosa est*. lib. ii. cap. 5. Sennert v. 1. 29. Hoffman, tom. i. p. 202, &c.

† Galen. iii. Prognost. 28, &c. Hippocrat. Prorrhætic. lib. ii. sub. fin.

form of the *Lepra* have not been fully ascertained. Particular kinds of diet, as dried meats, fish, oatmeal, and some incongruous mixtures of food, are usually mentioned, but not on sufficient authority. At least the disorder is very frequent in this city and its environs, where the articles of diet above-mentioned are but little used. I have not, upon inquiry, traced any foundation for the general opinion, that *Lepra* is more prevalent in fishing-towns, on the sea coast, than in other situations. Dr. Willis, who has adopted this idea, mentions, as a proof of it, that many hospitals were formerly built in Cornwall for the reception of the poor inhabitants of the coast, who, from living entirely on fish, were much affected with this disease.* It appears, however, from other authorities, that Dr. Willis, in this instance, has fallen into the error of those who confound the *Lepra Græcorum* with the Elephantiasis or Arabian Leprosy, for which many Hospitals or Lazar-houses were formerly established in different parts of Europe.†

The only occasional causes of the *Lepra vulgaris* that I am able to point out, with any certainty, are exposure to cold and moisture,‡ and the accumulation of sordes on the skin. Thus the disease frequently affects bakers and bricklayers, labourers, coal-heavers, dust-men, laboratory-men, and others, who work among dry, powdery substances.§ Labourers in the metropolis cannot be very attentive to personal cleanliness, as they have not

* Willis Op. page 29. 4to.

† Turner, on Dis. of the Skin, p. 8.

‡ Dr. Jackson, *Dermatopathologia*, pag. 135 and 149.

§ See Reports on the diseases in London, for 1800, page 303.

the advantage of public baths, and are not sufficiently supplied with water in their own houses. It is singular that London, the most populous city of Europe, should not be provided with any extensive accommodation for bathing. Till this defect be remedied, its inhabitants must undergo many inconveniences, and be liable to many disorders, which are unknown in warm climates, where the frequent use of baths has been at all times thought indispensably necessary. In the principal towns of ancient Greece and Italy, there were Balnea, or public baths, of a great extent. To some of these, men were admitted, to others, only women, a trifling sum being paid to the attendants: to others, persons of the lowest rank had access without expence.* The same practice is continued to the present time, in Greece, Egypt, and Syria. Ancient physicians considered the balnea to be of so much importance for the preservation of health, that they have carefully transmitted to us a series of observations respecting their utility, and the mode of their application. Great advantages might likewise be derived from baths in our climate; it is therefore to be wished that they were more general, and of more easy access to the lower class of people: the frequent use of them would not only relieve or prevent Cutaneous complaints, but would be useful in a variety of internal diseases.

2. *LEPRA ALPHOIDES*. In this form of *Lepra*, the scaly patches are smaller than in the *Lepra vulgaris*; they also differ, by having their central parts a little

* Plin. Nat. Hist. lib. xxxvi. cap. 15. l. xxxiii. 12. Compare Oribas. Med. Collect. lib. x. Aet. Tetrab. i. Serm. 3.

Paulus Ægineta, after enumerating the advantages of the tepid bath, observes, that "it is equally proper for men and women, for children and old people, for magistrates and private citizens." Lib. i. cap. 51.

depressed. The eruption usually begins about the elbow, with distinct hard protuberances, not much larger than *Papulæ*, and of a dull red colour. These in a short time dilate to nearly the size of a silver penny. Two or three days afterward the central part of them suffers a depression, within which minute white scales may be observed. The surrounding border, however, still continues to be raised, but it retains the same size and the same red colour as at first. All the fore-arm, and in many cases the back of the hand, is spotted with similar patches, which seldom become confluent; but there is sometimes a white incrustation round the point of the elbow. This eruption appears in the same manner upon the joint of the knee, but without spreading far along the thigh or leg. I do not remember to have seen it on the trunk of the body, nor on the face. It is a disease of long duration, and not less difficult to cure than the foregoing species of *Lepra*: even when the scaly patches have been removed by a perseverance in the use of suitable applications, the cuticle remains for a long time red, tender, and brittle; but the small hairs of the skin are not destroyed, not altered in their colour, and texture, as some authors have stated.

The exciting causes of this complaint are nearly the same as those of the *Lepra vulgaris*. It chiefly affects women and children: I have repeatedly seen it in those who are employed to dress flax, hair, or feathers.

The *Lepra Alphoides*, above described, seems to have been ranked by the ancients with the *White Alphas*.* According to Galen,† the *Alphas* is a

* Dr. Burges, *Gulstonian Lectures*. See *Hist. Morbor. Vratislaven. Ann. 1702. p. 139.*

† *Isagoge, & De Simp. Med. Facult. vi.*

slighter affection, and less rough, than the common *Lepra*. He further observes, and after him likewise *Oribasius* and *Aetius*, that this disease affects the surface of the body, but does not penetrate into the flesh, and that the patches appear like scales affixed to the skin.* *Celsus*, who copies some of the earlier Greek writers, has given a description of the *Alphos* in the following terms. *Αλφος*-vocatur, ubi color albus est, ferè subasper et non continuus, ut quædam quasi guttæ dispersæ esse videantur. Interdum etiam latiùs, et cum quibusdam intermissionibus, serpit.† He has, however, classed under the same generic title (*Vitiligo*) the *Alphos*, and another disease, termed by the Greeks *Leuce*, in which portions of the skin become smooth, white, and shining, the colour of the hairs upon them is changed to white or yellowish, and the muscular flesh beneath is altered both in its colour and texture.‡ *Hippocrates* seems to distinguish the *Leuce* from the *Alphos*. He observes that the latter should be con-

* Των Αλφων ἡ γένεσις ὁμοίωδης μὲν εἰς τὴν Λευκὴν καὶ τὴν Λεπτρῶν, οὐ μὲν αὖτις δι' οὐκ πεπονθῆναι τῆς σαρκὸς ἐν τῷ βᾶθει, ἀλλ' ἐπιπολῆς τὰ δερμάτις· οἷον λεπίδες τινὲς ἐπιπετηγασιν οἱ Αλφοί, λευκοὶ μὲν ἐκ φλεγμᾶτος, μελανοὶ δὲ ἐκ μελαγχολικῆς χυμῆς γιγνομένοι. *Galen. de Sympt. Causis, lib. iii. cap. 2.*

Ο' δὲ Αλφος ἐπιπολαιὸς εἶναι, καὶ ὡσεὶ λεπίδες προσπετηγῆς τῷ δερμάτι. *Act. Tetrab. iv. l. 134.*

After having made the above observations, do these authors consistently state that *Lepra* differs from *Alphos* in being rough and without itching?

† *De Medicinâ, lib. v. cap. 28.*

‡ *Aetius, ex Galeno et Archigine, De Leuce, et De Leprâ, Tetrab. iv. Serm. 1. cap. 133-4.*

sidered as an external blemish, rather than a disease,* but he speaks of the Leuce as a distemper of the most fatal kind.† Celsus himself makes the same distinction: Αλφος et Μελας, in quibusdam, variis temporibus oriuntur, et desinunt; Λευκη quem occupavit, non facillè dimittit. The latest Greek authors maintain the identity of the Alphos and Leuce, observing that the Alphos sometimes penetrates beneath the surface, and whitens the hairs on the parts affected.‡ We may therefore conclude that the Greeks expressed, by the term White Alphos, two different appearances, one of which preceded the Elephantiasis, the other being connected with Lepra. I have endeavoured to make a sufficient distinction by arranging the latter, with an altered denomination, under its proper genus.

Most of the Arabian physicians express the White Alphos, and the Leuce, by the terms Alauzah (or White Albohak) and White Albaras, and are of opinion that the diseases, so denominated, only differ in degree, or ex-

* De Affectionib. sect. 5.

† Prorrheth. lib. ii. ad finem.

Γινοῖται δὲ Λευκαὶ μὲν ἐκ τῶν θανατοφθασάτων νοσημάτων, οἷον καὶ ἡ νύστος ἢ θινικὴ (φοινικίνη) καλεομένη.

Compare Galen, Isigoge, cap. 13, who likewise observes that the Lichenes, Alphos, Psora, and Lepra, may be cured without much difficulty, and by nearly the same plan of treatment. De Simpl. Med. Facult. lib. xi. 6.

‡ Λευκαὶ δὲ πρὸς τὰς Αλφῶς τοῦ αὐτοῦ ἔχουσι λόγον ὅν αἱ Λεπρῶν πρὸς τὰς Ψώρας, αἱ μὲν γὰρ Λευκαὶ το πλεον δια βάθους χωρεσι. καὶ τὰς ἐκείθεν τριχὰς τοιαύτας προβάλλουσι· οἱ δὲ Αλφοὶ ἐξ επιπολῆς εἰσι· ἐστ' ὅτε δὲ καὶ αὐτοὶ προβαίνουσι δια βάθους χωρεσι, ὡς καὶ τὰς τριχὰς λευκάσφιν.

Paul. Æg. lib. iv. c. 6. and Actuar. ii. 23. M.S. in Soc. Med. Londinens. Bibliothec.

tent. Alsaharavius, apparently anxious to comprize in his work all the observations of preceding writers, has distinguished three varieties of Albohak,* the black, the white, and the clayey; the last of them coincides with the scaly Alphos of the Greeks, or the *Lepra alphoides* above described.

3. The *LEPRA NIGRICANS* does not much differ from the *Lepra vulgaris*, with respect to its form or distribution. The most striking difference is in the colour of the patches, which are dark and livid. They appear first on the legs and fore-arms, extending afterwards to the thighs, loins, neck, back, and hands. Their central part is not depressed as in the Alphos. They are somewhat smaller than the patches of the *Lepra vulgaris*, and have a livid or purplish border. The skin likewise appears of a livid colour through the scaly incrustations, which are seldom very thick. It is further to be observed, that the scales are more easily detached than in the other forms of *Lepra*, and that the surface remains longer excoriated, discharging lymph, often with an intermixture of blood, till a new incrustation forms, which is hard, brittle, and irregular. This complaint is particularly troublesome when it covers the scalp.

The *Lepra nigricans* affects soldiers, sailors, sculler-

* This term is rendered *Morphea* by those who have translated the works of the Arabian physicians into Latin.

Morpheæ sunt tres species; una est quæ similatur terræ alia nigra, et alia alba. Quæ similatur terræ fit duobus modis; quia aut erit cum eâ pruritus, et resultabunt ex eo squamæ similes furfuribus tritici, aut erit plana, sine pruritu, et æqualis cutis corporis superficiali: apparet in æstate vel quando ingreditur quis aquam, vel exponit se soli; et hæc species facilis est curationis. Alsaharav. Tract. xxxi. cap 3.

Compare Serapion, Tract. v. cap. 5. and Avicenna, lib. iv. Fen. 7. cap 9, 10, who remarks that the terms *Alauzah* (*Alguada*) and *White Bohak*, are synonymous.

men, stage-coachmen, butchers, brewers, labourers, and others whose occupations are attended with much fatigue, and expose them to cold and damp, and to a precarious or improper mode of diet. Women habituated to poor living, and constant hard labour, are also liable to this disease.

A soldier in the guards, during the active campaign of 1794, in Flanders, observed on his fore leg, above the knee, and in the palms of his hands, small scaly circles, surrounded by a purplish border. Some of these increased, within a month, from the size of a sixpence to that of a half crown piece. Other similar patches appeared, in succession, on his arms, on the fore-part of the neck, on the thighs, loins, and back. They were very sore and tender, and were kept bleeding, or discharging, in consequence of the violent exercise he was obliged to take. He first observed them in October, after a long, fatiguing march, in which the men of his detachment had been obliged to sleep in the open air. About six weeks afterward he was taken to a temporary hospital in Holland, being affected with a violent Fever, which spread among the troops by contagion. He was brought over, while yet in a delirious state, to the York Hospital at Chelsea, where he recovered from the Fever in two or three weeks, but nearly lost the sight of his right eye. When he first came to me, March 24th, 1795, the central parts of the patches were red, and without scales, the surrounding borders being lived. Around the red centre of every patch, there was a semitransparent incrustation, through which the livid colour of the skin was visible. April 24th, I saw this patient a second time. No alteration, he said, took place in the cutaneous complaint after the Fever. Some of the first patches on his arms, neck,

&c. were scarcely discernible ; but fresh ones of the usual form, and colour, had appeared, from time to time, in other places. The friction of his gaiters removed the scales, and left his legs almost constantly sore, and bleeding, in consequence of which he was discharged from military service.

I observed in two persons, who came from India affected with the *Lepra nigricans*, that the patches successively ulcerated, but at length healed spontaneously, with a concave though not a very deep cicatrix. An account of the *Lepra*, as it appears in a hot climate, is yet wanting in medical science.

In the Venereal disease circular patches sometimes appear, which resemble those of the *Lepra nigricans* in size and colour, but which are not incrustated. The dryness and harshness of the skin, so remarkable in the *Lepra vulgaris* and *alphoides*, do not occur in the venereal *Lepra*, its patches, when somewhat advanced, being as soft and pliable as other parts of the skin.* It is, however, proper to observe that every patch originates from a small hard reddish protuberance. As this gradually dilates, the increase of its circumference is not attended with an increasing elevation at the centre ; on the contrary, the sides of the patch are somewhat raised, and the central part of it appears a flat surface covered with thin, white scales. The patches are generally distinct, and at a distance from each other : I have seldom seen any of them exceeding the size of a shilling ; yet it is probable they might acquire a greater magnitude, if the progress of the disease were not early arrested by the use of mercury.

When the constitution is under the full influence of this remedy, the sides of the patch shrink, and become paler ; the centre is also depressed ; but the desquama-

* J. Pearson, surgeon.

tion proceeds slowly ; and the disease cannot be removed without a perseverance in the course for six or eight weeks. A circular red spot usually appears for some time in the place of every declining patch, and a minute shallow depression, like a cicatrix, is left at the centre ; but no permanent discolouration of the skin remains, as in some other cases. The leprous form of the Syphilis takes place, like other venereal eruptions, at very different periods after infection, in different cases. If no medicines were employed, it would at length terminate in ulcerated blotches.

The *Lepra nigricans* is probably comprized under the denominations of Black Alphos (*Melas*) and Black Albohak, in the writings of ancient authors. On comparing their accounts, we find that some of them represent the Black Alphos as smooth and shining, like the *Leuce*, while others assert that it is rough and scaly.* By this inaccuracy respecting the Black as well as the White Alphos, they have led succeeding writers to conjoin the *Lepra* and *Elephantiasis*, diseases generically different.

In the treatment of *Lepra*, the Greek physicians always premised bleeding and strong purgative medicines ; but they seem to have depended chiefly on external applications, such as alum, sulphur, nitre, lupines, cabbage leaves, elm bark, the dung of goats, mice, and foxes, human urine, and the gall of bears. They likewise used several vegetable and mineral substances, which had a corrosive or vesicating quality, as hellebore, calophonia, the roots of white lily, onion, bryony, asphodel, ranunculus, and anemone, the seeds of mustard and

* See *Aet. Tetrab. iv. Serm. i. cap. 131.* T. F. Serapion, *Breviar. Tract. v. cap. 4.* Haly F. Abbas, *Theorice, lib. viii. Capitulum. 16.* Avicenna, *lib. iv. Fen. vii. Tr. 2. cap. 9.*

horse radish, quicklime, vitriol, &c. Remedies of this kind, or even blisters, are, however, found to have only a temporary effect, their operation being soon succeeded by a reproduction of the scaly crusts.

Liniments composed of tar, or of some mercurial preparations, have been much employed both in ancient and modern practice; but I think frequent bathing, or washing, is the external remedy most advantageous in the two first species of *Lepra*.* Dr. Willis, from some theoretical notions,† was averse to warm-bathing, or the external use of any mineral water: I am, however, well assured that the Sulphureous waters of Harrogate, Croft, and Moffat, whether applied externally or internally, prove very useful in the *Lepra*. Much advantage may also be derived from baths prepared with a solution of alkalized sulphur and marine salt.

Dr. Falconer's remarks on the use of the Bath waters, in this complaint, deserve attention. He says, "The method in general pursued is, to order the patients to bathe twice or thrice a week, according to their age, strength and other circumstances. This, after a few times trial, commonly causes an abatement of the itching, and an incipient desquamation of the leprous erup-

* *Sec Act. Tetrab. i. Serm. iii. cap. 167.*

† *Balnea sulphurea, tum naturalia, tum artificialia minùs convenire, imò priora sæpiùs officere, crebrâ experienciâ deprehenditur: quinetiam Balneatio quæcunque cautè admodùm adhiberi debet; nam quatenùs administratio hæc sanguinem exagitat et effervefacit, crasin ejus plus dissolvere, et corruptelas in cutim uberiùs suffundere periclitatur. Willis de Medicamentorum Operatione, sect iii. cap. 7.*

His censure on the Bath waters is very severe. *Novi plures haud graviter impetiginosos Bathoniam nostram ad balneandum in aquis calidis profectos indè prorsùs leprosos rediisse.*

tion, and of consequence renders the skin softer and more pliable. This course is accompanied with a direction to drink the waters, which at a medium are taken in the quantity of about a pint daily, and are thought thus to second the good effects of the bath, by promoting an easy and gentle perspiration. If the amendment appears to proceed according to expectation, no other medicines are given, but occasionally such as are opening, if the body be costive.*

Bathing in sea-water may be mentioned as a certain auxiliary in the cure of Leprosy. It is usual, and seems proper, first to use a bath of warm sea-water, till the skin be softened, and the scaly incrustations removed; after which a cure is soon obtained, especially in young persons, by bathing in the open sea.† As the disease is apt to recur in winter, or in spring, the same plan may be requisite for several successive summers; but I have known it, by perseverance, finally eradicate the complaint.

A simple warm bath, with moderate friction, likewise contributes to remove the scales, and to produce

* "The whole number of persons admitted into the Bath hospital for this disease in the space of four years, viz. from June 12, 1775, and their state when discharged, was as follows :

Whole number admitted	- - - - -	83
Of whom were cleansed	- - - - -	52
Much better	- - - - -	24
Died of the Small-pox	- - - - -	1
Irregular in behaviour, and discharged without a sufficient trial of the waters	- - - - -	2
State in which they were discharged, omitted in the Register."	- - - - -	4

† Russel, De Aquæ Marinæ usu, page 37.

a soft, red skin, which, in time, regains the usual colour and texture. This plan is sufficient in the slighter cases of Lepra, without the use of internal remedies. If the disease affects the extremities only, bathing the whole body is not necessary; it may be enough to apply steam, or warm water, frequently to the disordered parts.

Of the mercurial preparations employed externally, sublimate (hydrargyrus muriatus) dissolved in spirit of wine, and the unguentum hydrargyri nitrati, seem most efficacious in restoring the cuticle after the leprous crusts are removed: I do not, however, think the latter preferable to the tar-ointment which Dr. Willis, and others, have recommended. This may be used in the forms mentioned by Dr. Willis,* or as prepared in the London Dispensatory. It should be well rubbed upon the parts affected every night, and carefully washed off, the following morning, with warm water, or with a slight alkaline lotion. Besides removing the scales, and softening the skin, it has a powerful effect in allaying that troublesome itching which often attends the disease.

Respecting the internal remedies usually directed at present, in cases of Lepra, I have had occasion to make the following remarks:

1st, That antimonials, sulphur, and nitre, have not alone any considerable efficacy.

2dly, That decoctions of emollient herbs, of guaiacum-wood, sarsaparilla,† mezereon, or of elm-bark,‡ which

* Willis, de Medic. Operat. page 294.

† Sennertus, lib. v. 1. 28.

‡ Dr. Lysons.

have been recommended as specifics, by no means deserve that character.

3dly, That calomel, hydrargyrus calcinatus, pilulæ hydrargyri, or mercurial frictions applied so as to produce salivation, do not remove the disease. The only preparation of this mineral which makes any considerable impression on the Lepra is the sublimate, or hydrargyrus muriatus.* The spirituous solution of it in small doses, continued for a length of time, proves very useful; and its operation may be promoted by giving at the same time an antimonial, with any of the decoctions above mentioned.

4thly, That the nitrous, and muriatic acids, lately recommended in obstinate cutaneous eruptions, though successful in some cases of Lepra, have been given in other cases for three or four successive months, without any manifest advantage. I have observed, on the whole, more beneficial effects, in this disease, from a medicine of an opposite quality, the caustic alkali, or aqua kali puri of the London Dispensatory. The dose of it may be twenty or thirty drops, to be given thrice a day, in a cup full of any mild fluid.

* "The acrid mercurial preparations have been much in use in this disease. The solution of corrosive sublimate, both that in water, and that in spirits, have been given, and continued a long time, and joined with decoction of the woods, and of sarsaparilla. I am inclined to think some considerable advantage must formerly have been believed, at least, to have been produced by the use of such preparations, as the name of guttæ ad Leporam was affixed to a solution of this kind in the old Pharmacopœia of the Hospital, and I have been told, by persons whose observation I could not but respect, that in some obstinate cases they had seen much advantage from such a course continued for some time. I cannot, however, affirm the same from my own experience, though I do not mean to deny it altogether." Dr. Falconer, p. 375.

In obstinate cases of *Lepra* I have used with success the mineral solution recommended by the late Dr. Fowler.* The doses he prescribes are larger than is necessary, and may prove injurious in cases requiring a frequent repetition of the medicine. It may, however, if cautiously administered, be taken not only with safety, but with the greatest advantage. My experience is confirmed by that of Dr. Girdlestone, physician at Yarmouth, who has kindly transmitted the following observations on the subject.

“After having often successfully employed the mineral solution in mesenteric, and other scrofulous affections, I made trial of it in several cases of *Lepra*, *Lichen*, *Prurigo*, *Tinea capitis*, &c. &c. It seldom failed to remove these complaints, but I thought it most efficacious in the *Lepra*. I have generally prescribed the solution at first in very small quantities, and never persisted in a dose which was productive of any inconveniency. Five or six drops, taken three times a day, will be the largest dose requisite for an adult. Children should not take more than one, two, or three drops, twice in the day. A man who took eight drops had, after the third dose, an efflorescence over all his body, and an erysipelatous appearance on the face. An

* His prescription is as follows :

R. *Arsenici alb. in pulv. subtiliss. triti,*
Kali pp^{ti}. āā gr. 64.
Aquæ fontan. distillat. lb. ss.

Immittantur in ampullam Florentinam, quâ in balneo positâ, aqua lentè ebulliat donec arsenicum perfectè solutum fuerit : solutioni frigidæ adde

Spir. Lavend. co. unc. ss.

Aquæ font. distillat. lb. ss. plùs, minùs, aded ut solutionis mensura lb. j accurata sit, vel potius pondere (Troy weight) uncix quindecim cum dimidiâ.

infusion of senna was then directed for him, and in two days, the redness of the skin having disappeared, he began to take the solution again, in doses of four drops, and thus presently removed his complaint.

“ In another case, after the disappearance of the Lepra, there was an eruption of large biles on the nates, which, however, gradually dried up, and gave no farther trouble.

“ The insipidity of the solution tempts some persons to injure themselves by exceeding the assigned doses. I therefore usually combine it with an equal quantity of the tincture of cascarilla, gentian, or cinnamon, or prescribe it in a draught made with the decoction of sarsaparilla. Many ladies, and others, without medical knowledge, give the solution in very improper doses to persons affected with intermittents, more especially to children. I have often seen this incautious practice occasion sickness, pains of the abdomen, hæmorrhage from the nose, cough, jaundice, and dropsy. I am inclined to attribute the cough to the action of the medicine on the liver, since large doses of it always give an icteric colour to the urine, and the symptoms excited presently yield to calomel, with or without opium.

“ We ought not to abandon an useful remedy because it has been abused. I have myself given the mineral solution in some hundreds of cases, and when the necessary precautions were observed, I have never seen any disagreeable effects from it.

“ In those unfortunate cases, where mercury at first relieves, but afterwards aggravates the ulcerations, I have seen the arsenical solution, with small doses of opium, prevent the extension of the ulcers, when the nitric acid, muriate of lime, sarsaparilla, and other boast-

ed remedies, had been administered without effect. Under the direction of a cautious practitioner, I think that arsenic and mercury; given alternately, might be made to assist each other in the cure of many diseases.

“Although by the mineral solution I have been able to mitigate, in a short time, several cutaneous diseases, particularly the *Lepra*, yet experience has taught me not to expect a cure in less than six or seven weeks. After it has disappeared for a considerable time, the *Lepra* sometimes returns, but in a slighter degree, and in such cases I have found it presently yield to the same remedy. Moderate doses of calomel become necessary for those who are costive, while they take the solution: but if it produce disorder of the bowels, the fourth of a grain of opium should be given with it twice or thrice a day. When the complaint is attended with a troublesome itching, lotions prepared by dissolving muriate of quicksilver in rose water, or in lime-water, generally afford relief.

“In the *Prurigo senilis*, or *Herpes senilis*, washing the skin every night and morning with warm water, and a strict attention to diet, will greatly assist the medicine.”

Several other remedies are mentioned by authors, of which it may be proper to take some notice.

Black and white hellebore were much employed by the ancients in *Lepra*, *Elephantiasis*, and other diseases of the skin. They chiefly made use of the roots of the black hellebore, in combination with water, wine, or honey. The modes of preparing it, the proper doses, and other particulars are related at large by *Oribasius*, *Medicin. Collect. lib. vii. & lib. viii. cap. 3, 6.* This remedy has been given, in general, as a purgative, and it acts with great violence. I have occasionally prescrib-

ed, in cases of *Lepra*, and other scaly diseases, the tincture of black hellebore, regulating its doses so as not to disorder the bowels, and I think it has some efficacy, but not more than the mineral remedies already mentioned.

The flesh of vipers was given in the *Elephantiasis* by Galen, and others, who likewise recommend it in the scaly *Psora*, and *Lepra*. Oribasius observes, that “ Viper’s flesh is of a drying, moderately heating, and powerfully resolving quality : its operation is exerted more especially on the skin, through which it expels recremental substances from the body : scales separate from the skin, and there is a renovation of the cuticle, which is the usual seat of the *Psora*, *Lepra*, and *Elephantiasis*.”* This is confirmed by Platerus, Turner, Sauvages and Bertrandi, and by some others, who profess to have made actual experiments on the subject. They did not employ the flesh of vipers, but the dried powder, or a decoction of it. Perhaps we shall be disposed to distrust their account, when we are further informed by them, that equal advantages accrue to the patient from living on pullets fed with viper’s flesh.†

Tincture of cantharides has been often prescribed for the *Lepra Græcorum*, as on the authority of Dr. Mead,‡

* De Virtute Simplic. lib. ii.

† *Æger prandio et cænâ comedet pullum gallinaceum sequenti modo saginatum. Viperæ viventes, abscissis capite et caudâ, pelle nudatæ, exenteratæ in frustula dissecentur, et cum hordei probè mundati manipulis duobus vel tribus, bulliant in aquâ donec hordeum rumpatur, fiatque pasta quâ pulli alantur, qui igne assi ægro comedendi sunt. De Morb. Cutan. a Medico Monspéliensi. page 304.*

‡ Med. Sacr. page 24.

who, however, recommends it only in cases of Elephantiasis, or Leprosy of the Arabians. I have prescribed this tincture in the *Lepra alphoides*, and have given it combined with Peruvian bark in cases of the *Lepra nigricans*, but without any manifest advantage. Dr. Falconer says, "The tincture of cantharides has not answered to the character given of it. I have several times tried it without being able to perceive any effect worth remarking from it : it did not appear even to show any effect as a diuretic."

Cucumbers have been thought advantageous in *Lepra* and other scaly diseases of the skin. Heurnius (*Comment. in Hip. Aph. 20. l. iii.*) has endeavoured to demonstrate their utility by an account of a particular case. *Cuidam nobili viro, huic morbo implicito, secui venam, præparavi, purgavi, tandem helleboro albo usus; topica præclara admovi; theriacâ pugnavi...omnia frustrâ. Tandem usu cucumerum evasit. His conditis etiam utebatur toto anno.* Dr. Willis (*de Medicam. operat. sect. iii. cap. 7.*) confirms the above testimony, and advises the use of cucumbers preserved in vinegar: he also recommends a watery infusion of them when cut in slices, or a decoction of the leaves and fruit, for a diet drink.

Another medicine, said to be of great efficacy in this disease, is mentioned by Marcellus the Roman physician, *de Medicamentis, cap. 19.* *Herba quæ Britannice dicitur cibo vel potui sumpta, intrâ diem sextum Lepræ molestiam tollit.* The plant described, under this title, by Dioscorides, and by some of the Greek physicians,* was probably not the same as that with which the Ro-

* In Dioscorides, Apuleius, Neophytus, &c. the Britannica is confounded with *Betonica*. See Dodonæi *Herbar. Magn.*

man troops, under Germanicus, became acquainted during their encampment in Fricsland, the natives having taught them its use in the Stomacace, and Scelotyrbe, or Scurvy*. Notwithstanding the laborious investigations of Muntingius, and his endeavour to reconcile the Greek and Roman writers on the subject, it seems clear that the Britannica of Pliny and Marcellus was one of the species of Cochlearia. On this point the observations of Lobel deserve attention. Qui Frisiam cochleariam antiquorum Britannicam profitentur, commodiùs suam opinionem tuerentur si scirent in Anglia ad amœnissimi Thamesis fluenta, quàm Londinum præterlapsus est, etiamque in Bristoiæ sinu occidui oceani, quò allidunt per stata incrementa undæ, aliam esse congenerem et similem illi, flore, semine et sapore, sed foliis non æque umbilicatis, aut cochleatis, potius atriplicem, aut Lapathium effigiantibus, unciam latis, inque sesquiunciæ aut unciarum duarum longitudinem porrectis, crassis densis, et succulentis; gustu et colore alterius Cochleariæ; radice majore, ut qualibet sui parte, minùs tamen astringente, nec commodâ ad ea quæ suæ Britannicæ Dioscorides attribuit: tametsi, æque ut superior, laudatâ ad Stomacacen, et Scorbutum, quibus vehementer afflictos ægros aliquot hujus ope jutos vidimus superiore vere.

Lobelii Stirp. Adversar nova. P. 121. De Cochleariâ Anglicâ.

Dr. Crichton, formerly physician to the Westminster Hospital, now at St. Petersburgh, has favoured me

* Frisii, quàm castra erant, nostris demonstravere illam. Plin. Nat. Hist. lib. xxv. cap. 3. Britannica ex oceani insulis extrâ terram positâ portatur. lib. xxvi. cap. 1. Pliny, who describes this plant as having black leaves, and a black root, had perhaps only seen it when dried, and long kept.

with the following particulars respecting the use of *Solanum Dulcamara*, or Bittersweet, in the cure of *Lepra*.

“It is now upwards of seven years since I first tried the *Dulcamara* for the cure of obstinate diseases of the skin. I was induced to do so by the perusal of a short, but well written practical essay on the subject, by the learned Professor of Botany in the university of Goettingen, Dr. Althoff. This gentleman relates ten cases of Cutaneous eruption, which he describes as analogous to the Itch, but not the true Itch, all of which were cured by this remedy. He confesses, at the same time, that it failed in a number of others. Professor Althof, and the other German physicians who employ it, seem to have taken their hint concerning it from the essay of Mons. Carrere on the *Dulcamara*.

“Out of twenty-three cases of *Lepra Græcorum*, in which I have tried it, two only have resisted its action. All the others were completely cured. That I was not mistaken in the nature of the complaint you yourself can testify, as you have seen two or three of the cases alluded to, and in all the others the appearance of the disease was similar.

“The true *Lepra* is the only disorder of the skin, in which I would venture to assert the *Dulcamara* will generally effect a cure. Next to *Lepra*, it appears to me to do most good in *Psoriasis* and *Pityriasis*. As to *Rheumatism*, for which it has been so highly praised by Boerhaave, Sauvage, Carrere, Werlhof, and others, I have not found it at all equal to the remedies which are generally employed in this country for the removal of that painful and troublesome disorder. I exhibit the *Dulcamara* as follows :

“R. Stipitum Dulcamaræ unciam j.

“Aquæ puræ libram iss : decoque ad libram j ; et liquorem frige factum cola.

“Of this decoction I generally desire the patient to take two ounces, at first, every morning, noon and evening ; but I afterwards increase the quantity until the pint is consumed every day. At the same time I order the patient to wash the skin with a stronger decoction, which greatly accelerates the cure. The remedy seldom begins to exhibit any evident good effects for the first eight days.

“It ought to be remarked that the Dulcamara, when first exhibited to very delicate people, and hysterical women, often produces syncope and slight palpitation of the heart, now and then nausea and giddiness ; these symptoms always show that the quantity exhibited is too large. If a smaller dose be given, and any aromatic tincture be added to it, such as the compound spirit of lavender, it ceases to produce such uneasy symptoms.”

None of the remedies above mentioned are particularly serviceable in the *Lepra nigricans*. This form of the disease requires, in the first place, a regular, and nutritive plan of diet, with moderate exercise : it may be afterwards wholly removed by the use of bark, and the mineral acids, sea-bathing, &c.

ORDER II.

II. PSORIASIS ; DRY OR SCALY TETTER.

TWO very different diseases are described under the title of Psora, by the Greek physicians ; the one pustular at its commencement, but terminating in superficial ulcerations, and under some forms contagious, termed *ψωρα έλκωδης*,* ulcerated Psora ; the other scaly or crustose, denominated simply Psora, or sometimes rough Psora, Leprous Psora,† &c. As the latter is never contagious, and does not agree, either in its appearances or tendency, with the ulcerated Psora, it cannot, with strict propriety, be joined with that, or any other pustular complaint.‡ I shall therefore refer the Psora *έλκωδης* to a subsequent Order of Cutaneous Diseases.§

* Galen. Introductio. et de Diff. Puls. iv. 1. Aristot. Problem. sect. 7. Aet. Tetrab. iv. i. 126 and 127. Oribas. Synops. vii. 8. Paul. Æg. iv. 2. Actuar. Meth. Med. i. 23. Jul. Polluc. Onomasticon. cap. 25. sec. 3.

† *Ψωρα τραχύτης, λιπρωδης, τυλωμενη*, &c. See Aet. iv. i. 130. 134. et 137. Galen. de Med. tac. lib. xi. et Comment. in lib. vi. Epidem. et Aph. 77. lib. iv. &c.

‡ See Pringie on the diseases of the Army, Part iii. chap. 8.

§ GEN. Impetigo.

I think it also necessary, in the present series of them, to express the scaly Psora by a distinctive appellation: for this purpose, the term *PSORIASIS*,* which the Greek writers themselves employ, seems in all respects suitable. The disease to be thus entitled is characterized by a roughness and scaliness of the surface, sometimes continuous, sometimes in separate patches, of various sizes, but of an irregular figure, and for the most part accompanied with rhagades, or fissures in the skin. From the *Lepra* it may be distinguished not only by the different form, and distribution of the patches, as formerly stated from the Greek writers, but also by its cessation and recurrence at certain seasons of the year, and by the disorder of the constitution with which it is usually attended.

Celsus has given a brief description of the *Psoriasis*, which he considers as a species of *Impetigo*. “*Alterum genus est pejus, et simile Papulæ ferè, sed asperius, rubicundiusque, figuras varias habens: squamulæ ex summa cute decidunt; rosio major est; celerius, et latius procedit, certioribusque, quam prior, temporibus, et fit, et desinit: Rubra cognominatur.*” *De Medicinâ, lib. v. cap. 28.*

The *Psoriasis* is ranked by the Arabians with the *Li-*

* *Ψωριασις* is more especially applied to express a scaliness of the eye-lids and corners of the eyes, also a rough and scaly state of the scrotum, attended with great itching, and occasionally with excoriation. Galen *de Oculis, cap. 9. et Definit. Med.* The bladder was supposed by the ancients to be affected internally with *Lepra* or *Psoriasis*, when the urine was thin and acrimonious, and deposited a flocculous, or branny sediment: see *Hippoc. Epid. v. sect. 7. & de Natur. Hom. sect. 3. Alex. Trallian. lib. ix cap. 7, &c.* Since the term *Psoriasis*, in all the above instances, implies an appearance of scales, it may be allowable to express other forms of the scaly *Psora* under the same generic title.

chen, and *Lepra Græcorum*, under the title of *Alkoubā*. It is described by Serapion, as “an eruption of *Bothor* (*Papulæ*) in various figures, attended with roughness, itching, chops, &c. and with an appearance of branny scales.” According to Haly Abbas, “*Est asperitas quæ in superficie accidit cutis, et ad nigredinem declinat, aliquando ad ruborem.*”*

Since the year 1500, this complaint has been described by some medical writers under the denomination of *Psora*, or *Scabies sicca*,† by others under that of *Impetigo*.‡

It would be possible to comprize in a connected detail all the forms of *Psoriasis*,§ but as the appearances it assumes are very different, some advantage may arise from

* *Theorice*, lib. viii. capit. 16. In the next sentence he gives the diagnostics of *Lepra*, established by the Greek physicians; see page 114. *Petiginis autem chronicæ et diurnæ in quâ non exco-riatur cutis, signa sunt, quod in profundo est membri, et squamulæ ab eâ tolluntur rotundæ quales piscium videmus squamas.* Compare *Serapion Breviar. Tr. v. cap. 4.* and *Avicenna*.

† *Mercurialis*, *Hafenreffer*, *Platerus*, *Etmuller*, and *Hoffmann*. The last author likewise terms it *Scabies, ferina, Impetigo*, and *Psora leprosa*.

‡ *Manardus*, *Fernelius*, *Amatus*, *Sennertus*, *Willis*, *Lommius*, *Harduinus*, *Heurnius*, *Plenck*, &c.

§ *Dr. Willis* has endeavoured to execute this plan in his treatise *de Medicam. Operat. c. vii. s. 3.* He observes, in his preface to it, *Quum affectûs hujus appellationes variè confundantur, et forsan quoad naturam et rationem ejus formalem in diversis regionibus diversimodè habuerit, neque prorsùs idem sit in nostro hoc seculo ac fuit olim; idcirco non ex libris, sed ex propriâ ægrotantium observatione, morbum hunc describere satagam.*

It is, however, necessary to remark, that the *Lepra vulgaris* and *aphoides* are included in *Willis's* description.

distinguishing them by different titles : I shall therefore describe the most striking varieties which I have remarked, under the titles Psoriasis guttata, Psoriasis diffusa, Psoriasis gyrata, Psoriasis palmaria, Psoriasis labialis, Psoriasis ophthalmica, Psoriasis præputii, Psoriasis scrotalis, Psoriasis unguium, Psoriasis infantilis, Psoriasis inveterata. A general view of the causes of this disease, and of the remedies for it, will be sufficient.

I begin with the *PSORIASIS GUTTATA*, as most nearly allied to the *Lepra vulgaris* and *Alphoides*.

This complaint appears in small, distinct, but irregular patches of laminated scales, with little or no inflammation round them. The patches very seldom extend to the size of a sixpence : they have not an elevated border, nor the oval or circular* form, by which all the varieties of *Lepra* are distinguished : but their circumference is sometimes angular, and sometimes goes into small serpentine processes. The scale formed upon each of them is thin, and may be easily detached, leaving a red, shining surface. The patches are often distributed over the greatest part of the body, but more particularly on the back part of the neck, the breast, arms, loins, thighs and legs. They appear also on the face, where they are red, and more rough than the adjoining cuticle, but not covered with scales.

The *Psoriasis guttata* often appears on children, in a sudden eruption, attended with a slight disorder of the constitution, and spreads over the body within two or three days. In adults it commences with a few scaly patches on the extremities, proceeds very gradually, and

* Verum non semper sunt rotundæ, vel formæ regularis, sed varii formes existunt. WILLIS.

has a longer duration than in children. Its first occurrence is usually in the spring season, after violent pains in the head, stomach, and limbs : during the summer it disappears spontaneously, or may be soon removed by proper applications ; but it is apt to return again early in the ensuing spring, and so continues for several successive years. When the scales have been removed, and the disease is about to go off, the small patches have a shining appearance, and they retain a dark red, intermixed with somewhat of a bluish colour, for many days, or even weeks, before the skin is restored to its usual state.

In the Venereal disease, an eruption sometimes appears, which very much resembles the Psoriasis guttata, differing from it only by a slighter degree of scaliness, and by the livid red, or dark rose colour of the patches. The patches vary in their extent from the size of a silver penny, to that of the section of a pea, but they are not exactly circular. They rise at first very little, if at all, above the cuticle : as soon, however, as the scales appear on them they become sensibly elevated, and sometimes the edge or circumference of the patch is higher than the little scales in its centre. This eruption is usually seen upon the forehead, and breast, between the shoulders, or in the inside of the fore-arms, in the groins, about the inside of the thighs, and upon the skin covering the lower part of the abdomen.*

When mercury is administered, the small scales are soon detached, and fall off, but the dark colour still remains, though it becomes gradually fainter under the continued influence of the medicine ; and some vestiges of the cutaneous affection are distinguishable

* J. Pearson.

for two or three weeks after all the venereal symptoms have been removed. For a much longer period, a slight depression, or cicatrix, of a white colour, will be seen at the points which constituted the centres of the patches.

This kind of eruption exhibits a whitish appearance on the skin of the Negro; and when desquamation has taken place, it leaves the surface of a darker colour than that of the surrounding parts: this blackness disappears more slowly than the copper colour from the skin of an European affected with the disease.

The Syphilitic Psoriasis guttata is attended with, or is soon followed by, an ulceration of the throat. It appears about six or eight weeks after chancres have been healed by too short a course of mercury: a similar appearance takes place at nearly the same period in some cases, where no local symptoms had been noticed. When a venereal sore is in a discharging state, this eruption, or other secondary symptoms, often appear much later than the period above mentioned. They may also be kept back for three months, or longer, by an inefficient application of mercury. If no medicines be employed, the syphilitic form of the Psoriasis guttata will proceed during several months, the number of the spots increasing, and their bulk being somewhat enlarged, without any other material alteration.

2. The PSORIASIS DIFFUSA spreads into large patches, irregularly circumscribed, reddish, rough, and choppy, with scales interspersed.* It commences, in general, with numerous minute asperities, or elevations of the

* Cognoscitur morbus, quòd cutis dura, sicca, aspera, et quasi squamosa redditur: adest pruritus; et malum indies latius serpit, et ab exiguo initio sese latè diffundit. Sennert. Med. Pract. v. 1. 30. De Impetigine. Compare Plater, tom. ii, cap. 17.

cuticle more perceptible by the touch, than by sight. Upon these small, distinct scales are soon formed, which adhere by a dark central point, while their edges may be seen white and detached. In the course of two or three weeks all the intervening cuticle becomes rough, and choppy, appears red, and raised, and wrinkled, the lines of the skin sinking into deep furrows. The scales which form among them are often slight, and repeatedly exfoliate. Sometimes, without any previous eruption of *Papulæ*, a large portion of the skin becomes dry, harsh, cracked, reddish, and scaly, as above described. In many cases the disorder commences with separate patches, of an uncertain form and size, some of them being small, like those in the *Psoriasis guttata*, some much larger. The patches gradually expand, till they become confluent, and nearly cover the part or limb affected. In other instances, both the *Psoriasis guttata* and *diffusa* occur, as a sequel of the *Lichen*, especially after frequent returns of that disorder.

The parts most affected by the *Psoriasis diffusa* are the cheeks, chin, upper eye-lids, and corners of the eyes, the temples, the external ear, the neck, the fleshy parts of the lower extremities, and the fore-arm, from the elbow to the back of the hand, along the supinator muscle of the radius: The fingers are sometimes nearly surrounded with a loose, scaly incrustation, and the nails crack and exfoliate superficially. The scaly patches likewise appear, though less frequently, on the forehead and scalp, on the shoulders, back, and loins, on the abdomen, and instep. This disease occasionally extends to all the parts above-mentioned at the same time; but in general it affects them successively, leaving one place free, and appearing in others, sometimes again returning to its first situation.

The Psoriasis diffusa is attended with a sensation of heat, and with a very troublesome itching, especially at night : it exhibits small, slight, distinct scales, having less disposition than the Lepra to form thick crusts. The chops or fissures in the skin, which usually make a part of this complaint, are very sore and painful, but seldom discharge any fluid. When the scales are removed by frequent washing, or by the application of ointments, the surface, though raised or uneven, appears smooth and shining, and the deep furrows of the cuticle are lined by a slight scaliness. Should any portion of the diseased surface be forcibly excoriated, there issues out a thin lymph, mixed with some drops of blood,* which slightly stains and stiffens the linen, but soon concretes into a thin dry scab : this is again succeeded by a white scaliness, gradually increasing, and spreading in various directions. As the eruption declines, the roughness, chops, scales, &c. disappear, and a new cuticle is formed, at first red, dry, and shrivelled, but which, in two or three weeks, acquires the proper texture. The whole duration of the complaint is from one to four months, and in some cases much longer.

Symptoms of general disorder attend the first appearance of the Psoriasis diffusa, as head-ache, inappetence, pain or sickness at stomach, pains, cramps and coldness of the extremities, with a sense of universal languor, and debility. During the progress of the eruption, these symptoms abate, or wholly disappear ; but they precede almost every return of it. The returns usually take place in autumn, or early in the spring ; but the complaint differs much in different years, both as to its extent, and to the violence of the

* See Plenck, Doctr. de Morb. Cutan. Page 87.

preceding symptoms. The eruption is, indeed, often confined to a single scaly patch, red, itching, and chapped, of a moderate size, but irregularly circumscribed. This solitary patch is sometimes situated on the temple, or upper part of the cheek, frequently on the breast, the calf of the leg, about the wrist, or within and a little below the elbow joint; but especially at the lower part of the thigh, behind. In any of these situations it continues several months, without much observable alteration. Some persons are constantly affected with the Psoriasis diffusa for a series of years, but in such cases there is usually an aggravation or extension of it, at the periods above mentioned.

The complaint denominated the BAKERS' ITCH, which often affects bread-bakers, is the Psoriasis diffusa on the back of the hand. It commences with one or two small, rough, scaly patches, and finally extends from the knuckles to the wrist. The rhagades, or chops and fissures of the skin, are numerous about the knuckles, and ball of the thumb, and where the back of the hand joins the wrist. They are often highly inflamed, and painful, but there is no discharge of fluid from them.

The back of the hand is a little raised or tumefied, and, at an advanced period of the disorder, it exhibits a reddish, glossy surface, without crusts, or numerous scales. The deep furrows of the cuticle are, however, for the most part whitened by a slight sealiness. This complaint is not general among bakers: that it is merely aggravated by their business, and that it only affects those who are otherwise disposed to it, may be concluded from the following circumstances. 1. It disappears about midsummer, and returns in the cold weather, at the beginning of the year. 2. Persons constantly engaged in the business, after having been once affected with the eruption,

sometimes enjoy a respite from it for three or four years.
 3. When the business is discontinued the complaint does not immediately cease.

The SUGAR BAKERS' or GROCERS' ITCH has some affinity with the Bakers' Itch or Tetter; but, being usually a pustular disease at its commencement, it properly belongs to another genus.

Washerwomen, probably from the irritation of soap, are sometimes affected with a similar scaly disease on the hands and arms, or on the face and neck, which, in particular constitutions, proves very troublesome, and of long duration. In some instances, they have a quadrangular figure, being formed by deep cuticular furrows intersecting each other nearly at right angles.

The Venereal disease seldom assumes the form of the Psoriasis diffusa. Such an appearance does, however, sometimes occur, but it is perhaps constituted by an enlargement or confluence of the patches in the syphilitic form of the Lepra, or Psoriasis guttata, when their progress has not been interrupted by a course of medicine.

3. The PSORIASIS CYRATA is distributed in narrow patches or stripes, variously figured: some of them are nearly longitudinal, some circular, or semicircular, with vermiform appendages: some are tortuous, or serpentine, others are shaped like earth-worms or leeches; the furrows of the cuticle, being deeper than usual, make the resemblance more striking, by giving to them an annulated appearance. There is a separation of slight scales from the diseased surface, but no thick incrustations are formed. The arrangement of these patches is singular: I have seen a large circular one situated on each breast, above the papilla; and two or three others of a serpentine form, in corresponding situations

along the sides of the chest. The back is often variegated in like manner, with convoluted tetterers similarly placed on each side of the spine. They likewise appear in some cases on the arms and thighs, intersecting each other in various directions. A slighter kind of this complaint affects delicate young women and children in small scaly circles or rings, little discoloured: they appear on the cheeks, neck, or upper part of the breast, and are mostly confounded with the herpetic or pustular Ring-worm.

The *Psoriasis gyrata* has intermissions like the *Psoriasis diffusa*; it also exhibits, in some cases, diffuse scaly patches on the face, scalp, or extremities, while the trunk of the body is chequered with the singular figures above described.

There is an appearance of the venereal disease, somewhat resembling that of the *Psoriasis gyrata*, in which several of the Tetterers have the form of a crescent, a horse-shoe, or of the figure 8; others are in rings, either oval, or circular, the central part being neither scaly, nor discoloured. Small scales separate repeatedly from the rings, which, in their denuded state, exhibit the dark-red ground usually observed in venereal eruptions. The rings, crescents, &c. constituting this disorder, are sometimes, at their first appearance, composed of small dark-coloured Papulæ, resembling those described under the article *Lichen syphiliticus*: sometimes the scaliness is preceded by an efflorescence consisting of patches, diffused in the same kind of figures over the face, limbs, and different parts of the body. This rash continues more or less vivid, for many weeks, or even months, before desquamation commences: it is always attended with febrile symptoms, head-ache, emaciation, and violent pains of the limbs.

When this form of the venereal disease has subsisted for a long time without any check from medicines, the circles, &c. become considerably enlarged, and the scaly rings are at length formed into superficial ulcerations, comprising a circular area of sound skin, two inches or more in diameter, on which the ulcerations do not encroach, though they frequently spread outwards to the breadth of half an inch or an inch. These ulcerated rings appear between the shoulders, upon the back, and sometimes on the skin covering the abdomen; more seldom, I think, on the arms and legs.

4. *PSORIASIS PALMARIA*. This very obstinate species of Tetter is nearly confined to the palm of the hand. It commences with a small, harsh, or scaly patch, which gradually spreads over the whole palm, and sometimes appears in a slighter degree on the inside of the fingers, and wrist. The surface feels rough, from the detached and raised edges of the scaly laminæ: its colour often changes to brown or black, as if dirty, yet the most diligent washing produces no favourable effect. The cuticular furrows are deep, and cleft at the bottom longitudinally in various places, so as to bleed on stretching the fingers: there is usually a sensation of heat, pain, and stiffness in the motions of the hand. The complaint is most troublesome in winter or spring; in summer and autumn it sometimes disappears, leaving a soft, dark red cuticle; but many persons have it for a series of years, with only very slight remissions. Every return or aggravation of it is preceded by an increase of heat, and dryness, with intolerable itching.

Shoemakers are subject to this complaint, from the irritation of the wax they so constantly employ. In braziers, tinmen, silversmiths, &c. it seems to be pro-

duced by handling cold metals. A long predisposition to it, from a weak, languid, hectic state of the constitution, may give effect to different occasional causes. I have observed it in women after lying in : in some persons it alternates with arthritic complaints.

During the Psoriasis palmaria, a roughness and scalliness, with thickening of the skin, often takes place on the soles of the feet ; but rhagades, or fissures, are seldom formed there, because the feet are constantly kept warm and covered.

We often observe in Syphilis, rhagades or fissures, and indurated patches within the palm of the hand, somewhat resembling the Psoriasis palmaria. The venereal patches are, however, distinct, white, and elevated, having nearly the consistence of a soft corn ; and from the rhagades there is a slight discharge, of an offensive smell. The patches appear without rhagades on the soles of the feet ; but the toes and fingers are not affected in venereal cases. When the disease yields to the operation of mercury, the indurated portions of cuticle separate, and a new smooth cuticle is formed underneath.

5. PSORIASIS LABIALIS. The Psoriasis sometimes affects the prolabium, without appearing on any other part of the body. Its characteristics are, scalliness intermixed with chops, and fissures of the skin. The scales are of a considerable magnitude, so that their edges are often loose, while the central points are attached. A new cuticle gradually forms beneath the scales, but it is not durable ; in the course of a few hours it becomes dry, shrivelled, and broken, and, while it exfoliates, gives way to another layer of tender cuticle, which soon in like manner perishes. These appearances should be distinguished from the slight chops and roughness of the lips,

which are produced by very cold or frosty weather, and which are easily removed. The Psoriasis labialis may be a little aggravated by frost, or sharp winds, yet it receives no material alleviation in warm weather: it is not indeed confined within any certain limit, or period of duration, but continues, in some cases, through all the seasons. The under lip always suffers more than the upper; and the disease especially affects persons whose lips are full and prominent. In a man who had had it for thirty years, I observed that the gums, and inside of the upper lip, were considerably corroded, and that his arms were covered with a thick incrustation.

6. PSORIASIS OPHTHALMICA. When the Psoriasis is diffused over the face it frequently occasions an itching, and inflammation of the eye-lids, with a watery discharge from the eyes. I apply the title Psoriasis ophthalmica to cases, in which these symptoms are violent, and long continued, without an eruption on other parts of the body. The disease begins about the external canthi, or angles of the eyes, producing a bright redness of the skin, with a smooth, shining, and somewhat moist surface. The edges of the eye-lids near the canthi become thickened and rigid; the inner surface of the eye-lids appears redder than usual, but the redness does not extend to that portion of the tunica conjunctiva, which covers the anterior part of the globe of the eye. I have seen, in many venereal cases, a complaint resembling the Psoriasis ophthalmica: it was, however, always attended with syphilitic eruptions on the face, or other parts. Authors have not distinguished it from the usual venereal lippitudo, affecting the ball of the eye.

The term Psoriasis ophthalmica, as applied above, is not precisely synonymous with Psorophthalmia, under

which title ancient authors include ulcerations of the tarsi and angles of the eye, and perhaps the strumous Ophthalmia.*

7. The *PSORIASIS PRÆPUTII* often accompanies the *Psoriasis palmaria*: It is characterised by a scaliness, with painful fissures, and thickening of the præputium. These symptoms, being usually attended with a phymosis, render connubial intercourse difficult, or even impracticable. In some cases, both internal medicines, and external applications, disappoint our expectation, and the patient can only be relieved by circumcision. This complaint should be carefully distinguished from the Venereal Phymosis, in which scales and fissures of the skin do not occur.

8. *PSORIASIS SCROTALIS*. The skin of the scrotum may be affected in the *Psoriasis diffusa* like other parts of the surface of the body; but sometimes a roughness and scaliness of the scrotum appears as an independent complaint, with much heat, itching, tension, and redness. These symptoms are succeeded by a hard, thickened, brittle texture of the skin, and by painful chops, or excoriations,† which are not easily healed. The itching

* Galen (*De Oculis*, cap. 9.) divides the *Psora* of the eyes into four species, *Psorophthalmia*, *Trachoma*, *Sycosis*, *Tylosis*. In the *Defin. Med.* he says, *Ψωρα εἰς δριμυτάκι ῥευματος γιγνομένη αναξρωσις τερσων, ἢ κανθων, μετὰ κνησμοῦ.*

Paulus *Ægeneta* (iii. 2.) and *Actuarius* (ii. 7.) define *Psorophthalmia*, “an itching *Psoriasis* of the eyelids;” to which *Aetius* adds, that it is attended with redness and ulceration at the angles of the eye, with inflammation of the eyelids, and with a discharge of salt tears. *Tetrab.* ii. iii. 66.

† *Aetius* (iv. ii. 20.) and *Galen* (*Defin. Med.*) say, that the *Psoriasis scrotalis* is sometimes attended with ulceration. *Ψωρῶσις εἰς σκληρότης τῶ οσχέου, μετὰ ἐπιπέταμενῶ κνησμοῦ, εσθ' ἕως δὲ μεθ' ἐλκώσεως.*

and irritation are much increased by changes of temperature, especially on undressing or getting into bed. This complaint is most severe in autumn or in spring, and usually disappears in summer, when the weather is settled. It is often produced under the same circumstances as the Prurigo scroti, of which it appears in some cases to be the sequel. A species of the Psoriasis scrotalis likewise occurs in the Lues venerea, but does not merit particular attention, being always combined with other secondary symptoms of the disease.

9. The PSORIASIS UNGUIUM sometimes occurs alone, but it is usually connected with scaly patches on the arms, hands, &c. In some cases, the nails from the middle appear brown or yellowish; they bend upwards, and are ragged at the ends, and rough on the surface. In other cases, they are thickened, deeply indented, and bent downwards over the ends of the fingers.

10. PSORIASIS INFANTILIS. Infants between the ages of two months and two years are occasionally affected with the Dry Tetter. Irregular, scaly patches, of various sizes, appear on the cheeks, chin, breast, back, nates, and thighs: they are sometimes red, and a little rough or elevated, sometimes excoriated, then again covered with a thin incrustation, and lastly intersected by chops or fissures. The general appearances do not much differ from those of the Psoriasis diffusa; but there are several peculiarities in the Tetter of infants which require a distinct consideration:

1. It is, in some cases, succeeded by inflamed pustules, which suppurate.

2. It is attended with an obstruction, or snuffling, in the nostrils, occasioned by a morbid secretion, and by scabs formed internally.

3. When the eyelids are affected with this complaint,

the hairs of the eyebrows and the eyelashes frequently fall off.

4. The scaly patches are interspersed with smooth shining elevations of the cuticle, a little flattened at the top, and having a circular or oval base. They are sometimes reddish, sometimes of the usual colour of the skin. A slight scale is formed on some of them, but many of them undergo no alteration for a length of time. The face, back, breast, and extremities, are equally liable to be affected with this eruption. It likewise appears on the nates, and about the anus. In the last situation it frequently suppurates, and, in every respect, so much resembles venereal tubercles, that the most accurate eye can scarcely make a distinction. It is no less difficult to distinguish the general appearance of the Psoriasis infantilis from the scaly patches which occur in infants, as secondary symptoms of the Lues venerea. The latter are for the most part accompanied with a sore throat, and a peculiar hoarse sound in the child's crying, which assists those who are attentive and experienced in forming a diagnosis. Though other criteria from external appearances would, in these cases, be particularly desirable, I am sorry it is not in my power to establish such as are precise and satisfactory. I can only therefore advise practitioners, not to be hasty in judging from mere inspection, and never to decide till they are justified by collateral circumstances.

11. The *PSORIASIS INVETERATA** is characterised by an almost universal scaliness, and a harsh, dry, thickened state of the skin. It begins with a few irregular,

* This complaint was termed by the ancients Psora agria; rough and inveterate Psora, &c. See Aet. Tetrab. iv. i. 113, 126, and 130.

though distinct, patches on the extremities. Others appear afterwards on different parts, and, becoming confluent, spread at length over all the surface of the body,* except a part of the face, or sometimes the palms of the hands, and soles of the feet. The skin is red, deeply furrowed or wrinkled, stiff, and rigid, so as somewhat to impede the motion of the muscles, and consequently the flexure of the joints. The production and separation of scales is so rapid, that large quantities of them are found in the bed on which a person affected with this disease has slept. They fall off in the same proportion by day, and being confined by the linen, excite a troublesome and perpetual itching. An incrustation of the scalp is formed in the manner stated under the article *Lepra vulgaris*. The nails of the fingers and toes become convex, and are thickened at their extremities: a frequent renewal of them also takes place, the new nails soon assuming the morbid form.† The thumb and fingers are enlarged, and contracted at their articulations, or in some cases retorted. On the abdomen, the skin is very red, deeply indented, and brittle: no thick incrustation forms, but the scales appear thin and semitransparent, peeling off from time to time in large flakes. Painful excoriations are occasioned by the pressure of some parts of the clothing, or

* *Affectus, nisi per medicinam cohibeatur, in pluribus usque locis ebulliens, & latius ubique serpens, tandem haud solùm membra integra sed et totum corpus vitiligine leprosa obducit.* Willis de Medic. Operat. page 289, 290. Compare Schenckii Obs. Med. lib. v. de Lichene, et Furfuribus; and Riverius, de Impetigine totius cutis, Obs. Communicat. 39. Hoffman. Supplem. P. I. page 131, 2. Ephem. & Act. Nat. Cur. Ann. 2—8.

† Oribas. Synops. lib. iii. & de Virt. Simpl. lib. ii. Aet. Tetrab. iv. ii. 79.

by the attrition of contiguous surfaces, as of the nates, groin, thighs, scrotum, &c. At an advanced period of the disease, the cuticle is often more extensively destroyed. I have seen all the extremities, the back, and nates, excoriated, at the same time, with a very profuse discharge of thin lymph from the surface.* In the course of a few weeks, however, that discharge usually abates, when a new cuticle is formed, of a dry, harsh, or almost horny texture, and which from time to time separates in large pieces. The same circumstances are frequently repeated, and the disease proceeds without any considerable remission † for an indeterminate length of time, especially in old people. Young persons are not so liable to it; yet I have seen it in some under thirty years of age, and in others before the time of puberty, ‡ arising perhaps from a strong hereditary disposition.

The Psoriasis diffusa, after its annual returns have been frequently repeated, becomes, in many instances, permanent, and inveterate, § like the disease above described. The obstinate complaint entitled Prurigo senilis also terminates occasionally in the Psoriasis inveterata. A particular case of this kind is detailed by Hippocrates, Epidem. lib. v. ||.

* Compare Hoffman. tom. iii. page 436.

† In aliis verò plerisque hic morbus continuus nullas inducias concedit; imò nullam remissionem vel mediocritatem habet. Willis, page 290.

‡ Schenckii Obs. Med. lib. v. and Act. Nat. Cur. tom. i. obs. 3.

§ This is one instance of the transition of Psora into Lepra, mentioned by the Greek physicians, who did not always distinguish Lepra from the Psoriasis inveterata.

|| Compare Hoffman. tom. iii. page 490, &c.

The opinion given by Mercurialis,* Sennertus, and others, that the Dry or Scaly Tetter is communicable by contagion, has been contradicted by Dr. Willis. "Impetiginis infectio tam rara, aut nulla est ut miasma a viro in uxorem, aut ab hâc in illum, assiduè concumbentibus, minimè transeat." I have, however, observed that the Psoriasis guttata, and the slight scaly rings, before mentioned, affect several children at the same time, in large families, and in schools, especially those who sleep together. There can be no doubt of the truth of the observation made by Hoffmann, that a disposition to the disease is transmitted hereditarily. "Scabiem, præsertim siccam, in genitos propagari observatione non unâ constat." Supplem. ii. p. i. De affect. hæreditar. sec. 6. The Psoriasis most frequently occurs in persons who may be said to be of a mixed temperament, having some of the characteristics of the sanguineous combined with other appearances belonging to the melancholic temperament. In such persons, the skin is in general dry, the pulse feeble and languid, or irregular. Women are much more liable than men to the Scaly Tetter, and particularly those, of the habit above mentioned, who are weak and irritable. The complaint often affects them soon after lying in. It also frequently takes place in young females affected with the Chlorosis, and proves very obstinate. On the whole, I may venture to say that this disease, when of considerable extent, is always connected with some disorder of the constitution.†

* Proprium est Scabiei humidæ ut contagio acquiratur : et quamquam Scabies sicca possit contagio capi, id tamen non adeò frequens est. De Morb. Cutan. lib. ii. cap. 4. Compare Sennert. de Med. Pract. v. i. 28.

† See Roncalli Hist. Morb. p. 33.

Galen has remarked that several of the scaly diseases of the skin originate from the Gout and Rheumatism. * In conformity to this remark, I have seen the four first species of Psoriasis and the Psoriasis inveterata sometimes connected with arthritic complaints, but more frequently alternating with them.

Dr. Willis,† who has given an elaborate history of the Psoriasis and Lepra, conjointly, assigns the same exciting causes for both of them ; more especially, a constant diet on dried and salted meats, on pork, or shell-fish, with the too liberal use of acid wines, bad malt liquors, &c. I formerly observed that the Lepra can seldom be referred to this mode of diet ; and I believe that the Psoriasis often originates from occasional causes, which are much slighter, or have a more immediate operation. Food of difficult digestion, too great a quantity of acid fruits, the unseasonable use of the cold bath, large draughts of cold water taken when the body has been heated by exercise, and some improper mixtures of food, as of milk and fish, are the circumstances to which patients refer the complaint, when it appears in a sudden eruption on the skin : and such causes will, I apprehend, be deemed sufficient to excite the disease in those who are predisposed to it constitutionally.

Dr. Falconer's observations on the causes of the Lepra Græcorum are more directly applicable to the present disorder. "I have been able in numerous instances to trace the cause of this disease to a circumstance so general, that I doubt not it is, if the truth

* Πρι δε το δερμα και τοπωσι καθ' ὅλην τὴν σωματιος, Λιπρα, Ψωρα, Αλφος λευκος, Αλφος μελας, Λιχην ἀπλος, Ασιχην αγριος, Δρακοιγιασις, Ακροχορδονες, Θυμοι, Μυρμηκια, Ηλοι, Παροι—οι μιν εκ Ποδαγρας κ̅ Αρθριτιδος, οι δε και καθ' ἑαυτας. Galen. Isagoge. sect. 17.

† Willis, de Medicamentorum operationibus, sect. iii. cap. 7.

could be always discovered, universal; I mean the sudden application of cold to the body, when in a heated state. This commonly happens from drinking some cold liquor; but this is not peculiarly necessary to produce the disease, as I have seen it arise from the external application of cold. It matters not in what manner the body be heated, whether by heat of fires, rooms, or by exercise, as cold produces the same effects in all the above cases. Hence such persons are especially liable to it, whose ways of life subject them to such vicissitudes, as smiths and other trades, that oblige those who work at them to be near fires, or in heated rooms; and such as use violent exercise or labour, as huntsmen, porters, and such like, who are too apt to indulge their appetites without caution. Women, in situations where they are exposed to the same sudden changes of temperature, are liable to the same diseases, as cooks, laundresses, &c. Several of them I have seen in Bath Hospital, affected as above described. It is proper to observe, that the danger is much less in those who take cold liquors at the time they are heated with exercise or labour, if they continue to pursue their labour for some time after drinking, than if they leave off their work immediately. Those cases that I have seen were of persons who exposed themselves, when at rest, to the effects of cold. The same observation holds equally true of cold externally applied. The quality of the liquor drank is, I believe, of less importance than its temperature. I have known the disease produced by the drinking of water, milk, and beer; and I doubt not many other liquors, if cold, would do the same." Page 372.

The season of the year, or temperature of the air, materially contributes towards the production of this disease. It generally occurs, according to my own obser-

vation, in the spring, when the changes of the state of the atmosphere are most frequent and severe; but on this point medical authors speak with some diversity of sentiment.*

I have had occasion to witness the truth of Dr. Falconer's observations on the consequences which arise in the Scaly Tetter, from a sudden retrocession produced by cold, or by improper applications to the skin. "It sometimes happens that a sudden application of cold, which originally produces the scaly eruption, will likewise cause it to strike in: and whenever this occurs, it produces great disturbance in the system. Vomiting is a symptom, that generally, if not always, precedes the eruption at the commencement of the disease: and when the eruption is struck in, this symptom again makes its appearance. A girl about sixteen years of age, having at the time a leprous eruption upon her, drank, when violently heated, a large draught of cold water. Presently afterward the eruption suddenly disappeared, on which she was seized with a perpetual disposition to vomiting, and rejected every thing she swallowed in a few minutes. Her health, in other respects, was not much affected, save what the fatigue of straining, and loss of strength by the want of sufficient sustenance, produced. A variety

* Hippocrates enumerates *Lepros*, and *Psora*, among the spring diseases; *Aph.* 20, lib. iii; but *Avicenna* observes, "*Scias quod Scabies excorticata, et Impetigines multiplicantur in autumno.*" *iv.* vii. 3, 6.

Imprimis verno tempore accidit, nonnunquam etiam hyeme. *Sennert. Pract.* v. i. 30.

Porro hujusmodi eruptiones in quibusdam temporariæ, adeòque diversimodæ existunt, namque in his ferè tantùm in hyeme infestant, circà æstatem evanescentes; item e contrà in aliis quasi brumam horreant, hirundinis adventum et exitum expectare solent. *Willis, de Med. Operat.* p. 290.

of remedies were tried, both external and internal. Beside the Bath waters, both drank, and used as baths, she tried opiates, bitters, aromatics, elix. aloes, the effervescing saline draught, ipecacuanha in small doses, and a multitude of other medicines. Opiates also were externally applied to the stomach, and blisters, but all without the least effect. In about eight months afterwards the disease had taken a different turn: the vomiting ceased, but her limbs and body were almost universally convulsed, though without loss of the senses. She again used a variety of remedies for several months, without receiving any benefit." Page 350.

The Scaly Tetter is one of the most frequent Cutaneous diseases in this kingdom. Hence Dr. Willis was enabled, from his own observation, to give a fuller account of it than any other author had done. The method of treatment, which he has proposed for it, being founded on experience, requires some consideration. He recommends, in the first place, evacuants, particularly, bleeding and cathartics; and secondly, certain alteratives, as the acidulous chalybeate waters, the expressed juices of several plants, whey taken alone or impregnated with succory, fumitory, and sharp pointed dock, decoction of the woods, preparations of iron, and mercurials.

1. I have never seen a case of Psoriasis, in which bleeding, or the repetition of purgatives, were employed advantageously; and, from what has been observed respecting the predisposition to this disease, I apprehend, those remedies will be deemed generally inadmissible.

2. Of the alteratives mentioned by Dr. Willis there is not any which can be considered as specific, or as having a decided efficacy in all cases of the disease. The vegetable juices do not appear to be of any material use. Dr. Willis, coinciding with the popular idea

of an affinity between the Scaly Tetter and the Scurvy, inspires hopes of curing the former by the plants denominated antiscorbutics, of which we have an extensive list, comprehending probably several hundred different species. If the means of cure were thus numerous and easy to be obtained, we might wonder at the frequency of this disorder, and its unconquerable obstinacy in some cases, which Willis himself has acknowledged.*

3. Decoctions of guaiacum wood, willow, or sarsaparilla, cannot alone be depended upon for the cure of Psoriasis. They are, however, useful auxiliaries to other medicines in some stages of the Psoriasis diffusa, palmaria, and inveterata: the same may be said respecting the decoction of elm bark, sassafras, juniper tops, burdock, mezereon, &c.

4. The chalybeate waters of Great Britain, particularly those at Scarborough, Cheltenham, Nevil Holt,† and Tunbridge, have been at all times particularly commended for their utility in the Lepra, Scaly Tetter, and other Cutaneous affections.‡ Notwithstanding the specific virtues attributed by many physicians to these springs, they do not seem to be more efficacious than the sulphureous waters, whether taken internally, or applied to the skin by washing and bathing.§ I have seen some very

* Postquam radices altius egit morbus; Curatio ejus perdifficilis vel nulla est. Willis de Med. Op. s. iii. c. 7.

† Dr. Short, on Mineral Waters, vol. i. p. 177. Vol. ii. 257 & 279.

‡ Acidulæ ferratæ contra hunc morbum præscribuntur, et non raro insigniter juvant, quippè, cum cætera quævis mendicamenta incassum cessere, cum his solis Impetiginem gravem, et pene leprosam aliquoties curavi. Willis, p. 292.

§ Aquæ sulphuræ sunt bonæ Impetigini & Scabiei, si ex eis fiat balneatio. Avicenna, l. ii. Tr. ii. c. 59.

obstinate cases of *Lepra* and *Psoriasis* completely cured by the proper use of the waters of Harrogate and Croft, in York-shire. The sulphur-waters at Moffat, Shap-moor, Broughton, Keddleston, Skipton and Wigglesworth, * have likewise an established reputation in the cure of the same diseases.

5. Chalybeate medicines are perhaps occasionally useful, by removing certain states of the constitution with which the Scaly Tetter seems to be connected. Thus, when it depends on the languid circulation of the blood constituting the chlorotic habit, preparations of iron will afford certain relief.

6. Strong mercurial preparations are of no advantage in the Scaly Tetter, but eventually rather aggravate the complaint. Of this I am well assured from many experiments cautiously made : Dr. Willis has likewise acknowledged the repeated failure of mercurial inunctions, and of mercurial remedies taken internally till they excited a salivation. His observations on the subject may serve to deter others from entering upon a mode of practice so injurious to the constitution. “ *Aliis remediis nihil juvantibus, multi salivationem quasi athletam fortissimum ac tanto hosti unicè parem, commendant. Attamen prægrandi huic expectationi eventus non semper respondet : fateor enim me hoc remedium in quatuor personis Impetigne graviore, et medicamentis aliis obstinatâ, laborantibus, sine commodo expertum fuisse. Quidam ex his per inunctionem ex hydrargyro, alique per catapotia ex præcipitato solari in sputationem copiosissimam quam per xx circiter dies pertulerunt, ciebantur ; quo temporis spatio elapso, eruptiones omnes squamosæ, et papillarum corymbi evanuerunt : nihilominùs ad the-*

* Short's History of Mineral Waters, vol. i. 314.

rapciam confirmandam potus diæteticus ex decocto sarsæ, cum crebrâ sudatione subtùs cratem, et debitâ purgatione interjectâ institutus, per mensem continuabatur: attamen hoc cursu finito, cum nulla tunc impetiginis vestigia relinqui viderentur, intrâ mensem alteram, nova ejusdem morbi seges pullulare incipiens, brevi tempore ad solitam maturitatem accrevit. Porrò cum unus ex eis hanc medicinam repetere, atque alter post duas morbi recidivas, eam vice tertiâ experiri voluit, uterque demùm post immanes tot ærumnarum perpressiones de curationis ope decidit.”*

Unfortunately, one of the Doctor's patients who underwent the harsh treatment above stated was a delicate young lady, fifteen years of age: her case is given at length, page 295. A slower and more cautious administration of mercurials would not have succeeded better. I wish particularly to impress this observation, considering the indiscriminate use of mercury in diseases of the skin. It seems a point of material consequence, to ascertain in what Cutaneous complaints this mineral will be found useful, and in what cases it is inefficacious. If I should only be enabled, from sufficient trials, to give correct information on this head, under the different articles of which I have to treat, the intent of this publication would not be entirely frustrated.

The three first species of Psoriasis, when they appear in a sudden eruption, attended with febrile symptoms, may be advantageously treated, by administering in the evening an emetic dose of ipecacuanha, and the following day two or three grains of calomel, or some other gentle purgative. Afterwards, by the use of fixed alkali, combined with sulphur præcipitatum, by a light moderate diet,

* Willis loc. citat. page 292.

by frequently washing with tepid water, and by abstinence from fruits, acids, and fermented liquors, these disorders may be removed in two or three weeks. But should the scaly patches, through neglect on their first appearance, or from an unhealthy state of the constitution, have become considerably enlarged, and have spread over a great part of the body, it will be necessary to employ antimonials, and the warm bath, with repeated friction, and decoctions of elm-bark, sarsaparilla, dulcamara, &c. or some of the mineral waters formerly mentioned.

The Psoriasis inveterata requires the same plan of treatment as the *Lepra vulgaris*, and *alphoides*. The bark of mezereon root forms an active ingredient in the decoctions employed in the cure of these disorders. I think it right to notice an observation respecting its use, made by a medical friend.* When the patches of the *Lepra*, or Scaly Tetter, are about to disappear, a cuticle of proper texture is in general formed at their centres, and gradually extends toward the borders, till all the scaliness be removed; but if the mezereon have been employed, it has the effect of softening the whole scaly patch at once, or of restoring the cuticle from the circumference toward the centre.

In the Psoriasis inveterata an ulceration sometimes appears on the shin. It is preceded by a red, shining, brittle state of the cuticle round the ancle: cracks or fissures are formed both in the cuticle, and the skin, of various magnitudes, and in different directions. When the integuments are wholly removed from some part of the diseased surface, the ulcer seldom becomes deep, but has an uneven bottom, and a red, thin, smooth edge, liable to bleed from very slight causes.

* Dr. Sinclair, in his own case.

A violent itching accompanies this species of ulceration, and a small quantity of glairy fluid is discharged from it. We find much difficulty in healing the ulcer, the new skin being disposed to break, and separate. The following cerate may be applied with advantage. R. Cerat. lapid. calam. unc. j. Hydrarg. nitrat. rubr. scrupulum j. M. After the ulceration is healed, if the skin round the ankle remain harsh, dry, and brittle, it will be proper that the leg should often be held over the steam of hot water, and that oiled silk should be constantly worn round the ankle. When the cuticle is extensively removed, and a clear lymph exudes from the excoriated surface, it is only necessary to employ a mild ointment, spread on linen cloth, or calico, as in the formula prescribed below.*

In the Psoriasis palmaria, the same internal remedies are proper, as in the other forms of the disease. If the heat, dryness, and itching of the palms, be very distressing, the hands may be held for some time every night in the vapour of hot water, and be then covered with gloves made of oiled silk, which should also be worn as much as possible during the day. A little of the unguentum hydrarg. nitrati may be applied at bed time, either alone, or diluted with a portion of some milder ointment, according to the state of the skin. Sea-bathing, continued for three or four successive months, has generally the effect of removing this complaint, and preventing its returns.

All acrid applications are detrimental in the Psoriasis labialis. The lips should not be much exposed, either to heat or cold, but should be almost constantly covered

* R. Emplastr. lithargyri unc. jj. ceræ flavæ unc. ss. olei oliv. unc. jss. vel q. s. ut fiat unguentum.

with some mild ointment, or plaister, such as that composed of *emplastrum lithargyri*, with wax, and oil. A temperate regimen is particularly necessary; and suitable remedies should be employed to relieve pain of the stomach, acidity, flatulence, &c. with which this complaint is usually connected.

The *Psoriasis ophthalmica* may require some of the internal medicines mentioned page 140. Externally, the unguent. *calcis hydrargyri albæ*, or unguent. *hydrargyri nitrati* softened with unguent. *ceræ*, may be employed with advantage.

In the *Psoriasis scrotalis*, besides the use of general remedies, care should be taken to keep the parts clean, by washing them with warm water, water-gruel, &c. and to prevent the effects of attrition, an ointment composed of three parts of unguentum *ceræ*, and one part of the unguentum *hydrargyri nitrati*, may be employed. If the scrotum be inflamed and sore, with rhagades or chops, the unguent. *cerussæ acetatæ* will afford relief.

In the *Psoriasis unguium*, the nails may be from time to time immersed in warm water, and cut smooth. The complaint, however, is more likely to be removed by sea-bathing, and other remedies which act on the constitution, than by any local application.*

The Scaly Tetter of infants may be relieved by antimonials, and by warm bathing, or washing with water gruel. When considerable excoriations take place, it is proper to use mild applications, such as the *ceratum lapidis calaminaris*, and unguentum *cerussæ acetatæ*, mixed in equal proportions. Calomel will be found useful, where there are inflamed pustules or tubercles.

* The ancients endeavoured to detach the nails by stimulating or caustic applications, hoping the new nails that succeeded would be of a better texture. See a long chapter on this subject, in Aetius, *Tetrab. iv. Serm. ii.*

ORDER II...III. PITYRIASIS.

THE PITYRIASIS consists of irregular patches of thin, slight scales, which are repeatedly produced, and separated, but which never form crusts, nor are attended with fissures or excoriations. I think Pityriasis should be distinguished from Porrigo. The latter term is employed by Roman medical authors to express a disease of the scalp, which often terminates in ulceration,* whereas Pityriasis is, by the best Greek authors, said to be always dry and scaly. Thus, according to Alexander and Paulus, Pityriasis is characterised by “the separation of

* Under the term Porrigo, Celsus (l. vi. cap. 2.) has included the Pityriasis, Achores, and Ceria of the Greeks: he is followed in this arrangement by most of the modern writers; as Manard *Epist. Med.* vii. cap. 8. *Mercurialis de Morb. Cut.* page 75. Sennert. *Pract. Med.* lib. v. Part. iii. sect. 2. cap. 7. and Guido de Cauliaco. *Tract.* vi. ii. 1. who confounds it with *Tinea lupinosa*; as does also Ambr. Parè xvi. 1. and Sauvages, *Nosolog. Meth.* Some, with still greater impropriety, rank the Pityriasis as a species of Scabies. Hafenrefer, *de Cutis Affectibus*, l. i. cap. 15. Theod. Corbeius, *Patholog.* l. ii. sect. v. cap. 3. Dolæus, *Encycl. Chirurg.* v. 14. Platerus *de Doloribus*, cap. 17, &c. &c. Lorry (*de Morb. Cut.* 459.) refers it to the Lichenes. It may not be amiss to observe that one Roman author, posterior to Celsus, has distinguished Porrigo and Pityriasis in the same manner as I have proposed. See *Marcellus de Medic.* iv. Pliny, l. xx. and xxii. and Herm. Barbar. *Gloss.* in Plinium.

slight furfuraceous substances from the surface of the head, or other parts of the body, without ulceration.”*

I have observed three varieties of this complaint, viz. Pityriasis capitis, Pityriasis rubra, and Pityriasis versicolor.

1. *PITYRIASIS CAPITIS*, when it affects very young infants, is termed by nurses *The Dandriff*.† It appears at the upper edge of the forehead and temples, as a slight whitish scurf, set in the form of a horse-shoe: on other parts of the head there are large scales, at a distance from each other, flat, and semipellucid. Sometimes however they nearly cover the whole of the hairy scalp, being close together like tiling. A similar appearance may take place in adults, but it is usually the effect of *Lepra*, *Scaly Tetter*, or some general disease of the skin. Persons at an

* Η Πιτυριασις εστιν λεπιδων η πιτυρωδων σωματων εκ τε της επιφανειας της κεφαλης, η εκ τε αλλε σωματος αποληξις χωρις ελκωσεως. Paul. Ægin. iii. 3. Alex. Trallian. l. i. 4. The Pityriasis is mentioned by Galen, Aetius, Orabasius, &c. as affecting the head only. Πιτυροις ομοια απο τε της κεφαλης δερματος αποπιπτει πολλακις ενιαις κνωμενοις, η δια τελο Πιτυριασιν ονομαζουσιν οι ιατροι το συμπτωμα τειλο. Gal. de Comp. Med. sec. loc. l. i. cap. 6. Aet. Tetrab. ii. ii. 66. Oribas. Synops. iv. 9. Actuar. Med. ii. 5. Avicenna has described this appearance under the denomination of *Alavarati*, which, he says, “est modus excorticationis levis accidentis capiti propter corruptionem accidentem in complexionem proprie cum impressione in superficie superiore cutis. Lib. iv. Fen. vii. Tr. 2. cap. 24.

Scias quod Furfures qui accidunt in capite sunt corpora subtilia, parva, tenuia, sicut furfures, quæ cadunt de superficie capitis, et fiunt absque materiâ quæ appareat sicut apparet in pustulis quæ effluunt extra caput in Sahaphati. I. F. Serapion, Breviar. Tr. i. 4. See also Haly Abbas, Theorice viii. 18. Compare Arnald. Villanov. Breviar. l. i. cap. 24. Fuhsius, lib. i. cap. 3. Bonacursius, de Malis externis, cap 14. and Pract. Joan. de Concoregio, cap. 8.

† Turner, on Diseases of the Skin, page 7.

advanced age have the Pityriasis capitis in nearly the same form as infants have it: the only difference is, that the complaint, in old people, occasions larger exfoliations of the cuticle.

When the hair is thin, or the head shaven, the scales may be removed by the careful use of soap and warm water,* or by an alkaline lotion. It is particularly necessary to enforce this practice, for if Scales intermixed with sordes be permitted to cover the Scalp for a length of time, Pustules, containing an acrimonious lymph, are formed under the incrustation, and the true Porrigo† often supervenes.

2. The PITYRIASIS RUBRA is preceded by a diffuse redness, and slight roughness, of some portions of the surface. A few days after this appearance, the parts affected become scurfy, but the new cuticle formed under the scurf presently separates, and, after many of these exfoliations and renewals, a scaliness is produced. The scales are most conspicuous on the face, hands, and fingers. Those who are affected with the Pityriasis rubra seldom have any sensible perspiration. The skin is dry, and disposed to crack, and the secretion in the miliary glands being slowly performed, the fluid condenses before it can be discharged, so that the small duct of every gland appears to have a short bristle fixed in it. This complaint is further attended with a troublesome itching, with a sensation of stiffness and soreness in the skin, with languor,

* Furfura removentur continuò abradendo caput, et singulis noctibus inungendo, et postero mane in multâ aquâ calidâ obluendo in balneo, vel in domo. Rhazes de Re Medicâ, lib. v. 4.

† Pejor pervenit ad ulcera, et ad corrumpendum origines capillorum, &c. Avicen. tom. ii. page 240. See Constantin. African. op. page 5.

and great restlessness. It affects, in some cases, only the face and neck, but in others it extends, though not continuously, to every part of the surface of the body. As it proceeds, the redness abates considerably, and when the scaliness is removed, the skin appears of a sallow or yellowish hue. At intervals, however, and often without any assignable cause, the redness returns, and all the symptoms are aggravated: in this manner the disease is often prolonged for many months. When the redness affects the palm of the hand, it is often succeeded by an appearance resembling the *Psoriasis palmaria*.*

The *Pityriasis rubra* generally occurs at an advanced period of life, but I have seen it in several young men who had travelled through various climates. It may be removed by taking the compound decoction of sarsaparilla with an antimonial, and by the use of tepid baths, more especially of those prepared with sea-water. A slight appearance of this complaint takes place on the cheeks and round the mouth, in persons who are accustomed to sit near a strong fire after exposure to a very cold atmosphere.

3. The *PITYRIASIS VERSICOLOR* chiefly affects the arms, breast, and abdomen. It is diffused very irregularly, and being of a colour different from the usual colour of the skin, it exhibits a singular, chequered appearance. The patches, which are at first small, and of a brown or yellow hue, appear at the scrobiculus cordis, about the mammæ, clavicles, &c. Enlarging gradually, they assume, in many cases, a tessellated form. In some cases they are branched, so as to resemble the *Foliaceous*

* In a case attended by Dr. Blair, of Lewes, "the cuticle on the hands and feet, especially in the palms and soles, was thickened, rough, dry, and in many places deeply fissured, with pain, and inconvenience in handling any thing, or in walking."

Lichens* growing on the bark of trees ; and, in others, when the discolouration is not continuous, they suggest the idea of a map, being distributed on the skin, like islands, continents, peninsulas, &c. All the discoloured parts are slightly rough, with minute scales, which soon fall off, but which are constantly replaced by others. This scurf or scaliness is most conspicuous on the sides, and epigastric region. The cuticular lines are somewhat deeper in the patches than on the contiguous parts ; but there is not an elevated border, or any distinguishing boundary, between the discoloured part of the skin, and that which retains its natural colour. The discolouration rarely extends over the whole body. It is most strong and full round the umbilicus, on the breasts, and sides : it seldom appears in the skin over the sternum, or along the spine of the back. Interstices are most numerous and largest at the lower part of the abdomen and back, where the scales are often small, distinct, and a little depressed. The face, nates, and lower extremities, are least affected ; but the patches are found upon the arms, chiefly on the inside, where they are distinct, and of different sizes.

The *Pityriasis 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 singular appearance is not attended with any internal disorder, nor with any troublesome symptom, except a little itching and irritation felt on getting into bed, and after strong exercise, or drinking warm liquors. There is sometimes a slight redness in several of the discoloured patches, and sometimes an appearance like the *Lichen pilaris* ; but eruptions of this kind are not

* Linn. Gen. pl. 1065.

permanent, neither do they produce any change in the original form of the complaint.

The Pityriasis versicolor is always of long duration. I have observed it remaining, in some persons, for four, five, or six years. It is not limited to any age or sex. Its causes I am not able to point out with certainty. Several patients have referred it to fruit, taken in too great quantity: some have thought it was produced by eating mushrooms, others by exposure to sudden alternations of cold and heat. In some individuals, who had an irritable skin, and occasionally used violent exercise, I have seen the complaint produced, or at least much aggravated, by wearing flannel next to the skin. I have likewise observed it in persons who had resided for a length of time in a tropical climate.

The Maculæ hepaticæ described by Solenander and Sennertus* seem referable to the present article: *Vulgò notus est affectus quem Germani Leverflechte nominant, proculdubiò quod ex hepate ortum habere credant; maculæ scilicet fuscæ, vel ex flavo nigricantes, latæ, palmi magnitudine, inguina imprimis, et pectus ac dorsum occupantes, imò totum pectus interdùm obtegentes, cum cutis quâdam levi asperitate, quæ squammas aut furfures quasi emittit, quæ tamen non uno loco hærent, sed hinc, indè, disseminantur, et modò evanescent modò rursus emergunt. Eas unicus, quantum memini, clarè describit Reinerus Solenander, sect. v. Consil. 11. sed sine nomine. Ipsæ quidem maculæ per se nihil periculi conjunctum habent, neque aliquem molestiam pariunt, cùm non in facie aut manibus, ut lentigines, sed in locis vestibus tectis oboriantur.*

The dark coloured spots, which frequently appear on the skin of pregnant women, should not perhaps be rank-

* Med. Pract. lib. v. iii. 1, 6.

ed under this head, being never attended with roughness or scaliness of the skin. For the same reason it is proper to exclude Ephelides, and other Maculæ, such as the discolourations which appear during a mercurial course, or after it, and which are distinguishable by a border of a deeper tinge than that of the centre. Although the Pityriasis versicolor is not in itself a disorder of any serious consequence, yet both medical and chirurgical practitioners should have a proper knowledge of it. Those who are unacquainted with its appearance, especially when it is diffused in separate or scattered patches, sometimes mistake it for a syphilitic symptom : there is not, however, so far as I have seen, any venereal appearance, which at all resembles it.

I have not been very successful in my medicinal treatment of this species of Pityriasis. Acids, alkalis, mercurials, and antimonials, under whatever form, seemed to produce no beneficial effect. Some advantage was, however, derived from using first a warm bath of sea-water, and afterwards bathing in the open sea; and in one instance the complaint was by these means wholly removed.

ORDER II...IV. ICTHYOSIS.

ICTHYOSIS is characterized by a permanently harsh, dry, scaly, and, in some cases, almost horny texture of the integuments of the body, unconnected with internal disorder. Psoriasis and Lepra differ from Ichthyosis, in being but partially diffused, and in having deciduous scales.

There is a peculiar arrangement, and distribution, of the scales in this disease. Round the olecranon, on the arm, and near the patella on the thigh and leg, they are small, rounded, prominent or papillary, and of a black colour. Some of the scaly papillæ have a short, narrow neck, and broad, irregular tops. On some parts of the extremities, and on the trunk of the body, the scales are flat, and large, often placed like tiling, or like the scales on the back of a fish; but in a few cases they have appeared separate, being intersected by whitish furrows. There is usually in this complaint a dryness and roughness of the soles of the feet, sometimes a thickened and brittle state of the skin in the palms of the hands, with large painful fissures, and on the face an appearance of scurf rather than of scales. The inner part of the wrists, the hams, the inside of the elbow, the furrow along the spine, and the inner and upper parts of the thighs, are perhaps the only parts of the skin always exempt from scalliness. Patients affected with the Ichthyosis are occasional-

ly much harassed with inflamed Pustules, or with large, painful boils on different parts of the body : it is also remarkable that they never seem to have the least perspiration, or moisture on the skin.

This disease did not, in any case presented to me, appear to have been transmitted hereditarily ; but I have seen two or three children of the same parents affected with it.* In several instances the disease was said to have appeared immediately after birth, but in others to have occurred at the age of two or three months : in one case it appeared soon after the Small-pox, at the age of two years, and had continued six or seven years without alteration.

When a portion of the hard scaly coating is removed, it is not soon produced again. The 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.

A short case given by Panarolus (Pentecoste, v. obs. 9.) seems referable to the article of Ichthyosis. ‘Vidimus nos pulchram mulierem, cui cutis piscium aut serpentum more squammas minutissimas representabat, quæ tanquam acutissimæ spinæ tactum mirificè lædebant. Hoc autem nullo modo credas, lector, ortum habuisse ab aliquo morbo, ut puta Scabie, Elephantiasi, et similibus, sed res erat absolutè naturalis.’

* This is not universal ; for in some instances one child is affected with Ichthyosis, while all the rest have a clear and soft skin. Mr. Baker’s case (page 207.) ascertains that the disorder is sometimes hereditary.

Another instance of the same kind is related by Stalpart Vander Wiel, obs. 35. cent. ii. ‘Anno 1683, mense maio, Hagæ puer quidam, 10 circ. annorum, conspicendus exhibebatur, nomine Bernardus, Bisegliæ (quod est regni Neapolitani ad Hadriæ litora oppidum) natus : cujus patri Petro Antonio Consiglio nomen erat : mater Elizabetha Nastasia vocabatur. Pueri illius manus, pedesque toti quanti squammei erant, brachia autem et crura, atque adeò totum corpus, excepto solo capite, veluti phocæ pelle obducta, contactuque dura erant et scabra. Narrabat matertera, cujus curæ ipse creditus erat, ortam fuisse istam cutis deformitatem, quòd mater, cum linteaminum purgandorum causâ littus peteret, in flumine vicino varios squammatos et testaceos vidisset pisces, quorum imaginem tam firmiter cerebro impressisset, ut non ità diù post a marito imprægnata, pisciumque perpetuò memor fætum pepererit, instar piscis squammosum, facie tamen, colloque decorum, reliquo autem corpore prorsùs nigricantem, et obscuro quodam, scabroque obductum musco, quâpropter idem nudus non tantoperè frigore, quam quidem alii infestabatur. Puer ille ingenio, quantum ætas ferebat, subtili et acri, ac quod mirere, piscium avidus admodùm erat, adeò ut post crebriorem carnis esum malè se haberet. Ipse etiam cum aliis medicis ex ejus corpore prodeuntem animadverti qualem pisces diffundunt odorem, quem quivis admoto propiùs naso percipere poterat. Delapsis veteribus novæ succedebant illicò squamæ quibus evulsis mox effluebat sanguis.’

Some observations on a diseased state of the skin, similar to the Icthyosis above described, appear in the Philosophical Transactions, vol. xiv. No. 160; and a striking instance of the same, though somewhat differently

modified, is inserted, No. 424, by John Machin, Sec. R. S. Gresham Professor of Astronomy.

“ A country labourer living not far from Euston-Hall, in Suffolk, shewed a boy, his son, about fourteen years of age, having a cuticular distemper of a different kind from any hitherto mentioned in the histories of diseases. His skin (if it might be so called) seemed rather like a dusky coloured thick case, exactly fitting every part of his body, made of a rugged bark or hide, with bristles in some places; which case, covering the whole excepting the face, palms of the hands, and the soles of the feet, caused an appearance as if those parts alone were naked and the rest clothed. It did not bleed when cut or scarified, being callous and insensible. It was said he sheds it once every year, about autumn, at which time it usually grows to the thickness of three fourths of an inch, and then is thrust off by the new skin which is coming up underneath. It was not easy to think of any sort of skin, or natural integument, that exactly resembled it. Some compared it to the bark of a tree; others thought it looked like seal-skin; others like the hide of the Elephant, or the skin about the legs of the Rhinoceros; and some took it to be like a wart, or number of warts uniting, and overspreading the whole body. The bristly parts, which were chiefly about the belly and flanks, looked and rustled like the bristles or quills of an hedge-hog, shorn off within an inch of the skin. His face was well featured and of a good complexion, if not rather too ruddy: and the palms of his hands were not harder or in worse condition than is usual for workmen or labourers. His size was proper for his age: his body and limbs straight, and, excepting as to his deformity, well shapen. This rugged covering gave him no pain or uneasiness, unless that sometimes, after hard work, it was apt to start and cleave, and cause a bleeding: and

notwithstanding the unusual disposition of his humours to form so strange an integument, his natural excretions were said to be in the ordinary course and manner, without any thing remarkable attending them. The father knew of no accident to account for this distempered habit, but said that his skin was clear at his birth as in other children, and so continued for about seven or eight weeks; after which, without his being sick, it began to turn yellow, as if he had had the jaundice, from which by degrees it changed black, and in a little time afterwards thickened, and grew into that state it appeared in at present; that he has been in health from his birth, and hath no sickness at the season when he sheds it. He further said that his mother had received no fright, to his knowledge, whilst she was with child; and hath borne him many other children, none of which have ever had this or any other unusual distemper or deformity."

"The sequel of this case is given in the xlixth vol. of the Philosophical Transactions, (Part I. for the year 1755) by Henry Baker, Esq. F. R. S. His name is Edward Lambert. He is now forty years of age; a good-looking, well-shaped man, of a florid countenance, and, when his body and hands are covered, seems nothing different from other people. But, except his head and face, the palms of his hands, and bottoms of his feet, his skin is all over covered in the same manner as in the year 1731, which therefore I shall trouble you with no other description of, than what you will find in Mr. Machin's account; only begging leave to observe, that this covering seemed to me most nearly to resemble an innumerable company of warts, of a dark brown colour, and a cylindric figure, rising to a like height, and growing as close as possible to one another, but so stiff and elastic, that when the hand is drawn over them they make a rustling noise.

When I saw this man in the month of September last, they were shedding off in several places, and young ones of a paler brown succeeding in their room, which he told me happens annually, in some of the autumn or winter months; and then he commonly is let blood, to prevent some little sickness, which he else is subject to, whilst they are falling off. At other times he is incommoded by them no otherwise than by the fretting out of his linen, which, he says, they do very quickly; and when they come to their full growth, being then in many places near an inch in height, the pressure of his clothes is troublesome. He has had the Small-pox, and been twice salivated, in hopes of getting rid of this disagreeable covering; during which disorders the warting came off, and his skin appeared white and smooth like that of other people, but, on his recovery, soon became as it was before. His health at other times has been very good during his whole life. But the most extraordinary circumstance of this man's story, and indeed the only reason of my giving you this trouble, is, that he has had six children, all with the same rugged covering as himself; the first appearance whereof in them, as well as in him, came on in about nine weeks after the birth. Only one of them is now living, a very pretty boy, eight years of age, whom I saw, and examined, with his father, and who is exactly in the same condition, which it is needless to repeat. He also has had the Small-pox, and during that time was free from this disorder. It appears therefore past all doubt, that a race of people may be propagated by this man, having such rugged coats or coverings as himself: and if this should ever happen, and the accidental original be forgotten, 'tis not improbable they might be deemed a different species of mankind: a consideration, which would almost lead one to imagine, that if mankind were

all produced from one and the same stock, the black skins of the negroes, and many other differences of the like kind, might possibly have been originally owing to some such accidental cause."

The inhabitants of Paraguay are, according to M. Buffon, much affected with the Ichthyosis, or a complaint nearly resembling it. 'Il regne parmi eux une maladie extraordinaire ; c'est une espece de Lèpre qui leur couvre tout le corps, et y forme une croûte semblable a des écailles de poisson : cette incommodité ne leur cause aucune douleur, ni meme aucun autre derangement dans la santé.'

Buffon Hist. Naturelle. tom. iii. p. 507, from Les Lettres Edifiantes, Recueil 25. p. 122.

A state of the skin similar to that in Ichthyosis takes place partially, under a variety of circumstances. It occurs on the limbs of persons, who, from long continued ill-health, or a weakly constitution, are much emaciated, and have little perspiration. When inveterate ulcers of the lower extremities are at length healed, the common integuments are not replaced in the usual order: instead of the cuticle, the legs are covered with thick, dry, shining scales, variously disposed. In some cases of Anasarca, likewise, the skin becomes scaly, rigid and inelastic. This rugged coating prevents for a time any farther enlargement of the limbs; but the effused lymph, by its gradually increasing pressure, at last overcomes the resistance, and is discharged through innumerable crevices.

2. *ICTHYOSIS CORNEA.* I never met with an instance of a horny rigidity of the integuments, impeding the motion of the muscles, or joints. It is, however, mention-

ed by authors as affecting the lips,* prepuce,† toes, fingers,‡ &c. and as sometimes extending over nearly the whole body. A singular case, of the latter description, is recorded in the Philosophical Transactions, vol. xlviii. Part. 2. pag. 580. ‘A young woman, seventeen years old, called Patrizia Galiera, was brought to the Royal Hospital, in June, 1752, and placed under the care of Dr. Crusio, who was informed by her, that the complaint was an excessive tension and hardness of her skin over all her body, by which she found herself so bound and straightened, that she could hardly move her limbs. Upon examining her, he found her skin hard to the touch, like wood, or a dry hide; however, he observed some difference in the degree of the hardness; for in some places it was greater, as in the neck, forehead, and particularly in the eye-lids; insomuch that she could neither raise nor entirely shut them. It was also very great in the lips, tongue, and on each side of her body. She could scarce open her mouth, not from any fault in the digastric or other muscles, but from the hardness of the skin that covered the lips and cheeks, and that would not permit her to draw down the lower jaw. This was the case in the other parts of the body; the muscles being, as it were, tied down, and compressed by a dry, hard, and unpliant covering. Her skin had lost its natural warmth, but was sensible when it was pressed upon by the nails or a pin, the patient then saying that she felt a

* Verbrug, de Aneurismate.

† Reghellini, Osservazione Sopra alcuni Casi Rari, 1.

‡ See *Affectus Cutaneus singularis*, ab Abrahamo Vaterno, *Eph. Nat. Cur.* i. page 89. and *Zacut. Lusitan.* lxi. *Pr. Hist. obs.* 188.

pain, as if the skin were tearing. Her pulse was perceived to be deep and obscure, but equal and regular. Her respiration was free and uninterrupted : her digestion was good ; and she found no inconvenience after eating, except a greater straightness and an uneasy constriction round the belly. As to the natural excretions, the alvine were easy and proper ; but the urinary sometimes exceeded the quantity of what she drank, and appeared loaded with salts : both which circumstances, perhaps, proceeded from the sensible and insensible perspiration being entirely wanting. For upon her being asked whether she ever sweated, she answered, that she did not, though she was ever so much exercised and fatigued. Her sleep was natural : she had never had the menstrual evacuation. She said her disorder began first in her neck, which she perceived she could not move as usual : then she found the skin of her face and forehead to grow hard ; and so successively, from day to day, she saw and felt all the external parts of her body grow hard and tense.

This form of Ichthyosis is sometimes attended with the production of horns ; a proof that those singular excrescences may be cutaneous, or perhaps cuticular, and generated in nearly the same manner as the nails in the human body, or the hoofs and claws of quadrupeds. The following case is in the *Philosophical Transactions*, No. 176.

“ Ann Jackson, the horny girl, was born in the city of Waterford, of English parents, who are both said to have been sound and healthy ; but the father becoming exceeding poor, the child was left a charge upon the parish. She is now between thirteen and fourteen years of age, yet can scarce go : and is so little in stature, that I have seen children five years old taller : she is very silly, speaks little, and that not plainly : her eyes look very

dead, and seem to have a film or horn growing over them, so that she can hardly now perceive the difference of colours. The horns abound chiefly about the joints and flexures, and not on the brawny fleshy parts of her body : they are fastened to the skin like warts, and about the roots resemble them very much in substance, though toward the extremities they grow much harder, and more horny. At the end of each finger and toe grows one as long as the finger or toe, not straight forwards, but rising a little between the nail and the flesh (for near the roots of these excrescences is something like a nail) and bending again like a turkey's claw, which too it much resembles in colour. On the other joints of her fingers and toes are smaller ones, which sometimes fall off, others growing in their places. The whole skin of her feet, legs and arms, is very hard and callous, and does daily grow more and more so. On her knees and elbows and round about the joints are many horns ; two more remarkable at the point of each elbow, which twist like rams horns : that on the left arm is above half an inch broad and four inches long : on her buttocks grow a great number, which are flat, by frequent sitting : at her armpits, and nipples of her breasts, small hard substances shoot out, much slenderer and whiter than the rest : at each ear also grows a horn : the skin of her neck does of late begin to turn callous and like that of her hands and feet. She eats and drinks heartily, sleeps soundly, and performs all the offices of nature like other healthy people, except that she has never had the evacuation proper to her sex."

Another case of this kind is stated in the *Phil. Transactions*, No. 297. N. Hulme, aged 17, was eight years ago; soon after the Small-pox, overspread with a Leprosy, when his finger nails, thumb-nails, and toe-nails,

began to grow thick, and by degrees hardened into horns, which grew in seven or eight months to the length of an inch, and some almost two inches, and some much longer. All these horns about the end of twelve months fell off by degrees, that which grew first falling off first, without any pain, unless when cut off, as they were at first, there appearing great quicks or roots under the nails. He has now shed them seven or eight several times. Oct. 2, 1804.

ORDER III.

EXANTHEMATA, OR RASHES.

EXANTHEMA, Efflorescence, seems originally to have expressed an eruption of papulæ, miliary vesicles, wheals, or petechiæ.* Systematic nosologists, at present, denote by this word all eruptions on the skin attended with fever, while other medical writers apply it to eruptive complaints of every denomination.† I have used it in a more limited sense, to express the appearance termed in English a Rash, which is a redness of the skin, varying as to extent, continuity, and brightness of colour, and occasioned by an unusual quantity of blood distributed to several of the cutaneous veins, in some instances with partial extravasation. Of these Exanthemata, or Rashes, some are contagious, others not; some are always febrile, others not manifestly attended with fever; some continue for a definite time, others are of an uncertain duration. Their generic divisions may be entitled,

* Hippocrat. Coac. p. 208. (Ed. Fœsii) and page 157. Aphor. 9. lib. vi. Epidem. lib. v. 7. lib. vi. sect. 2. lib. ii. p. 1020. lib. vii. p. 1221 & 1235. Oribas. Synops. vii. 7. Actuar. Med. lib. i. cap. 23. & ii. 11. Cels. de Re Med. lib. v. 28.

† See Mercurialis, de Morb. Cut. lib. v. cap. 11. Sennert. Pract. Med. lib. v. part. 1. cap. 22. Hafenreffer, lib. i. cap. 13, and Gorræi Definit. Med.

Rubeola, Scarlatina, Urticaria, Roseola, Iris, Purpura, Erythema.

I. RUBEOLA, or MEASLES. In this genus the rash appears mostly on the fourth day of a febrile disorder, and, after a continuance of four days, gradually declines with the fever. The disease is contagious, and takes place in children, or in grown persons of an irritable constitution, from ten to fourteen days after they have been exposed to the infection.* Others, who are less susceptible, may have frequent communication with persons affected, during several successive weeks, but the contagion does not act upon them, unless the body be brought into a feverish state by some incidental cause, as by taking cold, by watching, fatigue, or mental suffering. I do not recollect any person wholly unsusceptible of this disease, after repeated exposure to the contagion, as happens in the Small-pox in a very considerable proportion.

* The children of my friend Mr. Pearson were affected with the Measles in the following order.

1. A boy, aged 10, had the eruption the 5th day of fever, Dec. 3, 1797.
2. A boy, 7, - - - - - 6th - - - - - 15,
3. A boy, 2, - - - - - 3d - - - - - 15,
4. A girl, 11, - - - - - 4th - - - - - 16,
5. A girl, 6, - - - - - 5th - - - - - 18,
6. A boy, $\frac{1}{2}$, - - - - - 3d - - - - - 27,
7. A girl, 13, - - - - - 4th - - - - - Jan. 1, 1798.

The last child came home from school on the 16th, and was therefore affected with the rash sixteen days after exposure to contagion. For eight days before she had catarrhal symptoms, attended with head ache and giddiness.

The eldest child of White, King-street, St. James's, had the rash Oct. 31, 1796, the fifth day of fever. Two younger children had the rash on the 11th of November, the fifth day of fever.

Infants at the breast are not so susceptible as children more advanced.

The varieties of Rubeola hereafter to be noticed are, Rubeola vulgaris, Rubeola sine catarrho, and Rubeola nigra.

I. In the RUBEOLA VULGARIS, or usual form of Measles, the symptoms prior to the efflorescence are, on the first and second days, irregular shiverings, alternating with heat of the skin; general debility, or listlessness; flushing of the cheeks; giddiness; a sensation of pain or weight across the forehead and eyes, with disposition to sleep; sometimes pain of the back and limbs; slight soreness or roughness in the throat; loss of appetite; frequent nausea; thirst; a white fur on the tongue; clear, high coloured urine; pulse much increased in frequency, and somewhat labouring or irregular. On the third and fourth days, the same symptoms continue, but with greater violence: the eyes become tender and inflamed; the eye-lids and tarsi appear a little turgid; at the same time a serous humour is copiously discharged, both from the eyes and nostrils, which occasions repeated sneezing. The disease during this period, and usually for two or three days longer, is accompanied with a frequent, dry cough, hoarseness, difficulty of breathing, and a sense of constriction across the chest. In children, a harsh, sounding cough often occurs seven, ten, fifteen, or twenty days* before the disease formally commences: all the symptoms of the first stage are in them more severe than in adults; and they are affected, more especially if teething, with frequent twitchings, or even with strong convulsive fits, a circumstance mostly considered as favourable, with which opinion, however, the result of my own experience does not coincide.

Compare Hoffmann, tom. ii. sec. 1. c. 8. Heberden. Comment. page 266.

In those who have a very delicate skin, the rash or efflorescence sometimes appears partially on the third day : a dark, or thickened skin, and the application of cold, may, in a few cases, prevent its being manifest till the fifth or sixth day ; but when it is said not to have appeared till after this time, the patient had probably become feverish from some incidental cause.* If the disease begin with a distinct paroxysm of fever, in a person more than twelve years old, the efflorescence takes place almost invariably on the fourth day. It is first visible on the forehead, under the chin, or about the throat, then on the nose, cheeks, and round the mouth, exhibiting elsewhere, in the course of this day, only a few scattered specks, with a somewhat warmer colour of the skin than usual. It is formed on the neck and breast early on the fifth day, and is diffused, towards evening or in the night, round the trunk of the body, and along the extremities : during this day it is most full, and vivid, on the face.

The colour of the rash in the Measles is less bright than in some other diseases of the present order. On the eighth day, when the rash declines, the colour changes to somewhat of a yellowish hue. The rash commences with distinct, red, and nearly circular dots. Larger patches appear afterwards, which are not exactly defined, but approach nearest in their form to the figure of a crescent, or semicircle. These patches are slightly raised, and give to the finger the sensation of an unequal sur-

* When a person who carries about him the contagion of the Measles gets a catarrh, or becomes feverish, from the causes mentioned page 163, the contagion begins to operate about the fourth day of such a fever, and then excites fresh paroxysms, which, after four days, terminate in the eruption : hence the febrile stage previous to the rash appears in this instance to have the extent of eight days.

face. Being examined with attention, they are found to consist merely of clusters of the small red circles before mentioned. Many of the patches are interspersed with the same red, circular dots; but there are, for the most part, large interstices of cuticle retaining its usual colour. From these characteristic appearances of Rubeola there are only partial variations; as, 1. The flushed and tumefied state of the cheeks, while the fever continues, may obliterate or obscure the form of the rash on those portions of the surface. 2. In infants less than a year old the efflorescence is much scattered; and on the cheeks, nose, backs of the hands, &c. it often consists of distinct papulæ. The wrists, hands and fingers, are also frequently papulated in adults. 3. In many persons, at different ages, there are, during the height of the efflorescence, lymphatic or miliary vesicles* on the neck, breast, and on the arms.

* I inoculated about the same time three children with the fluid contained in these vesicles, but no effect was produced by the inoculation. A similar trial at the Inoculation Hospital proved more successful. Richard Brookes, aged eighteen, was inoculated, by Mr. Wachsel, with fluid from the miliary vesicles in measles, and with vaccine virus, January sixth, 1800. On the tenth, there was some redness and elevation of the cuticle at both the inoculated places. January fifteenth, the redness round the part where the lymph of the measles was inserted had disappeared, while the vaccine pock was vivid. January eighteenth, the vaccine disease was over. January twenty-second, he had severe cough, sneezing, and watery eyes, with cold shiverings and fainting. January twenty-eighth, the measles appeared: his eyes were inflamed, and the lids swollen. January twenty-ninth, the efflorescence was diffused all over the surface of the body; frequent cough; violent fever. February first, efflorescence disappeared; cough and fever much abated. From that time he recovered gradually, and was dismissed in health the twelfth of February.

Three children, of one family, infected by him, had the usual efflorescence of measles on the tenth, eleventh, and thirteenth of

It is to be observed that, on the fourth day, small dark red patches, in their form nearly resembling those above described, appear on the palate, uvula, tonsils, and *velum pendulum palati*. During the fifth day they become more mixed, and terminate in a general streaky redness, extending to the fauces behind the *velum pendulum*. This state of the surface occasions the sensation of roughness in the throat, and aggravates the hoarseness already produced by the primary catarrhal inflammation about the larynx, &c.

On the sixth day of the disease the efflorescence on the face begins to fade and subside, while the patches on the body are most red and extended; but these, in like manner, change their appearance the day after, losing gradually their distinguishing form. The patches, or *papulæ*, on the back of the hand and wrist, which usually appear latest, in some instances on the sixth or seventh day, do not always decline till the eighth day.

On the ninth day there remain only vestiges of the efflorescence, marked by a slight discolouration; this however disappears before the end of the tenth day. When the rash begins to decline on any part, the cuticle becomes dry and rough, and soon after separates in scurf. Hence arises a very disagreeable itching of the skin, which continues from the seventh to the tenth day.

The progress of the eruption is sometimes prematurely checked by exposure to cold, or by the improper use of purgatives. Its retrocession occasions violent delirium, restlessness, difficulty of breathing, pain of

February. From these the contagion extended to others in the house, three of whom had the efflorescence on the third of March, one on the fifteenth, one on the eighteenth, one on the twentieth, one April ninth.

the bowels, diarrhœa, &c. and always greatly endangers the patient's life.*

The inflammation of the eyes, the discharge of tears, the sneezing, and hoarseness, generally cease on the decline of the efflorescence, about the seventh day; at least they are always much abated at that time, and the appetite for food returns. Between the fourth and sixth day, there is often a hæmorrhage† from the nose, and in females an appearance of the catamenia, out of their course; but these circumstances occur in other eruptive diseases.

Dr. Heberden has noticed the following particularities of Rubeola: "One patient was seized with a spitting on the fourth day, which continued to tease him for forty-eight hours, without suffering him to rest at all by day, or to sleep at night: the cough in the mean time almost ceased, and all the other symptoms were as mild as in a favourable sort of the Measles."

"In one or two patients I have seen the eruption appear on the arms a few hours after its having been observed on the face and neck."

"Once or twice the distemper has been observed never to have reached the arms, which parts, through the whole of it, shewed none of the usual spots."

* Quando morbilli, et variolæ de improvise intus subsidunt, postquam cœperint emergere, et cum molestia simul accedit deliquium, interitus cito deliquium istud sequetur, nisi erumpant denuo. Rhazes, cap. 14. Compare Avicenna, de Alhasbet, & Alsaharav. tract. 31. cap. 1. Foresti Obs. 45. l. vi. Schol. and Reports on the Diseases in London, page 99.

I never saw what is remarked Ed. Med. Essays, v. 28, "that in some instances, after the patients had remained listless for several days or weeks, the eruption came out again." This occurs, however, in the Scarlatina.

† Foresti, Obs. 48. l. v. Hoffmann. tom. ii. page 66.

“The eye-lids have been so swelled, on the second day of the eruption, that for twenty-four hours they could not be opened.”

“In several patients the marks on the face have been, the third and even fourth day of the eruption, of as bright a red as ever. In others I have observed them to disappear entirely on this day, and all the other symptoms likewise to retreat.”

“I have noted a very troublesome and constant sneezing, which first came on upon this day.”

“A child, five years old, became comatose the third day of the eruption, and died the next.”

“The longer the preparatory symptoms have continued, and the worse they were, so much the less mild the distemper proved.”

“Those who have shown the least remains of the eruption after the seventh day of the disease (and some have hardly shewn any) have appeared the best; and in those where it was still in undiminished vigour, the cough and fever have been the worst.”

At the commencement of the eruptive stage of the Measles, the fever does not receive any immediate alleviation, but is often somewhat aggravated. However, the nausea and vomiting seldom continue beyond the fourth day, as Sydenham has justly remarked: the distressing heat, panting, and restlessness, abate on the sixth day. When the efflorescence and its concomitant symptoms are finally removed, about the ninth or tenth day, a diarrhœa, in general, supervenes, and is troublesome for several days afterward: it sometimes comes on at an earlier* period of the disease, especially in children.

In many persons the cough, soon after the disappear-

* See Syd. sect. 1. c. 5. and Med. Trans. iii. 399.

ance of the rash, recommences with violence, being attended with difficulty of breathing, fixed pain in the side, flushing of the cheeks, quick pulse, and often with paroxysms, as in the hectic. This state is protracted much longer than pneumonic inflammation produced by cold, and more frequently terminates by effusion into the cavity of the chest, or by spitting of blood, suppuration, and confirmed pulmonary consumption.

Some other appearances which occasionally succeed the Measles likewise demand attention. These are,

1. Small hard tumours, like boils, being in the beginning very much inflamed, and sometimes of a livid colour, afterwards suppurating, with great pain, and a sanious discharge. They appear mostly on the back, loins, or lower extremities, and are not readily healed. In children there is an analogous eruption of inflamed pustules on different parts of the body, but particularly on the feet, legs, thighs, and scrotum.

2. An eruption round the chest, about the mouth, temples, &c. of watery vesicles, in clusters, with an inflamed base, producing much heat, pain, and tingling of the skin.

3. In infants, aphthous ulcerations of the tongue and fauces.

4. Soft pustules, containing a viscid, straw-coloured fluid, on the head, face, breast, and thighs, succeeded by ulcerations at the corner of the mouth, with tumour of the upper lip, sore eyes and ulcerations of the tarsi, discharges from behind the ears, enlargement and tedious suppuration of the submaxillary, occipital, axillary, and inguinal glands, sometimes with pain and swelling of the joints.*

* See J. J. Schlierbach, in Act. N. C. tom. vi. p. 215. ann. 1739.

5. In some cases, where no eruption of pustules nor superficial ulcerations have preceded, the lymphatic glands of the neck and other parts become considerably enlarged: this appearance is succeeded by a swelling and tension of the abdomen, with hectic fever, and emaciation.

I never saw the Rubeola terminate by gangrenous ulcers of the throat, cheeks, gums, &c. or by caries of the jaw-bones, as stated in several respectable authors.* Those dreadful symptoms more especially belong to another disease of the present order.

The eruptive stage of the Measles is not attended with much danger, either to infants or adults; but the subsequent period may prove fatal to both. Between the ninth and twelfth day, some children are unexpectedly attacked with great difficulty of breathing, or suffocation, † and die in a few hours. In others, the usual diarrhœa, beginning about the tenth day, continues, without intermission, so long, that they become

* Nonulli ex neglectis aphthis tanta accrevit oris putredo, ut ante instans mortis punctum, mandibulæ sponte exciderint; alias a chirurgis caro circa illas, gangrænâ affecta, omnino resecta fuerit. Eph. Nat. Cur. dec. 1. ann. 2. 1669.

Plus semel hoc mense notavi faucium, et oris gangrænâ, maxillæ porro, et vomeris ossis cariem, unde mortem miserrimam.... post Morbillos scilicet. Huxham de Aere, tom. ii. 137 & 139. The epidemic disease here mentioned was often succeeded by "ophthalmia, angina, ulcera faucium, parotides, cum erysipelate capitis, &c. It was, therefore, probably the Scarlatina anginosa, not the Measles. Huxham, in the early part of his observations, uses without nice discrimination the terms rubeola, morbilli, rubeoli, and rossalia or scarlatina, page 68. Many singular examples of this inaccuracy of language, which has been very injurious to medical science, will appear hereafter.

† See Hoffmann de Febre morbillosâ.

pale, emaciated, and exhausted: aphthous ulcerations of the mouth, under these circumstances, are generally the forerunners of death. Adults, as well as children, have, in some cases, hectic paroxysms twice in twenty-four hours, without any cough or diarrhœa: during the intervals, there is great restlessness, panting, and a quick irregular pulse. The patients, thus affected for two or three successive weeks, gradually sink under the complaint: a fatal termination of it seems, however, to be averted by the appearance of boils, pustules, or suppurating tubercles on the skin, which operate very favourably with respect to the internal disorder. In like manner the fever, diarrhœa, cough, pain, and dyspnoea, soon abate after an eruption of the Açhores, and almost instantaneously after an eruption of inflamed watery vesicles round the chest, about the hypochondria, &c. An alleviation takes place, but more slowly, in consequence of a discharge from behind or from within the ear, and of suppuration in some of the lymphatic glands. When nothing of this kind appears externally, the inflammation of the lungs and pleura in adults is sometimes on a sudden greatly aggravated: the cough ceases, respiration becomes more and more laborious, with a sense of oppression and anxiety: the eyes are glassy, the countenance livid, the extremities cold, the pulse scarcely discernible. After a struggle of three or four days, the disease has a fatal termination, the cause of which dissections have ascertained, in several cases, to be an effusion, into the cavity of the thorax, of lymph mixed with blood or matter.

The *Rubeola vulgaris* is usually a mild disease in the summer months, being attended with a moderate degree of fever, and but little cough. In January, February, and March, it is most frequent, most severe, and most

dangerous. Dr. Sydenham's observation,* that the Measles, whether regular or anomalous, begin in February, arrive at their acmè about the vernal equinox, then decline till midsummer, and wholly disappear in July," is not confirmed by other writers, nor seems to agree with the experience of practitioners in London at the present time.† The diffusion of contagious diseases may be somewhat promoted by the state of the atmosphere, but it certainly depends much more on other circumstances; as the full population of any place, the closeness and want of cleanliness in its tenements, the frequent intercourse between the inhabitants of the district where infection prevails and those of other towns and cities; lastly, a greater extent is given to all contagious febrile distempers, when the public mind is strongly impressed with the fear of a hostile invasion, famine, or any general calamity. Of these predisposing apprehensions, the dread of contagion itself is not the least.

In the eruptive stage of the *Rubeola vulgaris*, it is necessary to enjoin a very light diet, with mild, tepid drinks: and to keep the patient in a moderate degree of warmth, carefully guarding against any sudden changes of temperature. An emetic,‡ given on the second or

* De Morbillis ann. 1670, page 158, 196. "The Measles take place mostly in autumn, either with a south wind, when the air is turbid and hazy, or when there is rain with any other wind." Rhazes, from George Bachtishua. "The Measles and Small-pox are multiplied in hot summers with a south wind." Rhazes, cap. 2. & Avicenna i. 2. 2. 6. Alsharavius says, "When the winter is hot and dry, with little rain, then expect the Alhasba" (Measles.) Tr. 31. cap. 1.

† See Reports on the Diseases in London, page 104-5.

‡ See De Meza, tom. i. 98. Hoffmann. tom. ii. p. 63.

third evening, somewhat alleviates the violence of the catarrhal symptoms. During the eruption I have not observed any considerable effect from antimonials or other diaphoretics : bathing the feet every evening in warm water seems to be a more beneficial application. Emulsions and mucilages afford but a very feeble palliation of the cough, and difficulty of breathing. These symptoms are relieved by the inspiration of steam, which may be further recommended as an effectual mode of promoting perspiration. The metallic inhalers, usually employed, convey too strong a heat into the lungs ; it will therefore be sufficient to set before the patient a bason full of hot water, the vapour being slightly confined round the head by a piece of cloth or flannel.

The necessity of blood-letting in this disease is generally allowed, authors only differ in respect to the time when it may be practised with most advantage. Dr. Morton * thinks it requisite as soon as the eruption is completed, the disease being, in his opinion, most inflammatory at that period. Sydenham† recommends bleeding after the eruption has disappeared, and when a difficulty of breathing succeeds, with symptoms of inflammation of the lungs : in that case he thinks even infants may be bled with great advantage. Dr. Mead‡ criticises the doctrine of both these eminent physicians, and observes that our practice should be regulated by the degree of the pneumonic inflammation, without attending to the particular period of the disorder, or state of the eruption. Dr. Heberden agrees with him in opinion : “ Bleeding may be used at any time of the

* De Morbillis, page 54.

† De Morbillis, añn. 1670.

‡ De Morbillis, 92—95.

Measles, and is always beneficial where the symptoms are very distressing, particularly an oppression of the breath, to which every stage of this distemper is liable : and 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. The flowing of the menses ought to be no objection to the opening of a vein, if the cough and shortness of breath make it otherwise adviseable. I never saw any bad consequences from bleeding a woman in these circumstances ; but the greatest danger might attend the omitting to do it in a violent cough and oppression of the breath.”

“The Measles are far less dangerous for pregnant women than the Small-pox. I have attended several, who were greatly harassed by the violence of all the usual symptoms in this illness ; but I never knew it make one woman miscarry, or be in more danger on account of the pregnancy.”* It appears further, that infants, before birth, may go through the Measles without injury, some having been born with the actual eruption, others with the vestiges of it on the skin.†

In bleeding infants during the Measles, it is not necessary to open a vein, as Dr. Sydenham has advised ;

* Comment. page 271. and Med. Trans. vol. iii. 404.

† Hon. matrona cum dimidiam partem noni mensis imprægnationis attigisset, febre acutâ et quidem malignâ, correpta fuit : Morbilli quinetiam mox per totum corpus eruperunt. Quartâ die morbi, prægnantium doloribus correpta, puellum per totum corpus morbillis contaminatum peperit. Hildan. Obs. Chirurg. 56. Cent. iv. Compare Ephemerid. N. C. Dec. ii. Ann. iii. page 204. Cent. v. page 91. and Rosenstein. chap. xiv. I have not myself ever seen an instance of this kind.

but the application of leeches to the upper part of the chest will generally prove advantageous, and may be repeated as the symptoms require. It seems, however, not improper to bleed, with the lancet, children more than five years old, in the case of sudden difficulty of breathing, which threatens to suffocate the patient at the conclusion of the disease.

On the third, fourth, or fifth day of the fever, when there is oppression, with anxiety, heaving of the lungs, and a labouring pulse, most practitioners recommend bloodletting in adults. I have not adopted the recommendation, unless urged by the coincidence of a hard cough, and pains in the chest. Those who, from doubt, or from some collateral motives, are led to await the event, usually find the pulse become moderate, and the uneasy laborious respiration terminate in twenty-four hours. This oppressed breathing is, indeed, common to other eruptive fevers, and if it were universally considered to be an indication for bleeding, the practice would often be more fatal than the disease. When the efflorescence in Measles has wholly disappeared, and the cough, difficulty of breathing, and pains in the chest, are very severe, bleeding and cupping may perhaps be repeatedly necessary. Yet, even in robust habits, some limitation is requisite to this mode of practice, since it has not an effect in alleviating the symptoms, equal to that which is experienced from it in pulmonic inflammations, originating from cold. Hence we should employ as auxiliaries to bleeding, at the latter period of the disease, blisters, opium, and demulcent liquors. Sydenham prescribed an opiate* every night through the whole course

* At præ reliquis diacodium omni nocte ab ipso morbi insultu, per totum ejus decursum, exhibendum curavi. Sect. 4. cap. 5.

of the Measles; but this plan seems not beneficial in the eruptive stage: I have observed, and myself felt, while labouring under the disease, that opium did not conciliate sleep, but produced an increase of heat and restlessness, and therefore seldom direct it till the efflorescence has declined. A diarrhœa occurring at this period may be accounted a most favourable circumstance, since nothing so effectually relieves the peripneumonic symptoms, or contributes more to prevent the troublesome consequences of the disease formerly mentioned. The necessity of bleeding, as a remedy for the diarrhœa, is insisted on by Dr. Sydenham from theoretical reasoning.* Experienced practitioners in London seem to have now decided, that we ought not much to interfere with this critical evacuation, but rather allow it a free course, at least for some days. Where the diarrhœa does not thus take place, it is proper to imitate the usual process of nature, by the occasional use of purgatives, which will always be found to relieve the cough, and by allaying the inflammatory symptoms often to supercede the necessity of bloodletting.

2. RUBEOLA SINE CATARRHO. When the Measles are epidemical, a few cases occur, wherein the eruption goes through its different stages without any cough, difficulty of breathing, or inflammation of the eyes; without much alteration in the pulse, or any febrile symp-

* Quin diarrhœa quam Morbillos excipere diximus, venæ sectione pariter sanatur: cum enim halitibus inflammati sanguinis in intestina ruentibus ortum suum debeat (quod etiam in pleuritide, peripneumoniâ, aliisque qui ab inflammatione creantur morbis usu venit) a quibus illa ad excretionem stimulantur, solâ venæ sectio levamen adferet, a quâ tum revelluntur acres isti humores, tum etiam sanguis ad debitam redigitur temperiem.

toms.* This variety of Rubeola may be distinguished from other efflorescences, also from the Lichen, and Strophulus. In infants the eruption is more papulated, and the patches often less extensive, so that to discriminate with exactness, the patient being under two years of age, requires both minute attention, and some previous habitude.

An eruption of the Measles, without fever or catarrhal symptoms, though not requiring medicine, merits in this place a specific consideration, because it does not appear to emancipate the constitution from the power of the contagion, nor to prevent the accession of the Rubeola vulgaris at a future period. For two instances of this recurrence, being among my own children, and at an interval of two years, I can decidedly answer. The particulars are given in the "Reports on the Diseases in London, 1799," page 207. Under what circumstances the Measles have elsewhere occurred two or more times in the same person, is not easily collected from the authors who mention such repetitions of the disorder.† After an attention for more than twenty years to eruptive complaints, having never met with an individual who had

* So Dr. Heberden; "Some have been so fortunate as to have the Measles appear, after suffering so very little from fever, or any of the preparatory symptoms, that they could hardly say they had been ill;" and Sprengel, de Constitut. epid. Halens. anni 1790. Act. Nov. N. C. tom. viii p. 153. "Vidi infantes sanos, robustos, qui nec lecto, nec hypocausto affixi, quatuor diebus liberi fierent ab omni morbi molestiâ. Nulli hic desquamatio obtigit. Remediis fere non opus fuit. An recursui morbillorum genuinorum hæc subjecta obnoxia sunt observare non licuit." The author considers this as the species termed by other German writers morbilli spurii.

† See Burserii Instit. Med. Pract. sect. cxii. & Roberdière, Recherches sur la Rougeole, page 3. A Paris, 1776.

twice had the febrile Rubeola, I am led to suspect some mistake in the cases adduced, contradictory to this observation; a mistake likely to be made, considering how difficult it often is to distinguish the Measles from Scarlatina, Roseola, Strophulus, &c. considering also that young practitioners are not less forward than those more experienced in publishing their observations, nor less desirous of establishing new doctrines in medicine. I cannot, however, omit the singular occurrence of two eruptions of the Measles, in the same person, at a short interval, or of the immediate succession of the Rubeola vulgaris to the Rubeola sine catarrho, noticed in the Reports on Diseases, above quoted. I have since seen other cases of the same kind, wherein the efflorescence without fever or catarrhal symptoms having declined, there appeared, on the fourth day from its commencement, a new efflorescence, and violent disorder of the constitution. These instances are perfectly analogous to some cases of Small-pox, in which distinct pustules arise, without any material complaint, and when these decline, about the eighth or ninth day after their appearance, the variolous fever takes place, with an eruption of confluent pocks over the whole surface of the body.

3. RUBEOLA NIGRA. I never saw the Rubeola vulgaris intermixed at an early period with petechiæ: but it sometimes happens, about the seventh or eighth day, that the rash becomes suddenly black, or of a dark purple colour, with a mixture of yellow. This appearance has continued ten days, and in some cases longer, without much distress to the patient,* and with no other symptoms of fever than a quick pulse, and a slight degree of languor. It is, however, observed by Hoffmann, “Malum dein, quando

* See Reports on the Diseases of London, page 189.

aliæ maculæ, virulentia non expertes, uti petechiæ, purpura, vel etiam pustulæ scorbuticæ, complicantur, vel in fine, cum vitæ discrimine, superveniunt.”* In the treatment of this disease the mineral acids were employed with evident advantage. The only case I have seen, which terminated fatally, was of a boy under four years of age. He had symptoms of catarrhal fever on the seventeenth of December, 1799. The usual efflorescence appeared on the twenty-fourth; and after partial desquamation on the twenty-sixth and twenty-seventh, became of a livid colour, especially on the breast. His fever continued, with a frequent dry cough, with quick laborious breathing, blackness of the lips and cheeks, beating at the temples, occasional delirium, thirst, nausea, and frequent small slimy offensive stools, till the eighth of January, when his hands began to swell, and were soon afterward, as also the feet, permanently contracted. In this state he died, January thirteenth, in the morning.

* Hoffm. op. tom. ii. page 67. We might conclude, from the repeated mention of them by certain medical writers, that these appearances are much more frequent and fatal in a hot climate: Signum Alhasbæ mortalis, et pravæ, est livedo coloris, et viriditas, vel color violaceus. Alsharav. Pract. ii. 31. & Avicenna, tom. ii. page 74.

Dixit F. Mesue: cum vides Blactias coloris fuscæ, et sunt universaliter per totum corpus, et amplæ; et murmurat, et pigrescit æger, et venter ejus inflatus est, manibusque percussus sonat ad modum tympani, est malum.

Morbilli fuscæ quidem pravi sunt, virides autem et violacei, ambo planè lethales. Rhazes de Variol. & Morbillis, cap. 14. Ad Almansor. l. x. cap. 18. & Continent. l. xviii. cap. 8. Rhazes also mentions an oozing of blood from the patches in the Measles. The above observations, however, cannot be fully depended upon, because most of the Arabian physicians have confounded the symptoms or circumstances of the Measles with those of the Small-pox, and Scarlet Fever.

I have not observed any other varieties of Rubeola requiring particular consideration. There is no sufficient ground, or authority, for the distinction of Rubeola variolodes made by Sauvages.* Those who speak of Morbilli sine Rubeola, and of Febres morbillosæ sine Morbillis,† perhaps refine too much: should the efflorescence be partial, or very obscure, on the surface of the body, it will generally be seen in the mouth and fauces. Any person, much exposed to the breath of patients affected with the Measles and Hooping Cough, may, after having had those complaints, be notwithstanding liable to slight inflammation of the eyes, sneezing, and severe cough, with some febrile symp-

* He refers to the Journal de Medicine, July 1758, where the complaint mentioned is the zona herpetica, or shingles. The terms Rougeole boutonée are applied by some French writers to the Chicken-pox: in others they express the appearance of papulæ, and miliary vesicles, along with the usual rash. Malouin, Hist. de l'Acad. It is observed, Ed. Med. Ess. v. 27. of the Measles in 1735, "The Exanthemata were of the common form generally, but in some they rose above the surface of the skin, as high as the mild kind of Small-pox are generally on the second day; none of them however suppurated." These papulated Measles are called, at Edinburgh, "the Nirles," a term likewise applied in Scotland, and the northern counties of England, to denote the Herpes miliaris.

† De Haen de Febr. divis. 17. sec. 6. Ed. Med. Essays, vol. v. page 29. Act. Nova. tom. viii. page 183.

"J'ai vu, tandis que la Rougeole règnoit en ce pays, quantité de Fievres morbilleuses sans eruption, chez ceux surtout qui avoient déjà éprouvé cette maladie. Cette espece de fièvre, plus maligne en quelque sorte que l'eruptive, en avoit tous les symptomes au dernier degré, de sorte qu'on ne pouvoit se méprendre, et la regarder pour autre chose qu'une Fievre morbilleuse, qui ne differoit de la Rougeole, que par une apparence extérieure." Roberdière, page 7, 8.

toms ; but the *Febris morbillosa* of Sydenham* and De Haen is not of this nature : it should rather be ranked among the species of epidemic Catarrh, a disease which often occurs at seasons when the Measles are most prevalent, and which seems annually to visit our metropolis.†

In the *Morbilli anomali ann. 1674*, mentioned by Sydenham, the anomaly is referable merely to the following points : 1. The rash occurred a few hours sooner or later than in the regular Measles of 1670. 2. It appeared first on the shoulders and trunk of the body, not on the face. 3. It was not often followed by desquamation of the cuticle. In every other respect the disease, of 1674 agreed with that of the year 1670, and required the same mode of treatment. The irregularities noticed by Bursarius chiefly relate to the form and duration of the fever attending the Measles.

It may be proper here to notice the “*Putrid Measles*,” observed by the late Sir William Watson among the children at the Foundling Hospital, in 1763 and 1768 ; see *Med. Obs.* vol. iv. In this disease there was a cough, and watery inflamed eyes, but “the eruption appeared, over nearly the whole body, on the second day ;” “the fauces were of a deep red colour ;” “the pulse was very quick, but low ;” “the patients complained of extreme weakness, and could not bear bleeding ;” “their oppressed and difficult breathing was attended with great restlessness, and anxiety, but with scarce any expectoration throughout ;” “some died under laborious respiration, more from a dysenteric purging ;” “several were

* *De Morbillis*, ann. 1674.

† See *Reports on the Diseases in London*, pages 2, 59, 76, 146, 253.

so debilitated, that they refused to take almost any nourishment, and sunk, quite emaciated, one so late as six weeks after the attack ;” “ some cases terminated in mortification of the rectum, pudenda, cheeks, gums, &c. others with caries of the jaw bones.” These circumstances do not belong to the Rubeola, or Measles, generically considered ; they are, indeed, ranked otherwise in Sir W. Watson’s own statement respecting the disease, which he refers to the *Morbilli maligni*, or *epidemii*, described by Morton.* Now it must be observed, Dr. Morton expressly maintains that the Measles and Scarlatina are the same disease, with no more variation in their form than there is between the distinct and confluent Small-pox ; † he has therefore conjoined their principal symptoms (cap. iii.) and wishes to banish the distinction, and the very name of Scarlatina, from medical language. ‡ In this wish Dr. Morton has not succeeded : hence those readers who attend, not to the names of things, but to

* Dr. M. also terms them *Morbilli spurii*, pages 33, 41, 55, 86, &c. *De Morbillis et Febre Scarlatina*. These “ malignant” or “ spurious Measles” were, in some cases, attended with peripneumonic symptoms, in others with angina, or ulcerations of the fauces and parts adjoining, said to have been fatal, by a sudden strangulation, to many hundreds during the year 1672.

† *De Morbillis & Febre Scarlatina*, cap. 4 & 5. *Febris Scarlatina quoad causas, symptomata, differentias, prognostica, indicationes curativas, et methodum medendi, idem ipsissimus morbus est ac Morbilli*. Page 7.

‡ “ *Exulet igitur per me e censu morborum hæcce febris, nisi euiquam Morbillorum confluentium titulo eam designare in posterum visum fuerit.*” Dr. M. accordingly subjoins histories of Measles, and Scarlatina, taken indiscriminately. The first case, which is given as a specimen of the *Morbilli epidemii* of 1672, must, according to Dr. Morton’s own definition, be considered as a case of Scarlatina ; for he says, *efflorescentia morbillosa...summè inflam-*

the things themselves as described, will find that the *Morbilli maligni*, *Morbilli epidemii*, *Morbilli spurii*, and *Febris morbillosa pestilentialis*, in his writings, have no relation to the Measles, but constitute the disease, to which other writers have given the titles of *Angina maligna*, *Ang. epidemica*, *Ang. pestilentialis*, *Ang. ignea*, *Scarlatina anginosa*, *Scarlatina maligna*, &c. &c.*

Sir William Watson probably first adopted Dr. Morton's opinion, and nomenclature, about the year 1768; see *Med. Obs.* iv. p. 133. In 1763, his technical terms seem to have been different: he says, *Med. Obs.* iv. p. 136, "The first person seized with the Epidemic Measles was on April the twenty-first;" but in the weekly Report of the sick to the Hospital Committee, and in the Apothecary's book, this case is denominated "Eruptive Fever."† The two other cases, said, *Med.*

mata, *ferè ad instar erysipelatis*, *apparebat*; and applies nearly the same terms, in the second case, to express the efflorescence of an acknowledged Scarlet Fever. The last case, entitled *Febris Scarlatina symptomatis dirissimis, et pestilentialibus comitata*, he refers to a "morbillous poison," which, when it cannot be propelled through the cuticle, usually falls upon the glands of the nostrils, fauces, groin, &c. producing inflammation, and ulceration of them, also carcinoma, buboes, and swelled parotids.

* The same observations apply to the passages quoted from Huxham in sir W. Watson's paper. Dr. Morton might have been defended from the severe censure on his accuracy respecting the fatality of the *Morbilli maligni* (*Med. Obs.* iv. 30) by allowing him the classical licence to use the numeral "tercentos" indefinitely. did not the adverbs "pius, minus," rather too strongly convey an intention of fixing the average of deaths by this malignant disorder at 300 a week in London, during the autumnal months of 1672.

† "Mary Grant, April 21, Eruptive Fever and Mortification Died May 3, 1763."

Obs. p. 137, to have occurred between the twenty-first of April and the fourth of May, are not entered in the written books under the denomination of "Measles:" one is termed "Eruptive Fever," the other "Scarlet Fever."* From these sources one hundred and eighty children were soon affected with the disease in question, every case of which is termed "Eruptive Fever," no mention being made of Measles in the Report-book till the latter end of November, when ten cases are entered, under the name of "Morbillous Fever." This, however, had no connexion with the preceding "Eruptive Fevers," which, according to the printed account, wholly ceased on the ninth of June.† In 1766 many of

* "Edward Page, April 26, Scarlet Fever." "Hester Fox, April 30, Eruptive Fever." One of the first cases is also termed "Fever with a Rash;" some others are entitled "Fever" simply. The varieties of Scarlatina were not named, or distinguished, by English physicians, for many years after the date of Sir William Watson's Essay. Hence, in connecting his observations with those of preceding writers, he was probably led to use their terms and distinctions, and to entitle his paper "An Account of Putrid Measles," instead of Putrid Scarlet Fever. The symptoms detailed coincide with those of the latter disease: and I have no doubt, considering the gradual change of medical nomenclature since 1769, that, if Sir W. W. had written eighteen years later, on the same subject, he would have prefixed a different title.

† Sir W. Watson's statement has led several persons to suspect, that from the virulent symptoms of a disease always reputed inflammatory, there must be something amiss in the state of the air, the diet, or general management of the children, at the Foundling Hospital. For this suspicion there is no ground. The regulations remain nearly the same as first framed by the governors, yet their active and intelligent physician, Dr. Stanger, informs me that the Measles, during the last twelve years, have never appeared in any other form than as described by Sydenham; and though frequently occurring there, that they have not been fatal beyond the usual

the Foundling children, particularly those placed at Westerham hospital in Kent, are said to have been affected with "Eruptive Fevers and Sore throats," a title not afterwards employed. The Measles appeared among the children of the Foundling Hospital at the beginning of March 1770, and continued some time. In May, the Scarlatina and Measles seem to have occurred together, and to be distinguished, according to Dr. Morton's nomenclature, as follows, "Measles," "Measles and Sore throat," or "Measles and ulcerated Sore throat," and Measles with "Putrid Fever." The denomination, "Scarlet Fever and Sore throat," first occurs in the weekly Report, Sept. first, 1787. About the same time, in the prescription book appropriated to the Measles, a separate entry is made of Scarlatina, this generic title being at length applied, when the disease, after a dreadful ravage during two successive years, had fully impressed the inhabitants of London with a knowledge of its distinctive character, and peculiar virulence.

An author of great respectability, in the year 1751, has ranked the Scarlatina maligna as a malignant and putrid form of the Measles, which, "when it occurs epidemically, with a sore throat, inflammation within the chest, ulceration of the glands, strangulation, and

proportion. Thus, in the year 1798, twenty-five boys, and forty-four girls, had the measles: six of the latter died. In autumn 1800, twenty-nine boys and thirty-seven girls were affected, and four boys died of the disease, or its consequences. In 1794, twenty-eight had the Measles, and all recovered. In 1802, one died out of eight children affected. Particular cases may occur, wherein symptoms of putrescence appear during the latter stages. Of such cases I have only noticed five, in a practice of twenty-four years: many practitioners, who have been established fifty years, have not seen them in a greater proportion: I never yet conversed with any one, who had noted putrid Measles occurring epidemically.

sphacelus of the fauces," he thinks the most fatal of European diseases.* Another physician, cotemporary with Dr. Watson, has written a paper very similar to his, in the *Acta nova Ac. nat. cur.* (tom. viii. page 186) on the malignant Measles, "*Morbilli malignè grassantes,*" at Eisenach, between 1759 and 1763. He says, "*Vix unquam sine symptomatibus anginosis primus morbus fuit:*" the other circumstances narrated agree with those of the *Scarlatina anginosa*, or *maligna*; and the remedy principally recommended is Peruvian bark. This paper scarcely requires further consideration, the author having fully expressed his sentiments, that the Measles and *Scarlatina* (*Maasern* and *Roethe*) do not in any respect differ from each other.†

* Philip. de Violante, de *Morbillis*, sec. xiv. & xv. His general statement, which is applicable to the *Scarlatina* only, he has exemplified by a particular account, sec. xvi. *Hæc epidemia Viennæ Austriæ, anno 1732 visa fuit. Primò, febre valde acuta, et inflammante, ægrotantes adoriebantur; et in primâ febris periodo Morbillorum eruptio apparebat: maculæ verò in hac corporis parte rubræ, in illâ pallidæ conspiciebantur, cum faucium inflammatione. 2 da vel 3tiâ febris die sphacelus in faucibus aderat: alvus laxa erat; Maculæ evanescebant; postremò ægrotantes brevi temporis spatio moriebantur, 3tiâ scilicet, vel ad summum 4to ægrotationis die.*

† The same opinion is held by Ludwig, *Tentamen de Febrium nat. et cur.* p. 185, and by many other German writers. Some, however, consider the *Scarlatian Febris*, or *Scarlatina simplex*, as a distinct, independent disease, but rank the anginose and gangrenous forms of it under the genus *Rubeola*, or sometimes under different titles. Sauvages himself has quoted in his nosology, at the article *Rubeola anginosa*, an epidemic "*Scarlet Fever and Sore throat,*" so denominated *Ed. Med. Ess.* vol. iii. page 26-7. Senertus, and more than thirty other medical writers after him, have considered *Scarlatina* as a species of the *Morbilli*.

The year after Sir William Watson's observations were published, Dr. Grant described the Scarlatina, which was still epidemic in London, under a new title, Angina erysipelatosæ, as if it had been an unusual disease. He wrote, about six years afterwards, "An account of a Fever and Sore throat, which began to appear in September 1776." This disease, he then observes, had been with propriety* called Scarlatina anginosa, yet he neither adopts that title, nor retains the name before given by himself, preferring another, Angina mucosa, as more applicable. In 1777-8, Dr. Levison, Physician to the General Medical Asylum, Welbeck-street, published a treatise on the same complaint, by him denominated an "Epidemical Sore throat." It was sometimes, he says, without, sometimes with, a miliary, or scarlet efflorescence on the skin; and adds, that in several instances "this disease was mistaken for the Measles, not only because the cough was an idiopathic symptom of the same, but because the efflorescence of the benign kind was very similar to that of the Measles, which were also epidemical at the latter end of August." Dr. Levison considers "the Sore throat as the genuine and principal disease," to which, in autumn, he thinks "two other epidemics, namely, either the Scarlet, or Miliary, Fever, and a purging, like the autumnal Dysentery, were joined," incidentally, both of them being, in his opinion, unconnected with the primary epidemic Angina. I have quoted these observations of a physician residing in the city of London, and of another in Westminster, as a farther proof of the unsettled state of opinions and nomenclature respecting the Scarlatina, till after the year 1780.

The original writers on the Measles, who are all of

† Referring to Cullen's Nosology, published about that time.

the Saracenic school, have created no little confusion by describing the Small-pox and Measles as one and the same disease; a disease admitting, in their judgment, of some variation in its form, and with symptoms more or less urgent in different cases. This error was transmitted by medical authors through more than eight centuries. It is unnecessary here to review the primary accounts of the Measles given by the physicians of Egypt and Arabia, since their observations, from the year 600 to the middle of the ninth century, appear together in a curious tract published by Rhazes soon after the latter period.* The following specimen of their manner is taken from Judæus and George Bactishua: "Et signa Blactiarum (Morbilorum) sunt febris acuta vehemens, angustia, et murmuratio, et labor assiduus, desiccatio linguæ, sputum grossum, vox grossa et rauca, tempora elevata, ponderositas capitis et pectoris, impedimentum anhelitus, rubedo faciei, tussis, oculi rubicundi, lachrymæ, sternutatio, et nausea cum abominatione: et Blactiæ accidunt subito, et Variolæ successivè. Et Blactiæ, viridis, et violacci coloris, sunt malæ, et propriè cum apparent et absentantur subito, quia syncopizabit patiens cum tremore cordis, et velociter moritur."

Rhazes himself, though he considers the Measles and Small-pox as the same disease generically, and requiring a similar mode of treatment, has yet been more anxious than any of his countrymen to point out their specific differences. The Measles, he observes, appear later in the fever, sometimes on the ninth day, or even after it, adding, "Cum vides in autumno dolorem lumborum cum

* Rhaz. de Variolis et Morbillis, in Continent. Lib. xviii. cap. 8. interprete Feragio Judæo, A. D. 1486.

febre, securus sis de Variolis, non tamen de Blactiis, quoniam eum Blactiis non est dolor lumborum Scias etiam quod Variolæ humidæ sunt, et Blactiæ aridæ et siccae Et aliquando apparent Variolæ similes Blactiis, et aliquis medicus dixit, quod Blactiæ vertuntur in Variolas. Et inveni quod differentia est inter has, quia Blactiæ sunt rubæ, et apparent in superficie cutis sicut Ignis Persicus; (see Herpes, ord. iv.) et non sunt profundæ eminentiæ, nec eminentes: et Variolæ habent eminentiam, ac rotunditatem; et acuas tu benè intentionem tuam super hoc; et cum hoc tibi non erit intelligibile, et sensui occultatum, non judices suprâ ipsum quousque transeat dies septimus; et illæ duæ non sunt eminentes, non debent Variolæ appellari.”*

There is no trace in medical history of the origin and primary cause of the Measles. Aaron, a physician of Alexandria, cotemporary with Mahomet, and the first mentioned writer on this subject, does not speak of the small-pox and Measles as new, or unusual diseases. He considers them, especially when having a livid appearance, as highly malignant, and in other respects similar to the Anthraces, or Carbuncles of the groin, axillæ, &c. which were often epidemical in the climate where he resided, and fatal within four or five days. Another ancient author observes (in libro de abbreviationibus) that “the Small-pox and Measles may be, at any time, excited by dead bodies putrefying and corrupting the air, but especially during the summer season, and in persons who have long omitted blood-letting.” On these points Rhazes says he could not collect any thing satisfac-

* Loc. cit. Compare Avicenna, tom. ii. page 74, and Haly Abb. Theorice, viii. 14.

tory from his immediate predecessors.* He takes it for granted that the Small-pox and Measles were known to Galen more than six hundred years before his own time, being misled by some incorrect translation of Galen's works into the Arabian language. The passages which he quotes have certainly not the least relation to the diseases above mentioned.† Indeed no description of them, nor the slightest collateral hint, appears in the writings of the Greek physicians, which could lead us to suppose they had any knowledge on the subject. Some modern writers have held a contrary opinion, maintaining that Hippocrates and his successors applied to the Measles and Small-pox the denominations of Exanthemata, Ecthymata, Ecpymata, Eczemata, Erysipelata, Herpetes, Anthraces, &c. Now some of these terms have been strictly defined, and in a way which admits of no such application; the rest are left indefinite, and although intended to express generally eruptions on the skin, yet have not been appropriated to any particular form of them. A controversy, founded on materials so slight and unsatisfactory, was carried on with ardour during a part of the last century, but need not at this time be revived, when it is nearly consigned to oblivion.

* *Nihilominus ex iis ne unus quidem est, qui memoravit causam ejus morbi efficientem, et quare eveniat ut illum vix effugiat vel unus mortalium.*

† The mis-translated terms are, Phlegmonæ, Erysipelata, Herpetes, and Ionthi (pimples of the face) in Tr. i. de compos. med. sec. loc. De Prognos. a pulsib. lib. ii. and de usu partium, lib. ix.

ORDER III....II. SCARLATINA.

THE SCARLATINA* is characterised by a close efflorescence, of a scarlet colour, appearing on the surface of the body, or within the mouth and fauces, usually on the second day of a febrile disorder, and terminating in about five days, but without certainty of a crisis to the fever. This disease spreads rapidly, by contagion, among children, in whom the eruption often appears five or six days after they have been infected.† The sus-

* Nomina morbi varia, erronea sæpe, ineptaque, quibus cum medici quondam appellarunt, laudatis in scriptoribus invenire est, Scarlatinæ nomine, barbaro satis, a colore panni vulgò sic appellati, mutuato, civitateque, ut videtur, in arte donata. Est febris acuta, exanthematica, rubras, easdemque latas, maculas proferens, organa deglutitionis non rarò impetens, epidermidis in desquamationem abeuns, et infamis præcipuè periodo suâ alterâ, unius, alterius, tertix, et ultra, septimanæ, quâ tumore corporis vario, anxietate, debilitate, hominem non rarò in longé majus discrimen quam in periodo priore conjicit. De Haen. Rat. Med. Continuat. tom. i. c. 7.

The denomination Scarlatina was first applied to this disease by British writers: however offensive the term may be to a classical ear, it cannot well be displaced, having found admission into all the systems of Nosology. Another age will correct and refine the language now used on subjects untouched by the Fathers of Physic.

† Dr. Withering says, "I have repeatedly had occasion to observe, that it is upon the third or fourth day after exposure to contagion that the patients begin to complain." On the Scarlet Fever and Sore throat, page 61. See Heberden, Comment. de Morb. page 20.

ceptibility of infection is, however, very different in different persons; it also differs in the same individuals at different times. I have seen, in numerous families, one child have the Scarlatina, without communicating it to any of the rest; yet, perhaps, in the succeeding autumn several of them were infected, by only passing near a patient recovering from the disease, or by touching those who had a little time before visited some person affected with it. Adults are not very susceptible of the contagion: several physicians and apothecaries of London have never felt its effects, notwithstanding their attendance on many hundreds in the disease, often under the most unfavourable circumstances.

The generic term *SCARLATINA* comprises three varieties, which may be denominated *Scarlatina simplex*, *Scarlatina anginosa*, and *Scarlatina maligna*.

1. *SCARLATINA SIMPLEX*. This form of the disease consists merely of the rash, and a moderate degree of fever for three or four days, not being, like the two other species, attended with any local swelling, inflammation, or ulcer. The first symptoms are, general debility, nausea, and slight successive shiverings, terminated at length by considerable heat and thirst. On the second day, numerous specks, or minute patches, of a vivid red colour, appear about the face and neck: within twenty-four hours, a similar efflorescence is diffused over the surface of the body, likewise in the nostrils, on the inside of the lips, cheeks, and eye-lids, over the tongue, palate, and the whole fauces. These internal parts being red, the effects of the disease upon them do not perhaps attract attention till the high scarlet flush be produced. A studious observer can, therefore, best trace on the external surface the gradual progress of the rash. It is at first composed of innumerable red points, with interstices

of the usual colour of the skin. Most of these interstices are obliterated by a diffuse redness on the third day, and the efflorescence becomes almost continuous on the cheeks, and over the limbs, particularly round the fingers, assuming the full scarlet colour, which characterizes the disorder. Several papulæ are scattered on the back of the hand, breast, arms, and lower extremities. All that extent of surface is indeed rough, like *cutis anserina*, but red and tense, from the great quantity of blood distributed to the cutaneous vessels, to the miliary glands, to the bulbs of the small hairs, and to the papillæ of the skin. On the trunk of the body the efflorescence is seldom universal, but either forms many separate patches, greatly diversified as to their size and outline, or extends in ramifications, appearing somewhat like a reticular distribution of small vessels injected with wax, in an anatomical preparation. On the loins, and nates, and within the flexures of the joints, the scarlet colour is most strong, and general: in those situations it also remains the longest time. The rash is always less florid in the morning than at night, its colour being highest on the third and fourth evening. On the fifth day it begins to decline, the interstices becoming larger, and the scarlet hue less vivid:* On the sixth day its appearance is very indistinct, and it is wholly gone before the end of the seventh. Between the fourth and seventh day there is often a scattered eruption of minute semi-globular vesicles, containing a thin pearl-coloured fluid. They rise on the temples under the hair, also on the neck, breast, and shoulders, succeeding one

* At this time, and on the second day, when the efflorescence appears most in patches, minute attention is requisite, to distinguish *Scarlatina* from the Measles.

another without any certain order.* On the fifth day a slight scurfiness sometimes appears about the temples, neck, or breast, but a more general separation of the cuticle† takes place on the eighth and ninth days. Sometimes large pieces of the cuticle come off entire, more especially from the hands, fingers and feet, a new cuticle having been previously formed underneath. There is likewise, on the limbs, an appearance as of round, white vesicles, which, however, on being opened, are seldom found to contain any fluid. These have been noticed by many authors,‡ and may, I think be thus explained.

* Miliary pustules occur in almost every form of rash. From their occasional appearance in the Scarlatina, Vogel and Burserius have thought proper to establish a variety of this disease, entitled by them *Scarl. complicata*, or *pustularis*, *Inst. Med.* tom ii. sec. 62. For the *Scarlatina variolosa* of Sauvages (*Nosol. Meth.*) there is no better foundation.

† *Maculis demum evanescentibus, decedenteque subjectâ cuticulâ, restant furfuracæ quædam squamulæ, ad instar farinæ, corpori inpersæ, quæ ad secundam aut tertiam vicem se produnt, conduntque vicissim.* *Syd. sect. 6. cap. ii.*

‡ See Plenciz. *Tract. de Scarlatinâ* ; Rosenstein, on the Diseases of Children, chap. xvi.

Vesiculæ ampliores, vacuæ tamen, bullas a combustionè repræsentantes exsurgunt. *S. P. de Meza, Compend. Med. Pract.* page 59.

“ In one man, when the scarlet of the skin was turning brown, several white blisters arose upon different parts of his hands and feet, which, when cut open, appeared quite dry ; but in a boy who had similar blisters, some of which were cut in a few hours after their appearance, a thin pellucid, watery fluid was discharged.” *Withering, on the Scarlet Fever and Sore throat*, page 21.

“ In Several instances, an eruption of white blisters succeeded their recovery. This form of the disease has been called by Sauvages, *Scarlatina variolosa*.” *Professor Rush, of Philadelphia, Medical Inquiries and Observations*, page 123.

When the larger papulæ subside, by the great contraction of the cutaneous vessels at the decline of the efflorescence, the portions of cuticle suddenly raised up at their formation, and detached from the former points of adhesion, cannot contract along with them, but remain prominent for a short time, and then fall off in scurf.

The pulse, during the eruptive stage of the *Scarlatina simplex*, is usually very quick and feeble. The tongue exhibits, on its upper surface, a whitish fur, through which the elongated papillæ extend their scarlet points; the sides of the tongue are of a darker red colour. The urine is clear, and of a bright straw colour. The face is considerably tumified. In some cases, the scarlet efflorescence may be observed on the tunica albuginea, when the eyes appear red, bright, and humid, but without any material increase of the lachrymal secretion. There is usually great restlessness, with a sense of itching or tingling in the skin, and often slight delirium. These symptoms continue with more or less violence from three to seven days. A few patients escape without fever, pain, or any particular uneasiness.*

Although the Measles and *Scarlatina* are now known to arise from different modes of contagion, yet so many authors have considered them as varieties of the same disease, that it may be allowable in this place to recapitulate their diagnostic characters.

1. The efflorescence in *Scarlatina* generally appears on the second day of fever: in the Measles it is seldom visible till the fourth.

* Alii postquam levissima hujus morbi signa per biduum experti sunt nullo negotio convaluerunt. Heberden, Comment. page 28. Compare Sydenham, page 6. 2. de Gorter Prax. Med. ii. 196. Prosp. Martian. in Hipp. Epid. 1. ii. sec. 3.

2. It is much more full and spreading in the former disease than the latter, and consists of innumerable points and specks under the cuticle, intermixed with minute papulæ, in some cases forming continuous, irregular patches, in others coalescing into an uniform flush over a considerable extent of surface. In the Measles the rash is composed of circular dots, partly distinct, partly set in small clusters or patches, and a little elevated, so as to give the sensation of roughness when a finger is passed over them. These patches are seldom confluent, but form a number of crescents, or segments of circles,* with large intervening portions of cuticle, which retain their usual appearance. The colour of the rash is also different in the two diseases, being a vivid red in the Scarlatina, like that of a boiled lobster's shell; but in the Measles a dark red, with nearly the hue of a raspberry.

3. During their febrile stage, the Measles are distinguished by an obstinate harsh cough, forcing up, in repeated paroxysms, a tough, acrimonious phlegm; by an inflammation of the eyes and eyelids, with great sensibility to light; by an increased discharge from the lachrymal gland, sneezing, &c. The Scarlatina is frequently attended with a cough, also with redness of the eyes, from an extension of the rash to the tunica albuginea, circumstances which render the distinction between this complaint and Measles particularly difficult, if other symptoms be not clear and decisive. On minute observation, however, it will be generally, perhaps always, found, that the cough in Scarlatina is short and irritating, without expectoration; that the redness of the eye is not attended with

* In Scarlatina, when any part of the rash has a tendency to circular forms, the circles are usually completed. Sometimes the circumferences of these circles intersect each other variously.

intolerance of light, that the ciliary glands are not affected; and that, although the eyes appear shining and watery, they never overflow.

4. Most writers on the subject, in distinguishing Scarlatina from Measles, and other eruptive complaints, observe, that there is a peculiar sensation of anxiety, depression, and faintness, in all cases of it which are attended with fever.

5. When the rash appears on the third or fourth day; being scattered, and of a dark shade of colour, as frequently happens in the two latter varieties of Scarlatina, the disease may be distinguished from Measles by the appearances in the throat, by the rigidity of the muscles of the neck, and other peculiar symptoms hereafter to be described.

2. SCARLATINA ANGINOSA. In this species of the disease, there is superadded to the fever and efflorescence a considerable swelling of the tonsils, velum pendulum palati, and uvula, accompanied with a florid redness of their whole surface, often terminating in numerous slight ulcerations. The Scarlatina, principally under this form, was, in London, the leading epidemic of the year 1786. It occurred in 1785 sporadically, as usual, from about the middle of March to the end of November, and then ceased till the month of May ensuing. During that interval, there was a more general diffusion of the Measles than had been observed for many years before. They first appeared in the eastern confines of the city, and afterwards spread from thence rapidly through Westminster and all the adjacent villages. The Scarlatina simplex, and anginosa, recommencing in May, followed nearly the same course as the Measles, and were not frequent in Westminster till September: in the course of the

next three months, the most unfavourable species of the disease was diffused over that quarter of the metropolis, and very often proved fatal. Cases of Scarlatina, during the year 1786, exceeded in number the sum of all other febrile diseases within the same period. Since that time the disease, occurring annually, has had a different extent, and shown different degrees of virulence, in different years, but without any material variation of its form.

The primary febrile symptoms of the Scarlatina anginosa are the same as those mentioned page 194-5, but more violent. The affection of the throat sometimes begins with the fever, at other times is not perceptible till the scarlet efflorescence has arrived at its height; most frequently it is felt when the rash appears, and increases and declines with it. A sudden sensation of stiffness in the muscles of the neck, and lower jaw, takes place at the beginning of the disease. On the second day of fever the throat is rough and straitened, the voice becomes hoarse, and deglutition is performed with pain and difficulty. These symptoms are attended, on the second, third, and fourth day, with nausea, vomiting of bile, head-ache, delirium,* restlessness, and great heat,† with a feeble fluttering pulse, a

* "In Febre rubrâ ægri vel ipso primo die delirant; atque interdum, licet omni alio periculi indicio vacent, tamen non cessant aliena loqui singulis noctibus ab initio morbi usque ad finem. Heberden, Comment. page 19.

“The tendency to delirium prevailed in proportion to the intensity of the redness in the eyes.” Withering, page 16.

† The heat of the skin is such as to raise the thermometer to 112 degrees. The patient's breath seems also to be felt hotter by the attendants in this disease than in any other fever.

quick respiration,* and extreme languor or faintness. On examining the throat, there appears a considerable enlargement of the tonsils, and a florid redness of their surface, which extends over the palate, its velum pendulum, the uvula, and posterior part of the fauces. The tongue also assumes a high red colour; and the papillæ over its whole surface are greatly elongated. In some cases no further change is observable in the fauces, neither do the appearances above mentioned continue beyond the fifth or sixth day. No deep, or considerable ulcer forms in the tonsils.† Slight superficial ulcerations are very frequent, and more especially at the latter end of the year. They occur at an early period of the disease, as on the second or third day: when they are later, an opportunity is afforded of marking their progress more distinctly. The formation of them is preceded by a very quick and unequal pulse, with lowness, and great inquietude. Small white patches are then visible over the velum pendulum palati, and the tonsils; at the same time, the red colour in those parts becomes darker in some places than in others, so that the whole surface has a peculiar speckled appearance. Soon

* "The breathing was short, and often interrupted by a kind of imperfect sigh." Withering, page 15.

† Dr. Withering says, "I never saw any real ulcerations in these parts, but sometimes collections of thick mucus, particularly on the back of the œsophagus, greatly resembling the specks or sloughs in the putrid Sore throat; but these are easily washed away by any common gargle." He allows, however, that "during the autumnal season some patients threw out several white or ash-coloured sloughs, though no such sloughs were visible on inspecting the throat;" and that "in most, the fauces, particularly the tonsils, were covered with them, and upon their separation looked raw, as if divested of their outer membrane." Page 24.

afterward, fissures, or excoriations, take place at the centers of the white patches, which are almost immediately covered with whitish sloughs. When these are numerous, the fauces are constantly clogged with a large quantity of tough, viscid phlegm : hence the difficulty of swallowing is increased ; and much pain is felt from pressure externally applied. The sloughs are in some cases removed about the fifth or sixth day, at the decline of the efflorescence ; in other instances they continue to the eighth day, or even later ; and when they separate, partial excoriations remain, which may, however, be readily healed.

The efflorescence differs in a few particulars from that described under the article *Scarlatina simplex*.

1. It does not appear so early in the disease, but is often delayed to the third day.*

2. It does not so constantly extend over the surface of the body, but comes out in scattered patches on the back, sides, neck and breast, or about the joints.†

3. It sometimes wholly vanishes the day after its appearance, and re-appears, partially, at uncertain times.

4. The whole duration of it is longer than in the *Scarlatina simplex* ; and the mode of desquamation is less regular.‡

* *In aliis hic color non nisi quarto morbi die in conspectum venit.* Heberden, page 22. Withering, page 16, 18.

† *Interdum pectus, et brachia solummodò rubent ; et non rarò vidi exteriorem carpi partem levi rubore suffusam, cujus nusquam alibi reperiri vestigium potuit.* Heberden, Comment. page 17 and 22. Withering, page 20.

‡ See Dr. Rush, page 120. According to De Haen, cuticular exfoliations take place successively, often in large pieces, from the sixteenth to the fortieth day. He also mentions the cracking and separation of the nails. *Rat. Med. Contin. i. 71.*

These variations are most frequent during the autumnal and winter months, when the disease is in general most severe. Other symptoms occur, at the same period of the year, in addition to the usual series, Dr. Sims* observes, that, in the autumn of 1786, “a frequent, short, hicking, cough took place in several patients: they did not bring up any matter with it, nor did each fit last beyond one or two short expectorations, but these were repeated several times in a minute: many, who had no appearance of pituita, and but the slightest possible appearance of angina, had this cough more troublesome than those who had much of either. Another circumstance, in the months of November and December, was, that a few days after the apparent change of the disorder, a swelling attacked the face, but more frequently the extremities, attended with most excruciating pain. This swelling was neither red, puffy, nor œdematous, and did not depend on the previous mode of treatment, as it occurred in those who had been treated in the most different manners. Some first complained of a violent tooth-ache: after two or three days they complained of an equally violent pain in the back, the first one gradually subsiding. In a day or two more, or even sooner, the pain attacked their elbows, wrists, and hands, which

Whenever the rash is slight, or when it suddenly disappears, there is seldom any desquamation. In that case the disease is always rendered precarious, and has a troublesome sequel. The same observation is true with respect to the Measles: no separation of the cuticle takes place, when the efflorescence is obscure and partial, or when its premature retrocession occasions the distressing symptoms recorded page 168.

* Memoirs of the Medical Society of London, page 405. See Dr. Heberden, Comment. page 20.

were usually the parts last attacked.* These pains, in some patients, were only in the hands and arms. In one child the Scarlet-fever appeared without any angina, and having finished its course, left the patient seemingly in perfect health : but in a few days the fever returned, without any eruption, but with a very considerable degree of sore throat, and much pain and swelling of the tonsils and parotids, which likewise ran its course, as if the former symptoms had never appeared."

Although no uneasiness is, in general, felt in the throat previously to the febrile symptoms, or efflorescence, it would yet appear, on inspecting the fauces of persons exposed, that the contagion had been acting on them many days before the commencement of fever. Its action is denoted by a dark red line, extending along the velum pendulum palati, and lower part of the uvula. Dr. Sims* says, " In many families, where some have been confined with the disease, I have had an opportunity of observing the first, and most minute, approach of it in others, and there always found that the first marks of its approach were a paleness and dejection of countenance, and if the fauces were inspected, the under edge of the velum pendulum palati was considerably redder than natural. The pulse, at this time, was rather disturbed and flurried than feverish : in some the uvula was more inflamed, and the tonsils

* According to Dr. Withering (page 23) " These swellings had sometimes a reddish shining appearance, like the gout." He adds, " The eyes did not, in autumn, bear the light, though they had less of that redness described before, but still a slight tinge of it was visible, together with something of the shining watery appearance, which is so remarkable in the Measles."

* On the Scarlatina anginosa of 1786, " Memoirs of the Medical Society," vol. i. page 394.

a little swelled, so as to give a slight degree of pain in swallowing: this pain and inflammation, however, varied on different days, so as to give frequently hopes of the disorder going off entirely; and I have reason to think that it often did go off, under a treatment hereafter mentioned, without ever gaining greater ground. In very many, however, after remaining in this uncertain variable state for several days, sickness and vomiting came on suddenly, and the disease was completely formed."

Nearly the same observations were made by my friend Dr. Binns, while superintendant of Ackworth school, Yorkshire, where the Scarlatina, in 1802, affected the greater part of the children. "There are many incipient cases of the disease, in which the throat is moderately affected with swelling of the tonsils and erythema of the neighbouring parts, the papillæ of the tongue, more especially at and near its tip, are enlarged, prominent, and of an intense redness, and the pulse is from ninety-six to one hundred and eight. Several of these cases have remained, with very little variation, for two or three weeks, some for a month. In some again, the appearances have wholly gone off* in ten days or a fortnight, while in others the fever has at that time increased, the scarlet eruption has become very general, and the disease arrived at its crisis in about ten days more."

Those who have formerly had the disease, and also those who are just recovering from it, if exposed to

* Those persons on whom the effects of contagion thus cease, or have been removed by early applications, are not less liable to take the disease in its fullest form, when again exposed to its influence. See Dr. Blackburne, on Scarlet Fever, page 25.

the contagion, are very liable to be affected in the manner above described, but with no other symptom of fever than a quick pulse. They are, however, pale and languid, and have often an appearance of red specks or patches, like flea-bites, on the breast and abdomen, and some times a purple eruption of greater extent. Dr. Binns observes, "Notwithstanding that this is usually a secondary appearance, at the distance of two, three, four, or even five weeks after recovering from the first attack, yet some are affected in this way at first: I remember a boy, who died, came to me in consequence of such an eruption, not making any complaint otherwise; but, on inspecting the fauces, I found further symptoms of the disease. He died on the tenth day from his application."

During the state of extreme debility which usually succeeds the *Scarlatina anginosa*, some patients are affected with anasaruous swellings of the face and hands, but more especially of the lower extremities.* The swelling becomes conspicuous about the eighth or tenth day from the disappearance of the rash, and continues for two or three weeks. In cases exhibiting a very full and vivid efflorescence, the anasarca takes place more frequently, and to a greater degree. When the throat is much ulcerated, and the rash not extensive, and when no desquamation succeeds, anasaruous swellings rarely occur. I do not remember to have observed any considerable effusion of water into the cavity of the abdomen, thorax, or pericardium, nor into the ventricles of

* Dr. Sims says, "I saw but four cases of Anasarca succeed the disorder; and these were all in poor persons, and unattended with danger."

the brain,* an effect which many practitioners and medical writers have noticed. However, two of my patients, who had been in a very weak state before the fever, died hectic, with anasarcaous swellings of the limbs. These were the only fatal cases I ever saw of *Scarlatina anginosa* retaining the form above stated.

An enlargement of the parotid glands happens frequently in adults, and continues a long time without suppurating. Children, at every period of the disease, are liable to tumours, both of the parotid and submaxillary glands, sometimes ending in tedious and painful abscesses.* With these, they have, during the latter stage of the complaint, ulcerations at the corner of the mouth, strumous ophthalmia, swelling of the upper lip, and purulent discharges from the ears, sometimes accompanied with deafness: They are also subject to pustules, or small ulcerations of the tongue, which prove troublesome for some days, but without any se-

* The occasional termination of this disease in a sudden phrenzy, I have remarked elsewhere. (On diseases in London, p. 47.)

† The swelling of the parotid glands was sometimes apparent in the beginning of the complaint, at other times it came on about the fifth day, with great pain, protracting the disease: and in many it came after the efflorescence had entirely disappeared, bringing it in some degree, and all the feverish symptoms, back with it. Though this swelling was attended with great pain, I did not see one case of its suppurating. I should mention here, that both in the cases attended with the pains already mentioned, and those with the parotids, the pulse was more violent and inflammatory than in any other cases." Dr. Sims, p. 407.

"After the fever ceased, it was not uncommon to have abscesses form on one or both sides of the neck, under the ears; but the matter easily discharged itself through the ruptured teguments, and they healed in a few days without much trouble." Withering, 18. and page 24.

rious consequences.* In one instance the disease terminated by a swelling of the testicle.†

During every epidemic Scarlatina, many cases occur, in which the efflorescence is confined to the throat and mouth, there being no appearance of a rash on the skin.‡ The febrile symptoms, vomiting, and delirium, continue violent for several days. A crimson colour of the throat is perceptible often before the fever commences. In the course of it, numerous small specks of ulceration are formed on the tonsils, &c. and become in many places confluent, when the increased secretion of phlegm, the tumour, pain, and difficulty of swallowing, occasion great distress. This complaint seems peculiar to adults, and is evidently a species of Scarlatina, because it affects some individuals of large families, while the rest are labouring under other forms of the Scarlatina, and because it is capable of communicating, by infection, all the varieties of that disease. It is sometimes succeeded by an enlargement

* “No symptom was more troublesome to some individuals, than exulcerations at the side and down towards the root of the tongue, which were so painful as to deprive them of the power to take solid food, even several days after the inclination for it had returned.” Dr. Withering, on the Scarlet fever and Sore throat, page 24. He adds, “I have been told of several cases that were followed by a succession of boils, upon different parts of the body.”

† Dr. Heberden has observed, *Neque vero testiculī semper fiunt liberi a tumoribus.*

* *Quidam sine cutis efflorescentiâ aut ejusdem desquamatione, satis severâ afficiuntur anginâ: attamen hi mitiùs quam qui simul Scarlatinâ correpti ægrotabant apud nos. (Havniæ, 1777-8.) De Meza, Compend. Med. Pract. t. i. page 58. Compare Dr. Sims, page 413. Dr. Withering, page 22. Memoirs of the Medical Society, London, vol. iii. page 358.*

of the parotid glands, but not, according to my own observation, by dropsical swellings. Persons who have previously gone through the *Scarlatina anginosa* experience, while conversant with the sick, very uneasy sensations in the throat; they remain, however, free from fever, although the swelling and inflammation of the tonsils be considerable.

3. *SCARLATINA MALIGNA*. Its symptoms on the first day are nearly the same as in the *Scarlatina anginosa*; but some of the following peculiarities are afterwards observable :

1. A small, indistinct, and irregular pulse; a brown or black incrustation of the tongue, teeth, and lips :*

2. A dull redness of the eyes,† a dark red flushing of the cheeks, deafness, delirium, or coma, alternating with fretfulness and violence :

3. Breath extremely fetid; a rattling and laborious respiration, partly occasioned by a thick, tough phlegm, clogging the fauces; a constriction of the jaws, and painful deglutition; a fulness and livid colour of the neck, with retraction of the head :

4. Ulcerations on the tonsils, and adjoining parts, covered with dark sloughs, and surrounded by a livid base :‡ the tongue is often so tender, that a slight touch produces excoriation :

* Huxham, on Fevers and Sore throat, p. 110 and 112. Withering, p. 18.

† “The eyes were heavy, reddish, and as it were weeping.” Huxham, p. 110. “Eyes inflamed, and watery, or sunk and dead.” Withering, page 56.

‡ The aversion to swallowing is occasioned by the soreness of these ulcers, not by any tumour, or obstruction in the passage. “Cibi et medicamentâ respuuntur, neque tamen ideo quia devora-

5. An acrid discharge from the nostrils, causing soreness, or chops, and even blisters, about the nose and lips, the fluid discharged being at first thin, but afterwards thick and yellowish :

6. The rash is usually faint, excepting in a few irregular patches ; and all of it presently changes to a dark or livid red colour.* It appears late, is very uncertain in its duration, and often intermixed with petechiæ. In some instances the rash suddenly disappears a few hours after it is formed, and comes out again at the expiration of a week, continuing two or three days : in one case numerous patches of it appeared a third time, on the seventh day from the second eruption ; these remained for two days.

When the Scarlatina spreads widely, it exhibits, in the different persons affected, every gradation of appearances, from the slightest to the most malignant form of disease : yet during its diffusion through some large families and schools, I have seen it uniformly retain the series of symptoms which occurred in the first patient, with nearly the same degree of fever. In the autumn of 1786, and occasionally since that period, the Scarlatina maligna, as above described, affected the inhabitants of several districts in London, comprizing narrow courts, alleys, and close crowded streets ; and afterwards extended to some

tio molesta est, quæ sæpe ad mortem usque, quod miratus sum, satis facilis manet, quamvis fauces sordidissimis ulceribus fuerint undique circumtectæ, et spiritus penè interclusus." Heberden, Comment. p. 23. He thinks the ulcerations may, in these cases, extend along the trachea, rather than down the œsophagus.

* " Their whole skin, instead of the scarlet, assumed a very remarkable appearance, which resembled nothing so much as that of a dead body which has been kept several days, or as if a mixture of blood and water were universally diffused under it, and could be seen through it." Dr. Sims, p. 410.

adjoining villages, in low, damp, or cold situations. It is, however, more frequently intermixed with the other varieties of *Scarlatina*, and it sometimes unexpectedly supersedes the milder forms of the disease, on the fourth, fifth, sixth, or seventh day of their course.* Patients who withstand the violence of its first attack have nevertheless to struggle through a series of most untoward circumstances,† continued far beyond the usual febrile period. The ulcerations gradually spread from the fauces to the œsophagus, larynx, and trachea. Violent pains of the bowels, and excoriations about the nates, succeed; also hectic paroxysms, with suppuration of the glands, a teizing cough, great difficulty of breathing, pains in the side, and a remarkable alteration in the sound of the voice.‡ A few recover after having been thus harassed, almost incessantly, for six or eight weeks. In 1786-7, more than two-thirds of those who were affected with the *Scarlatina maligna* died, between the seventh and nineteenth day of the fever. The symptoms portending danger were, continued coma, dulness of the eyes, laborious breathing, diarrhœa, petechiæ, vibices, and hæmorrhagy. A case terminated fatally on the sixth day, in which there were vesications on the hands, legs, insteps, and toes, as if boiling water had been poured on those parts, or large blisters had been applied to them. The patient was an adult female,

* See Dr. Grant, on *Angina maligna*, ii. 125, and Dr. Sims, p. 410.

† In *Scarlatinâ malignâ* quid putridi latet, unde pulsus parvus, celer, urina pallida, ulcera aphosa; nec non parotides, quamvis suppurantes, lethales observantur. Sic in *Epidemiâ Havniensi* per quatuor hebdomadas, si non primis morbi diebus suffocati, languentes tandem peribant. De Meza, tom. i. page 59.

‡ Dr. Withering, page 22-c

who had a very full efflorescence. It may be observed, that the degree of danger in the complaint does not depend on the greater or less extent of the rash on the skin : the fullest redness affords no decided security, nor is the total absence of it incompatible with a mild disease. In one infant, about the eleventh day, a considerable erysipelatous swelling affected the left cheek, and within three days produced a deep gangrenous eschar. The wrists at the same time became rigid and contracted ; and the patient died on the sixteenth day of the disease. Another child, eight years old, was affected on the seventeenth day with an erysipelatous swelling * under the left eye, and died on the following day. It will appear from authors hereafter quoted, that there has often occurred superficial gangrene in other parts of the body, as about the nates, and genitals, likewise on the tongue, gums, and insides of the cheeks, sometimes attended with caries of the jaw-bones.

Many patients sink under this disease, unexpectedly, at a very early period, as on the second, third, or fourth day, no symptoms having preceded, which could excite an apprehension of immediate danger. It has been thought that so sudden a mortality is owing to a gangrenous state of the fauces, œsophagus, stomach, intestines, or lungs : † this opinion seems to be confirmed by dissec-

* See a case of this kind which terminated favourably. Rep. on Diseases in London, page 78, 83.

† Nisi ægro statim in primo morbi impetu succurratur escharæ gangrænosæ in fundo faucium, versus arcus, et velum palati, superveniunt, et hisce ortis pauci emergunt. Hæc gangræna œsophagum, asperamque arteriam sæpe ante occupat, quam illam percipere, illique mederi queamus. Navier : See Comment. de reb. P. l. vol. iv. 338.

tions.* Sometimes, at a much later period of the disease, when the fever has been slight, and no alarm excited, the symptoms mentioned page 208 commence almost instantaneously, and terminate the patient's life in a few hours. Such a termination took place within four hours, in a girl six years old, on the fourteenth day, of the Scarlatina. She had specks in the throat, with swellings of the submaxillary glands, and a degree of fever so moderate, that she had not been confined to bed, nor even to the house, till the time mentioned. In the cases which terminate fatally, within forty-eight hours after the accession of fever, it must be concluded that the throat had been long affected in the manner stated page 203-4, and that the poison had gradually pervaded the whole constitution: hence the sickness, shiverings, languor, and insensibility, do not in such instances denote the commencement of fever, but are the final symptoms of an insidious and most virulent distemper.†

It is truly singular, that the slightest of all eruptive fevers, and the most violent, the most fatal disease known in this country, should rank together, and spring from the same origin. Experience, however, decides that the sim-

Dr. Heberden observes, "*Inspectis faucium crustis conjectura quidam fieri potest de periculo ægri, quod eo majus erit quo latius illæ manent, quo altiùs carnibus insideant, quo hæreant pertinacius, quo sæpiùs renascantur, et magis in gangrænam spectent. Conditio tamen harum crustarum index est, non autem causa, periculi.*" Comment. page 22.

* Sannert. Pract. Med. l. iv. cap. 12. Heberden, Comment. page 24.

† So Dr. Binns; "This insidious disease is often acting on the constitution, particularly on the throat, while the persons affected are wholly unapprised of it: for dreadful languor, sickness, and vomiting, have in several cases occurred a few hours after the patient began to complain." Compare Med. Obs. v. i. page 216, and Dr. Blackburne, on Scarlet Fever, page 42.

ple Scarlet Fever, the *Scarlatina anginosa*, the *Scarlatina* (or *angina*) *maligna*, and the scarlet ulcerating Sore throat, without the efflorescence on the skin, are merely varieties of one disease.* That all of them proceed from the same source of contagion is evident; because, under the same roof, in large families, some individuals have the disease in one form, some in another, about the same period.† According to the state of the air, the soil, climate, or season of the year, one form predominates over all the rest, and gives the general character to every epidemic *Scarlatina*. Hence arise the various accounts and opinions respecting it, which are to be found in medical writers.‡ The malignant species of the disease is most rare, and usually limited to the winter months. It exhibits some peculiar appearances, and is often attended with only a partial or obscure eruption. On these accounts, perhaps, it has been separated from the rest, and been improperly considered as a distinct genus of disease. Several practitioners, with whom I have conversed, would yet retain the distinction, stating that

* “The affection of the throat has occurred with us in every possible state; mere erythema, sometimes with a swelling of the tonsils; aphthous specks; deeper ulcerations, with white sloughs; ash-coloured sloughs, which I consider as gangrenous; also darker coloured sloughs, with extreme fœtor. The rash has also varied considerably, being sometimes an almost universal entire redness, sometimes appearing only on the neck or breast, and not so generally diffused, but with interstices, so that it was rather difficult to ascertain where the colour terminated. Petechiæ have very seldom been observed; and the rash has not appeared of a livid hue in more than two or three cases, except just before death.” Dr. Binns.

† See Rosenstein, on the Diseases of Children, chap. 16. *Memoirs of the Medical Society*, vol. iii. p. 358. Compare Withering, page 5, and Dr. Heberden. *Comment.* page 25.

See De Haen, *Nat. Med. Contin.* tom. i. p. 138.

they had observed this species of Sore throat, with a vivid eruption, occur in persons who had previously undergone the simple Scarlet Fever, and thence concluding that the two diseases were generically different, or that Scarlatina may be had twice, under the same circumstances as the Measles. Not having ever seen such a repetition among two thousand patients whom I have visited in it, I cannot at present confirm the above opinion, and should be very unwilling to add to the numerous mistakes already made respecting the disease. On this subject Dr. Binns says, "I have not during the prevalence of Scarlatina this year seen the Fever and Scarlet eruption occur twice in the same patient, nor have I seen the rash appear at one time, then, after an interval, the Sore throat; but we were informed by some eminent practitioners, that several children, affected here in 1803, had gone through the disease before; and I recollect, during my practice at Liverpool, instances of the Scarlet-Fever and ulcerated throat occurring together, twice in the same person, and in one patient thrice, at distant periods, but I cannot speak with any certainty of the intervals, nor have notes to which I can refer for the particulars of each case."

Dr. Withering, at the time of publishing the first edition of his pamphlet, believed that the Scarlatina anginosa, and the ulcerated Sore throat ("Angina gangrænosa of Fothergill and Huxham,") might attack the same individual at different periods. In the second edition (page 4) he acknowledges this opinion to be erroneous, and adds, "Further observation, aided by the concurrent testimony of many of my colleagues in this place, engaged in extensive practice, confirm me in the opinion that the infection of the Scarlatina anginosa, like that of the Measles and Small-pox, can

only be taken once : that it is not generated under any known circumstances, like the poison of the Typhus or Low Fever, but that it is from time to time propagated by contagion, like the other Eruptive Fevers just now mentioned." Page 3 and 6. He repeats the same observation, page 53. "I never yet have seen an instance of the same person having the Searlet Fever twice, and I believe it to be as great an improbability as a repetition of the Small-pox."*

At what time, or in what place, the Scarlatina first appeared, is very uncertain. It was probably introduced into this country from the ports of the Levant, or Mediterranean. Its origin might be referred particularly to Egypt, if the "Pestilential ulcers of the tonsils," described by ancient authors, and the Scarlatina maligna, could be proved to be the same disease. That they do not materially differ from each other, many practitioners have been convinced by an attentive consideration of the following passages in Aretæus and Aetius : "The Pestilential ulcers of the throat are broad, hollow, smooth, and covered by a white, or livid, or black slough (*πιπρωα*.) These ulcers have the name of Aphthæ ; but if the slough be deep, the affection is properly called Eschara. All around the Eschara there is an intense redness, and inflammation, and throbbing, as in a carbuncle ; also small papulæ, (*δριζωνδηρωτα*) which arise at a distance from each other, but which, gradually increasing in number, become confluent, and produce a broad ulcer. Then, if the disease proceed towards the mouth, it reaches the uvula, which it destroys, and is spread over the tongue, the gums, and

* Thus Rosenstein, "I have never heard of its seizing any one more than once." Chap. xvi.

fræna of the lips; the teeth are loosened and blackened, and the neck is externally swelled and inflamed: thus, in a few days, the patients sink under the inflammation, fever, offensive smell, and aversion to food: but if it proceed into the chest, through the trachea, it occasions immediate suffocation. Boys and girls, under the age of puberty, are most subject to this complaint. It is chiefly produced in Egypt, and may be referred to the great dryness of the air of that country, the variety and acrid nature of the food used by its inhabitants, the fermented liquors, and thick water of the Nile, which they are accustomed to drink. Syria, more especially Cælo Syria, likewise produces these ulcerations, whence they are called Syrian as well as Egyptian ulcers. The mode of death is most miserable. The pain is acute and hot, as in a carbuncle; the breath offensive, having a strong putrid smell; and the tainted air is drawn back into the chest by the patients' laborious respiration. Losing their power over the sphincters,* they cannot bear their own stench. Their countenances are pale or livid; they have violent paroxysms of fever, with thirst, as if burnt, and yet decline drinking, on account of the pain it occasions; for they are greatly distressed, whether the liquor force a passage by compressing the tonsils, or run up into the nostrils. They are restless, and uneasy in every position. Their inspiration is deep, from a desire of being cooled by the cold air, but

* Ασπεροι: Petit and others read ασπεροι (fastidiosi, nauseabundi) which does not suit the context. A better reading would be σξηροι: when the discharge from secretory organs ceased, or became very scanty, the complaint was termed νοσος ξηρος: for a list of these diseases, see Galen De Ptisanâ. Patients labouring under the opposite state....of increased and vitiated secretions, might, in the quaint language adopted by Aretæus, be called αξηροι. The accepted reading ασπεροι, in whatever sense it be taken, is too figurative for historical detail.

the expiration is restrained, because the burning ulcers are still more inflamed by the heat of the breath. Hoarseness, and loss of voice succeed, and the symptoms becoming more violent, the patient suddenly falls dead to the earth." Aretæus, de Morb. Acute. i. 7.

Actius observes, that "Sloughy and pestilential ulcers of the fauces begin for the most part without any preceding defluxion, but that they are sometimes consequent on an aggravated state of the usual inflammation of the tonsils;" that "they take place mostly in children, and in virgins at the age of puberty, but now and then affect adults, especially those of a bad habit of body, in the pestilential constitutions of the spring season;" that, "in children, aphthæ generally precede the formation of the sloughs;" that, "some of these are white like spots (*σπιλοι*) others ash-coloured, or resembling the eschars made by a cautery;" that, "they are very soon followed by a dryness in the patient's throat," (*περι τρι και αποσι*) and that "he is seized with a sudden suffocation (*αθροος πιγμυς*) more especially when there is an erythema under the chin;" or, "the same acrimony turning inwards,"* that a "noma and putrefaction succeeds in the parts affected;" that "the attending fever is vehement;" and that "the principal danger occurs in the first seven days;" but that he knew "a young girl who died of the disease, or its consequences, even after the fortieth day."†

* *Παραδρομους*, should perhaps be the technical term *παλινδρομους*. See Fæs. Œcon. Hippoc. and Gorræi Defin. Med.

† Page 162. Ed. Aldi. With the two preceding accounts may be compared Tournefort's description of this disease, as observed, fifty years ago, in the same climate (*Voyage du Levant*, tom. i.) "Il regnoit dans l'isle de Milo une maladie tres fâcheuse, et qui est assez commune en Levant, ou elle emporte les enfans en deux

Some authors* suppose the Al-hemeka, mentioned by Avicenna, to have been the Scarlatina simplex; but no certain conclusion can be drawn from his brief account, which is contained in the following words: "The Hemeka is something between the Small-pox and the Measles; and it is less dangerous than either."† It seems, however, most likely the Arabians would rank the Scarlet Fever with these diseases; and I think no one will deny that the description of the rash given by Haly Abbas might apply to the Scarlatina, as well as to the Measles. In treating of the Small-pox, he says, "Et in rubore species est aliqua, quæ vocatur Rubeola, quæ ex sanguine fit calido, et subtili, non multum malo. Et hæc species, cum ad statum pervenerit, similis fit mili granis, aut paulò major, et ejus color rubeus; nec aperiuntur pustulæ, neque fluunt. Communia signa sunt febris, faciei tumor, temporum et auricularum pru-

fois 24 heures. C'est un charbon dans le fond de la gorge, accompagné d'une cruelle fièvre: Cette maladie, que l'on peut nommer la peste des enfans, est epidémique, quoique elle épargne les grandes personnes. Le cas est pressant.....et la precaution la plus nécessaire pour arrêter les progrès d'un si grand mal est de faire vomir les enfans dès le moment qu'ils se plaignent du mal de gorge, ou que l'on apperçoit que leur tête commence a s'appesantir. Il faut réitérer ce remède suivant le besoin, afin de vider une espèce d'eau forte qui se décharge sur la gorge."

* See Ingrassias, de tum. præt. nat. lib. i. cap. i.

† Lib. iv. Fen. 2. Tr. 4. 6. The word Hemka signifies Beet, the colour of which does not ill apply to the colour of the Scarlatina: but the cursory mention of the disease, so entitled by Avicenna, is not sufficient to determine its character." Dr. Robert Jackson.

‡ Theorice, lib. viii. cap. 14. Compare Constantin. African. Loci Med. lib. viii. who has nearly copied the words of Haly.

rigo, in naso inflammatio, rubor in facie et in membris affectis, capitis gravitas, et in gurgulione asperitas." Rhazes and others observe, that Measles of a highly red colour are more dangerous than those which are moderately red.*

Ingrassia is the first author of modern times, who has described the Scarlatina. His account of it extends no farther than to the first species. The disease was known to the Neapolitans before the year 1500, by the name of Rossalia; and he considers it as having a close affinity with the Small-pox and Measles. "Præter ambas species, alias adhuc duas passim advenire conspeximus, quarum altera nuper a vulgaribus Rossania sive Rossalia vocatur: alteram verò Crystallos vocant. Illam idcirco Rossaliam † nuncupant, quoniam maculæ, per universum corpus plurimæ, magnæ et parvæ, ignitæ ac rubræ, cum vix effatu digno tumore, instar multa seorsim erysipelata, dispersæ sunt, ut totum corpus

* Cap. xiv. Cont. xviii. 8. & Ad Almansor.

† The efflorescence was termed Rossalia, or Rosalia, from its colour. Other Italian writers denominate the disease Robelia, or Rubiola, from Robia, madder, the Rubia tinctorum. Physicians in France adopted a similar denomination, using sometimes the word Rubeola, or Rubiola, sometimes the plurals Rubiolæ, Rubioli. See Ballonius de Epidem. lib. i. & Consult. Med. lib. ii. M. Chesneau observes, "Vulgus Massiliæ distinguit Rubiolam a Morbillis, hos vocantes Senepion, et illam Rougeole, in quâ non sunt pustulæ, sed magnæ tantum areæ, in modum Erysipelatis rubentes. Obs. Med. page 454.

In consequence of the expressions used by Ingrassia, many writers of the seventeenth century apply the denominations of Erysipelata, and Morbilli ignei to the Scarlatina; others use the name of Purpura; but there is no end to the synonyms of this disorder. Compare Eust. Rud. Sympt. Extern. de Fersâ Venet. Prosper. Martian. in Hippoc. Epidem. i. 2. sec. 3. and Bonacurs. de Mal. Extern. cap. 45.

ignitum appareat." He is careful, however, to distinguish this disease from the Measles. "Nonnulli sunt qui Morbillos idem cum Rossaliâ esse existimant: nos autem sæpe distinctos esse affectus nostrismet oculis, non aliorum duntaxat relationi confidentes, inspeximus."*

A contagious Sore throat proved extremely fatal in the vicinity of Amsterdam during the year 1517. From the account of it given by a Dutch physician, as quoted by Foresti,† we may conclude that this disease was an epidemic Scarlatina of the most malignant kind. "Aliter se habuit dolor gutturis, tum inflammatio, in illa Anginâ epidemiâ, imo pestiferâ, et adeò malignâ et contagiosâ, quæ tempore M. Joan. Tyengii, Amstelrodamensis medici celebrioris, in multos circa principium anni 1517 grassabatur, ut quibus intra sex vel octo horas apta remedia non adhibebantur, ante sedecim vel viginti horas subito moriebantur; neque aliquis evadebat (ut perhibetur in ejus libello propriâ manu scripto) si medico docto non uteretur. Erat autem materia, in illo morbo populari, ita furiosa, ut uno momento tantam anhelitûs difficultatem, cordisque angustiam, et dolorem in collo pareret, ut ægrotus strangulari mox videretur: quibus symptomatis rursum cessantibus, moxque redeuntibus, cum materia adeo maligna, venenosa, et fluxa, per musculos colli, tum pectoris, uno ictu trajiceretur, multi suffocabantur."

We may without hesitation rank, as an epidemic Scarlatina anginosa, the pestilential Sore throat described by

* De tumor. præt. nat. Tract. 1. cap. 1.

† Forestus, Obs. 2. lib. vi. The morbus epidemicus cum gutturis et pectoris angustîâ, described by Foresti himself, was an Epidemic Catarrh, or Influenza.

Wierus,* which spread through Lower Germany in the years 1564 and 1565. The Small-pox, Measles, and a Contagious Catarrh immediately preceded this disease. It proved chiefly fatal to infants; and, in addition to the Sore throat, was attended with violent fever, vomiting, swelling of the parotid glands, and patches of an erysipelatous efflorescence.

A few years afterward the same disorder was epidemical in Paris. The celebrated Ballonius (De Baillou) has described it under the title of Rubiolæ.† His account most clearly comprises the principal varieties of the Scarlatina. He compares the efflorescence to a blush over the whole surface of the body, observing, that this appearance, if no fever had preceded it, was not formidable; and that it occurred in many women, and children, who were not afterwards affected with fever, pain, or any uneasiness whatever. He also mentions the leading symptoms of the Scarlatina anginosa. “Uvulæ inflammatio multis, et deglutiendi difficultas, aliquando faucium exulcerationes; aliàs angina quædam sicca (ut vocat Hippocrates) per erysipelatoden phlogosin: suffocatio inde. Multis et parotides comites, et præcedunt, et sequuntur, quæ non sunt semper metuendæ. A capite, sunt dolores in oculo profundi, oculorum dolor et flagrantia, propensio in somnum, et tamen dormiendi impotentia immo et coryza, et aurium dolor, siccitas in gutture, et implacabilis sitis cum anorexia. Alvi aliquando astrictio est, aliquando fœda

* Obs. Med. rarior. See also Schenckii Obs. lib. vi. page 775.

† De Epidemiis, lib. 1. 2. & Consult. Med. lib. 1. He carefully distinguishes the Rubiolæ from the Measles (Morbilli) and thinks the former partake of the nature of Erysipelas, but that the Small-pox and Measles have an affinity with Herpes.

illuvies, corporis pruritus, et velut acicularum puncturæ.” He likewise mentions hæmorrhagy, and abortion,* as frequent occurrences. Those who were affected with the disease in its slightest form, he says, often brought on, through neglect or mismanagement, a fever of the most malignant kind: (“cum hoc negligenter, non impunè tulerunt, nam non ita longè post febre correpti sunt mali moris:”) and, when the eruption appeared on the fourth, fifth, sixth day of fever, or later, the most violent and dangerous symptoms followed. The dreadful mortality of this distemper in autumn 1575 is particularly remarked by Ballonius: “Et hæc quidem diversis oborta sunt annis, nunquam tamen majore cum clade quam autumno 1575, feracissimo exanthematum puerilium, ex quâ peribant omnes, et non proficiebat hilum ars ea quæ multis auxilio esse solet. Tanta seri venenati erat malignitas!”

During the year 1580, an Influenza,† said to have originated in Asia, was rapidly diffused over all Europe. According to Alphonso de Fontecha,‡ the In-

* Uxor Bodini septimestrem partum excussit vi morbi, eodem modo maculatum quo mater. Uxor Lyssæi nono die germen exclusit, &c.

† This epidemic Catarrh is described by Forestus, Obs. 3. lib. 1. See also Synops. Novi Morbi Catarrhalis a Jo. Bokelio, M. D. Prof. Helmostat. 1580. De Febre Epidemiâ anni 1580, a J. Sporischio ab. Ottenbachaw, M. D. Francofurti: and de Morbo arietis libell. a Franc. Campo, M. D. Luccæ, 1586.

‡ Ab anno 1581 adnotatæ fuerunt anginosæ istæ lues prædictæ, ut affirmant quam plurimi doctores, et senes magnæ autoritatis, et constat ex relationibus quam plurimis. Disputat. de Anginâ, lib. ii. page 22. Alphonso's Observations on this disease were made in the years 1603, and 1604.

fluenza in Spain was immediatly succeeded by an epidemic Sore throat, of a most malignant and fatal kind, to which the Spaniards gave the name of Garrotillo. It remained among them forty years, and within that period spread to all the sea-ports of Italy, Sicily, and Malta. Its first appearance at Naples was in 1618.* Being there deemed, as it had before been in Spain, a new disease, it presently received a variety of new appellations.† The mortality of it, reported by the Spanish and Neapolitan physicians, appears at present incredible. Mercati informs us, that every one who was seized with it died in less than four days.‡ According to Carnevala, it destroyed 500,000 § persons at Naples within two years. This assertion, however, is contradicted by Francesco Nola, ||

* *Angina pestifera ab anno 1618 erupit, insuetus inter nostras gentes morbus, &c. Boneti Sepulchret. tom. i. 479.*

† *Ulcera anginosa, Ulcera Syriaca, Passio anginosa, Phlegmone anginosa, Carbunculus anginosus, Angina maligna, Angina Puerorum, Angina pestilentialis, Angina pestifera, Tonsillæ pestilentes, Pestilens faucium affectus, Therioma faucium, Aphthæ malignæ, Ignis sacer, Pædanhone maligna, Affectus suffocatorius, Morbus strangulatorius, Laqueus gutturis, Epidemica gutturis lues, Male in canna, &c.*

‡ *Consult. Med. 14. De gutturis anginosis et lethalibus Ulceribus, vulgo Garotillo, page 136.*

§ *Quingenta hominum millia. A mistake surely for quinquaginta! The population of Naples could not admit of so great a mortality. Jo. Baptista Carnevala, de Epidemico Strangulatorio affectu; Neapoli 1620. page 2.*

|| *De epidemio Phlegmone anginoso; Neapoli, 1620, page 15. Nearly the same observations were made, in Sicily, by Marc. Anton. Alaymus. Morbus non totam civitatem, verum nec dimidiam, nec centesimam partem hominum, sed puerulos paucos, et ex his ut*

who has given a more accurate history of the disease than any of his cotemporaries. He observes, that the contagion seldom affected all the individuals of a family; that it only proved fatal to persons of a weak humid temperament, and to children; and that in some houses, all who were seized with it had it in a very mild form.

It may be necessary here to assign my reasons for ranking the Garrotillo among the varieties of Scarlatina, as it is generally supposed that none of the writers on the subject describe an eruption * similar to that which occurs in the Scarlet Fever. I formerly remarked that the efflorescence, in the Scarlatina maligna, is usually partial and indistinct: it might therefore pass unnoticed by authors, who seem less anxious to describe minutely what their own experience presented, than to copy the descriptions of similar complaints from the ancients, or to establish ancient theories, "constantly appealing," as Dr. Fothergill justly observes, "to Hippocrates, Galen, Avicenna, &c. for the support of their opinions concerning a disease, which it is not certain that those they appeal to ever saw." The identity of the Garrotillo and malignant Scarlatina does not, however, depend upon negative circumstances, but can be proved by the direct testimonies of Mercati, and Francesco Nola. Both of them

plurimum cacochymos et malè curatos exanimat. Consultatio pro Ulceris Syriaci, nunc vagantis, curatione, Panormi, 1632. See also Tractat. de Garrotillo, cap. 8. a D. Fr. Perez Cascales Guadalajara. Matriti, 1611.

* On this point, Dr. Fothergill was only able to collect from the different authors whom he consulted, that, "the fever was frequently accompanied with small pimples, and eruptions like flea-bites." On the Ulcerated Sore throat, page 12. *Cruore confusas pustulas nigras, hoc illo loco, parvas, Ecthymata, et Pustulas pulicum morsus referentes. Severin, de Pædanhone maligna, Partic 2. p. 31.*

designate the Scarlet efflorescence, as was usual at that time, by the denomination of Erysipelas, * or Erysipelata, † and they have both remarked its frequent appearance with the Garotillo. Mercati, (Consult. 28,) has related at length one case under this form, and adds, that he saw many persons affected with a similar disease, especially at the monastery of St. Lawrence, and in its vicinity. The importance of this subject induces me to quote the case and consultation in the author's own words, as a confirmation of what has been advanced, and likewise as a specimen of the injudicious treatment of a disease, which would perhaps have safely and speedily terminated, without medical interference. But the Doctor, like many of his cotemporaries, chose rather to err with Galen, than trust to his own reason and sagacity. Illustrissima Domina Maria Manrique, religiosi ordinis sancti Bernardi in Vallevolitano cœnobia, 40 cum esset annorum, biliosæ, et sanguinæ naturæ, menstruis copiosis purgata ante hanc ætatem, et nunc longè minùs, curis et solitudine non parùm affecta, prope solstitium æstivale, correpta est febre, non admodum intensâ, sed variis horroribus implicatâ, et intermissâ, ac totiens recalescente, cum capitis dolore intenso, et viscerum, maximè juxta ventriculum parte ejus dextrâ, molestissimâ sensatione, quâ ferè animo videbatur deficere. Tertio die ab his accidentibus, faciem cœpit occupare, et gutturis dextram partem, rubor plurimùm saturatus, citrà, evidentem tumorem : crevit ad caput usque per oculos, utramque faciei partem occupans, quo minus horrida erat, et magis

* Mercati says, "Although this disease be usually entitled Erysipelatous, yet it is widely different both in its nature and circumstances from the ancient genuine Erysipelas."

† See Sennert, lib. iv. cap. 12.

continuè febricitabat, et longè minùs molestiis prædictis premebatur, præsertim sanguine misso bis ac ter, quo rubor quievisse videbatur. Verum eo tandem nondum cessante, horrere iterum cœpit, et anxietate premi; ac mox febris increvit, et thoracis, a cervice ad mammas, extimam regionem apprehendit rubor, non ità intensi coloris, cæterùm febris, cessantibus reliquis accidentibus, non ità manifestè cessavit, sicut primo ruboris insultu. Quo ordine, reversionibus, et remissionibus usque ad vigesimum diem, malum revertebatur: deinceps verò usque ad mortem, cessante Erysipelate, vires plurimùm delitescabant, et febris atrocioris conditionis sese ostendebat, ità ut nullis auxiliis cedere videretur, donec subito motu, in importunissimum somnum delapsa (quamvis ab 11mo die in somnum erat proclivis) cœpit deinceps oblivisci, et tandem cum sopore delirare, quo usque ad 30^m diem, quo mortua fuit, duravit, humore subito etiam ad cor recurrente, quo celerius quam affectus et vires pollicebantur, morte correpta fuit. Placuit historiam hujus illustrissimæ fœminæ hac in parte recensere, cui consimiles jam conspeximus alias, maximè in cœnobio Sancti Laurentii Hiscorialis, tam intùs, quam in habitatiunculis extra ipsum. Namque in omnibus illis apparuit is morbus quem Erysipelatis nuncupamus, tamen longe dissitus ac diversus ab antiquâ et innatâ ejus naturâ et conditione. In nostrâ laborante pars dextra facile rubescere cœpit, verum non ut in vulgari Erysipelate, sed cum febre, capitis dolore, ventriculi anxietate, et biliosis vomitibus, quibus nihil levata erat: quinimò indies magis ac magis animo deficere videbatur. Tunc quidem sanguinem misimus, verentes retrocessum biliosi succi Erysipelantis faciem, vi medicamenti purgantis; idque ter fecimus. Sed cum hoc horrores iterum revertebantur, et febris magis incresebat, donec apparuit rubor,

maximam cervicis et pectoris partem occupans. Tunc quidem quartò sanguinem misimus, et cum remitterentur hæc omnia, iterum horrere cœpit, et per alias partes corporis rubor apparere, quò sanguinem quintò misimus. Et cum constaret, neque præsidia, neque expulsionones a naturâ factas aliquid profecisse, consideravimus jecur adeo pravâ intemperie esse affectum, quod non solum bilem torridam et pravæ conditionis generaret, sed insuper genitam iterum inficèret, ac ob id per utramque alvum conari expellere, et ad cutem teneriorem partim transmittere. Cæterum conjecimus, ità naturam interiorius premi, tum jecoris vitio, tum humoris malignitate, quod longè plùs in deterius rueret laborans ex his, quam ab expulsâ ad cutem bile levaretur : et deinceps verentes naturæ exitum, curavimus jecori subvenire, priùs bile ab ipso repurgatâ, ac mox reductâ ejus vitiosâ temperie in familiarem et salubriorem.*

From the account of the Epidemic Sore throat at Naples, as given by Francesco Nola, we learn,

1. That, after a very rainy season, a contagious distemper affected cattle in 1616.

2. That the Small-pox, Measles, and Erysipelata, prevailed, with almost equal violence, among the human race, during the spring and summer of the year 1617.†

3. That, while these eruptive diseases still continued, the Sore throat began to affect children, in the spring of

* Compare the case of Xuarez, at Toledo, Cons. Med. 14. tom. v. page 135.

† Anno 1617, erant Fluxus ventris, Variolæ, et Morbilli permulti ad ætatem usque ; et Erysipelata, tum maximè in humidioribus. Nola, de Epidemio Phlegmone anginoso ; Neapoli, 1620, page 13.

1618*, and became in the succeeding autumn highly malignant.

4. That, on the first appearance of the disease, adults were affected with the Erysipelata † only; but when the contagion was extensively spread among children, that adults were likewise seized with the complaint in the throat.

5. That, under similar circumstances, some had symptoms so favourable, others so malignant, that they seemed scarcely to have the same disease.‡

The testimony of this writer being clear and decisive, I think it unnecessary to multiply authorities in proof of my position, that the Garrotillo in Spain, and the Epidemic Sore throat at Naples, were in every respect similar to the Scarlatina anginosa of later times.

While this disease raged with so much virulence in the southern states of Europe, we find, from the writings of Sennertus, Doringius, and others, that the milder forms of the Scarlatina prevailed in different parts of Germany. They are described under the titles of Morbilli ignei,§

* Postmodùm iisdem morbis inter aliquos homines perdurantibus, an. 1618, and 1619, gulas pueris affecit contagio. Page 47.

† Adultos in principio Erysipelatibus corripuit, et similibus morbus; postmodùm vero gulas pueris, et dein adultis invasit. Page 45.

‡ Erat alio malignus morbus, alteri benignus, ferèque toto cælo ab altero diversus. Simillimos, æque viventes persæpe vidimus correptos diverso modo, benignè vel malignè. Page 23. Compare Severinus, de Pedanchone, Partic. ii. page 30.

§ Morbilli ignei sunt tumores corporis, in cute potissimùm conspicendi, omnium minimi, cum febre continuâ putridâ, malignâ, et ruboribus totius corporis pruriginosis conjuncti, a sero, bilioso, maligno, et specificè corrupto orti Ephemer. Acad. Nat. Cur. Dec. 1. ann. 6. 7. Obs. 42. Bonetus terms the Sore throat, connected with this eruption, Angina ignea, Med. Sept. ii. 7. 3. See Sennerti op. tom. ii. l. 4. cap. 12.

Rossalia, Erysipelata, and Universal Erysipelas. Doringius has given a more accurate account of the Scarlatina anginosa than any preceding writer; and he is, I believe, the first who has noticed the frequent termination of this disease in painful tumors of the joints, or in dropsical swellings of the abdomen and lower extremities. “Terminatur ad plurimum translatione materiæ ad articulos extremorum, cum tam dolorifico tumore ac rubore qualis apud arthriticos esse solet: hinc cutis reliqua corporis squamatim detrahitur: mox pedes ad talos et suras usque intumescunt: urinæ crassescunt, et rutescunt. Hypochondria tenduntur primùm, et respiratio difficilis redditur: paullò post abdomen ipsum in tumorem attollitur: isti autem non nisi magno labore, et post multas demum septimanas, ceu hydropici incipientes, ad pristinam sanitatem deducuntur.”*

The Scarlatina is again described as a new disease, under the title “Febris miliaris rubra,” which is said to have appeared at Leipsic about the middle of the seventeenth century. Godofred Welsch, in a Dissertation, entitled “Historia medica novum istum puerperarum morbum continens, qui ipsis Der Friesel dicitur,” mentions, besides the white miliary eruption usual in puerperal cases, another † form of disease, characterised by shiverings, pain of the head, redness of the eyes, a vi-

* Epist. 18. ad Sennertum. See Bonet. Med. Septentr. collat. lib. ii. c. 7. Compare Prosp. Martian. Comment. in Hippoc. Epid. l. ii. sec. 3. and Bonacursius, cap. 45. Mal. Extern. de Rossaliâ, vel Persâ. Bononiæ, 1656.

* Malum hoc duplici ut plurimùm comparuit facie, rubrâ plerumque, non rarò albâ; illud cum insigni ac intenso semper calore, rubore, pruritu, et asperitate cutis duriusculâ; hoc vero quoad calorem, pruritum, juxta ac rubedinem, remissius, et pusillis albicanibus pustulis, ichorem in se continentibus, conspicere est.

vid red rash, sometimes over the whole body, sometimes in scattered patches, great heat, roughness and itching of the skin, general debility, restlessness, and frequent hæmorrhagy from the nose. He further observes, that between the fourth and sixth day, from the beginning of the complaint, the redness of the skin was at its height, or rather declining; and that in those who recovered there was a regular crisis, either by a slight diarrhœa, or copious perspiration, succeeded by desquamation of the cuticle. With these leading circumstances, the author has intermixed the symptoms usually attending the appearance of miliary pustules, and has thus unnecessarily added another species to the miliary eruptions noticed, before his time, by the Germans and French, in treating of puerperal and malignant Fevers.* In comparing this eruptive fever with Sennertus's imperfect account of the Rossalia, Welsch betrays his total ignorance of the latter. He says the complaint at Leipsic could not be the Rossalia, "because it was attended with a general redness, and roughness of the skin," circumstances, which, though not noticed by Sennertus, are in reality characteristics of the Scarlatina. We cannot be surprised at the mistake of a medical student on subjects, wherein the authors he consulted were very defective; but there seems little excuse for men of experience, who could persuade themselves that a new epidemic and contagious eruptive disease commenced almost instantaneously, and, after spreading in a short time over the greatest part of Europe, suddenly and finally disappeared. The

* Tagaultius, Fernelius, Hadrianus Junius, Fœsius, Sennertus, &c. See Foresti Op. page 206. Riverii Prax. l. xvii. sect. 3. cap. 1. Bonet. Med. Septen. t. ii. l. 5. Etmuller de Febribus, page 245. and Burserii Inst. Med. vol. ii. sec. 384.

nature of the disease at Leipsic may be easily understood, by comparing Dr. Welsch's Dissertation with the statements of his cotemporaries, and of some preceding writers. From these it appears that the *Morbilli ignei*, or *Purpura* (both which terms denote the *Scarlatina*) was, about the year 1650, epidemical in the vicinity of Leipsic. According to Dr. D. Wincler, *Eph. Ac. Nat. Cur. Dec. i. an. 6. 7. obs. 42.* "Hi *Morbilli* apparuere primùm apud nos anno 1642, post obsidionem *Bregensem*; *Lipsiæ* verò paulò post: et quod nos in pueris, ipsi in puerperis* annotarunt, ut testatur *Disputatio* ibi habita anno 1655, a D^{no} D. *Welschio*. Vocant verò *Der Friesel*, a *panni Friese* similitudine: nomen quidem est diversum, res vero eadem, ut ex definitione ipsorum, cap. iii. *Thes. 5.* unusquisque videre potest. *Symptomata* autem ista periculosa, ut *angina*, *parotides*, &c. apud illos abfuerunt." He has prefixed to his observations a fatal case, entitled "*Angina in Morbillis.*"

Georg. Hieron. Welsch mentions the *Lipsian* epidemic under the title "*Febris coccinea*;"† and has given the particulars of one case, which appears evidently to have been a mild *Scarlet Fever*. From *Chr. Joannes Langius* we learn that the disease at *Leipsic* was not, according to the first account of it, peculiar to women in childbed, but extended to persons of all ages and sexes, and proved fatal to many. In treating of the *Febris*

* Whenever the *Scarlatina* is epidemical, it usually affects women two or three days after lying in, and often proves fatal to them. Many instances of this occurred in 1786, and the succeeding years, while the *Scarlatina* was prevalent in *London*. In 1796-7, there was a still greater mortality from the same cause. See *Reports on the Diseases of London*, page 341, 2. Dr. *Withering* also says, "the *Scarlet Fever* and *Sore throat* at *Birmingham* was "particularly fatal to lying-in women:" he had himself three patients under these circumstances, and they all died. Page 25

† *Cur. Propr. 2. Dec. 1.*

Purpurea, he observes, “Purpura in nostrâ Lipsiâ perquam frequens est, ut non modo pueros cum juvenibus, adultos cum senibus, viros cum fœminis, et ex his speciatim puerperas, totâ pene die invadat ; et paucos intrâ dies, ni summa habeatur cura, interimat. Sed non a multis retrò annis hanc Purpuræ molestam familiaritatem civitas nostra experta est, sed demum paulò ante annum hujus seculi quinquagesimum, cum puerperarum quamplurimarum strage, primam ejus invasionem recordantur incolæ.”*

Etmuller, who was Professor of physic at Leipsic about twenty years after the first appearance of this epidemic, makes nearly the same observations : “Febris nostra purpurata, Der Friesel dicta, alias Febris miliaris dicitur, item Morbilli ignei. Febris hæc quosvis adortur, mares et fœminas, infantes et adultos, præsertim puerperas, quibus et malignior et funestior existit mensium retentorum occasione.” De. Feb. page 527.

An epidemical Miliary Fever, resembling that at Leipsic, is said by C. Rayger to have prevailed at Presburgh in the year 1671-2. From his account of the disease, however, we may decisively conclude that it was the Scarlatina : after considering it as an “Erysipelas per totum corpus diffusum,” he adds, “totum corpus intensè rubrum erat, ac si panno rubro involutum esset :” and he himself thinks it might more properly have been denominated Rossalia.†

* Chr. J. Lang. Prax. Med. cap. 13. and Scacher de Febre acutâ exanthematica ; Lipsiæ 1723. Iste affectus non modo puerperas, verum tenellos, etiam adultos utriusq ; sexûs, adortus est. See Haller. Disputationes, vol. v. p. 488. Hoffmann, Consultat. Med. page 413. Juncker’s Conspectus, tab. 64.

† Miscell. Nat. Cur. Dec. i. ann. 3. De Febre malignâ cum Exanthematibus miliaribus.

The Scarlatina spread through Poland in the year 1665, and has been well described by Schultzius under the denomination of *Purpura epidemia maligna*.* A few years afterward it was noticed by various authors in Denmark, Holland, Switzerland, Lombardy, Bavaria, Austria, England, and Scotland.† J. N. Pechlin observes, that this disease, which he considers as a species of Measles (*Morbilli*) was epidemical in different parts of Germany from 1677 to 1683. As a proof of the rapid progress of the contagion, he says that seven hundred persons were affected with the disease, at the same time, in Stutgard.‡

Between 1690 and 1696 this disease, termed *Morbilli maligni, perniciosa lues, pestis puerorum, &c.* made similar ravages in Dresden, Wirtembergh, and Ulm, as appears from several dissertations in the *Ephemerides*.§ According to Loew, *Hist. Epid. Hung. Act. Nat. Cur.* p. 26, the *Rossalia* immediately succeeded the Measles, and was diffused through Hungary in the year 1697. About the same time it prevailed in Saxony, and again proved fatal to many in Leipsic, as we are informed by C. J. Langius ;

* *Act. Ac. Cur. Dec. i. ann. 6. 7.* page 206. The fatality of this epidemic among infants and children deserves to be noticed. “*Ple-rique 2dâ die morbi, nonnulli etiam 1mâ moriebantur.*”

† Borrichius de *Rossalia squamosâ*. *Misc. Nat. Cur. Dec. i.* ann. 45. & *Dec. iii. Ephemer. Dec. iii.* Targione, *sopra humana salute*, tom. iii. Nerucci de *Variolis*, Sydenham, Morton; and Sibbald, *Scotia illustrata*, part i. page 55. It is observed, *Act. Erud. Lips. tom. iv. ann. 1685*, “*Describit Sibbaldus febrem Scarlatinam dictam, cujus historia nostratium Purpuræ, germanicè Friesel, accuratè respondet.*”

‡ *Obs. Physico. Med. 19. 1. ii.*

§ *Dec. iii. ann. 1. Dec. iv. p. 21, &c. &c.*

Disputat. 44. It continued in different parts of the electorate above fifty years, occasionally exhibiting all its different forms, of which an enlarged account was given in the year 1742, by John Storch, who had seen upwards of two hundred cases of the disease. Its latter stage was attended with dropsy, and many dangerous symptoms, so that one in ten of his patients died. The *Scarlatina anginosa* raged at Berlin from 1694 to 1701, and has been well described by its proper title in the *Act. Med. Berolin. Dec. i. vol. ii. and Dec. ii. v. v. sec. 3.* Its subsequent appearances in different parts of Germany and Italy, until the middle of the last century, are noticed by several writers on the *Febris miliaris*, *Purpura miliaris*, *Purpura rubra*, *Purpura febrilis*, *Morbilli maligni*,* &c.

The ulcerated Sore throat, or *Aphthæ febriles*, a disease frequently occurring in Holland, was, in the opinion of Van Swieten,† a modification of the *Purpura*, or *Febris miliaris*, described by German authors. De Haen does not hesitate to denominate it, *Scarlatina pessima*.‡ It is singular that this complaint, when epidemical in the vicinity of Leyden about the year 1669, should be again mentioned and described as an unknown disease.§

* *Act. Nat. Cur. vol. ii. obs. 32. vol. vi. page 72. vol. ix. page 55, &c. &c. Historia Morbor. Vratislav. 1700-1702. Violante de Morbillis, 1732. Saltzman Historia Purpuræ miliaris, Argentorati, 1736. Aloysio Targioni, at Florence, 1717-18, tom. iii. Rosenstein, at Upsal, 1741, cap. 16. Ant. Storck. mens. Nov. 1759. Vindebonæ, &c. &c.*

† *Commentar. in Boerh. Aph. 997.* ‡ *De Feb. Division.*

§ *Dr. Guid. Fantoise, Dissertatio Medica de Epidemio hactenus inaudito, æstate anni 1669, Lugduni Batavorum, vicinisque locis, grassante. His account of this disorder agrees precisely with the description of a similar epidemic in Holland by Tyengius in 1715, formerly quoted.*

Dr. Morton is the first English author who has given an enlarged account of the Scarlatina. He mentions the affection of the throat, with all the other symptoms peculiar to the Scarlatina anginosa,* and its usual consequences, as swelled parotids, scrophulous ulcerations, atrophy, and anasarcaous swellings of the legs. He also relates some cases of the disease in its malignant, or, as he terms it, pestilential† form. However, he considers the Scarlatina merely as a variety of the Measles, and thinks it has the same relation to that disease, as the confluent has to the distinct Small-pox.‡ On this hypothesis, all per-

* Ubi morbus est benignus efflorescentia 2do vel 3tio morbi die incipit, atque 4to vel 5to die, unâ cum febre comitante, recedit: ubi malignus est, et epidemicus, non rarò efflorescentiæ apparatus ad 6tum vel 7m diem protrahitur; et efflorescentia usque ad 14m et ultrâ durat. Interea febris accenditur; glandulæ pharyngis, laryngis, &c. inflammantur: dolor fit in gutture ulcerosus; deglutitio læditur; anhelitus, strangulatio ac suffocatio, cæteraque, angina symptomata sæpiùs ingravescunt. Post efflorescentiam peractam, denique morbi ipsissimi, scrophulæ, cachexia vel atrophia universalis, leucophlegmatia, ascites, morbum consequuntur. De Morbillis & Febre Scarlatina, cap. iv. v.

† See Case ii. cap. v. on which he remarks, siquando venenum istius modi, crisi perfectâ, per cuticulam propelli haud potest, tanquam venenum pestilentielle glandulas sponte petit narium, faucium, inguinum, &c. easque inflammat, et exulcerat: nec non carcinomata, bubones, et parotidas excitat. Quantum tonsillas, uvulam, fauces, nares, et quamdiu intumuisse vidi! quam turgida nonnumquam labia! et quam sordidâ scabie obducta et exulcerata, ab eâdem causâ, animadverti!

Dr. Morton's observations were made between the years 1672 and 1694.

‡ Hunc morbum prorsùs eundem esse cum Morbillis censeo, et solo efflorescentiæ modo ab illis distare. Quæ differentia tanti non est ut alterum morbum constituat, nisi pari ratione Variolæ confluentes et distinctæ, cæterique morbi ex accidente aliquo inter se

sons who had passed through the Rubeola vulgaris* might, without apprehension, expose themselves to the contagion of the Scarlet Fever. The fatal consequences which would arise from acting in conformity to such an opinion have been ascertained, by the experience acquired during the lapse of another century.

The Scarlatina anginosa is properly noticed in the Edinburgh Medical Essays, vol. iii. p. 27. "July 1733, children were attacked with the SCARLET FEVER and ANGINA, which became very epidemic in the two succeeding months, was less frequent and milder in October, but continued all the winter and spring. This disease began commonly with a quick pulse, heat, thirst, head-ache, and pain in the throat, where frequently a swelling of the amygdalæ was observed. Many had a vomiting and diarrhœa at the first attack of the disease, without any remarkable change on the other symptoms. After a day or two, the face, or extremities, and sometimes the whole body, swelled, the skin being red, with a watery clearness shining through it. Frequently the swelling and redness proceeded gradually from one part to another. It was remarked that such patients as had undergone the Scarlet Fever any time in their lives before took at this time the fever and angina, without the scarlet eruption; but all who laboured under the Scarlet Fever had the angina also. Many, who were neglected in the beginning of this disease, were suffocated by the anginæ."

differentes, ubi causæ, symptomata, prognostica, curativæ indicationes, atque methodus medendi, ab invicem minimè distent, in diversos morbos dividantur. Quorsum enim nova nomina affectibus imponantur, et morbi tantum specie differentes sub alio atque alio titulo tractentur?

* Dr. Morton himself says, *Nunquam in totâ meâ praxi novi quemquam, præter unum puerum, secundâ vice hoc morbo correptum. De Morbilli et Febre Scarlatinâ, cap. iii. page 38.*

In the fourth volume of the same Essays, page 490, is an abridged account of a similar epidemic Fever in New England, attended with "swelling, pain, and white specks in the uvula, and tonsils, and a distinct, red, miliary eruption over all, and at its height on the fourth day; after which it itched, and scaled off, and the specks sloughed off from the subsiding fauces."

"A worse kind of this fever was accompanied with a low, unequal pulse, prostration of strength, despondency, colliquative vomiting, purging, or sweats, chopped tonsils, with brown or livid spots; the eruption darker coloured, or appearing, and disappearing; ichor, or pus coming by the mouth and nose from parts out of sight; mucous exuviae sloughing off the tongue, œsophagus, or bronchia. Many thus affected died the sixth or seventh day."

"In the worst sort, the pulse and strength were still lower, the colliquations greater; and the sick had a sinking pain at the stomach, stupor, delirium, convulsions, and an intolerable fœtor. The few thus seized died the first, second, or third day. This disease was followed in some by discolourations and hæmorrhages, like those in the Scurvy; in others by tumours, which often suppurated; in others by hysterical symptoms, melancholy, fatuity," &c.

The author adds, that this fever "seized a half of the inhabitants of New England, and killed one in thirty-five," and that "in some places one sixth, one fourth, or one third of the sick died."

This statement, given by Dr. Douglass, of Boston, is confirmed by Mr. Colden,* who remarks, that "The

* On the "Throat Distemper," Med. Observ. and Inquiries, vol. i. page 211. It will appear probable, from Dr. Huxham's state-

first appearance of the disease was at Kingstone, an inland town, about the year 1735;" that "it gradually spread from thence, westward, over all the colonies in North America;" that "it was two years in Hudson's River," that "it was some time before it passed to the west side of that river, its first appearance being in places to which the New England traders resorted, or through which they travelled."

Dr. Huxham, in the year 1734, observed an epidemic disease, termed by him *Febris anginosa*, which answers in all respects to the *Scarlatina anginosa*. This will be manifest to those who carefully read his description of the symptoms, particularly of the efflorescence, and appearances in the throat.* The anginose and eruptive Fever continued under Dr. Huxham's notice, in different parts of Devonshire and Cornwall, till the year 1753. He mentions it under the denominations of "*Febris miliaris rubra*,"† "*Febris miliaris maligna*,"‡ and "*Febris anginosa miliaris*;"§ in other passages he informs us that the simple *Scarlatina*,|| also termed *Eruptio Erysipe-*

ment below, that the infection was conveyed to America by the ships cleared out from Plymouth, Falmouth, or some of our southern ports.

* *De Aere et Morb. Epidem.* vol. i. page 92, &c. &c. This appears to be the disease noted in the *Gentleman's Magazine* for the year 1734, Sept. 30 "In Cornwall, a fever, which last year was very mortal, seemed to return this month, seizing suddenly those who, in appearance, were well but a moment before, with violent vomitings, flux, faintness, sighings, heat, thirst, raving, doating, and depression of heart."

† Vol. i. page 60 and 111. Vii. page 115. ‡ Vol. i. page 123-4.

§ Vol. i. page 107. || Vol. i. page 125. Vii. page 113.

latoſa.* and perhaps Rubeolæ,† frequently occurred with the anginoſe fever. The Small-pox and Measles (Morbilli) were alſo very prevalent within the ſame period, as alſo the Chicken-pox, termed ſometimes Rubeoli, and ſometimes Febris Rubeoſa puſtulata.‡ In his diſſertation on the “Malignant Ulcerated Sore throat” (Angina maligna of Dr. Fothergill, and other authors) he ſays, “The Febris anginoſa was attended with ſcarlet or puſtular eruptions, ſucceeded by great itching and deſquamation of the cuticle,” page 108. At page 116, he conſiders “the malignant ulcerous Sore throat as a diſeaſe ſui generis,” yet he acknowledges, “It had a very great reſemblance to the Febris anginoſa;” and that “truly ſome of the Scarlet Fevers mentioned by Morton were not much unlike it.” He alſo ſtates (De Aere & Morb. ann. 1752) that the Febris anginoſa, and the malignant ulcerated Sore throat, equally exhibited an eruption of papulæ or exanthemata, and conſequent deſquamation of the cuticle: “Febris anginoſa puſtuſoſa gravaſſatur adhuc plurimum: eſt etiam angina maligna ulceroſa perfrequens, cum putridâ febre, fœdiſſimo ſpiritus odore, vomitu, alvi fluxu, imo et interdum faucium ipſa gangrænâ. In morbo utroque facilis puſtularum, ſudorum, aut exanthematum eruptio, magna conſequenti cuticulæ deſquamatione: funeſta ſane ſunt ſigna, perarida cutis, aut lividæ puſtulæ.”

Perhaps the épidemic Febres eryſipelatoſæ and Febres miliareſ, which occurred in the years 1728-29-30, and the Febris miliaris cum pravis admodum ſymp-

* Vol. i. page 95.

† Vol. i. page 28, 71 and 116.

‡ See vol. ii. page 76, 132, 137, 153, &c.

tomatibus, in 1731,* were the same as the disease here mentioned, but not so well understood by Dr. Huxham till afterwards. In December 1752, he uses the term *Scarlatina* to express the eruption attending the *angina maligna*, or malignant ulcerous Sore throat. *Decembri; Angina valdè maligna frequens: Jam cruptio non est tantum Scarlatina, sed interdum Erysipelatosa.*

In the year 1743, the *Scarlatina maligna* appeared at Paris. Much information respecting it is given under the titles *Esquinancie maligne*, and *Mal a la gorge*, in the *Hist. de l'Acad. des Sciences*. M. Malouin, who wrote the article on epidemic disorders, observes, that, in 1746, many patients died of the Sore throat in nine hours from the commencement of fever, and that none escaped with life. Such a mortality will not now excite wonder in those, who are informed that the Parisian physicians attempted to cure this disease by repeatedly scarifying under the chin, by bleeding in the jugular vein, and by extirpating the uvula, *velum pendulum*, and a portion of the tonsils. In 1749, Malouin connects the *Mal a la gorge* with *Rougeole*; † then, like many French

* See vol. i. page 107, 111, 125. Vol. ii. page 28, 31, 68, 113, 115, 132.

† 1749, *Les Rougeoles ont ce printems été avec enflure fluxionnaire de visage, et les rougeurs ont été extraordinairement long tems a se dissiper, surtout au menton. Je crois devoir remarquer, a cette occasion, que les maux de gorge érisipélateux, qui ont été communs dans le même tems que les Rougeoles, ont été accompagnés de rougeurs a la poitrine, vers le cou, et aux bras. Ces rougeurs étoient en boutons qui blanchissoient lorsque on passoit le doight dessus, et ensuite ils redevenoient rouges. Les maux de gorge commençoient presque toujours par un embarras dans la tête, une envie de vomir, et un abattement de tout le corps: Quelques uns de ces malades sont meme tombés en défaillance; et enfin les élevures avec rougeurs parossoient au bras, et au haut de la poitrine.*

physicians who make little distinction between Rougeole and la Fièvre rouge, he says, in 1751, “Les maladies épidémiques étoient des espèces de Fièvres rouges, qui ont plus attaqués les femmes que les hommes. Cette maladie ressembloit a la Rougeole : c'étoient de grandes plaques rouges, sans boutons : les malades avoient la tete enflée, les yeux rouges, de l'étouffement, et mal a la gorge.” This disease continued till the year 1753 or later, though not always with the same degree of violence. Within the period mentioned, an accurate account of the different forms of the cutaneous eruption, and appearances in the throat, of the state of the pulse, the swelling of the submaxillary glands, and of the succeeding anasarca, was given by several writers * in Paris, and in other parts of France, to which the disease soon afterwards extended. The most accurate of these is Navier, † whose observations on the Fièvre rouge were made in the years 1751-2, at Chalons and other places.

The “Sore throat attended with ulcers,” which was prevalent in London during the years 1747-8, and of which an accurate account was given by Dr. Fothergill, appears to have been an epidemic Scarlatina, like the anginose Fever and ulcerated Sore throat described by

J'ai vù un de ces malades dans lequel tous ces accidents ont disparu parceque lui est survenu une enflure douloureuse à la main droite, et au pié gauche.

* Comment. Med. Lips. vol. i. page 91. Chomel's Dissertation on the Gangrenous Sore throat, 1749. Rabours de Ulc. tonsillar. Mem. de l'Acad. de Montpellier. Journal de Medecine, tom. xxxi. &c.

† Dissertation sur plusieurs maladies populaires, &c. a Paris, 1749. See Commentar. de rebus, vol. iv. page 338.

Huxham. Although many of Dr. Fothergill's cases were certainly of the malignant kind, and he thought proper to insist generally on the putrid * tendency of the disease, with a view to combat the mode of treatment then employed, yet it is evident from his treatise, that he frequently saw the disease in its mildest form. The rash, of which he has given a full description, † coincides exactly with that in the Scarlatina. It appeared on the second day of the disease, and began to decline on the fifth. He further observes, that there were "in general symptoms of recovery on the third, fourth, or fifth day," and that, "some grew easier from the first day of the attack." ‡ With respect to the affection of the throat, he says, "The disease terminates in a superficial ulceration of some of the parts about the fauces, with little appearance of sloughs, if the disease is very mild; and with large and deep ones, of a white, cineritious, livid or black colour, if it is more violent." § In another place he says, "Where the disorder is mild, a superficial ulcer appears in one or more of these parts, which may easily escape the notice of a person unacquainted with it, as it can scarcely be distinguished from the sound part, but by the inequality of surface." || He adds, that, under a proper mode of treatment, "it seldom happens, but that the febrile symptoms disappear, the slough comes off, and the ulcers are disposed to heal in a few days, unless it be where mismanagement at

* Page 49, 59, 71.2.

† Page 32. Notwithstanding this characteristic appearance, he is anxious to establish "an essential difference" between the disease he describes, and the Scarlatina (see page 3 and 52) particularly "the Sore throat and Scarlet Fever, which shewed itself at Edinburgh in 1733." *Med. Essays*, vol. iii.

‡ Page 35.

§ Page 51.

|| See page 34, 59, and 64.

first, malignity of the infection, or an unfavourable constitution, have one or all contributed to increase the disease, and to render its consequences more lasting and mischievous.”*

The disease described by Dr. F. was attended with hæmorrhage from the nose, mouth and ears, also from the uterus: such discharges of blood take place in every variety of Scarlatina, and in the two latter species are often fatal. He has noticed a circumstance peculiarly attributed to the Scarlatina anginosa by most writers on that subject: “Another symptom which requires our attention in the cure of the disease is an excessive faintness, of which they generally complain soon after they are taken ill, and continue to do so, if they are sensible, till the distemper begins to abate.”†

The doctor has elucidated his observations by two instances (pag. 52. 56) in which slight cases of Scarlatina anginosa seem to have proved fatal, from an imprudent use of bleeding and purgatives. One of the cases so treated, he says, “was apprehended to be a common Scarlet Fever.”

He remarks, in concluding, “Thus much, however, seems to be true in fact, that in some cases the disease appears to be of so mild a nature, and so benign, as to require but little assistance from art. Persons even recover from it under the disadvantages of unskilful and injurious management; whilst in others the progress of the symptoms is so rapid, and the tendency to corruption so strong, that nothing seems able to oppose it. Just as it happens in the Small-pox: the benign and distinct sort bears ill treatment without injury; in the malignant flux kind, the utmost art and experience are too often insuffi-

* Page 67.

† Page 39, 40, 57.

cient to conduct the distemper to a happy issue. Whether this diversity in the Sore throat we are speaking of is owing to a difference of constitutions, or of seasons, to the different quality or quantity of the contagion, or the manner of receiving it, or whether there are in reality distinct species, may perhaps hereafter be more certainly determined.”*

That the disease described by Dr. Fothergill was an epidemic Scarlatina is further proved, by a letter from Dr. Cotton to Dr. Mead, “On a particular kind of Scarlet Fever, prevalent at St. Alban’s in the year 1748,” published about the same time as Dr. Fothergill’s treatise.† The disease had undoubtedly spread from London to all the adjacent towns : and Dr. Cotton’s narrative affords an opportunity of comparing its appearances in the country with its form in a crowded metropolis.

* Page 68.

† The influence of accidental circumstances on medical practitioners and medical authors was strikingly exemplified in Dr. Fothergill and Dr. Cotton. A popular alarm, first owing to the sudden death of Mr. H. Pelham’s two sons, on the same day, by a malignant Sore throat (*Gent. Mag.* vol. xxvii. Nov. 1739.) and afterwards kept up through reports of the appearance of this supposed pestilential distemper in other parts of the kingdom, occasioned Dr. F.’s account of it to be read with the utmost avidity. The title and tenor of his publication so far coincided with current opinion, that he soon attained the highest professional eminence. Dr. Cotton’s treatise on the same subject had perhaps equal merit with regard to style and precision ; but as he gave an old appellation to a disease certainly not new, his work attracted little attention, and produced him no emolument. The doctor was, however, consoled by the visitation of his muse, and by the comforts of his rural “Fire-side.” He declined an invitation to practice in London, considering “the metropolis as a dangerous and stormy ocean.” If we can trust the muse, his “search after happiness,” among calmer scenes, was not ineffectual.

“ The disease began at St. Alban’s in September, and as usual affected children more than adults. In general the first symptoms were sickness, vomiting and purging. A sore throat immediately followed these discharges, or sometimes appeared along with them. The pulse was quick and small ; the thirst intense, with a sensation of burning heat on the skin. The tongue was often moist, and but slightly furred. Some were delirious for several days together ; some comatose ; others had continued watchfulness, without any delirium ; only a few complained of head-aches ; and even some of those who were afterwards most delirious did not complain of previous pain in the head. Almost all experienced a sudden loss of strength, with extreme anxiety and dejection of spirits. The eyes looked watery ; the countenance was bloated, and particularly the eye-lids. In many the hands, arms, and neck, were somewhat tumefied : and sometimes a cough attended these symptoms. The tonsils, parotid and submaxillary glands, suddenly swelled to a considerable degree : at the beginning of the disorder ulcerations in those parts did not constantly appear ; but in some cases, as the disease advanced, ulcuscula might be seen scattered about the fauces, being large on the tonsils, though everywhere superficial, and covered with a whitish slough. The disease arrived at its height on the fourth or fifth day ; after which it gradually declined : and the glandular tumors subsided. In two or three patients the swelling of the parotids remained a fortnight longer, and suppurated largely. The cuticle separated as in other cases of Scarlet Fever. Many had a sensation of general soreness ; the dejection of spirits likewise extended beyond the disease, and was accompanied with singular perturbations of the mind.”

“ The Scarlet efflorescence appeared, in some,

over the whole surface of the body, immediately on the attack of the disease: in others there intervened one or more days between the first sickening and the eruption, the rash being sometimes partial, and gradual in its advances. The legs and thighs were spotted up and down with spots of various dimensions, some as large or larger than a sixpence, while the trunk of the body was covered with such an infinite number of them, and so closely set together, that no interstices appearing, the body was in some persons almost as red as if it had been dipped in blood. In others the scarlet efflorescence was trifling as to the degree of colour; and so very slightly was the skin tinged, that the disease was known more from the collateral symptoms than from the efflorescence. The scarlet efflorescence not only differed as to degree in different persons, but even in the same patient; appearing on the face, neck, and breast, even with the superficies of the skin, erysipelas-like, at least so far as the eye could discover; while on other parts the eruptions were prominent, and the cuticle felt rough, with all the asperity of fish skin that spectacle cases are made of. The appearance of the efflorescence seemed not to demand attention, so far as to influence the method of treatment; some being very delirious with the eruption fully out and intensely red, and others equally so with the eruption sparing and pale. It is a general law in eruptive disorders, that the more liberally the eruption comes out, the securer is the patient rendered thereby: and yet so little did this rule hold true in the present case, that in two patients who died the eruption was universal, and florid to the last; and in one of them, that *anxietas circa præcordia*, which is usually most urgent in other eruptive fevers before the eruption breaks out, was in this case as exquisite, when

the efflorescence had attained its highest colour, as before the eruption made its appearance."

"From this diversity of symptoms, I have found some practitioners inclined to think that this disease could not with propriety be called a Scarlet Fever. But I imagine that such disputes are about words only. For though there is a considerable difference between the present Scarlet Fever, and that milder one which Sydenham describes, yet, if an increased number of symptoms, and a more exasperated degree thereof, would authorise a physician to alter the name of the disease, I fear that confusion would be the consequence of such a liberty. For the same reasons the Small-pox might suffer a change of its name; because there is not a greater difference between the present and any former Scarlet Fever, than there is between Small-pox and Small-pox; more especially if the comparison be made between the mildest degree of the distinct, and the most violent degree of the confluent sort."

Dr. Starr, a physician at Liskard, Cornwall, has described, *Philosoph. Transactions*, No. 49, 1749, the most virulent form of Scarlatina, but under another title. He says, "We have had ravaging among us for some time, at certain seasons, a disease, formidable in its advances, and fatal in its consequences. I mean an occult Angina, called, with some propriety, *Morbus strangulatorius*. Dr. Fothergill's Sore throat with ulcers, and Dr. Cotton's St. Alban's Scarlet Fever, &c. are but its shadows. Many parishes have felt its cruelty, and whole families of children (whence its contagious nature is but too evident) have by its successive attacks been swept off. Few, very few, have escaped." "They complained, on the first attack, of swellings of the glands, as tonsils, parotids, submaxillary, and sublingual glands, but frequent-

ly of no great importance ; some, from an internal tumour, have had a large external œdematous swelling of the sub-cutaneous and cellular tunic, from the chin down to the thyroid gland, and up the side of the face. In one case the tumour broke in the fauces, but instead of a laudable pus, some ounces of coffee-coloured, exceedingly fetid matter were spit off : the man recovered."

"A fœtor oris is usually an early symptom : not a few had gangrenous sloughs in their mouths, perhaps so early that the disorder was scarce complained of till the slough was formed. Others, without any of the preceding symptoms, have only complained of a slight pain in swallowing, succeeded with a hot flesh, feverish pulse, a short, low, heaving, hoarse cough, which sooner or later was productive of a difficult, noisy, and strangulating respiration."*

"Some had corrosive pustules in the groin, and about the anus, eating quick and deep, and threatening mortification, even in the beginning. In others, after a few days illness, numbers of the worst and deepest petechiæ broke out in various parts of their body. A child here and there had red pustules on the nape of the neck, which threw off a surprising quantity of thin transparent ichor, vastly glutinous when dry. These, if pultised or drawn with colewort leaves, were succeeded by a thick spreading slough. Nearly the same appearance took place where blisters had been applied."

"There were large whitish membranous bodies adhering to the tonsils, velum pendulum palati, perhaps to the trachea, and often forced up by the cough with great relief." These Dr. Starr at first thought were of

* Dr. S. adds, "I never saw one in this disorder attacked with delirium."

the same nature as the external sloughs. He afterwards changed his opinion, and in his statement to the Royal Society accounts for the mortality of the disease, and the great difficulty of its cure, by observing, that in one case "the mucous coat of the velum pendulum, with much adhering slime, was separated;" and that in another, "the mucus coat of part of the larynx, [and of] the whole of the aspera arteria, with the grand division of the bronchial ramifications," was drawn out by a thumb and finger. The patient survived twenty-four hours, "and died in the end somewhat suddenly, though in his perfect senses." An accurate engraving represents the size and form of what Dr. F. calls the separated membranes, which, however, seem to have been nothing more than condensed, adhering mucus. vol. xlvi. Tab. 1. Fig 1 and 2.

A malignant, ulcerated Sore throat, with an efflorescence on the skin, appeared in some parts of Holland about the same time as the disease, which was the subject of Dr. Fothergill's, Dr. Cotton's, and Dr. Starr's publications. Professor De Haen, who was then resident at the Hague, considered this fever to be a variety of the Scarlatina, mentioned by Sydenham. He says, "Anno 1748 & 1749, pessima Scarlatina Hagæ Batavorum fuit, cum validâ anginâ inchoans, plurimosq; infantes, tum et benè multos juvenes atq; adultos occidens; imò fauces, carnesque buccarum, in ulcera maligna, ossa maxillarum in cariem, convertens, similiaque etiam producens in cruribus. Nonnunquam parotis, non juvans, sed indurescens, aderat."*

* Theses sistent. Febr. divisiones, page 25. About the same time the Scarlatina, in its mildest form, extended through an adjoining province (Gelderland) the account of which may be found in De Gorter. Prax. Med. tom. ii.

Our settlements in North America suffered dreadfully from the same cause, between the years 1746 and 1760, as appears from some observations published in 1769, by “John Kearsley, jun. Practitioner of physic at Philadelphia:”*

“In the spring, summer, and autumn, 1746, and during part of the winter, a disease, since called by the learned Huxham, Fothergill, and others, Angina maligna, or the putrid and ulcerated Sore throat, prevailed in this and the neighbouring provinces, and spread itself with mortal rage, in opposition to the united endeavours of the faculty. Like most new† diseases, till their constitution and nature are known, it swept away all before it; it baffled every attempt to stop its progress, and seemed, by its dire effects, to be more like the drawn sword of vengeance, to stop the growth of the colonies, than the natural progress of disease. In the New England governments the stroke was felt with great severity: villages were almost depopulated, and parents were left to bewail the loss of their tender offspring. This disease, as it appeared then, and since within these few years,” (i. e. before 1769) “had most of those symptoms to characterise it, which the learned gentlemen above mentioned have handed down to us.”

Similar epidemics were noted, within the same period, by Dr. Wall, Dr. Johnstone, Dr. Russel, and others, in different parts of Britain.

Dr. Wall, ‡ in a history of the ulcerated Sore throat,

* See Gentleman’s Magazine, vol xxxix. page 521.

† The impropriety of this epithet will appear from former statements.

‡ Medical Tracts, and Gentleman’s Magazine, vol. xxi. page 497.

observes, "The disease appeared in some parts of this country (Worcestershire and Warwickshire) chiefly in low situations, about the beginning of the year 1748. It then went generally under the name of the Scarlet Fever, the complaint in the throat not being much attended to, or at least looked upon only as an accidental symptom." When this disease appeared at Kidderminster in 1749, it was found by Dr. Johnstone to coincide perfectly with the ulcerous Sore throat described by Dr. Fothergill.

The Angina epidemica, pestilens, or gangrænosa, seen many * times in London by Dr. R. Russel, before the year 1752, was attended with a scarlet efflorescence (eruptiones scarlatinæ) in some cases partial, in others spreading over the whole surface of the body. He has noticed the strong tendency to gangrene † in this disease, but remarks, "Atque ego quidem si eruptio ista mitior visa sit, morbum a Febre Scarlatinâ vix quidquam discrepare inveni, nisi fortè quod color macularum magis pupureus sit et petechiarum speciem æmuletur."

Prof. Cullen, following Sauvages, and other nosologists, has misplaced the species *Cynanche maligna*.‡

* *Memoriâ meâ, bis, iterumque, morbum hunc accessisse, et mox pro tempore se subduxisse, recordatus sum ; page 105.* One of these appearances must have coincided with the epidemic Sore throat described by Dr. Fothergill.

† *Tonsillas autem putrida ulcuscula occupant, et quod minimè dubito, tanquam nigræ quædam aphthæ per universum tubum alimentarium in plurimis casibus superveniunt. Page 106.*

Partes circa tonsillas, et laryngem nigrescunt sæpissimè, et gangrænâ tentantur. Econ. Nat. in Morb. Gland. page 107.

Pessimus hujus morbi status eisdem casibus patet quibus et Erysipelas, et ad ejus naturam accedere videri potest. Page 108.

‡ *First Lines of the Practice of Physic, sec. 306.*

His description of the rash connected with it is evidently taken from the Scarlatina, and does not apply to any other disease.* He acknowledges, indeed, that the scarlet eruption appears on the skin under the same form in both diseases," and adds, that "he had five or six times seen the angina maligna united with the common Scarlatina;" also, "that in different epidemic constitutions, sometimes one disease predominated, sometimes the other."

It may therefore be concluded that no British author has yet described any epidemical and contagious Sore throat, except that which attends the Scarlet Fever.† The title "Angina maligna" would have applied with equal, if not with more, propriety to the Sore throat connected with a different species of contagion, viz. that of the Typhus, or malignant Fever, originating in the habitations of the poor, where no attention is paid to cleanliness and ventilation. The Fever, and Sore throat, are sometimes communicated together,‡ but the disease thus complica-

* First Lines of the Practice of Physic, sec. 664, 665.

† This inference, though now generally made by practitioners, has been admitted slowly and with great reluctance. Dr. Russel, notwithstanding Dr. Cotton's previous remarks, and the strong bias of his own mind to draw the conclusion, still hesitated. Even Dr. Heberden speaks doubtingly on the subject; at least he uses the qualifying expressions, "Longè verosimillimum," "procul dubiò," "ni fallor," "judicet lector," &c. and terminates his observations by a sort of compromise; "Verùm, ut maximè fuerint hi morbi diversi, meo quidem judicio, utriusque curatio eadem esse debet; si exceperis illa remedia, quæ, ut quibusdam visum est, faucibus sunt admovenda." Comment. page 21, 25.

‡ Solet præterea pestilens hujus morbi malignitas fauces invadere, et anginosos effectus efficere, tonsillarum tumores, cancrosa ulcera, aphonias, gulæ resolutiones, et similia. Petr. a Castro, de

ted does not become epidemical, like the Scarlatina, nor is it attended with any eruption except petechiæ. It is often fatal, but not at so early a period as the Scarlatina maligna : it may also be repeatedly received, whereas the Scarlatina occurs but once in the same person.

Since the year 1760, more correct accounts of the Scarlatina, and its varieties, have been given by many eminent authors, particularly by Plenciz, at Vienna, in the year 1762 ; by Angelo Zulatti, at Cefalonia, 1763 (*Giornale di Medicina*, t. ii. No. 29. di Pietro Orteschi ;) by Sauvages, at Montpellier, 1765 ; by Dr. Grant, in London, 1769 ; by de Haen, at Vienna, 1770 and 1771 ; by Doctors Eichel, Bang, Meza, and Aaskow, at Copenhagen, and by Prof. Lorry, at Paris, 1777 ; by Dr. Levison, in London, 1777-8 ; by Dr. Withering and Dr. Johnstone, at Birmingham, Stourbridge, &c. 1778 ; by Dr. Clark, at Newcastle, 1778-9 ; by Prof. Rush, at Philadelphia, 1783 ; by Dr. J. Sims, at London, 1786. All these descriptions of the Scarlatina, occurring epidemically at different times, and in different climates, agree more nearly than might have been expected. I may add, that they coincide with my own observations, so far as to justify the distinctions I have made in this disease.

It is needless to review the entire treatise written on the subject by Plenciz. He seems to consider the dropical state which succeeds the Scarlatina anginosa as more dangerous than the fever itself, an observation not agreeing with the experience of others.

The epidemic in Cefalonia did not resemble the disease described by Aretæus, and Aetius (page 216)

Febr. malig. punctulari (sec. xxii. page 232.) Norimbergæ, 1652. See also Ramazzini, *Constit. ann.* 1691-4, sec. xx. and my Reports on the Diseases in London, Pref. & page 131.

was a mild *Scarlatina anginosa*, chiefly remarkable for a prodigious discharge of intestinal worms (*lumbrici*) from the stomach, as well as the bowels.*

Sauvage's account is short: "*Hac æstate Monspeliî viget apud infantes Scarlatina, in quâ totus truncus intense rubet cum voce raucâ, et anginâ ulcerosâ, imò in quibusdam gangrænosâ*". *Nosol. Med. cl. iii. 9. 6.*

Dr. Grant describes the *Scarlatina anginosa* under the title "*Angina erysipelatosâ*," and carefully distinguishes it from the *Angina maligna*. He says, "The pain in the head, and down both sides of the neck, is common to both; the feel as of pepper in the throat, the anxiety, restlessness, and oppression, are similar in both: the purple colour of the parts first affected, the redness or flushing of the skin, and the swelling of the hands and fingers, I have also seen in the *Angina erysipelatosâ*. In carefully comparing these two diseases at the same time in different subjects, I observed that the specks in the *Angina maligna* were more like a small ulcer, the edges round the specks thicker, and as if they were more circumscribed, the slough thick and quite opake: the skin all round, although discoloured, is not excoriated: whereas the other is a true *erysipelas*, and general excoriation, as far as it extends; upon which are to be seen, in different places, broad patches of a thin, gray film, which gradually spread, but do not fester and undermine, as the ulcers of the *Angina maligna* do. Although the tonsils are swelled in both, yet the oblong external swellings at the horns of the *hyoides* were most considerable in the *Angina maligna*: so that the *Angina erysipelatosâ* is a large excoriated surface, full of small, red, *angry papillæ*, and covered

* See *Giornal. di Medicin. t. ii. 29.*

here and there with a gray film, of irregular shape and size."* Dr. Grant concludes that this Angina erysipelatosæ is the same disease as the Febris anginosa of Huxham. From one of his cases, it also appears that the Angina erysipelatosæ and Angina maligna may be produced by the same contagion.

De Haen furnishes a case, in which two persons of the same family were affected with the simple Scarlatina, while the rest had the Scarlatina anginosa, with different degrees of malignity. He repeats the observations made at the Hague, in 1748, respecting the peculiar virulence of this disease: "*Tanta est frequenter ejus pravitas, ut in gangrænam sphacelumque, et fauces convertat, et buccas, et linguam, ossa in cariem vel dissolutionem, universum cruorem in mephitim.*"†

The Danish physicians noticed three varieties of the Scarlatina, at Copenhagen, in the year 1777. In the first, an efflorescence took place over the whole surface of the body: the disease affected children, and seldom continued more than four days: sometimes, however, it terminated by a discharge from the ear, or by indolent swellings of the parotid glands, which suppurated, and proved fatal after five or six weeks. In the second species, the throat was much inflamed and swelled, and the eruption appeared on the second, third, or fourth day, in red patches, of different forms, chiefly about the joints. In the third species, the throat was affected without any eruption on the skin. See Act. Med. Soc. Havniensis, vol. ii.

Prof. Lorry's elaborate history of this disease, which

* Grant on Fevers, vol. ii. 129. See the cases, which exhibit several varieties of the Scarlatina.

† Rat. Medend. Contin. page 44. Cas. 1. & page 134. Compare Kerchvogel. Diar. Med. Pract. cap. 3. page 29.

he calls an "universal Erysipelas," is given in the *Hist. de la Société Royale de Médecine*, tom. ii. and very nearly coincides with the account quoted from *Ballonius*.

Dr. Withering, after stating the usual appearances of the disease, thus describes the fatal form which it too frequently assumed. "In children, the delirium commenced within a few hours after the first seizure. The flesh was intensely hot; the scarlet colour appeared on the first or second day, and they died very early on the third. In others, who escaped this rapid termination, when the scarlet colour turned to brown, and their recovery might have been expected, the pulse still remained feeble and quick, the skin became dry and harsh, the mouth parched, the lips chapped and black; the tongue hard, dry, and dark brown; the eyes heavy and sunk: they expressed an aversion to all food, and extreme uneasiness upon the least motion or disturbance. Thus they laid for several days, nothing seeming to afford them any relief. At length a clear, amber-coloured matter discharged in great quantities from the nostrils or the ears, or both, and continued so to discharge for many days. Sometimes this discharge had more the appearance of pus mixed with mucus. Under these circumstances, when the patients did recover, it was very slowly: but they generally lingered for a month or six weeks from the first attack, and died at length of extreme debility."

"In adults, the rapidity of the fever, the delirium, &c. was such, that they died upon the fourth or fifth day, especially if a purging supervened. Some survived to the eighth, or to the eleventh day; in all these the throat was but little affected: the eyes had an uncommon red appearance, not that streaky redness, which is evidently occasioned by the vessels of the cornea being injected

with red blood, but an equable shining redness, resembling that which we remark in the eye of a ferret. But notwithstanding this morbid appearance in the eye, the strongest light was not offensive. This redness might often be discovered, by lifting up the upper eye-lid, some hours before it shewed itself in the part of the eye that is usually visible; and it was of some consequence to attend to this circumstance, as it greatly influenced the event of the case."

"These patients were extremely restless, clamorous, and desirous to drink, but after swallowing one or two mouthfuls, upon taking another, they seemed to forget to swallow, and let it run out at the corners of the mouth; whilst others spurted it out with considerable force, and were very angry, if urged to drink again. In these cases the scarlet colour appeared very soon after the attack, but in an unsettled irregular manner, large blotches of red intermixing with others of white, and these often changing places. Besides the full scarlet colour described above, there were frequently small circular spots of a livid colour about the breast, knees, and elbows. The pulse from the very beginning was so quick, so feeble, and so irregular, that it was hardly possible to count it for half a minute at a time. It is needless to add, that the greater part of those who laboured under these dreadful symptoms died. A few recovered, and others fell into a state of debility, bordering upon idiotism, from which they were rescued by time and generous living. In one patient, a man, the jaw was so perfectly locked upon the third day, that it was impossible to get any thing down his throat; and he died early upon the fifth day." Page 18, 21.

I met with a case similar to the last, recorded by Dr. Withering. A man, thirty-two years of age, was affected

with the Sarlet Fever, May 24, 1786. His throat was, on the twenty-sixth, so much swelled and so painful, that he was unable to drink; soon afterwards his jaw was completely locked; he became delirious, and died suddenly on the twenty-eighth, in the night.

Dr. Johnstone, in 1778, observes,* “the scarlet eruption was a much more frequent symptom, and attendant of this disease, than it used to be when I first became acquainted with it, near thirty years ago. The patient’s fever and dangerous symptoms generally ran high in the proportion as the efflorescence was more or less diffused, and of a deeper erysipelatous red colour. The patient for the most part vomited, and was purged, on the first day of seizure: the efflorescence appeared on the second, and about the fourth day began to disappear; though it sometimes both appeared later, and continued longer. The palate and glands of the throat were intensely red, and swelled in the same degree with the face, and other parts of the body. White ulcers often appeared from the very beginning, on the tonsils, uvula, and palate, and a thin acrid ichor flowed from the eyes and nostrils. But the ulcers, and this ichorous running, were more generally observable about the third or fourth day, or later; and when the disease took a favourable turn, health began to return after the sixth or seventh day; if otherwise, the patient died about that time.”

In the populous town of Newcastle, during the same year, Dr. Clark observed, and has described a Scarlatina, with the usual varieties, which it exhibits when it is epidemical. He says, that “Some patients had an erysipelatous inflammation of the throat, without ulceration: others

* Remarks on the Angina, and Scarlet Fever, of 1778. Mem. of Med. Soc. vol. iii. page 355.

had ulcerations of the tonsils, without any rash ; and some had the scarlet eruption and fever, without any affection of the throat.”*

“ When the disease was malignant, the sloughs increased ; the maxillary and parotid glands swelled ; the eyes became dull and heavy ; the face and neck often bloated and œdematous ; and the patient either laboured under inquietude, delirium, or coma. In the milder cases, after the skin began to peel off, the fever subsided, the ulcerations healed, and the patients were speedily restored to health. Several, however, who had the disease in a mild manner, fell into anasarous swellings, and the true hydrops pulmonis, or dropsy of the cellular substance of the lungs. Some, after showing signs of recovery, kept drooping, and though free from fever in the day-time, passed hot and restless nights. In such cases the countenance looked pale, the face puffy, and the maxillary or lymphatic glands of the neck continued swollen. Pale thin matter ran from the nose and ears ; and at last suppurations took place in the eustachian tube, which destroyed the tympanum ; and some patients lost the auditory bones. When the sick applied late for assistance, the inflammation communicated to the trachea and lungs, occasioning hoarseness, incessant cough, wheezing and rattling respiration. I saw several miserable objects, who had survived to the fourteenth day, with ulcerations which had perforated the velum pendulum, and with excoriations of the mouth, lips, and parts near the anus. The length of the disease was uncertain : there was seldom any sensible crisis. Some soon recovered : others had no favourable sign till the twelfth or sixteenth day. Five only, that I attended, died on the eighth day, four

* Compare Dr. Huxham, page 111.

on the ninth, and in all the other cases which proved fatal, the patients protracted their miserable existence to the thirteenth, fifteenth, sixteenth, seventeenth, and sometimes to the nineteenth day of the disease, when it was not succeeded by dropsical swellings. Soon after death, the bodies of all those whom I examined became of a livid or violet hue; and putrid gore sometimes issued from the mouth and nostrils." Page 210.

Dr. Clark has given a tabular view of the cases under his care in 1778 and 1779, from which it appears, that children under ten years of age were most liable to the disease;* that under twenty years of age, the number of males and females was almost equal: but that above this period, the number of females greatly exceeded that of the males:† a circumstance which may be easily accounted for, when it is considered that the former were more exposed to contagion, from being employed in attending the sick.

TABLE.

Ages.	Males.	Females.	Total.	Months. 1788.	
Under 1 year	6	1	7	June	14
From 1 to 10	44	47	91	July	6
10 to 20	12	13	25	August	18
20 to 30	4	14	18	September	33
30 to 40	0	2	2	October	34
40 to 50	0	3	3	November	12
				December	15
				1779.	
				January	2
				February	1
				March	5
				April	1
				June	4
				August	1
	66	80	146		146

* See Dr. Withering, page 25. † Compare Dr. Sims, page 438.

He observes further, that of one hundred and thirty-one patients, seventy-five had the Scarlet Fever, with a mild ulcerated Sore throat; that in thirty-three the disease occurred with every distinguishing symptom of the Angina maligna; and that, in twenty-three cases, it was succeeded by dropsy. He adds, with propriety, "When it is considered that great numbers had the distemper in such a mild manner as to require no medical assistance, and that application was only made for the advice of a physician, when the patients were severely attacked, perhaps the malignant cases ought not to be estimated higher than as one to twenty, in all who took the disease."

The following table exhibits the number of cases which occurred, under the different forms of the disease, in my own practice, during the year 1786.

TABLE.

Scarlatina simplex.	Scarlatina anginosa,	Scarlatina maligna.	Sore throat without eruption on the skin.
1786. April 0	3		
May 6	10	2	
June 4	12	1	4 June.
July 2	11	1	3 July.
August 1	17	4	4 August.
September 2	29	9	12 September.
October 3	24	5	7 October.
November 0	38	12	10 November.
December 0	8	5	2 December.
Total 18	152	39	42 | 251

In Dr. Rush's Medical Inquiries and Observations, we are informed that "After great and sudden changes of temperature during the summer of 1783, the Scarlatina anginosa became generally epidemic at Philadelphia in the month of September. In most of the patients who were affected by it, it came on with a chilliness and sickness at the stomach, or a vomiting, which last," he says,

“ was so invariably present, that it was with me a pathognomonic sign of the disease. The matter discharged from the stomach was always bile.”

“ The swelling of the throat was in some instances so great, as to produce a difficulty of speaking, swallowing, or breathing. In a few instances, the speech was accompanied by a squeaking voice, resembling that which attends the *Cynanche trachealis*. The ulcers on the tongue were deep, and covered with white, and in some instances with black sloughs. In several cases there was a discharge of a thick mucus from the nose, from the beginning; but it oftener occurred in the decline of the disease, which most frequently happened on the fifth day.”

“ I saw two cases of eruption, without a single symptom of sore throat. The face in one of those patients was swelled as in the *Erysipelas*. In the other, a young girl of seven years old, there was only a slight redness of the skin. She was seized with a vomiting, and died delirious in fifty-four hours. Soon after her death, a livid colour appeared on the outside of her throat. I can recollect but few cases which were attended with diarrhœa. The fever which accompanied the disorder was generally the *Typhus mitior* of Dr. Cullen. In a few cases it assumed the symptoms of the *Typhus gravior*. The disease frequently went off with a swelling of the hands and feet. I saw one instance in a gentlewoman, in whom this swelling was absent, who complained of very acute pains in her limbs resembling those of rheumatism.”

“ In two cases which terminated fatally, there were large abscesses, the one on the outside, and the other on the inside of the throat. The first of these cases was accompanied by troublesome sores on the ends of the fingers. One of these patients lived twenty-eight, and

the other above thirty days ; and both appeared to die from the discharge which followed the opening of the abscesses.”

“ Between the degrees of the disease which I have described, there were many intermediate degrees of indisposition which belonged to this disorder. I saw, in several cases, a discharge from behind the ears, and from the nose, with a slight eruption, and no sore throat. All these patients were able to sit up and walk about. I saw one instance of a discharge from the inside of one of the ears in a child, who had ulcers in his throat, and the squeaking voice. In some a pain in the jaw, with swellings behind the ear, and a slight fever, constituted the whole of the disease. In one case the disease came on with a coma, and in several patients it went off with this symptom. A few instances occurred of adults, who walked about, and even transacted business, until a few hours before they died.”

“ Such was the prevalence of the contagion which produced the *Scarlatina anginosa*, that many hundred people complained of sore throats, without any other symptom of indisposition. The slightest occasional or exciting cause, particularly cold, seldom failed of producing the disorder. The month of October was much cooler than September, and the disease continued, but with less alarming symptoms. In several adults who were seized with it, the hardness of the pulse indicated bloodletting. The blood in one case was covered with a buffy coat, but beneath its surface it was dissolved. In the month of November the disease assumed several inflammatory symptoms, and was attended with less danger than formerly. I visited one patient, whose symptoms were so inflammatory as to require two bleedings. During the decline of the disease, many

people complained of troublesome sores at the ends of the fingers. I saw one case of Sore throat, which was succeeded not only by swellings in the abdomen and limbs, but by a Catarrh, which brought on a fatal Consumption. In December, January, and February, the weather was excessively cold, the thermometer being sometimes below 0 on Fahrenheit's scale. For a few weeks in the beginning of December the disease disappeared in the circle of my patients; but it broke out with great violence the latter end of that month, and in the January following. Some of the worst cases that I met with (three of which proved fatal) were in those two months. The disease disappeared in the spring, but it spread afterwards through the neighbouring states of New Jersey, Delaware, and Maryland."

"This disease has prevailed in Philadelphia at different seasons ever since the year 1783. It has blended itself occasionally with all our epidemics. There often appeared to be effusions of water, not only in the limbs and abdomen, but in the thorax. A number of people were affected with sudden swellings of the lips and eyelids, of the cheeks and throat: at the same time many were affected by an inflammation of the eyes. The swellings generally came on in the night, were not attended with much pain, and went off in two or three days. In the autumn of 1788, it appeared in two instances with an obstinate diarrhœa; but it was in young subjects, and not in adults, as described by Dr. Withering. In both cases, the disease proved fatal, the one on the third, the other on the fifth day. In December I saw one case, in which a running from one of the ears and a deafness came on, on the fifth day, immediately after the discharge of mucus from the nose had ceased. This case terminated favour-

ably on the ninth day ; but was succeeded for several days afterwards by a troublesome cough.”

Having already made many quotations from the other authors, mentioned page 253, I will proceed to make some observations on the method of treatment in the different forms of Scarlatina. For the Scarlatina simplex, it seems only requisite to keep patients in a moderate and equable temperature, in clean open apartments ; to prescribe light diet without animal food ; and to give cooling liquors for drink. When there is no morbid appearance, or sensation in the throat, our chief care should be to prevent needless applications ; since, according to Dr. Sydenham’s observation, “ none die of this disorder except from a too great officiousness in the practitioner.”* The same author recommends one or two gentle purgatives after desquamation. He also mentions epileptic convulsions and coma, as frequent appearances at the beginning of the disease, which he relieved by blisters, and repeated doses of diacodium.

2. In the Scarlatina anginosa, physicians on the continent have recommended bleeding† from the arm, or, when the head is much affected, from the jugular veins. Dr. Morton‡ adopted the same practice in most of the cases he attended even in London. Blood-letting has been also recommended in the northern part of our island, where the disease is said to assume somewhat of an inflam-

* *Nimiâ medicî diligentîâ. sect. vi. cap. 2.*

† De Haen, Navier, Plenciz, Aaskow, Eichel, De Meza, &c. &c. In epidemiâ Havniensi subindè dabatur locus venæsectioni, sc. in plethoricis, et ubi pulsus durus cum aliis inflammationis signis : atqui ubi putredinis criteria minus tuta erant. De Meza, *Compend. Medic. Pract. vol. i. c. 18.*

‡ De Febr. inflam. universal. cap. 5.

matory form. The Medical Essays* state, that in the epidemic Scarlatina of 1733 at Edinburgh, "few died who were timely and plentifully blooded, which weakened the fever, relieved the throat, and was the only medicine that removed the vomiting and diarrhœa."

During the years 1785, 1786, 1787, and since, when the Scarlatina anginosa was epidemical in the metropolis, I never saw a case in which blood letting appeared to be indicated. Wherever it had been employed, great depression and faintness were the immediate consequences, the pulse becoming more weak and frequent, and often irregular. Of two adults who had been bled largely one died before the time of desquamation, the other lingered in a very precarious state upwards of twenty days, but at length recovered. The experience of Dr. Withering, Dr. Clark, and Dr. Sims on this point, agrees exactly with mine. Dr. W. observes, "Such was the state of the pulse with us, during the hot summer months, that I never saw a case in which blood was taken away: nor would it be easy to conceive with what view the boldest, or the most ignorant practitioner would have dared to attempt it; for in those cases where the inflammation upon the surface was very great, the loss of blood could only contribute to the further depletion of the larger vessels, and thereby increase the debility and faintness which

* Vol. iii. p. 27. See Cullen's Pract. of Physic. sec. 671. Huxham says, "in the Febris anginosa, they bore bleeding at the beginning with advantage, and the blood was often sizzly, though much less so in general than in quinsies of the truly inflammatory kind: they very seldom, however, admitted of large bleeding; scarce any, indeed, of a second."

Dr. Cotton's observations in 1748 nearly coincided with those of Huxham. Compare "Observations on the Sore throat and Fever in the north of Scotland, 1777, by Robert Saunders, M. D. Physician at Bamff."

already existed in a most alarming degree : for the small vessels accumulating the blood more in consequence of their own action, than from the pulse of the heart, would not be affected by the usual mode of blood-letting ; and the extent of the inflammation was much too great to allow us to have recourse to topical bleedings. Sometimes where the fiery redness of the eyes, and the state of delirium seemed to demand the application of leeches to the temples, I have seen them applied, but never with any good effect. In one instance, where the constant rejection of every thing that was swallowed, even simple water, and the pain in the stomach during the efforts seemed to indicate an inflammation in that organ, blood was taken away notwithstanding the feebleness of the pulse. This blood was sisy. The bleeding was repeated ; but no very evident advantage accrued to the patient. I think therefore we may conclude, that when the scarlet colour upon the skin is intense, we cannot expect to benefit either from topical or general bleedings. In the autumn, when the scarlet colour of the skin was seldom intense, and often did not appear at all, the tumefaction of the fauces was generally much greater, and the pulse considerably more firm. In this case, if the patient was threatened with suffocation, if violent head-ache, or if peripneumonic symptoms pointed out the expediency of blood-letting, it was sometimes done ; but still with less advantage than one would have expected in almost any other situation." Page 73-5.

Purgatives have nearly the same debilitating effect as blood-letting. They are indeed very seldom necessary ; for though a few patients may, on the first day, be affected with bilious vomiting and diarrhœa, the state of the bowels is more uniform * than in other febrile complaints.

* See Dr. Withering, page 17. Dr. Sims says, " they were almost never either costive or purged." *Memoirs of the Med.*

It has also been remarked that no hardness, or tension, of the abdomen occurs at an early period of the disease.

Emetics are recommended by the best writers on this subject.* I have not found it necessary to repeat them so often as Dr. Withering has advised; but I think that all he has said respecting their use and application merits particular attention. "In the very first attack a vomit seldom fails to remove the disease at once: If the poison has begun to exert its effects upon the nervous system, emetics stop its further progress, and the patients quickly recover. If it has proceeded still further, and occasioned that amazing action in the capillaries, which exists when the scarlet colour of the skin takes place, vomiting never fails to procure a respite to the anxiety, the faintness, and delirium." "In autumn, when the throat was more affected, when the tumefaction of the fauces was such that the patients could not swallow but with the utmost difficulty; when the peripneumonic symptoms threatened suffocation, and bleeding was ineffectual, an emetic opened the gullet, and unladen the lungs, so that deglutition became easy, and respiration free. But it is necessary to add, that a vomit only sufficiently strong to evacuate the contents of the stomach, is by no means adequate to these effects. The vomit must be powerful, and in ordinary cases repeated once in forty-eight hours; in those with more urgent symptoms daily; and in the worst cases twice in twenty-four hours. The patients never fail to express

Soc. page 403. He nevertheless ordered rhubarb and sal polychrest in equal proportions, so as to produce two motions every day. I think the occasional stimulus of a small dose, as two or three grains, of calomel very useful. On the first attack of the disease I have usually added an equal portion of antimonial powder.

* *Burserii Institut.* tom. ii. page 72, sec. lxxxiii. See the striking passage on this subject quoted from *Tournefort*.

the relief they find after the operation, and the physician soon discovers it in the countenance and in the pulse. As to the form of the emetic, the practitioner may vary it as he pleases; but I generally combine tartar emetic in solution with ipecacuanha in powder, that I may be more certain of their full effect on the stomach, and avoid the danger of their acting as a purgative. I also give them in much larger doses than usual, in order to secure a certain violence of action upon the system." Page 75-8.

Dr. Rush says, "In every case that I was called to, I began the cure by giving a vomit, joined with calomel.* The vomit was either emetic tartar or ipecacuanha, according to the prejudices, habits, or constitutions of the patients. A quantity of bile was generally discharged by this medicine. Besides evacuating the contents of the stomach, it cleansed the throat in its passage downwards. To insure this effect from the calomel, I always directed it to be given mixed with syrup, or sugar and water, so as to diffuse it, generally, over every part of the throat. The calomel seldom failed to produce two or three stools. In several cases I was obliged, by the continuance of nausea, to repeat the emetics, and always with obvious and manifest advantage. I gave the calomel in moderate doses in every stage of the disorder. To restrain its purgative effects, when necessary, I added to it a small quantity of opium."

Dr. Binns, having an opportunity of seeing the children at Ackworth from the commencement of the disease, gave an emetic in almost every case, and some-

* He observes in another place, that "when the Scarlatina appeared to be in a forming state, a vomit of this kind never failed of completely checking the disorder, or of so far mitigating its violence, as to dispose it to a favourable issue in a few days."

times repeated it after twelve or twenty-four hours. When the patients were extremely languid, he gave wine, or liquor *volatilis cornu cervi* before the emetic or during its operation. He adds, "My acknowledgments are due to Thomas Oxley, of Pontefract, not only for his frequent attendance, but 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 I had seen when a diarrhœa came on in this Fever. By his persuasion small doses of Calomel, and other laxatives were occasionally administered;* and so far from producing injury, I believe that by evacuating the acrid matter, which is often swallowed, they had a tendency to prevent excoriations of the intestinal canal, and the consequent diarrhœa which I dreaded. But it should be remarked that particular care was taken to support the patient during the operation."

In cases of *Scarlatina anginosa* where the throat is inflamed, and swelled, so as to occasion very painful deglutition, blisters applied between the shoulders, or to the external fauces, afford considerable relief. Dr. Clark observes, "In regard to blisters, meeting with an instance where their application was succeeded by mortification, I did not often apply them to the throat; but in several cases where the inflammation of the fauces was great, they

* This practice was more boldly enforced by a physician at Ipswich, when the "Ulcerated Sore throat and Scarlet Fever" prevailed there in 1772. He made a powder, with Pulv. Ant. p. 3. Calom. p. 1. of which the dose was from ten to thirty grains. To children he gave calomel alone, in the same quantity. A julep was at the same time prescribed, with Manna Unc. j. Cr. Tart. dr. j. in half a pint of water; the dose three table spoonfuls six times a day. Of three hundred persons, thus treated, none died. See *Gent. Mag.* for June, 1772.

were of advantage when applied to the nape of the neck."* Dr. Withering, from his experience in the disease at Birmingham, decided against the use of blisters. He says, "If the brain was affected soon after the attack, they did much mischief; but if the inflammation was pretty much confined to the fauces, a blister was frequently applied round the throat, but with less advantage than the practice in Quinsies, ulcerated Sore throats, and other local inflammations would teach one to expect."† Page 91.

It is proper to enjoin the regimen directed for the simple Scarlet Fever, page 265. As we observe the *Scarlatina anginosa* to be generally mild in spring and summer, but severe during the winter months, we may infer that a heat of about sixty degrees, preserved in the apartments of the sick, will be most agreeable and beneficial to them.‡ During the first six days of this disease, many practitioners endeavour to excite perspiration by antimonials, camphor, aromatics, dulcified spirits, and vol-

* Dr. Rush says the same. He applied blisters to the neck or behind the ears on the third day. See also Dr. Sims, p. 325.

† "As blisters excited considerable irritation, they were only applied when there was a comatose disposition, much pain in the ears, or an enlargement of the parotids." Dr. Binns.

"If the disease prevail in any of the summer months, blisters can hardly be used with safety." Kearsley.

‡ "Cold air is always found to be prejudicial, either by protracting the disease, or by throwing it on the lungs, or on some other part necessary for life. It has been frequently observed, that if persons seemingly recovered, and free from all the manifest symptoms of the disease, went into the cool air, before the putrid heat or ferment was quite exhausted, they had relapses." C. Colden, *Med. Obs. and Inq.* i, page 218. and Dr. Withering, page 294-5.

atile alkali saturated with vinegar, or juice of lemons.* If the efflorescence be full and vivid, such remedies, for the most part, fail to produce their usual effect, and often increase the heat, anxiety, and restlessness, they were intended to relieve. The affusion of cold water, recommended in Fevers,† has not yet been employed here as a remedy for the Scarlatina; but some physicians of London have ventured to sponge the whole surface of the body repeatedly with vinegar and water. During a hot season, or whenever the heat of the skin is much increased, the patient is greatly refreshed by this application, the pulse becomes more steady, the heat and fever abate, and a calm sleep frequently succeeds.‡

* Dr. Huxham, page 114. Dr. Fothergill, page 54. Dr. Grant, page 24, &c. Plenciz, De Scarlatinâ. Act. Hafn. tom. ii. &c. Med. Obs. and Inq. vol. i. page 219. Dr. Blackburne, page 27. I never succeeded in the endeavour to excite perspiration, before the decline of the efflorescence. When sudorific medicines and oppressive coverings are applied, they produce an universal miliary eruption, and aggravate the febrile symptoms.

† Dr. Currie's Medical Reports.

‡ "The Scarlet Fever prevailed among the children at the Foundling Hospital, from the end of June to the middle of October, 1804. Fifty-two boys, and nineteen girls were affected with it. Three boys died of the fever; a fourth died dropsical some time after being dismissed from the infirmary. Most of the patients were repeatedly washed with cold water and vinegar, mixed in about equal proportions. Only the hands and arms were washed in those who had no considerable heat of the skin: but when the heat became excessive, the washing was extended to the trunk of the body, and to the lower extremities. 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, I employed it at every period of the fever, provided the skin were hot and dry." Dr. Stanger.

I have of late given, at an early period of the disorder, oxygenized muriatic acid, which, when it is accurately prepared, appears to be very salutary. The dose for adults is half a drachm by measure, for children ten or twelve drops. Before this medicine is used, its state should be ascertained by a chemical test,* since it is soon decomposed by exposure to the air, or to light: it then becomes rough and offensive to the stomach, so as often to produce violent sickness, pains of the bowels, and diarrhœa.†

* “The oxymuriatic acid should contain as much of the gas as water can absorb under the common pressure of the atmosphere, and at a temperature of from 50 to 60 degrees. To a tabulated retort, adapt a quilled receiver, connected with the three bottles of Woolf’s apparatus, each hottle being half filled with water. The retort is to be charged with three parts of muriatic acid, and one part of the black oxide of manganese in powder: all the junctures must be closely luted: a very gentle heat from a lamp will be sufficient to expel the oxymuriatic acid gas: much heat should be carefully avoided. All the common muriatic acid gas will be arrested by the water in the first hottle. The oxymuriatic gas is retained in the second and third bottles. By a similar process this gas may be obtained from the oxygenised muriate of potash, and muriatic acid: but it cannot be correctly prepared otherwise than by distillation. When litmus paper is plunged into the true oxymuriatic acid, it is deprived of colour: but if common muriatic be present, the paper will instantly receive a red tinge, and thus ascertains that the preparation is unfit for medical use. W. Allen.

† “At the Foundling Hospital, one drachm of the oxygenised muriatic acid mixed with half a pint of water was given, every twenty-four hours, to children under six years of age. Children more advanced took nearly double the quantity in the same time. This remedy appeared to be cooling, and antiseptic. It was taken without repugnance; and in the doses above mentioned did not produce any uneasiness in the stomach, or bowels.” Dr. Stanger. See Med. and Phys. Journal, No. 62.

Dr. Sims found particular advantage from vitriolic acid given in considerable doses : he says, " My common prescription was two ounces of tincture of roses, a drachm of syrup of lemons, and twenty drops of spirit of vitriol, or as much as could be added to the tincture, without making it too highly acid for the patient it was prescribed for. This draught was ordered to be taken by an adult every hour and an half, or every hour, and even oftener, according to the exigency of the case. And even children from two to three years old have swallowed much above two hundred drops of the acid in twenty-four hours." Page 419.

Dr. Withering thinks that diuretic medicines, next to emetics, are most to be depended upon in the cure of the disease. He found the vegetable fixed alkali to answer best ; a small quantity was put in every liquid the patient drank, so that the whole might amount to one or two drachms of the salt, every twenty-four hours. Page 83-4.

Acidulated gargles appear to remove, and sometimes to prevent, the affection of the throat in persons exposed to contagion : when the disease has commenced, they carry off the virus with which the saliva is tainted.* In Dr. Binns's opinion, " Gargles are of so much importance, that they can scarcely be used too often : " " To them," he says, " it was chiefly owing, that few of the children at Ackworth school had a diarrhœa, or any affection of the intestinal canal. When patients could not gargle in the usual way, the liquor was injected by a syringe ; this, though frequently repeated, never appeared to produce the least inconvenience. I began with the acidulated infusion of red rose leaves ; but

* See Dr. Fothergill, page 63.

the roses being soon consumed, I had recourse to the Decoct. Hæmatoxyli, and lastly to the following; R. Decoct: cort: Querc: cong. xii. Alum: commun: lbjss. Solve, fiat gargarismus. It was hoped this gargle would have been serviceable in reducing the swelling of the tonsils, which remains after the disease; but the trial terminated in disappointment. An infusion of Cayenne pepper was also tried with the same intention, but had not any material effect."

Respecting the use of Peruvian bark and wine, the same gentleman expresses himself as follows: "As soon as the stomach was settled after an emetic, I generally began with the following mixture, R: Pulv: Cinchonæ unc. j. Pulv: Aromat: dr. ij Vini rubri lbij. When this had been used about six weeks, I substituted for the aromatic powder some canella alba, with one drachm of powdered ginger, which seemed to answer equally well. A child of ten years old would take about three table-spoonfuls of this mixture four, five, or six times, in twenty-four hours. Those who were very ill took, in addition, from a pint, to a pint and a half, or even more, of red port wine, or of a composition,* which was not unpalatable, which agreed well with the children, and was a considerable saving to the Institution. Another remedy was an infusion of red rose-buds in decoction of Peruvian bark, sweetened with extract of liquorice, and acidulated with vitriolic acid: to this was occasionally added simple, or compound, tincture of bark. In extreme cases, the extract and compound tincture of bark, with a little ammonia, and sometimes aromatic confection, were made into a mixture with peppermint water, a dose

* This was, red port two pints, raisin wine six pints, decoction of logwood one pint, alum one ounce, British brandy eight table spoonfuls.

being given every half hour. Such as were but slightly affected generally drank treacle-beer made with ginger in it, small ale, and sometimes cyder, sage-tea acidulated with vitriolic acid, and almost every other drink that was agreeable to them. New milk, and every nutritious food, both animal and vegetable, were allowed, as the patients could take them. It is impossible to specify, with certainty, the quantity of wine taken by individual patients, but from the general consumption, when a number of bad cases occurred together, it appeared that children about twelve years of age must have taken each a bottle of red port, and a bottle of raisin wine, in twenty-four hours, for several successive days. In a disease, the attack of which is apparently inflammatory, this practice may seem to add fuel to fire; but I have employed it for many years, with as much success as any of my brethren, and I fully experienced its advantages in the late disease at Ackworth. I was induced to push this plan further than many other practitioners, by observing the effect of cordials on the circulation: while the pulse remained low and fluttering, wine, frequently given, restored its firmness, without increasing delirium. By the same means, the fœtor of the breath was corrected, and the ulcerations in the throat greatly relieved. Although the state of the pulse, and other symptoms, were in many cases such, that a small proportion of bark and wine were sufficient, yet in other instances the debility was so great, as to require even the addition of brandy to the red port. Sometimes strong brandy and water, sometimes brandy unmixed, was given with comfort and advantage to the patient. No one should, however, be induced to take spirit as a preventive in Scarlatina, or other epidemic Fevers. Those who wish to have the advantage of spirit, when attacked with such diseases, ought never to indulge,

during a state of health, in what can only be used, with propriety, as a medicine.”

Whatever opinion may be formed respecting the above mode of practice during the first days of the fever, it is generally admitted, that, at the decline of the efflorescence, if the fever also declines, and is not succeeded by a cough, Peruvian bark, mineral acids, wine, and nutritious diet, obviate the debility and oppressive languor, which remain after the disease,* and contribute to prevent the accession of dropsy.†

De Haen, and others,‡ as well as Plenciz, consider the dropsical stage to be the most fatal period of the *Scarlatina anginosa*. Their opinion is not confirmed by the experience of practitioners in this country, who have

* Dr. Sims, however, says, I found it necessary to change my plan as soon as the height of the disease was passed. This was a point of the treatment as needful to be known, and exactly to be attended to, as any other in the malady; for as soon as the pulse on the sixth day began to fall to the natural standard, if the cordial medicines and regimen were persisted in, or increased, with a view to keep up the sinking pulse, many vexatious or even dangerous consequences ensued: a new fever, often more violent than the first, was raised; a great swelling and inflammation of the tonsils or parotids, with acute pain, came on, and the scarlet eruption re-appeared as copiously as before.” Page 422.

Are not the above symptoms referable to the secondary fever, which often takes place independently of medicinal treatment?

† Dr. Binns observes, that the disease, when thus treated, almost from its commencement, was “very rarely succeeded by dropsy.”

“An infusion of the bark, acidulated with elixir of vitriol, may be ranked as the greatest, best, and most sovereign remedy, provided that gentle emetics and the cordial diaphoretics had gone before.” Kearsly. *Gent. Mag.* vol. xxxix. 522.

‡ *Ex hoc consecratario plures moriuntur quam ex morbo primario.* De Meza, tom. i. 59.

generally found the dropsical symptoms yield to diuretics combined with Peruvian bark, preparations of iron, or calomel.* I do not mean to infer that my countrymen are successful in this stage of the disease by any peculiar practice. If they have had more success, in the treatment of Scarlatina, than physicians on the continent, I would ascribe it to the general disuse of bleeding and purgatives during the last thirty or forty years, within which period gangrene and dropsy have been, with us, much less frequent occurrences than formerly.

3. In the ulcerated scarlet Sore throat, which affects adults, without an efflorescence on the skin, emetics, given early, prove of great advantage, and the general treatment recommended in the Scarlatina anginosa will be found effectual. Gargles, whether acid, or detergent, if very sharp, or if injected forcibly enough to remove the sloughs, occasion much pain, and often protract the disease. Dr. Wall, Dr. Johnstone, Dr. Rush, and others,† recommend the inhalation of the vapour of

* Dr. Clark, Dr. Sims, and Dr. Withering, page 199.

Plenciz highly recommends the following prescription of Dr Weber.

R. Rhàbarb elect.
 Spir. Salis coagulati aa dr. ij.
 Mercurii dulcis
 Auri fulminantis
 Extracti Scillæ aa dr. ss.

M. fiant pilulæ cum Robo Juniperi, pondere unius alteriusve grani.

The dropsical swellings, in every case attended by Dr. Rush, were removed "by purges of Calomel and Jalap."

Small doses of Calomel are allowed, on all hands, to be useful, when glandular tumours succeed the Scarlatina anginosa.

† "I have generally ordered the hot steams of vinegar, in which wormwood, centaury, snakeroot, galangal, myrrh, and honey were boiled, to be drawn through a funnel into the lungs. As this vapour

myrrh and vinegar. Dr. J. C. Smyth's mode of fumigation, by pouring heated oil of vitriol on powdered nitre in a proper vessel, is, according to my own observation, entitled to a preference. The refreshing antiseptic vapour detached by this process, and circulated through the room, presently clears the patient's throat, and at the same time removes the fœtor both of the breath and perspiration.

4. In the *SCARLATINA MALIGNA* blisters are seldom useful, and sometimes prove injurious. Withering says, they "were universally detrimental: they never failed to hasten the delirium, and if the case was one of the worst kind, they too often confirmed its fatal tendency." Page 89. Bleeding and purging are always hurtful: a strong cathartic, or even the application of a few leeches to the throat, has been known to produce an immediate sinking, and sometimes death, within a few hours, in cases which seemed previously favourable. Dr. Fothergill was among the first to discourage this destructive practice.* An instance of its effects, quoted above (page 226-7) from a Spanish physician, must strike a practitioner of the present day with horror. From Spain the disease spread in-

acted upon the uvula, tonsils and fauces, by its antiputrescent and detergent quality, it often saved me the necessity of using any sort of gargarism." Kearsley. Compare Dr. Wall, *Gent. Mag.* xxi. page 498.

* Page 53-4. Dr. Huxham persevered in blood-letting till the year 1750, though he says, "It will be constantly found that the pulse, as well as the strength, sink vastly after the second or third bleeding, and truly very surprisngly after the first." Dr. Grant was also an advocate for bleeding in *Angina maligna*, 1770. On *Fev.* vol. ii. p. 104, 124. and on *Sore throat*, page 26. For the effects of this practice, see M. Chomel's cases, Paris 1749, or Grant on *Fevers*, vol. ii. page 213.

to Italy, where, under the same mode of treatment, it proved universally fatal on the second, third, or fourth day of fever : It is extraordinary, that after so dreadful a mortality no physician should have thought of instituting a different mode of practice. None of them, however, would recede from the plan or maxims they had adopted ; so that the honour of arresting the progress of this disease, and of effecting its cure, was claimed by a bold empiric,* who attracted general attention by advertising a specific remedy, which was merely a cretaceous earth, or bole, said to be the Samian earth recommended by Galen for ulcers of the mouth. We cannot now impute Charamonte's success, which was certainly very great, to an inert powder, but must refer it to collateral circumstances. A principal one seems to have been, that when the Neapolitans and Sicilians were induced to confide in a specific, they no longer submitted to the usual purging and bleedings, which, in opposition to the whole faculty of Naples, Charamonte decidedly reprobated as the causes of the preceding mortality. The event was by no means in favour of medical science at that period ; for, soon after the trammels of regular practice were shaken off, we find that the disease became less frequent, and less fatal, though its name impressed terror through many succeeding generations.

Dr. Fothergill and Dr. Cotton do not strongly enjoin the exhibition of emetics in the *Scarlatina maligna*. Dr. Huxham, though very cautious with regard to them, has justly observed, that "Emetics do not aggravate the pain of the throat in adults, but in general greatly relieve it ;" and that "it was frequently necessary to vomit

* See *Osservazione del contagioso mal di Canina* ; Di Girolamo Charamonte, della città di Leontini. In Napoli, 1637.

children with a little oxymel of squills, essence of antimony, or the like, otherwise the vast mass of tenacious mucus would have quite suffocated them." A bold and persevering course of emetics may be considered the most effectual mode of obviating the singular malignity of this distemper.* When administered in due time, they very generally prevent the transition from the milder to the more virulent forms of the Scarlatina, and remove the febrile symptoms at the earliest possible period. In dubious cases, if powerful doses of ipecacuanha, either alone, or combined with tartarised antimony, entirely fail to produce their usual effects, it may be concluded that the most unfavourable state of the disease has begun, and that the patient's situation is extremely dangerous.†

The nitrous fumigation seems particularly useful in keeping the throat clean, and often supersedes the necessity of Gargles. Gargles, however, contribute to remove the viscid offensive matter which encumbers the fauces, and which, if swallowed, produces disagreeable effects on the stomach and bowels. Those prepared

* Sed nullibi magis emesis necessaria, quam ubi a miasmate epidemico origo morbi pendere videtur; subtracto enim per vomitum fomite primas vias ingresso, multò mitior morbus evadit. Id in primis perspectum sæpe est in epidemicâ Scarlatinâ cui angina aphthosa, aut gangrænosa adjungitur. Burserius, *Inst. Med. Pract.* vol. ii. sec. 82.

Kearsly makes nearly the same observations, and adds, "The vomiting being sometimes repeated, and seconded by subacid camphorated diaphoretics, generally maintained the advantage, and effectually checked the discharge from the bowels, which had before well nigh destroyed the powers of life." Compare Tournefort's Remarks, page 287-8.

† See Reports on the Diseases in London, page 25.

with contrayerva, according to the directions given by Dr. Fothergill,* are the most grateful, and advantageous. It is probable that gargles of a much more stimulating quality would afford relief at an early period of this disorder. Tournefort observes, that in the epidemic Sore throat of infants at Milo, after repeated emetics, a solution of styrax in brandy, employed as a gargle, had an excellent effect.† Navier also states, that the progress of internal gangrene may be arrested by a gargle, composed of oxymel and camphorated spirit made with alkaline salt, according to Hoffman's method. In the West India islands, where the Angina maligna appears in the same form as in the Levant, the favourite gargle is made with Capsicum, or Cayenne pepper, which, though productive of much pain, is said to be very efficacious.‡

Occasional immersions in warm water § are recommended in this form of Scarlatina by some practitioners. I never tried the effects of warm bathing, but have observed considerable advantage from the application of warm vinegar and brandy to the limbs, and to the

* On the Sore throat, page 64. Compare Withering, page 91.

† "La solution de styrax liquide dans l'eau de vie est excellente en gargarisme, a cette rencontre."

"The only gargle that I have seen any service from is brandy, with a little water, or frequently without any mixture whatever." Sims, page 424.

‡ These strong applications do not impede the healing of the ulcers in Scarlatina maligna: for when there is loss of substance, it is not replaced by granulations, as in cases of simple ulcers or sloughs; but the cavities are hastily skinned over, without being filled up, and therefore often remain apparent, through life, on the uvula, tonsils, &c. See Dr. Adams on Morbid Poisons, chap. vi.

§ Dr. Withering, page 93.

greater part of the body.* Dr. Currie remarks, that the affusion of cold water is scarcely applicable to the *Scarlatina purpurata*, and that the tepid affusion makes little impression upon it. His experience, however, supported by that of Professor Gregory, fully evinces the salutary effects of the cold affusion in the *Scarlatina anginosa*.†

When emetics have not been exhibited at the proper period, it becomes necessary, as the disease advances, to direct cordials, wine, opium, Peruvian bark, mineral acids, &c. according to the circumstances of the case. The bark has been particularly recommended by De Haen, Sauvages, Navier, Plenciz, and other physicians on the continent. Their opinion is confirmed by the testimonies of many British authors, as Morton, Wall,

* "As an auxiliary to stop the progress of putridity, bathing the body with very strong warm vinegar, particularly the legs and thighs, throat and breast, was of no inconsiderable use." Kearsley.

† I should have noticed this under another head, if the sheets on that subject had not been printed off before I received Dr. C.'s second volume of Medical Reports. It seems unnecessary for me to make quotations from a work which will be generally read. The author justly reprobates the conduct of those who adopted his practice without attending to his principles, and prescribed the cold affusion in Fevers, when the constitution was sinking under the long continued influence of contagion, or other causes. This inconsiderate mode of practice having been, in many cases, attended with fatal consequences, an alarm was early excited, which yet prevents the inhabitants of London, and, I believe of many other places, from experiencing the benefit of a most powerful remedy. After stating its efficacy in the Scarlet Fever, Dr. Currie thus concludes; "I must again enforce the superior advantage of using the cold affusion early in this disease, and the propriety of ascertaining that the skin is dry, and the heat of the patient greater than natural, in all cases, especially in such as are advanced, and where, of course, the strength is considerably impaired." Page 452.

Cameron, Johnstone, Huxham, Cullen, Clarke, Percival, &c. Dr. Wall says, “ When I first gave the bark, I was not so much directed to its use by the ulcerations in the throat, as by the petechiæ which appeared in the patient ; but I was not a little surprised and pleased to find, that this method succeeded so immediately, both with regard to one and the other. I now began to recollect what I had formerly * observed in the Small-pox, “ that nothing so immediately cures a Sore throat of the malignant sort as the bark does ; and I was soon convinced, by a multitude of instances, that for the same reasons it is truly a specific in the case before us.” Medical Museum, vol i. No. 14. The terms here made use of are certainly too strong : for although the bark may be in many cases very useful, it often disappoints our expectations : and where the disease has been improperly managed in the beginning, or where the symptoms are violent, it seems wholly inefficacious. Dr. Withering is the only author, however, who from experience declares the bark to be universally prejudicial in the Scarlatina. “ In some instances,” he says, “ the inflammation attendant upon the disease is in itself sufficient to produce the sloughs, but they are generally the consequence of neglect or improper management ; for if the patient, from the beginning, is treated upon the plan I advise, the sloughs either never appear, or if they have appeared, never increase ; and in twenty-four hours vanish altogether. But when that inflammation is still augmented by large and frequent doses of bark, it is astonishing to see how much the tumefaction increases, and how rapidly the whole lining of the fauces is converted into a stinking slough. It is true,

* Phil. Trans. March 1746-7.

nevertheless, that many patients recover who take bark. The fact seems to be, that in mild cases an improper mode of treatment is not highly detrimental: it is only in the more dangerous state of the disease that we can do much harm. And I am ready to confess, that in two or three of the first bad cases I saw, misled by so many marks of putrescency, I gave the bark; but the consequences were not such as could justify a continuance of it."

Mr. J. Kearsley, though an advocate for the use of the Peruvian bark in the *Scarlatina maligna*, seems to be strongly impressed with the advantages of another remedy. He says, "There yet remains one thing, which is of great consequence in abating putrefaction, and which may be taken diluted with water. It is an infusion of gum myrrh, one ounce in a pint of the strongest vinegar. A pap or tea-spoonful of this tincture may be mixed with barley water, and given to the sick in any stage of the disorder." *Gent. Mag.* vol. xxxix. page 523.

The internal use of capsicum, at the beginning of the *Angina maligna*, is said to have been attended with very great success in the West Indies. An infusion is made in the following manner: "Take two table-spoonfuls of small red pepper, or three of the common Cayenne pepper, and two tea-spoonfuls of fine salt; beat them into a paste, and then add to them half a pint of boiling water. Strain off the liquor when cold, and add to it half a pint of very sharp vinegar. Let a table spoonful of this liquor be taken every half hour, as a dose for an adult; the quantity being diminished in proportion for children." A particular account of the epidemic Sore throat thus relieved, and of the effects of the remedy, is given in the *Medical Communications*, vol. ii. and in *Dr. Duncan's Medical Commentaries* for the year 1787.

A physician near Gainsborough considers volatile alkali "to be endowed with a specific power over the Malignant Scarlet Fever and Sore throat." He dissolves two drachms of the carbonate of ammonia in five ounces of water, and directs the patient to take half a table-spoonful, or two tea-spoonfuls, every two, three, or four hours, according to the urgency of the symptoms. If the difficulty of swallowing abate, and the patient wish for it, a little cold water may be added to each dose: Cold water, or toast and water, to be drunk at pleasure. The above remedy was given in every form, and in every stage, of the Scarlatina. "Some," he says, "were glowing with universal efflorescence: in some the extremities were swelled; in others fœtid ulcers appeared, particularly about the parts of generation; in most the throat was swelled and inflamed, often ulcerated, and respiration almost prevented; but in the most alarming cases, a scorching fever, and raging delirium, rendered the patient's situation horribly alarming; yet in all these variations of the disease, the volatile alkali was my specific, which I administered to between two and three hundred patients successively and successfully." The immediate effects of the remedy are stated to be a diminution of heat, fever, and delirium, and a disposition to sleep.*

There is not any certain preservative from the contagion of the Scarlatina for persons within its influence. After exposure to the effluvia or breath of the sick, in attending to the symptoms, and examining the throat, it is usual for medical men to have a sensation on the tongue, as if green vitriol were dissolving in the mouth. This taste remains for some hours, nor can it be obliterated.

* Dr. E. Peart's "Practical Information on the Malignant Scarlet Fever and Sore throat," 1802.

ed by gargling with water, acid, or spirit. It excites nausea in some persons, and very generally occasions repeated discharges of saliva, which may perhaps prevent the poison from entering the fauces or stomach, and from affecting the constitution. In conformity to this notion Dr. Withering recommends sternutatories, and gargles of of caustic alkali, largely diluted with water. The use of camphor, bark, wine, vinegar, and fumigation, is insufficient to prevent the diffusion of contagion, especially in schools, or other places where many young persons are crowded together. At Ackworth, in the seminary founded and supported by the Society of Friends, the Scarlatina in 1803 affected one hundred and seventy-one persons, and continued there upwards of four months, although the greatest exertions were made to arrest its progress, by keeping the infected separate from the rest, and also by strict attention to ventilation, and to cleanliness throughout the house. Dr. Binns's account of the introduction of this virulent complaint among the scholars, and of the difficulty of eradicating it, cannot fail to be acceptable both to medical readers, and to those who are interested in the prosperity of academies.

“ This disease attacked the family when it did not exist in the neighbourhood of Ackworth, and yet, six months before it came to our very doors, without affecting any one in the house. It began in a boy from Sheffield, who had been with us a considerable time. Though not able to ascertain the point, I was led to suspect that he might have received from his friends some present imbued with contagion, having reason to believe the disorder was once introduced into a school, sixty miles from Liverpool, by a hamper of oranges sent from that town, when the disease was very prevalent there. It might probably come in another way from a distance, namely, by

goods purchased, as flocks used for the children's bolsters, or curled hair for their mattresses; but I have no sufficient ground for any of these suppositions: being therefore baffled in my attempts to trace it to any other place, I have been almost ready to conclude that it may have originated here, as it must have an origin somewhere: but if so, I am entirely at a loss to say how it could be produced. Circumstances indeed seemed, at first sight, to warrant the conclusion, as two boys applied to me on account of this complaint, on the same day: I found, however, on inquiry, that the Sheffield boy was taken ill two days before the other, that he slept in the next bed, and that he had vomited very offensive matter between the beds: in this way, perhaps, infection was communicated to the second boy, for, on former occasions, I remember several cases in which the disease began two days after exposure to contagion. The above patients applied on the second of the Fourth Month, but no other till the twelfth of the same month, when two boys and one girl were attacked: these, I suppose, were infected by communication with persons who visited the sick, for some of the family could not be prevented from paying unnecessary, and, I think, very blameable visits.

“Our number of boys when the disease broke out was 179, of whom 104 were attacked in the course of four months; after that time only one was affected. Of the 105, five died.* Many children having been sent home soon after the appearance of the disease, there remained in the school, at the end of the Seventh Month, only 126 boys. The number of girls, at the beginning of the Fourth month, was 119. Between the twelfth of this, and the

* The *Scarlatina anginosa* occurred here about eight years ago, in a milder form, so that of sixty who were affected but one died: this patient was a girl, taken suddenly with convulsions, after being much reduced by the disease.

end of the Fifth Month, 48 girls were attacked, and but one afterward; so that the disease prevailed among the girls scarcely half the time it did among the boys. Of the forty-eight affected, two died; and since many of the girls also returned home soon after the complaint appeared, their number was, at the end of the Eighth Month, diminished to ninety. I mention this reduction of our list, lest otherwise it might appear that we were more successful than we really were, in defending a great number from the contagion. Besides the children, who were in general between eight and fourteen years of age, a few others of the family were affected with the disease. The following is a statement of the whole:

	Affected with the disease.	Died.
Boys - - - - -	105	of whom 5
Girls - - - - -	49	- - - 2
Masters, apprentices, and servant-men	8	- - - 0
Mistresses, servant-women, apprenticed girls	9	- - - 0
	171	7 nearly 1 in 24.

About thirty other children were affected, but too slightly to be included in the sick list: however, it may be observed, that in the list of 171 there was almost every gradation of the disease; I could not therefore draw the line of distinction with much exactness."

"In regard to prevention, I think that an improvement of the diet in such as live low, moderate exercise in the open air, cold bathing, in short, every mode of strengthening the constitution, with great attention to cleanliness and ventilation, must have a tendency both to ward off the disease, and to support through it those on whom the contagion has fastened. They who are in attendance ought as much as possible to avoid tak-

ing the breath of the sick, since it is clear that the Scarlatina, and very probable that some other diseases are so received. When children in a school are affected with symptoms of fever, they should be immediately separated from the rest, till the nature of the fever be fully ascertained: this precaution having been taken, I believe several children at Ackworth, though really attacked by the Scarlatina, were, through the early application of suitable means, presently restored to health. But when these attempts did not succeed, the patients were sent to a fever-house at the bottom of the garden, more than two hundred yards from the grounds frequented by the children. This house consisted of a chamber for the sick girls, and another for the boys, with answerable convalescent rooms on the ground-floor, and a bed-room for the nurses, besides a few other small apartments, all, by a little contrivance, sufficiently ventilated. Those, whose complaints did not require them to be strictly confined, might walk behind the house, where there is a grass plot: but when the fever and sloughs in the throat were wholly removed, the patients stayed a few days in the convalescent rooms, and had an opportunity of walking in the garden, at the front of the house, to clear themselves from infection by repeated exposure to the open air. After this they went across the garden to a wash-house, about equally distant from the fever-house and the school, where they were entirely stripped, and washed with soft soap, particular attention being paid to cleansing their hair. They then put on fresh clothing, and went up to the rooms in the school, being, however, kept apart for some time longer. Their bed and body linen was frequently changed on their return, as it before had been in the sick rooms. When they had continued thus about a week, and appeared to have recovered their strength, the

general ablution was repeated; and after rambling in the fields for some hours, they were permitted to mix with the other children."

"As soon as the weather would permit, cold-bathing was entered on by the boys who were in health: they began with it sooner than the girls, and used it more frequently, yet it appears by the proportion of boys affected, that they were more susceptible of the disease than the girls, which seems to militate against the opinion before given; however, the influence of other causes should be taken into account."

"Fumigations were used, with an unsparing hand, both in the sick and the convalescents' houses, also in the lodging rooms of the children who were well, every evening, after they retired to rest. Our usual mode of fumigation was by pouring vitriolic acid on marine salt, to which manganese was added, on the recommendation of Dr. Walker, who, at my request, came over several times from Leeds to visit the sick, and to whose assistance I attribute a considerable share of the success in our management of this dreadful disease. This plan of fumigation, after a long trial, appearing insufficient to destroy the contagion, the manganese was omitted, as it tends to oxygenate the muriatic acid, by which effect, in the opinion of Chaptal, its acid virtues become weaker, since its affinities with alkalies diminish, and it is so far from reddening blue vegetable colours, that it destroys them. *Elem. of Chem.* vol. i. p. 246. We afterwards used only the salt and acid, as recommended by Dr. Johnstone, but with no more apparent advantage than before. The vapour raised by Dr. C. Smyth's mode of fumigation proved so unpleasant to my lungs, that I was soon obliged to lay it aside."

"Vinegar was employed very freely in sprinkling the

floors, and even the bed-clothes : the patients likewise were very frequently washed, during the hot stages of the disease, with cold vinegar, or vinegar and water, or vinegar and brandy, by means of sponges, or linen cloths, not only on their faces and extremities, but occasionally over the whole body ; and they, in general, experienced much relief from it."

" Though the season was usually very cool, a system of ventilation was carried on, night and day, much beyond what can be done in almost any private family. The rooms were also frequently washed, sometimes even while the sick were in them ; nor do I know of any case in which this practice was attended with the smallest injury."

" Gargling, night and morning, as recommended to us by Dr. Lettsom, was not used by those who were well till the disease appeared on the decline : it must no doubt be serviceable as a preventive, but, notwithstanding it was long regularly practised by the children, it did not prevent returns of the Sore throat, with feverish symptoms.

" Not finding that the means above mentioned are to be wholly depended upon, I would recommend, in large schools, that the communication be cut off between the sick, their attendants or visitors, and the rest of the family.* This I found could not be carried into effect, though the house for the sick was two hundred and fifty yards

* In academies not so populous as Ackworth school, the above means, carefully applied, have been found effectual. See Dr. Haygarth's Letter to Dr. Percival, page 81 ; also Dr. Withering, page 67, and Dr. Blackburne, on Scarlet Fever, page 21. All these writers give a caution against the usual practice, on the appearance of the disease, of hastily dispersing the scholars, who may, after returning home, diffuse contagion in their respective families and neighbourhoods.

from the school, while provisions, &c. were sent from it to the sick ; I therefore proposed, when the disease broke out, to send away those at the time uninfected, as far as practicable : but this was not done till a very late period, some persons, who were consulted, thinking the first precaution would be sufficient.”

In making the separation here recommended, we may safely act on the supposition, that persons under the influence of contagion do not communicate it till they are actually affected with the fever and efflorescence. Under certain circumstances, indeed, the infection may be conveyed from one to another by a third person. A nurse, for instance, having received on her clothes, pocket-handkerchief, &c. the vapour from the lungs, the phlegm from the throat, or discharge from the nostrils, of a patient in the Scarlet Fever, would infect any child attended or caressed by her while she wore the same dress : or servants, after visiting their relations or friends, ill of Scarlatina, may sometimes infect their fellow servants, and the children, in houses where they reside ; but all the persons thus secondarily infected are incapable of communicating the disease, until the fever supervene, which, by altering the state of the secretions, opens a new source of contagion. It is to be remarked, that convalescents from Scarlatina, notwithstanding a minute attention to cleanliness and change of apparel, remain, for two or three weeks,* capable of infecting persons susceptible, especially children, with whom they have intercourse : in order, therefore, to prevent the contagion, the long, laborious pro-

* These periods I have been able to ascertain in several instances. I likewise had an opportunity of observing that a convalescent from the measles, at the end of a fortnight, although in fresh clothes, infected a child in the country, on whom the eruption appeared thirteen days after the intercourse.

cess, described pages 252-3, seems not more than sufficient. Dr. Blackburne has properly animadverted upon the dangerous practice of sending convalescents to school, often with the clothes worn during their illness. After adducing some examples of the mischievous effects thus produced, he adds, "The public are therefore most seriously admonished of the great danger of allowing convalescents to mix too soon with society. I have no doubt that thousands have been infected in this way, from the most unsuspected quarters, and will continue to be so, unless the momentous fact here substantiated be made known, and acted upon, with a conscientious regard to the public weal."*

All the precautions above specified should be observed on the appearance of the Simple Scarlatina, as well as when our attention is called to the more dangerous forms of the distemper. From the statement, pages 251-2, it follows that the slightest case of Scarlet Fever, occurring in a large family or school, where no preventive care is exercised, may presently produce in some the Scarlatina anginosa, in others the ulcerated Sore throat, and in others the gangrenous Sore throat; and may thus endanger all those who have communication with the persons affected, or with their attendants. Influenced by a consideration of these circumstances, ought we not to employ all the means in our power, and especially such as have been found successful against other contagions, to eradicate from our country this insidious, most virulent, and destructive disease? It does not seem to have been known among us more than one hundred and fifty years, for Sydenham and Morton are the first English writers who mention it. Sir Robert

* On Scarlet Fever, page 36.

Sibbald, physician to king Charles the Second for Scotland, says, in the year 1680, this disease had appeared so lately at Edinburgh, and was so little understood, that he could not venture to give any observations on the theory of it, nor on the method of treatment. “*Inter multos morbos, qui huic sæculo originem debent, nuperrimè Febris observata est quæ Scarlatina dicitur a coccineo colore, quo cutis ferè universa tingitur. Hujus morbi non ita frequentes observationes sunt, ut inde accurata ejus theoria tradi, et curandi methodus extruï poterit. Paucissimi verò ex hac febre mortui sunt.*” Before the middle of the last century, it had made its appearance in every populous town of North Britain, as well as England, and had extended throughout the greater part of Ireland. There are, however, in different quarters of the united kingdom, some districts, remote from any considerable town, and several small islands, which have not been visited by the disease, if we can trust to the memories or traditions of their inhabitants. The above circumstance affords a proof that the Scarlet Fever does not arise spontaneously in our climate, and that, when produced, it is not communicable to any great extent through the medium of the atmosphere, as was formerly supposed. Our endeavours to suppress it will be facilitated by the knowledge we at present possess of the manner in which it is diffused. Not only the perspiration and breath of persons affected with the fever communicate it to their attendants and visitors, but the clothes, bedding, and furniture, in the apartments of the sick, are for some weeks capable of infecting those who handle or use them. Infection is likewise retained in carriages employed to convey the sick, and convalescents, their nurses, or relatives. Since there is not on this head any restraint by law, and but

little from private feeling, some hundreds are annually infected by hackney-coaches, stages, sedans, and hired carriages. Dr. Fothergill remarks, that the ulcerated Sore throat, in 1746, began at “Bow, Greenwich, and adjacent places, seeming to spread from the river side westward over the whole city.” As the disease took the same course, when it was epidemical in 1786, some physicians have thought that the Scarlatina was, on both occasions, introduced by means of infected goods brought from abroad. The disease may have been sometimes thus imported; but when it appears in the eastern part of the metropolis, it will be more frequently found to have originated from the large repositories of old clothes near the Tower, East Smithfield, and Ratcliff Highway. It is ascertained that cotton, hair, and wool, are the substances most readily imbued with contagion, which becomes more virulent, when the air is prevented from having free access to them. If infected clothing, made of these materials, remain for some weeks in a full close room, or locked up in chests, and be then sold out during an unhealthy season, not only the wearers of it, but all who have intercourse with them, are presently affected, and contribute to spread the disease. Thus also the Small-pox, Measles, Typhus, Hooping Cough, Itch, and Scald-Head, are perpetuated among us; and the febrile contagions are from time to time widely diffused. During the last year of my attendance at the Public Dispensary, I had reason to think that a family in Wild-street, Lincoln’s-Inn Fields, was infected with Scarlatina maligna by clothes bought in Monmouth-street. More than fifty persons in the adjoining houses were soon affected with the disease, which afterwards traversed Drury Lane, and spread by Long Acre, and the streets connected with it, through several large parishes in Westminster.

Infection is principally communicated at the day-school, which we observe in almost every street, court, and alley. They are much crowded, ill ventilated, and open to children without restriction, and without inquiry into the health of the families from which they come. Some effective restrictions are, however, necessary with respect to these and the other sources of disease above mentioned, which, although they benefit individuals, endanger the lives of thousands. Those who deem such restraints an infringement on our civil liberties, and contrary to the tenor of the British constitution, may be referred to the quarantine laws, rigidly enforced on the passengers and crews of all ships coming from Turkey, or any place in Africa within the Straits of Gibraltar, or from West Barbary on the Atlantic Ocean. By an act of parliament, explained and enforced by an order of the privy council, "The appointed superintendant, and medical attendant, or the proper officer of the customs at the place where the quarantine is to be performed,* must go in a boat, on the windward side, and see the crew, with all other persons on board, mustered on the gangway, and in their presence put two sets of questions to the master, who is to answer the same on oath. Two quarantine guardians are then put on board by the superintendant, and the boats belonging to the ships are taken away till the expiration of the term: to prevent all clandestine communication, a sufficient number of guard-boats and officers row guard all night; and centinels with loaded muskets, and with small pieces of ordnance, loaded with grape and cannister shot, are constantly stationed near the lazarets."

* There are ten lazarets, or places for quarantine in Great Britain.

“Those who are appointed by the superintendant to supply the ships or lazarets with necessaries, must place their boats to windward, and deliver by means of metal buckets with chains the articles they bring.”

After a tedious probationary airing of the cargo upon deck, “all the goods, wares, and merchandizes, are carried to the lazaret, there to be unpacked, opened, and aired for forty days. The quarantine guardians are to take care that, after the discharge of the cargo, the holds and between decks of the ships shall be completely swept, and the sweepings be burnt : to search diligently the lockers, chests, and other repositories of officers, passengers, and crews, and see that no matter or thing, susceptible of infection, remain undelivered ; and that all the chests and repositories be daily opened, and aired, or fumigated.”

These regulations are not confined to the plague, but must be observed in every “other infectious disease, which is, by his majesty, with the advice of his privy council, declared to be of the nature of the plague.” Heavy fines are laid, and even death is inflicted, on those who do not strictly conform to them ; viz. “Masters of vessels without clean bills of health, meeting other ships at sea, or being within four leagues of the coast, must by day hoist a yellow flag, of six breadths of bunting, with a circular mark or ball entirely black, with diameter equal to two breadths of bunting, or by night a signal lantern at main-top-mast head, on penalty of two hundred pounds for every such offence.” “Pilots conducting vessels liable to quarantine into places not appointed forfeit one hundred pounds. “If the master of the vessel refuse to answer the questions of persons authorized, he forfeits two hundred pounds. If he refuse to show the officer such bill of health, and list of goods, schedule or manifest, as he shall have received from the British consul, or two known

merchants at the port where he took the goods on board, together with his log book or journal, he shall forfeit and pay the sum of five hundred pounds. He forfeits the same, if any goods, baggage, presents, or letters, not specified in such lists, schedules, or manifests, be landed or unshipped. "Any master, seaman, or passenger, quitting the ship without licence, may be compelled, by any person or persons whatever, by any kind of necessary force, to return on board, and may be imprisoned six months, and fined two hundred pounds." "Masters of vessels coming from places visited with the plague, or having any infected person on board, and concealing the same, shall suffer death." "If any person neglect to repair duly to the place appointed for him, or shall escape, and refuse to return, shall suffer death, as in cases of felony." This punishment extends to "any sound person entering the lazaret, who shall attempt to return from thence without licence, and after his escape refuse to perform quarantine." "Persons concealing from the officers, or conveying any letters, wares, &c. from the vessel, or from the lazaret, shall suffer death," &c. &c. &c.

Since we submit, without reluctance, to these strict and severe laws, in order to guard against the introduction of the plague, we cannot, I think, consistently oppose some necessary regulations with respect to other contagious and fatal diseases. The Reports of the Institution, for the Cure and Prevention of Contagious Fevers in the Metropolis, show us how much may be accomplished by a persevering attention to the subject. This society, by removing persons first affected to a convenient house, and by ventilating, cleansing and fumigating the apartments they had occupied, with their apparel, bedding, furniture, &c. was enabled, within three years, nearly to suppress the Typhus or malignant Fever in several ad-

joining parishes, where it had before annually produced a considerable mortality among the labouring poor.* Some restraints imposed with regard to the sources of contagion, and enforced by authority, might also prevent the diffusion of the Scarlet Fever in London, in other cities, in our sea-ports, and considerable manufacturing towns, from which it is often conveyed, in various directions, through the country. A specific mode of accomplishing so desirable an end need not be here detailed; but the necessity of it will, I think, be apparent from the foregoing historical statement. The exertions made, in different parts of Europe, to prevent the communication of the Small-pox and pestilential Fevers, have been very successful; it is, therefore, reasonable to conclude, that similar efforts might finally extirpate the Scarlatina, a disease which has so long been the bane of schools and academies, which has blasted the hopes of many noble houses, and which, in thousands of families, by suddenly destroying a numerous progeny, has consigned the destitute parents to anguish and despair.

* See Reports on Diseases in London, pages 229, 254, 266, 285.

ORDER III...III. URTICARIA.

THE URTICARIA * OR NETTLE-RASH is characterised by the round, oval, or longitudinal elevations of the cuticle, usually denominated wheals, which have a white top, often surrounded by diffuse redness. Some of the orbicular wheals resemble tubercles in form, but they are not permanent, nor have they any tendency to suppuration. The Nettle-rash, though in many cases accompanied with fever, is not contagious. Linnæus has described the eruption in the following terms: *Sudamina pruriginosa, inæqualia, ruberrima, dilatabilia, fugacia, recidivantia, fufuraceo-evanescentia: Hectica brevis, benigna.* The varieties of this disease, which seem chiefly to merit attention, I propose to denominate *Urticaria febrilis, Urticaria evanida, Urticaria perstans, Urticaria conferta, Urticaria subcutanea, Urticaria tuberosa.*

I. URTICARIA FEBRILIS. This is always attended with considerable disorder of the constitution. The symptoms preceding the eruption are, † pain and sick-

* This disease is mentioned by different medical writers under different generic titles, as *Scarlatina, Essera, Erysipelas, Purpura, Erythema, and Uredo.*

† *Purpura urticata, imprimis, corripit patientes cum subtili sensu refrigerii, in superficie corporis. 2. Subsequitur modicus calor. 3. Hunc comitatur sitis non admodum intensa. 4. Jungitur etiam aliqualis capitis perturbatio, aut lenis ejusdem dolor. Juncker's Conspectus, Tab. 64.*

ness at the stomach, head-ache, great languor or faintness, with a disposition to sleep, a sense of anxiety, an increased quickness of the pulse, and a white fur on the tongue. In two days, or sometimes later, after these symptoms, the wheals appear, with an efflorescence in patches of a vivid red, or sometimes nearly of a crimson colour*. They are preceded by fits of coldness and shivering, and are attended with a most troublesome itching or tingling, which is greatly aggravated during the night, and which prevents rest for many hours. In order to avoid this inconvenience, I have known many persons sleep on a sofa, without putting off their cloaths, as their distress begins immediately on uncovering the body.† The patches often coalesce so as to produce a continuous redness: they appear on most parts of the surface,‡ but they are diffus-

* Sydenham, de Febre erysipelatosâ, sect. v. cap. 6, observes, "Est et alia hujusce morbi species, licet rariùs occurrens. Febriculam quæ agmen ducit, mox excipit pustularum per universum ferè corpus, eruptio, quæ urticarum puncturas referunt, et nonnunquam in vesiculas attolluntur; mox recedentes tuberculorum more sub cute se condunt, cum pruritu mordacissimo, et vix tolerando; at quoties levissimam scalpturam subeunt, rursùm apparent." Compare De Meza, Med. Compend. i. page 54, De Febre erysipelaceâ. Andr. Loew. Hist. Epidem. Hungariæ, anno 1688, in Act. Nat. Cur. vol. i. and Ephemerid. cent. vi. obs. 96. Burserii Inst. Med. vol. ii. cap. 5. and Arnemann, Handbuch der Pract. Medicin. 1800.

† Every change of temperature seems to produce uneasiness: hence Buserius justly observes, "Calore lecti, et expiratione auctâ, sæpe evenit ut evanuisse papulæ videantur: sed si cutis aeri exponatur, aut e lecto surgant ægri, retentâ expirabili materiâ, statim papulæ conspicuæ fiunt, cutemque ut antea attollunt cum notabili pruritu et ardore. loc. citat.

‡ 5. Tandem cum multo pruritu, et superficiali tensione, et rigore, hinc indè Exanthemata tam in facie quam reliquo corpore

ed particularly on the shoulders, loins, nates, thighs, and about the knees. They extend likewise to the face; and there is sometimes a red circle round the palm of the hand, accompanied with a sensation of violent heat. They appear and disappear irregularly, first on one part, then on another, and they may be excited on any part of the skin by strong friction or scratching. During the day the efflorescence fades, and the wheals in general subside, but both of them return with a slight febrile paroxysm in the evening.* The red patches of efflorescence are often elevated above the level of the adjoining cuticle, and form dense tumours, with a hard distinct border: the interstices are of a dull white colour. When the patches are numerous, the face, or the limb chiefly covered with them, appears tense and considerably enlarged. At the latter end of the disorder, the eye-lids are red and tumefied, and there is often a swelling and inflammation on the sides of the feet. On the appearance of the eruption, the pain and sickness at stomach are in general relieved, but when it disappears, those symptoms return. The whole duration of the febrile Nettle-rash is seven or eight days. As the eruption declines, the tongue becomes clear, the pulse returns to its usual state,

erumpunt. 6. Hæc Exanthemata cutim superant, et citò in notabile augmentum ad crescunt, ac papulas quasdam eminentes, paulò latiores, coloris ex pallido rosei, urticarum læsiones referentes, offerunt. 7. Nonnunquam cum protuberantiis semierysipelaceis, et asperitate serpiginosâ efflorescit; et aliquo modo erysipelatis indolem imitatur. Juncker.

* 8. Febris, si adest, mitioris indolis esse solet. 9. Non permanent constanter exanthemata, sed diuturnis imprimis horis evanescent, quibus etiam motus febriles remittunt. 10. Circà vesperim verò, ubi febris revertitur, denuò prodeunt, et eo tempore etiam pruritus molestus et ardens insigniter affligit. Juncker.

and all internal disorder ceases : the efflorescence exhibits a light purple or pink colour, and then gradually disappears, being succeeded by slight exfoliations of the cuticle.*

This complaint, though not in general dangerous, is extremely troublesome, from the violent heat of the skin, and the itching and restlessness, with which it is usually attended : it is on some occasions very alarming, especially when the sickness and languor, at the beginning of the eruption, bring on repeated fits of fainting. I saw it terminate fatally in the case of a man about fifty years of age, who had impaired his constitution by hard labour, and intemperance. On the first and second day of August 1792, he complained of nausea, and of great pain in the stomach, which was increased by pressure. He was very thirsty, had a quick pulse, and a slight delirium at night. On the third and fourth of August, a number of elevated wheals, and red patches, were diffused over the body, with much heat and itching of the skin. While the rash continued vivid, his internal complaints abated, but, on its sudden disappearance about the fifth day, the febrile symptoms and delirium became more violent than at first. On the sixth day, the eruption appeared again on his face : he was notwithstanding very hot, restless, and delirious ; he remained in the same state through the following day, and died in the evening. †

* 11. Totus affectus intra triduum vel quatrimum finem suum adsequitur ; et si a febre immunis est, adhuc citius exitum sortitur. 12. Exit cum temperatâ diaphoresi ; et post cessationem, exilissimæ squamulæ ab affectâ parte secedunt. Juncker.

† Sennertus mentions the occurrence of the Nettle-rash in bilious fevers : “ Interdum Essere Febres biliosas præcedunt, et propterea ii, qui hisce tuberculis frequentius molestantur, curationem non negligere debent, ne in Febres et gravius malum incidant.” Pract. Med. lib. v. Part i. cap. 26.

The febrile Urticaria occurs chiefly in summer, and affects persons of a plethoric or sanguine habit, especially those who indulge themselves in eating and drinking too freely.* I have often observed this complaint connected with teething, or a disorder of the bowels, in infants not a year old,† who, from the itching and irritation attending it, become hot, fretful, and restless, and have a white tongue, with a very quick pulse. In children from two to ten years of age it is also very frequent. Among adults, I have found men more frequently affected with it than women.

Dr. Cleghorn (on the Diseases in Minorca, page 222) says, "The Essere often accompany Tertian Fevers, and appear most commonly in the hot fit. Sometimes I have seen them so numerous, that the whole body was disfigured by them, and painted in many places with all the colours of the rainbow. In a few such cases, the disease, contrary to expectation, proved suddenly mortal."

* Sydenham remarks, "Quolibet anni tempore invadit, idque hæc ut plurimum περιφασσι, quod scilicet æger vinorum subtilium, magis magisque attenuantium, potatione paulò liberaliùs indulsit, aut liquoris similis spirituosi." loc. citat.

† "Purpuræ volaticæ seu scorbuticæ species in infantibus aliquandò occurrit, quam Essere vocant Arabes. Exigua erumpunt tubercula hinc indè in corpore, sine insigniori calore, cute inæquali, rubrâ redditâ, cum insigni pruritu, non aliter ac si urticis percussæ essent partes, unde Die Ressel Sucht etiam vocatur." G. W. Wedel, de Morb. Infantum, cap. 37.

"The Nettle-rash occurs in Children, more generally under two years of age; and is exceedingly troublesome to the infant, as well as matter of surprise to parents, from the suddenness of its appearance. Children going to bed perfectly well wake very uneasy, and frequently continue screaming for some time before the cause is discovered. But upon examining the body and the lower limbs, they are found covered with large wheals, resembling those produced by the sting of nettles." Dr. Underwood, vol. i. page 101.

A disease very similar to the febrile Urticaria is produced, in particular constitutions, by substances offensive to the stomach, such as almonds, mushrooms, herrings, crab-fish,* muscles, and lobsters. The effect is almost instantaneous, and the symptoms are extremely violent for several hours, but the disorder seldom exceeds two days. Dr. Winterbottom says, "I have twice been violently affected by eating the sweet almond. The first time, within a few hours after eating this fruit, though in no great quantity, I was seized with slight nausea, uneasiness in the stomach and bowels (without any fixed pain) great restlessness, and increased heat. These symptoms were soon followed by an œdematous swelling of the face, especially of the lips and nose, which were very hot and itching. There was, at the same time, an uneasy tickling sensation in the throat, which excited a troublesome cough and a constriction of the fauces, which seemed to threaten suffocation. The tongue likewise became enlarged and stiff, causing a slowness and faltering in the speech. Soon after going to bed, an eruption took place over the whole body, of spots nearly as large as a sixpence, of a dead white colour, a little elevated above the skin, like the wheals produced by the sting of a nettle, and intolerably itching. In their interstices, the skin was of a high red colour: the whole body was also tumified, though in no great degree. These symptoms continued during the greater part of the night, but gradually abated towards morning, upon the breaking out of a considera-

* "A man was always affected with Urticaria after eating crabs, whether boiled or in soup: he was affected thus even by the vapour which arose from them, also by taking the lap. caneror." 'Dr. Tode, from whom this is quoted (Med. Chir. Bibl.) observes, that he is himself frequently, though not always, affected with a slight Urticaria after eating crab-soup.' Med. Facts and Obs. vol. v. pag. 59.

ble perspiration, which was encouraged by warm diluents: the next day not the least vestige of the complaint remained. The second time this affection occurred, the appearances were nearly the same, except that they began a few hours later than in the first instance. The eruption also continued the greater part of the ensuing day, and then gradually declined. I have not felt any inconvenience from eating the blanched almonds."

"Dr. Gregory, in his clinical lectures, stated that he had himself been subject to a similar complaint from eating almonds; that he had a violent attack of fever, swelling of the body, and a copious eruption on the skin, attended with a loss of voice, and coldness of the extremities, which, however, went off the next day.* Nearly the same symptoms, he added, had occurred to him from eating a green cucumber, with the skin upon it, and continued four days, but were at length removed by a cathartic. Dr. Gregory had seen two patients, affected, by drinking porter, with a similar disorder, which he referred to the bitters infused in that liquor."†

The disease, which takes place after eating muscles or lobsters, has in a few instances proved fatal. A statement of its symptoms has been given by different authors:‡ the eruption attending it, in some cases, re-

* In some persons, the predisposition is so strong, that a few kernels of any of the Drupacea will produce the disease. The first symptoms of it is, invariably, an uneasy sensation of itching or pricking in the fauces; this is succeeded by a swelling of the tonsils, and by a slight affection of the larynx, attended with a tickling cough, and an obstruction or loss of voice.

† Medical Facts and Obs. vol. v. page 60. Compare Dr. Withering on the Scarlet, ang. page 63.

‡ Mityli (vulgo muscheln) ab innumeris hominibus avidè satis, innoxique, comeduntur. Nihilominus tamen plurima, intrà muros

sembles that described page 303, in others it is like the Scarlatina.* An eminent physician, Dr. Bœhrens,† has minutely described the symptoms which took place in himself from partaking of a dish of muscles. Two hours after dinner (3 o'clock P. M.) he felt an uneasy constriction of the chest (*anxia præcordiorum constrictio*) a severe pain between the stomach or duodenum and the vertebræ of the loins, with pain shooting from the *scrobiculus cordis* to the lower intestines. At four o'clock he was affected with diarrhœa, vomiting, and excruciating pain and itching at the rectum. When these symptoms ceased, a considerable heat and swelling took place, on a sudden, in the external ear. At six o'clock the inflammation subsided, but heat, itching, stiffness, and swelling of the skin of the forehead, immediately followed. At this time, after drinking some warm liquors, his face was universally red and swelled, so that the eyes and nostrils were closed, the nose being almost buried in the swelling. He was again affected with violent pain and

civitatis nostræ, et extrâ exempla me docuerunt, ex eorum genere esse nonnullos, veneni quidpiam in visceribus occultantes. Vidi enim paucas matronas, virgines, et infantes, ex eorum esu, malè se habentes, sentientes præcordiorum anxietates, sudores frigidòs, lipothymias, ventris, faciei, et extremitatum intumescantiam, ità ut actum de earum vitâ putasses." Ephem. Nat. Cur. Dec ii. ann. 8. page 122. Obs. xlviii. a J. C. Bautzman, medico Kiloniensi.

* In fæminâ viginti annos natâ a mitylis ingurgitatis nausea, calor totius corporis, præcordiorum angustia, difficilis respiratio, pulsus nimium celer, animi deliquium; totum corpus undique adèò rubrum erat, ac si panno coccineo obductum esset, membraque ità semper convellebantur ut ægra ne momentum temporis quiescere posset. Ibid. Obs. 194, a J. C. Mentzelio.

† De Affectu a Mitylorum esu, a treatise annexed to Werlhoff's Dissertation de Variolis & Anthracibus, 1735.

constriction of the præcordia, till relieved by vomiting. In half an hour afterwards, the tumour of the face subsided, but eruptions, like the wheals produced by a stinging nettle, appeared on the breast and body, with considerable irritation. These disappeared as soon as a similar eruption had taken place on the arms, and lower extremities. Dr. Bœhrens remarks, 1. That the eruption was most in front of the body, and that there was not any of it on the scalp. 2. That the irritation diminished as the eruption approached to the extremities. 3. That there was not any increase of the pulse. 4. That the eruption commenced at six o'clock, and disappeared about ten o'clock. 5. That he slept well, and awoke refreshed on the succeeding morning.

For a more extensive account of this disease, I may refer the reader to two papers in the Memoirs of the Academy of Brussels.*

Physicians have been induced, by the circumstances above stated to conclude, that the febrile Urticaria originates, generally, from indigestion, or from substances of a poisonous quality taken into the stomach, even though in a few cases it may seem to have been produced by a

* See the Memoire, tom. i. page 242, &c. by M. J. B. de Beunie, who says that muscles are only noxious in May, June, July, and August, while they feed on the spawn of the stella marina, deposited, in those months, at the mouths of rivers. M. Du Rondeau, in the succeeding volume of Memoires, controverts this opinion, and observes that muscles prove equally injurious, at every period of the year, to some individuals. According to the experience of both these gentlemen, vinegar, or the citric acid, taken internally, and applied externally, soon relieves the persons affected by eating muscles. M. Du Rondeau says the disorder will not take place, if the muscles be previously dressed with vinegar. He thinks the efflorescence, in this complaint, peculiar, denying its resemblance to the Scarlatina, Erysipelas, or Nettle-rash.

sudden check to perspiration, without any previous internal disorder.

Dr. Withering endeavours to account in nearly the same manner for the rash in the Scarlet-fever, supposing that the acrimonious fluid secreted by the glands of the fauces in that disease, and received into the stomach, acts as “ a poison upon the constitution,” and “ increases the vibratory motion of the capillary blood vessels, by which an unusually large quantity of blood is accumulated in those vessels, and the heart and large arteries are deprived of their customary proportion.”*

A healthy young woman, after attending a child affected with the *Scarlatina anginosa*, had the fever and sore-throat, in the usual form, with an eruption on her skin. The eruption, however, was not like the efflorescence usually occurring in the Scarlet-fever, but resembled, in every respect, the Nettle-rash described page 303. Such cases appear to favour the opinion of Dr. Withering and others, who think the exciting causes of *Scarlatina* and of the Nettle-rash produce their effects by a similar mode of operation on the human body.

Dr. Frank has related the case of a young man, who had an universal eruption of the Nettle-rash, with a slight paroxysm of fever every day after dinner, though his diet was simple and moderate, and though he wholly abstained from the use of spirituous liquors.†

* On the *Scarlatina anginosa*, page 62, 70, 71.

† Frank, tom. ii. p. 107. In sanissimo ex auditoribus nostris juvene, vix a suscepto pastu, nec spirituosus liquoribus, nec pravis aut nimiis esculentis sanitati contrario, mordacissimus ac intolerabilis ad universam corporis superficiem, imprimis verò ad collum et ad faciem, pruritus ac ardor comparent, succedit calor non modicus, facies ipsa haud levi suffunditur rubore; auriumque tinnitus et

At the beginning of the febrile Urticaria, it is proper to give an emetic dose of the powder or the wine of ipecacuanha. Antimonial preparations should be avoided in this disorder, as they often operate with great violence, and occasion fainting. A laxative draught with rhubarb and magnesia is necessary, on the morning after the exhibition of the emetic, unless a spontaneous diarrhœa should have supervened. During the fever, patients should be restricted to a light and cooling diet, and should abstain from fermented liquors; they should not continue long in heated air, nor take sudorific medicines. When the complaint is declining, Peruvian bark, with vitriolic acid, often proves very advantageous.

I have not observed frequent returns of the febrile Nettle-rash in the same person. The following case of a gentleman, liable to such relapses, was transmitted to me some time ago: it is stated in the patient's own words, and affords a lively description of his sufferings under the complaint. "Ever since the first day of January, 1788,

capitis susurrus, cum anxietate et præcordiorum angustia per vices redeunte, superaccedunt. Pulsus naturalibus vix frequentiores inveniuntur. Mox verò phymata diversæ magnitudinis, ad superiorem juguli partem, ac propè mentum celeritate singulari propullulant, ipsumque cutis ambitum in tumorem inæqualem attollunt. Paulò seriùs ad faciem similia sed minori portùs numero prorumpunt; ad genas vero perexiguæ papulæ efflorescunt. Ad cæteras corporis partes, licet ardor ac pruritus continuent, exanthema nullum comparet: sub hoc interim rerum statu, liberiores vix aerem petierat ægrotans, cum statim efflorescentiæ, ampliori ex fundo, assurgerent, et in latiores plagas diffunderentur; ità ut quædam ex illis, circulo ad basim ruberrimo instructa licet ad collum nucis ferè avellanæ magnitudinem adæquarent, graciliorem tamen ac pellucentem, sed verè vacuum in apicem terminarentur. Lectulus nunc petitur, et morbi, ut timebat, majoris ab ægrotante suscipitur cura; cùm, erumpente per universam cutem madore, vix unius spatii horæ, jam totus et in integrum dissiparetur.

I have been confined to my house, at an average, once every fortnight or three weeks, with this disorder, sometimes for four, five, six, seven, eight, or nine days together, several times for a fortnight or three weeks. The first time it attacked me, I was not sensible of having caught any cold, nor can I attribute it to the too free use of inebriating liquors, as I always have avoided much drinking.

“It began with a sickness at the stomach, flatulence, and great oppression: there was afterwards an eruption of small white lumps on my hips, which increased to the breadth of the hand, changing to a fiery red colour, attended with an incessant inflammation and violent itching: I was, at the same time, affected with nausea, total loss of appetite, lowness of spirits, frequent head-aches, and violent pains in the breast, back, and loins. The rash came out, from the top of my head to my feet, in large distinct lumps, which had the appearance of the inflammation caused by the venom of a nettle. I tried a variety of remedies, without perceiving any benefit: for the complaint returned frequently, and grew, on every attack, more troublesome. It was always attended with a flushing of the face, and a slight hectic fever: it likewise occasioned great costiveness, which made me have recourse to opening medicines, but a most uncomfortable circumstance attends every evacuation, namely, a violent heat and itching in the anus, the stools leaving my body almost as if boiling water came from me. I often experience the same when free from my complaint, which greatly disturbs my rest in the night, and my peace of mind by day. When the disorder abates, I feel the pains at my breast more acute, and so they continue till the rash is totally gone.

“After an interval of eight, ten, or fourteen days, the

complaint returns again, often without any obvious cause. I undertook a journey, last summer, into Wales, where I continued near six weeks ; but in that time I was confined on three or four different occasions. At my return, I found myself much better in health, having gained a little flesh and spirits: I had not, however, been at home more than a fortnight, before I experienced a fresh attack, and afterwards five or six others, which became more and more serious ; the pain in my breast, loins, and back, being more acute than I had ever felt it, and my appetite worse, along with a continual sickness at the stomach. The rash, which never used to appear internally, now got into my throat, so as to prevent, in a great measure, my breathing and swallowing : at the same time my tongue was so much swelled,* that I could scarcely move it in my mouth. During the last six weeks, by the advice of my present physician, I have refrained from malt liquors and spirits, and drunk nothing but butter milk at meals, and a glass or two of white wine in the evening, to raise my spirits. Notwithstanding, the complaint has twice returned since I adopted this mode, with the usual pains, lowness of spirits, and a debility of my whole frame, though not to so violent a degree as formerly. For three weeks past I have had a troublesome cough in the morning, with a shortness of breathing : these symptoms are new, and may perhaps be attributed to cold.

* These circumstances were confirmed by his attending physician, the late Dr. Currie. " A Dyspnea has been, at times, very troublesome, and his swallowing somewhat obstructed, owing evidently to the same affection in the œsophagus as that on the surface, producing redness and inflammation of the fauces, and once or twice much enlargement of the tongue." " His face and extremities are likewise often swelled."

“ In the course of my regimen, I have found this complaint brought on by eating an oyster, or any rich fish : the same effect is produced from being the least wet in the rain, whence I am particularly on my guard against these circumstances.”

The gentleman was only twenty-seven years of age : he had employed a variety of remedies without success. Repeated bleedings, with purgatives, and anodynes, which were at first prescribed for him, proved injurious. He next tried a course of mercury, by rubbing mercurial ointment on the inside of his thighs, and by taking a small quantity of calomel internally ; but his bowels were so much disordered by this plan, that he soon found himself obliged to discontinue it. A bath of warm sea-water was afterwards employed for some time, without advantage. The only relief he ever experienced was from strictly adhering to a soft antiphlogistic diet, with drinks composed of milk and water, whey, butter-milk, &c. which, however, did not wholly prevent returns of the disease.

2. The *URTICARIA EVANIDA* is without fever, and without any extensive efflorescence on the skin. The eruption consists sometimes of round wheals, at other times of longitudinal elevations of the skin, resembling those which are produced by the stroke of a whip.* They are all white at the top, but in some there is a slight redness at the base. Though often hard and elevated, they do not contain a fluid, or tend to suppuration. They are occasionally seen on every part of the body, but they are most numerous on parts which are closely covered. The eruption appears and disappears many times in the course of a day and night, according to the temperature

* See Medical Transactions, vol. iii. page 174.

of the air, or to the exercise used by the person affected. It may be excited on any part of the body, in a few seconds, by strong friction or scratching, but the wheals presently subside again. A violent itching, mixed with a sensation of tingling or stinging, attends the eruption. These sensations are most troublesome to patients while they undress, and for some time after they have lain down in bed, when the eruption is usually most vivid.

The disease thus continues, with repeated eruptions, more or less extensive, for several months, or even for years.* It occurs most frequently in persons of the sanguine temperament, especially in those who have a delicate stomach and an irritable skin. The occasional causes are heat, fatigue, watching, agitation of mind or anxiety, and a too stimulating diet.†

I have observed that females are much more liable to this complaint than males. Dr. Heberden, however, remarks, "Males and females are equally liable to the Nettle-rash; and I have observed it in all ages, from childhood to decrepid old age. Constitutions tainted with strumous, or harassed by rheumatic and hysteric complaints, or broken down with intemperance, palsies, and age, have all been, as far as I could judge, equally fitted for the disorder; but not more so than the soundest state of health, in the vigour of life, to which all other complaints were unknown."

The last observation is, I think, incorrect. Persons affected with the *Urticaria evanida* may be capable of business and occasional exertion, but they are often low-

* "These eruptions, in some persons, last only a few days; in others, many months. I have known several complain of them for two years, with very short intervals, and some for seven or even ten years." Dr. Heberden.

† See Van Swieten's *Commentar. sec. 723.*

spirited, and they seldom remain for twenty-four hours without some bodily uneasiness, as head-ache, lassitude, pain and sickness at the stomach, aching in the limbs, or an oppressive languor. A young lady, apparently healthy and strong, favoured me with an account of her sufferings, and state of feeling, under this complaint,* in the following terms: "The rash is particularly troublesome, whenever I am fatigued by too much exercise, surprised by any thing, however trifling in its nature, pleased at any event, anxious on any subject, irritated in my temper, or exposed to damp air or a cold east wind. Every night, when I change my linen, the itching is intolerable, and it does not subside till I am warm in bed. I am subject to severe colds in winter; while they last I have little or no rash out; and, I think, on the whole I am better in health when I have most rash. I often feel a sickness for a few minutes before it appears, and often a weight and tightness across the chest, after dinner, which causes a great flushing in the face: perhaps I ought to observe I am but a moderate eater. The appearance of the rash varies but little. It consists of long red stripes, that look as if I had been scratched, white spots, sometimes small, at other times large, so as to bear some resemblance to a scald or burn. On taking a little white wine every day for a week, I found the eruption increased, and all the symptoms aggravated; but on returning to the use of red wine, I was presently relieved. Being, two summers ago, at the sea-side, I had very little of the rash, and in the succeeding winter I began to flatter myself it had finally disappeared: in this respect I was disappointed. I have not any other complaint, yet I am ve-

* She had been affected with it nearly five years: a heart-rending affliction was the primary exciting cause of the disorder.

ry far from being strong, and feel extremely nervous. My spirits, however, are not amiss: I sleep very well, and have a tolerable appetite.”

This form of Urticaria is thought to consist in a morbid irritability of the skin, connected with a similar state of the stomach and intestines. It seems attached to particular constitutions, being produced, in some individuals, by substances which do not make any impression on others. By rubbing oatmeal on the hands and wrists, I have known the Nettle-rash excited in persons otherwise healthy, and diffused over the whole body, proving very troublesome for a length of time. The same effect has been produced by a slight application of mercurial ointment. Dr Winterbottom says, “A lady of my acquaintance is affected with an eruption of this kind, whenever her skin is touched with the common wall-flower.” Page 66. Dr. Heberden has mentioned several substances which produce this disorder, through the medium of the stomach, as the wild valerian root, shrimps, honey, and the kernels of fruits.* Page 184. He thinks it may often be owing to external or mechanical causes, such as the hair of stinging nettles, the down surrounding the pods of cowhage, the fine hairs floating near the nests of certain insects,† and the spiculæ of cantharides. When the disease continues long without the application of external stimuli, we shall, in many cases, find it owing to some article in diet, which disturbs digestion. I have desired several persons affected with chronic Urticaria to omit first one, and then another, accustomed article of food or drink, and have thus been frequently able to trace the

* A woman by eating strawberries was constantly affected with Urticaria. Vogel's Handbuch. vol. iii. page 277.

† Reaumur, Histoire des Insectes, tom. ii. Mem. 4.

cause of the symptoms. This appeared to be very 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. I must, however, confess, that several cases have occurred to me, where a total alteration of diet did not produce the least alleviation of the complaint. In such cases I have employed a variety of medicines, but have found the vitriolic and marine acids, with magnesia, rhubarb, or other laxatives, given occasionally, the most successful remedies. Lotions made with brandy, vinegar, saline compounds, &c. cannot be applied extensively enough to produce any considerable effect. Baths, especially warm baths,* are necessary for the alleviation of a disease, which affects nearly the whole skin. Sea-bathing will be generally found advantageous, by those who persevere in the use of it for three or four successive months. A bath, prepared by dissolving marine salt in water, is not equally efficacious; in some persons it manifestly aggravates the disorder.

3. *URTICARIA PERSTANS*. In some cases of Urticaria, the wheals are stationary, and the redness, which at first surrounds them, gradually disappears. The eruption is attended with itching, especially when the person affected becomes warm in bed, or is heated by exercise. It does not extend over the body, but ap-

* See Amat. Lusitan, Cent. i. Curat. 15. De Menstr. suppressione, et exanthematibus per totum corpus erumpentibus. He cured his patient, a young lady, by a bath made of the decoction of red roses, myrtle, tamarisk, and balaustines, with wormwood, but he had previously bled her four times in different veins, and given strong purgatives. He encourages us to let two pints and a half of blood in all similar cases.

pears chiefly on the arms, breast, and thighs : its duration is two or three weeks. Pain and sickness at the stomach sometimes precede the eruption. When it is about to terminate, the wheals become flat at the top, and then gradually subside, leaving a reddish spot, not always scurfy, which continues for several days. This complaint is relieved by the mode of treatment recommended in the foregoing species of *Urticaria*. Moderate doses of the aqua kali puri seemed, in some instances, to shorten the period of eruption.

4. In the *URTICARIA CONFERTA*, the eruption is full, and extensively diffused. As the wheals in many places coalesce, or are indented by close contact, they have very irregular forms : when they are singly considered, however, the size and elevation of them is perhaps less than in any other species of *Urticaria*. They are sometimes considerably inflamed at the base, and they produce an almost incessant itching, combined, especially at night, with a sensation of heat, and pricking or tingling. The eruption spreads over the arms, neck, back, and thighs, and often continues many weeks. It appears chiefly in persons who have a dry and swarthy skin, and who are above forty years of age. I have seen it, in some, connected with pain and sickness at the stomach, in others with head-ache or vertigo. The occasional causes seem to be, too much exercise, exposure to heat, rich or highly-seasoned food, and the intemperate use of spirituous liquors.

Those who are affected with this complaint should observe a light cooling diet, and should abstain from malt-liquor, white wines, and spirits. Alterative medicines or tonics are sometimes useful with this plan of diet, but without it they afford little alleviation. Warm bathing affords a temporary relief. In one case

a cure was obtained by rubbing all the parts affected with unguentum calcis hydrargyri albæ.

5. In the *URTICARIA SUBCUTANEA*, the eruption occurs at distant periods, and continues only a few days at each return; but the patient is harassed during the intervals, as well as during the eruptions, with a violent and almost constant tingling in the skin, and with other distressing symptoms. The complaint is, at first, confined to one spot, on the leg or arm, and commences there with a sensation of tingling or stinging, which is afterwards felt more and more extensively, along the limbs, or perhaps over nearly the whole surface of the body. Sudden changes in the temperature of the air, and agitation of mind, occasion increased uneasiness in the skin, so that pains are sometimes felt as from a sharp instrument penetrating in different directions, at other times, as from needles piercing or pushing the skin upwards. There is usually a stiffness and slight torpor in the muscles of the parts most affected. An appearance of wheals takes place on the arms, chest, or lower extremities, from time to time, especially during the summer. This eruption continues two or three days; it does not effect any change in the other symptoms or sensations mentioned, but it seems to indicate that they may be properly arranged under the genus *Urticaria*.

Persons affected with the above symptoms are liable to frequent returns of severe pain in the stomach, and to cramps in the muscles of the lower extremities: they seldom have any sensible perspiration. In most of the cases which I have seen or known, the complaint was partial, affecting only the loins and thighs, or sometimes the arms. It usually proves tedious and obstinate; but it may be relieved by gentle friction, and by the repeated use of baths of warm sea-water.

A lady (Mrs. Allen) of Milbank Row, Westminster, who has laboured under this disease for a series of years, favoured me with a written statement of her sufferings, from which I will make some quotations.

She says, "About a fortnight after my recovery from an autumnal fever, at the age of twenty-two, I felt in walking a pain in one ankle, similar to that from the sting of a nettle. Four days afterwards I felt a similar uneasiness in the other ankle. The sensation of stinging and tingling, attended with a weakness of both ankles, continued till the spring, when I had the Bath waters applied, by bathing and pumping. From this plan I did not obtain any advantage, and was therefore recommended, during the summer, to bathe in the sea. Exercise and the bathing presently removed the weakness of the ankles; but the sensation of pricking, tingling, and stinging, remained in them as before, and, in the course of the summer, gradually extended to the legs, insteps, and toes. Two years afterwards, my spirits being much affected, in consequence of the death of a darling brother in the East Indies, I felt the stinging on other parts of the body, but particularly round the loins and back; it has continued ever since, and I have been more distressed with it there than in any other situation. This part of my complaint has been attended with stiffness of the muscles round the hips, and pain in the small of the back, so that I could not take much exercise. I never had any stiffness or cramps of the arms and legs. An eruption, like that from the sting of a nettle, with large wheals as from the stroke of a whip, I have had, over the whole body, three times in twenty years. A slight or partial appearance of this kind has occurred very frequently, and at all times of the year: the three very extensive eruptions were in the

summer season, but none of them continued more than three days. At the age of twenty-seven, I experienced great pain and difficulty in making water, which was referred to a tumour at the neck of the bladder. This complaint gradually yielded under proper medical treatment. Some time afterwards (in the year 1780) I was seized with a disorder of the bowels, which continued so long, that it very much reduced me. It was removed by a soft vegetable diet; but I had frequent fits of the colic for several years afterwards. None of the above complaints seemed to have any connection with the disease in the skin, which remained unaltered. In 1788, I was suddenly affected with a violent pain in the side, near the spine. It continued six months, notwithstanding the use of the Bath waters, and of a warm sea-water bath, &c. but was at last cured by an issue. In March, 1790, I felt my stomach much disordered, had frequent nausea, heart-burns, acid eructations, and an offensive taste in the mouth, after eating. By taking rhubarb, and occasional emetics, I enjoyed intervals of ease, without wholly removing the disorder. It increased during the summer of 1791, and before the end of that year became so violent, that I could not retain any sort of food on my stomach. Though much weakened and emaciated, I was free from pain and fever: I slept well, and could eat again almost immediately after the vomitings. As the complaint of the stomach became violent, I perceived that the stinging and pricking in the skin abated. Those sensations at length entirely ceased, which circumstance contributed to put me in good spirits, and enabled me to bear more patiently my other sufferings. The remedies prescribed for me during this state did not afford much relief. At the beginning of summer, in 1792, I was one morning affected with more violent

vomitings than any I had before experienced. When they ceased, I felt my stomach remarkably easy, and on the two following days I was so much relieved, that for the first time, after a long confinement, I went out in a carriage, to see a particular friend. While in her house, and on my return from it, I was again sensible of the stinging and pricking under the skin. This continued to increase for two or three days, when the sickness, and disagreeable taste as of rottenness, entirely left me. I was soon able to eat and drink any thing, and seemed internally well, but I found, in addition to the outward complaint, a pain in the side, equal to that from which I had before suffered so much. A seton was applied with relief. Electricity, tar-water, decoctions of sarsaparilla and elm-bark, sulphur powders, prepared chalk, alkali, and other remedies, prescribed by different physicians, were afterwards employed; they did not, however, effect any alteration in the complaint under the skin. I spent the summer of 1793 at Harrogate, but the sulphur water disagreed with my stomach, and disordered me so much, that I was obliged to desist from the use of it. I was likewise obliged to cease taking the medicine recommended by yourself* in 1795, for it suddenly and violently affected the stomach, before the effect you expected was fully attained. During the last ten years I have not taken any active medicine, nor have had any internal complaint deserving of notice. Time has not diminished, but rather adds to the sharpness of the stings, and the sensation of prickling, which are excessively painful about the loins, and seem to be connected with an increasing rigidity of the muscles in the small of the back. These symptoms have, therefore, continued to affect me from the age of

* The remedy was the nitric acid. R. W.

twenty-two to that of sixty, with but one considerable remission, purchased by another mode of suffering. Oct. thirtieth, 1806.”

6. In the *URTICARIA TUBEROSA* many of the wheals increase to a large size, forming hard tuberosities, which seem to extend deeply into the muscular flesh, and occasion a contraction in the sinews, with total inability of motion, and a sensation of pain in the bones. These tumors are usually whitish at their tops: they rise on the arms, thighs, loins, and calf of the leg, and are very hot and painful for several hours. The eruption, in all cases under my observation, took place at night, and before morning it wholly disappeared, leaving the patient weak, languid, and sore, as if he had been bruised, or had undergone much fatigue.

The *Urticaria tuberosa* often proves tedious and obstinate; I have known it continue, as above described, upwards of two years, with but a few short intervals. The only causes to which it could with probability be attributed, in the instances presented to me, were irregularities in diet, violent exercise taken by persons usually sedentary, and the too free use of spirituous liquors.

I have adopted Dr. Frank's denomination of this complaint, and will subjoin one of his cases, which, however, differs in some particulars from the above statement. *Adolescens viginti annorum, crapulis non parùm deditus, a prandio corripitur nausê et vertigine tenebricosâ. Intumescit mox, rubroque colore suffunditur facies; tumores verò palmæ latitudinem habentes, et colore rubro sed obscuro instructi, cum pruritu ad animi deliquium usque intolerabili, universam corporis, sed femorum in primis, superficiem occupare cernuntur. Accedit horror, ac demùm rigor,*

extremities potissimum inferiores violenter concutens, sub quo exanthemata in altas, et superficiem longè ac latè superantes, seu informes offas, increscunt. Pulsus nunc duri et pleni observantur, mortisque ægrotantem consternit formido. Ad noctem, subsequitur calor, sub quo vix formati ad cutem tumores immi- nuuntur, ac tandèm, reliquo tamen ad vultum rubore ac universali pruritu, pènitùs evanescent. Ast verò eorundem mox locum exanthema asperrimum, digi- tosque sub tactu vix non offendens, miliaribus ferè simile, sed nigro ad apicem puncto insignitum ac pel- lucidum, subintrat. Hoc facto, imminuitur anxietas, orisque summa comparet amarities. Die morbis se- cundâ, purgante alvus medicinâ laxatur, quâ occa- sione, ægroto lectum cum frigidiorè aurâ commutante, posterius hoc exanthema iterùm disparet, ac primî denuò ad cutem revertuntur tumores. Alterna hæc exanthematis efflorescentia eodem per sex dies tenore continuatur, quo tempore, sectâ ad interim venâ, et antiphlogisticis et evacuantibus ægrotanti porrectis re- mediis, ægritudo disparuit omnis. Frank de cur. ho- min. morb. Tom. ii. p. 108.

Hippocrates, Galen, and Aetius,* have only men- tioned the appearance of wheals as symptomatic in bi-

* Hippocrates speaks of "Exanthemata, resembling gnat-bites, or bug-bites," Epidem. lib. v. & l. vii. and Galen. Comment. "of large, or broad, less itching, Exanthemata," Aph. 9. Sect. vi. and of *πομφοι ὡς ἀπο κνιθης*: De Morb. Mul. lib. ii. Compare Actuar. Med. l. ii. cap. 23. and Celsus De Medicin. lib. v. cap. 28, &c. &c. Aetius has been more particular, in a chapter on the different kinds of Exanthemata which take place in fevers. Tetrab. ii. Serm. i. cap. 129. Herodoti. This is the famous chapter, in which some physicians have been ingenious enough to find a complete history of the Small-pox. Aetius gives from Herodotus the following ac- count of the symptomatic Nettle-rash in ardent fevers: *Γιγνίσαι δὲ*

lious fevers, and other acute diseases. J. F. Serapion,* and Alsaharavius,† seem to comprise the Nettle-rash with the Prurigo, the Lichen, and the Roseola, under the title *Essera*. Avicenna's account of the *Benat Alleili* (daughters of the night) seems applicable to the Nettle-rash. He says, "When any one has a stoppage of the pores, but with good digestion, he is often affected, in the cool of the night; with itching, roughness of the skin, and small eruptions (bother, wheals or papulæ) which are called *Benat Alleili*. The cause of it is obstructed perspiration, from a want of permeability in the skin, increased by the condensing operation of cold air at night, when the digestive process is most active, and when perspiration should therefore be most copious. In this disease, the itching is violent: it affords, at first, a

ποτε ἐξανθημάτα μεγάλα, κατα χροίαν λευκά, κινήσμον ολίγον ἐπιφύροντα, πλεοναζόντα ἐν τε μηροῖς, καὶ γαστροῖς, πλευραῖς τε καὶ ἐπιγαστροῖς, ὡς ἐπι το πλείον' τὴν δὲ καταρχὴν ἐκ πολλῆς καὶ ἀργῆς ὕλης λαμβάνει' ταῦτα δὲ συνθεραπεύεται τῷ παντὶ σώματι, οὐδὲ γὰρ παντὶ χαλεπὴν υπογραφίαν νοσῶν, ἐν τῇ ολίγοσίστῃ χρησθήσεται. Γίγνομαι δὲ τῶν κατὰ ταῦτα πυρέτων ἐγκαυστικῶν, ἐπίληθειας ἔχουσι πρὸς τὰς ἐν ταῖς ἀκμαῖς τῶν ἐπίσημασιων ψυχροδυσίας, ἀκμασάντος τε νοσημάτων, εἰ μὴ τὰ σπλαγχνὰ εὐπαθῆ ἔχουσιν. Aldus, 1534.

* *Breviar*, lib. v. cap. 5.

† *Pract. Tr.* xxxi. cap. 8. Compare Avicenna, lib. iv. page 116.

‡ *Lib. iv. Fen. vii. Tract. iii. cap. 10.* "The translator of Avicenna denominates this complaint *Nebat alleili*, plants of the night; but my Arabic copy acknowledges only the reading *Benat alléili*, daughters or offspring of the night, a mode of expression usual in the Arabic and Syrian languages. I may here observe, that the Latin translation of Avicenna, published in 1608, seems to have been made from a copy less correct than the edition of his works printed at Rome in the year 1593." Dr. Robert Jackson.

sensation of pleasure, but this is soon succeeded by severe pains in the parts affected."

The Neapolitan physician, Ingrassia, appears to be the only medical writer, for four or five centuries after the time of Avicenna, who has suggested any thing new on the subject of Urticaria.*

* Firmiter tenemus Arabas præscripto nomine (Esseras) eum affectum intelligere, quem nos in Sicilia vulgò dicimus Scotulum, nonnulli verò pilum cervinum. Florentiæ (ut Nicolaus ait) Arctica ab idiotis, vocatur, quin, communissimâ nostrorum omnium idiomatum comparatione, fabescere corpus dicimus, vulgò farse fave, quippe tuberculis fabarum sæpenumerò magnitudine paulòve majoribus, aut minoribus, universum corpus, quasi ex improvise nonnunquam, præcipuè in ætate, circumvenitur, perindè ac si a vespis undiq; demorsus esset, vel sæviori quâvis urticâ perfrictæ carnes ejus extitissent. Qui quidem affectus ex biliosi sanguinis fervore, magnâ ex parte, advenire consuevit, &c. &c. De Tum. præt. nat. page 138.

ORDER III....IV. ROSEOLA.

BY this title I mean to express a rose-coloured efflorescence, variously figured, without wheals or papulæ, and not contagious. The Roseola* can scarcely be considered as idiopathic, but though connected with different fevers, and perhaps with different states of the constitution, it requires notice in an arrangement of cutaneous appearances. I will, therefore, describe its principal varieties, under the denominations, Roseola æstiva, Roseola autumnalis, Roseola annulata, Roseola infantilis, Roseola variolosa, Roseola vaccina, Roseola miliaris.

1. The ROSEOLA ÆSTIVA is sometimes preceded by chilliness, alternating with flushes of heat, by slight pains in the head and limbs, faintness, lassitude, restlessness, and incapacity of close attention. The rash appears on the third, fourth, fifth, sixth, or seventh day after the commencement of these symptoms. It is distributed first on the face and neck, and afterwards, in the course of a day or two, over the whole body. On examination, the patches generally will be found larger and more irregular than in the Measles. They are at first red, but they soon assume the deep roseate hue peculiar to this complaint.

* I use this term arbitrarily. A few writers have employed it instead of Rossalia, which denotes the Scarlatina. The Roseola mentioned by Severinus, lib. vii. De reconditâ abcessorum naturâ, is left indefinite. Quæst. v.

The fauces are tinged with the same colour, and a slight roughness, or enlargement of the tonsils, is felt in swallowing. The efflorescence usually appears first in the evening or night, and continues vivid through the following day. It produces a considerable degree of itching and tingling, especially on the arms. On the fourth day, only slight specks, of a dark red colour, are perceptible : these wholly disappear on the fifth day, and with them the internal disorder.

Such, in particular instances, is the uniform course of the Roseola. In many cases, however, the rash is partial, affecting only the face, neck, and shoulders. It is more especially diffused over the forehead, along the spine of the lower jaw, on the upper part of the breast and shoulders, and round the neck, in patches slightly raised above the surface. The cheeks are tumefied, and flushed with a dark red colour. A considerable itching is felt in the parts affected. The duration of the complaint, in this form, is at least a week, the rash appearing and disappearing several times within that period. Its retrocession is usually attended with nausea, pain in the stomach, head-ache, and faintness. These symptoms are immediately relieved when the eruption appears again: it sometimes returns without any apparent cause, at other times, in consequence of sudden emotions, or from taking wine, aromatics, warm liquors, &c.

The Roseola, as above described, usually occurs in summer, and affects women of an irritable constitution. The occasional causes of it are, fatigue, sudden alternations of heat and cold, or the drinking of very cold water after strong exercise : it was referred by one lady, whom I attended, to her having slept in a damp bed. I have observed this efflorescence in persons affected with dysen-

teric complaints, or other disorders of the bowels, in the months of July and August.

The *Roseola æstiva*, on the first day of eruption, is often mistaken for the Measles, but its colour, and the mode of its distribution, with the concomitant symptoms on the second day, must remove every doubt from the mind of an attentive practitioner. All practitioners, however, are not sufficiently attentive, so that a further mistake has been sometimes made, by confounding the *Roseola æstiva* with *Scarlatina*. I recollect an instance of this in the case of a child, who was affected with an extensive efflorescence, about midsummer, for several successive years. The attending physician informed the parents that the Scarlet fever had recurred, in their child, seven times.

We shall generally find the symptoms connected with the *Roseola æstiva* alleviated by moderate diet, and by the use of acidulated drinks, with occasional laxatives. The complaint is only dangerous, when, in consequence of exposure to very chill air or of the application of cold water, the eruption has been suddenly repelled, and violent disorder has taken place in the head, stomach, or bowels, of the patient, as happens, under similar circumstances, in other eruptive diseases.

2. *ROSEOLA AUTUMNALIS*. I have frequently seen children, from five to ten years of age, affected with this complaint in autumn. Distinct patches of efflorescence appear in the skin, without occasioning any elevation of the cuticle. They have an oval, or nearly circular shape, and they gradually increase to about the size of a shilling. Their hue is very dark, so that, at a distance, the skin appears as if stained with the juice of black cherries or mulberries. The eruption is not accompanied with much itching or tingling, nor is there any symptom of general disorder, except a whiteness

of the tongue. The dark rose-coloured patches are usually diffused over the arms, seldom on the face and body: they disappear in about a week, being sometimes, but not always, succeeded by desquamation.*

This complaint is generally removed in a short time by the exhibition of the vitriolic acid internally.

3. The *ROSEOLA ANNULATA* appears in rose-coloured rings, with central areas of the usual colour of the skin. On the first and second days of this efflorescence, the rings are minute, but they afterwards gradually dilate, and form larger central spaces. I have sometimes seen them nearly half an inch in diameter. The eruption takes place on almost every part of the surface of the body, and produces, especially at night, a sensation of heat, and of itching, or prickling: It appears likewise to affect the throat. Its duration is very uncertain: † in some cases, it commences with shiverings, succeeded by heat, and is attended with head-ache, flushing of the face, sickness at the stomach, and pains in the limbs: it then continues four or five days, and disappears as the febrile symptoms decline. In other cases, which are without fever, the complaint is of long duration: the efflorescence usually fades in the morning, and returns in the evening or night, the rings becoming vivid, and sometimes a little elevated. Should the rings disappear, or be very faint in colour for several successive days, the patient is affected with pain in the stomach, sickness, vomiting of bile, great languor, giddiness, and aching in the limbs. These symp-

* M. A. Severinus, page 137, mentions *Roseolas colore livescen- te et opaco*. Sauvages probably comprises the *Roseola autumnalis*, and some other forms of *Roseola*, under the genera *Psyracium*, and *Essera*.

† Two, three, or four months, in different cases.

toms are alleviated, or removed, by the use of the warm bath, after which the efflorescence generally returns. I have seen much advantage derived, in this complaint, from sea-bathing, and from some of the mineral acids taken internally.

A singular case of the *Roseola annulata* was presented to my observation, in June, 1805, through Dr. W. Currie, of Chester, from whom I have since received the following particulars. "The eruption on Mrs. — has always appeared in the circular form, and affected every part of the skin, being attended with heat and a very troublesome itching. It came on every night as soon as she was warm in bed, and continued to torment her till morning; but it constantly left her on getting out of bed and dressing herself. She was only affected with it, in the day, by exposing herself to great heat, or by going into crowded rooms. This disorder began in the month of March, 1804: it increased during the summer, but when the cold weather of autumn set in, its violence gradually abated, and, about the beginning of October, it disappeared. She remained free from eruption through the whole winter. In March, 1805, it again made its appearance, and continued, as in the former year, to torment her during the summer, but disappeared, as before, in the first week of October. The eruption returned last March (1806) and proceeded, as usual, in the early part of the summer: it disappeared, however, in July, since which time she has been wholly free from it, and has enjoyed perfect health." "The vernal attacks of this complaint were preceded by diarrhœa, with pain and griping in the bowels. She eats moderately of plain food, has a good appetite, and never experienced symptoms of indigestion. Her drink, at meals, is water, with one or

two glasses of wine. She is of a gouty family, and was, some years ago, subject to repeated and severe pains in the stomach, and to violent head-aches; but these complaints do not seem to have been connected with the eruption. Perhaps some irritation in the bowels was the original exciting cause of the efflorescence, which might be afterwards supported by the stimulus of heat.

“ According to my patient’s account, a bath of moderate temperature was the only remedy productive of benefit, and that benefit, she says, was but temporary. If another similar case should occur to me, I would make trial of a tepid or perhaps a cold bath, with gentle laxatives, and small doses of the Aqua Kali puri, in lime-water.”

In two females, whom I attended, this complaint was connected with an irregular state of the Catamenia. In a man between forty and fifty years of age, the eruption twice succeeded to a severe fit of the Gout, and continued some weeks. An efflorescence, similar to the *Roseola annulata*, occasionally precedes the eruption of pustules, or the formation of scaly patches, in the venereal disease, as was formerly noticed under the article *Psoriasis gyrata*. No material difficulty in medical practice will occur from this circumstance, which is connected with, or immediately succeeded by some of the characteristics of Syphilis.

4. *ROSEOLA INFANTILIS*. Infants, during dentition, and in fevers, or in disorders of the bowels, are often affected with a rash. The efflorescence continues, in some cases, for a night; in other cases, it appears and disappears for several successive days, being attended with symptoms of violent irritation. I have seen, even in infants but a few days old, an efflorescence on different parts, in numerous coalescing patches, rounded, though not exactly circular, of about the size of a sixpence, and of a

strong red colour. These continue five, six, or eight days, with a slight elevation of the cuticle, and terminate by desquamation. They are not always attended with disorder of the constitution.* There appears occasionally, during the first stage of dentition, a single patch of efflorescence on one arm, or neck.† It remains three or four days, then disappears, and is in a short time succeeded by another, perhaps on the opposite arm. This fades and disappears in about the same period, when a fresh patch rises in another place. The eruption is thus continued for two or three weeks.

We must arrange under the article *Roseola*, two forms of Rash, noticed in infants by Dr. Underwood,‡ “The one,” he says, “slight, and preceded by sickness at the stomach, but without fever, the other extended in larger patches, and preceded by sickness, purging, pain, and a little fever, the whole subsiding on the appearance of the Rash, which therefore seemed to be critical, or at least, like some other eruptions, consecutive to convalescence.”

These appearances, as Dr. U. has observed, are often mistaken for the Measles and Scarlatina. They should

* “Infants, as early as the second or third day after birth, are sometimes covered over with a red rash, in small patches raised a little above the skin, and very much resembling the Measles. The rash continues out two days, turns brown on the third, and goes off with a slight desquamation: it is not accompanied with catarrhal symptoms, nor with any apparent disorder of the constitution.”

“This efflorescence differs from that you have described: I never saw it continue longer than till the third day.” Dr. J. Sims.

† *Roseolas intelligo bifariam, vel quod rosarum imaginem præ se ferunt, vel quod rosidas quasdam inspersiones repræsentant. Severin. de Roseolis saltantibus, page 133. Roseolæ cutem supremam lambentes, et efflorescentes, macularum modo, &c. page 137.*

* Treatise on the Diseases of Children, vol. i. page 87-9.

on that account be well known to medical practitioners, although they do not require a specific mode of treatment, but usually disappear on the use of remedies calculated to alleviate painful dentition, or those disorders of the bowels, with which the Roseola is so frequently connected.

5. The *ROSEOLA VARIOLOSA* occurs during the eruptive fever of both the natural and inoculated Small-pox. It appears in about one case of fifteen,* in the inoculated Small-pox, on the second day of the eruptive fever, which is generally the ninth or tenth after inoculation. The efflorescence is first observable on the arms, breast, and face: on the following day, it extends over the trunk of the body and the extremities. In some cases it spreads into contiguous arches, in others, it is in longitudinal, irregular patches, with small distinct dots intermixed, and, in a few cases, all these appearances being combined, it forms an almost continuous redness over the body. Seve-

* In three hundred and forty-six patients inoculated with Variolous matter, at the Small-pox Hospital, between the seventh of October and the 28th of December, 1806, an efflorescence took place, and continued two or three days, as follows:

In 4	. . . . .	on the 8th and 9th days.
3	. . . . .	8th, 9th, and 10th.
6	. . . . .	9th and 10th.
1	. . . . .	9th, 10th, and 11th.
2	. . . . .	9th, 10th, 11th, and 12th.
1	. . . . .	10th, 11th, and 12th.
5	. . . . .	10th and 11th.
1	. . . . .	15th and 16th.

Twenty-three in three hundred and forty-six, or one in fifteen nearly.

In the last case, the rash appeared on the third day of the Variolous eruption, being perhaps the effect of dentition.

Mr. Wachsels, the Resident at the Hospital, who favoured me with the above table, thinks the Variolous eruption may be generally distinguished, in minute pimples among the patches of efflorescence, at its first appearance.

ral parts of the rash are a little elevated above the surface, as in the Measles.

On the second or third day of the efflorescence, distinct Variolous pustules, containing a little fluid, may be distinguished in the general redness by their rounded elevation, by their hardness, and by the whiteness of their tops. The rash then begins to decline, and we seldom find any vestiges of it on the fourth day.

The *Roseola variolosa* is accounted by inoculators a certain prognostic of a small and favourable eruption of the Small-pox. It takes place chiefly in persons who have a delicate stomach, and an irritable skin. Thus Baron Dimsdale observes, if “a rash of this kind happen during the preparation (by mercurial and antimonial medicines) it is apt to return at the time of the eruption of the Small-pox.”

He says further, “If it shews itself on the skin partially, and here and there, it is not very alarming, and soon wears off. But sometimes the whole surface of the skin is covered with a rash intimately mixed with the Variolous eruption, and so much resembling the most malignant kind of confluent Small-pox, as scarcely to be distinguished from it; and indeed some cases of this sort have happened, where, being accompanied with petechiæ and livid spots, I have been much alarmed. . . . The real and essential difference is to be gathered from the concomitant symptoms. In the erysipelatous or variolous rash, there is not so much fever, nor is the restlessness, or pain of the head or loins, so considerable, neither is there that general prostration of strength, which are almost never-failing attendants on a confluent Small-pox, especially when accompanied with such putrid appearances. Besides, upon a careful examination, there may sometimes be a few distinct pustules, larger than

the rest, mixed with the Rash, which are indeed the real Small-pox. After two or three days, the skin, from a florid, changes to a dusky colour, a few pustules remain, which advance properly to maturation, without any further trouble ensuing from this formidable appearance.”*

Inoculators, about the middle of the last century, being apprehensive of the retrocession or repulsion of the Roseola variolosa, confined persons affected with it to bed, and prescribed sudorific medicines. By this practice, the efflorescence was prolonged, but the succeeding eruption of small-pox is said to have been generally favourable.† Baron Dimsdale advises that “patients, during the efflorescence, should refrain from cold water, or any thing cold, and should keep within doors, but not go to bed.” “If any sickness yet remains,” he says, “a little white wine whey, or other cordial, should be given.” This rash, so far as I have observed, is not easily repelled either by drinking cold liquors, or by exposure to cold air. I have seen children, who were covered with it, taken out during severe weather, and kept in the open air for several hours, without the least detriment. At the Inoculation Hospital, persons affected with the Roseola variolosa walk about the garden daily, take purgatives, and are treated in every respect like the other patients. Out-patients, with the rash upon them, are likewise conveyed thither, on the days of attendance, in all seasons of the year, without inconvenience.

* Present Method of inoculating for the Small-pox, pages 44-5, fifth edition, 1769.

† Account of the Preparation and Management necessary to Inoculation; by James Burges, 1754, page 24. Compare Kirkpatrick’s Analysis, page 335.

In a child inoculated by Mr. Wachsel, the Variolous Fever, and the efflorescence, took place at the usual time, without any eruption of pustules. Mr. W. favoured me with the following particulars relative to this case: "The child was inoculated with small-pox matter, September second, 1805. On the eleventh, she was indisposed, and the inoculated part was surrounded with small confluent pustules. The rash appeared on the thirteenth of September, and gradually extended over the body. She was very feverish in the night of the thirteenth, and throughout the following day. The rash continued strong till the seventeenth; it declined on the eighteenth and nineteenth, and disappeared on the twentieth of September. This girl has not since taken the Small-pox." From these and other similar observations, we may infer, that in many of the instances, where persons have been supposed incapable of receiving the variolous infection,* the disease had actually taken place, though not in its usual form.

In the natural Small-pox, I have occasionally observed an appearance of the *Roscola variolosa* on the third or fourth day, with slight fever, and with a small and favourable eruption of pustules; but I am informed, by those who must have had better opportunities of observing than myself, that this appearance is much more rare in the natural than in the inoculated Small-pox. When an universal efflorescence of a dark red colour takes place, with a violent eruptive fever, immediately before the Variolous pustules,† we have reason to expect a

* See Woodville, on Inoculation.

† *Variolæ confluentes nunc Erysipelatis ritu, nunc Morbillorum, erumpunt, a quibus, non nisi a medico in his morbis versatissimo, distinguuntur, saltem quoad faciem externam.* Sydenham, page 99.

confluent eruption, and a fatal termination of the disease.*

The scattered efflorescence, which attends the eruption of the Small-pox, after inoculation, and which appears in some cases of the distinct natural Small-pox, has, by several medical authors and practitioners, been considered as a coincidence of the Measles and Small-pox, in which the latter overpowered the former. Thus Rhazes says, “*Aliquando apparent Variolæ similes Blactiis (morbillis) et aliquis medicus dixit quod Blactiæ vertuntur in*

Universa cutis. in instanti quasi, rubedine saturatâ et profundâ perfusa, erysipelatosi tumoris ad instar (maculis nigris hic illic interspersis) cum æquali superficie quadantenus crassescit; quam quidem erysipelatosam rubedinem cutis per triduum eruptionis integrum retinet. Morton, de Variolis, pages 169 and 451. Compare Burserius, Instit. Med. Pract. vol. ii. page 195.

“*In every bad kind of Small-pox, the eruption is ushered in by a Scarlet Rash, which appears first upon the face, neck, and breast; and sometimes spreads over the whole body. It is observed some part of the second day, and within twelve hours, sooner or later, the pimples rise from these inflamed parts of the skin.*” Dr. Robert Walker’s *Inquiry into the Small-pox, &c.* page 132. Edinb. 1790.

* *Efflorescentia confluens, et ubique rubedine saturatâ, more febris scarlatinæ vel erysipelatosæ, universam ferè cutim perfundens, cum petechiis intermixtis, mortem ultrâ secundum maturationis diem, nullâ medicorum arte posse protelari significat. Morton, page 186.*

Cas. 36. *Efflorescentia plana, continua, sublurida, die 2^{do}.*

Cas. 37. *Tota facies efflorescentiâ coccineâ æquali perfundebatur, die 2^{do}.*

Cas. 38. *Efflorescentia æqualis, continua, atque intensè rubra, sine pustulis notabilibus. die 3^{tio}.*

Cas. 39. *Animadverti universam cutem efflorescentiâ continuâ et planâ, intensè rubrâ, non scarlatinâ, verùm, quasi levi et plano erysipelate perfusam, maculis rubris minoribus, et nigris majoribus, per totum pectus sparsis, die 4^{to}. page 446, 451.*

Variolas.”* De Haen is nearly of the same opinion. “Quo tempore uterque hic morbus grassatur, fit ut alterum sive integrè sive ferè curatum alter sequatur, imò ut ambo simul eodem in subjecto efflorescant.” “Puerulus anni unius 22^o Maii 1748, Febre morbillosâ corripiebatur, et die 25^o Morbilli prodire, sed brevi adèò conferti ut nunquam magis. Verùm circà os, pustulæ minimæ, instar nascentium Variolarum, comparuere. Die 26^o inter densissimos Morbillos, toto corpore diffusos, duodecim Variolæ in facie, binæque utrâque in manu, prodire, foveam in medio habentes, albidiores, ac circulo rubro in ambitu ornatae.”†

6. ROSEOLA VACCINA. This efflorescence is sometimes diffuse, like the Variolous rash, but it appears generally in congeries of dots and small patches, a little elevated. It takes place in some children, especially in those who have a very irritable skin, on the ninth or tenth day of the Vaccination, about the same time that the red areola is formed round the Vesicle, at the place of inoculation: from thence it spreads irregularly over the whole surface of the body.‡ I do not remember to have seen this efflorescence continue vivid for more than forty-eight hours. It is usually attended with a very quick pulse, a white tongue, and great restlessness. Some inoculators attach little importance to it; others think it a favourable circumstance in Vaccination, as denoting that the skin and constitution have been fully affected. It is not nearly

* Continent. lib. xviii. cap. 8. Interprete Feragio.

† Theses sist. Febr. divisiones, page 107. Compare the observations, in his Ratio Medend. part ii. pages 115, 116, 117.

‡ See Dr. Pearson's Report on the Cow-pock Inoculation, in 1800-1-2, and Mr. G. Bell, on the Cow-pox, page 52.

so frequent as the the efflorescence after Variolous inoculation.*

7. The *ROSEOLA MILIARIS* is an efflorescence which often attends an eruption of miliary Vesicles, with fever. I shall have occasion to make some remarks on it hereafter, under the genus *Miliaria*.

In the Typhus, or Contagious malignant Fever, an efflorescence also takes place occasionally, resembling, in its distribution, a species of Roseola, but of a darker hue. I observed such a rash on the fifteenth day, in one case of fever, which terminated on the seventeenth day. In other cases, it precedes the formation of purple spots and vibices, and in others it is seen early in the disease, but remains only for a short time, without any material consequences.

† “The appearance you mention is extremely rare. My notes do not furnish me with an instance of it, nor do I recollect, in any case, more than one or two slight patches of redness, which very soon disappeared. However, I do not, in the country, usually see the children vaccinated after the eighth day.”

* * * On printing off the first sheets of the third Order, I announced a new generic distinction, termed *IRIS*, having seen, in a few cases, what appeared to be efflorescences, consisting each of four concentric rings, of different colours, with a yellowish central speck. From similar cases, lately presented to my observation by Doctor Cholmely, and other medical practitioners, I have ascertained that the central speck is a Vesicle, and that one of the rings is Vesicular; I must, therefore, according to my own arrangement, transfer this singular affection to the genus *HERPES*.

ORDER III...V. PURPURA.

THE title Purpura, or Efflorescentia purpurata, has been applied to papulous eruptions on the skin, to different forms of Rashes,* and to the purple eruption which often occurs in malignant Fevers.† Riverius is, I believe, the first author, who makes a distinction between Purpura and petechial Fevers: he observes, Nullum dari signum harum febrium verè pathognomonicum, nedum bubonem, aut carbunculum, in verè pestilenti, neque maculas purpureas in Febre malignâ, quamvis illa a pluribus medicis purpurata nominetur; cum in multis eâ laborantibus nusquam compareant; et interdum erumpere soleant in mulieribus mensium suppressionem patientibus, et in nonnullis pueris ob levem quandam sanguinis ebullitionem nullâ tamen apparente febre; quod nobis in utrisque non rarò videre licuit.‡

* To the Red-gum, by Etmuller:

To the Scarlatina, by Schultzius and Juncker; and in the *Ephemeres Act. Nat. Cur.* &c.

To the Measles, by Hafenreffer, ii. 4. and Morton, *Pyretolog. Appendix*:

To the Miliaria, Lichen, and Nettle-rash, by Juncker, Hoffman, &c. and in *Act. Nat. Cur.*

† Sennertus, lib. v. Porchon, *Traité du Pourpre*, a Paris, 1688. *Sauvages, Nos. Med.* &c.

‡ *Prax. Med.* xvii. i. Compare Foresti, lib. vi. *Obs.* 59, 60.

With Riverius and some other authors, I propose to express by the term *PURPURA* an efflorescence, consisting of small, distinct, purple specks and patches, attended with general debility, but not always with fever. Three striking varieties of the complaint thus defined may be denominated, *Purpura simplex*, *Purpura hæmorrhagica*, and *Purpura urticans*, no one of which is contagious.

1. The *PURPURA SIMPLEX* is characterised by an appearance, of petechiæ, without much disorder of the constitution. The petechiæ are diffused chiefly over the arms, legs, breast, and abdomen. They are largest on the legs, though seldom confluent. Flea-bites may be distinguished from petechiæ, by the dark central speck which the insect makes with its proboscis. In some cases, a general red efflorescence takes place, for a day or two, before the appearance of petechiæ.

The *Purpura simplex* is attended with paleness, languor, debility, and pain in the limbs. It chiefly affects women, and children, especially those who are much confined, and whose food is not sufficiently nutritious. A cure is soon accomplished, in such cases, by proper diet and regular exercise.

1. The *PURPURA HÆMORRHAGICA* is attended with hæmorrhage, anasarcaous swellings, and vibices. Some weeks before this disease is fully formed, patients are affected with lassitude, faintness, and pains in the limbs, which render them unfit either for business or society. In some cases, the eruption is more immediately preceded by shiverings, nausea, vomiting, and acute pain. The petechiæ, or purple spots, appear first on the legs, and, at uncertain periods afterwards, on the thighs, arms, and trunk of the body, the hands and face being generally free from them. They are, however, numerous on the tonsils, uvula,

palate, gums, tongue, and inside of the cheeks and lips. In these situations, they are sometimes raised or papulated, and discharge blood on the slightest pressure. The colour of those on the surface of the body is at first a bright red, but it soon becomes purple or livid. The cuticle over them appears smooth and shining, but is not sensibly elevated. Though of very different sizes, they have all nearly a circular form. Sometimes they are few and distinct, sometimes numerous and coherent; they are sometimes distributed uniformly over the surface of the body, and sometimes in irregular clusters. Many of the patches disappear in a week or two, while fresh ones arise in other places. They are largest and most vivid, in the evening or night: during the day they are smaller, and of a yellowish hue. In the greater number of cases, they are interspersed with vibices or livid patches resembling the effects of a violent bruise.*

The hæmorrhage which attends this complaint is at first profuse, and cannot be easily restrained: in some cases, it returns every day, at a stated hour. It takes place from the nostrils, fauces, gums, insides of the lips and cheeks, or from the tongue, often from the lungs, stomach, or intestines, or from the uterus, even in women of an advanced age. The hæmorrhage sometimes begins a few days before the eruption, sometimes after it, and sometimes on the same day with the eruption. After a week or two, the hæmorrhage becomes less violent, and does not return so frequently. When the discharge of blood is from the gums and mouth, the purple spots on the surface are very numerous, and of a smaller size than

* Blood is extravasated under the cuticle, and the vessels on the surface become so tender, that the slightest scratch, or bruise, or even pressure, produces a rupture of them." Dr. Duncan's *Annals of Medicine*, for 1799, page 235.

usual ; under these circumstances, the fauces, gums, and tongue, sometimes appear livid and tumefied.

This complaint is attended with extreme debility, and depression of spirits : the pulse is generally weak and frequent. Febrile paroxysms, like those of a hectic or remittent fever, occur at intervals. A woman, aged fifty-seven, had, every evening, from six to ten o'clock, repeated shiverings, with pain and coldness of the lower extremities, which symptoms were succeeded by heat, and a moderate degree of perspiration. This patient was affected with the shivering fits, with purple eruptions over the body, and with frequent menorrhagia, for upwards of nine months. In other cases, heat of the skin, and acute pains in the limbs, are felt every night, without the shiverings. When the disease has continued for some time, anasarca swellings take place first in the ankles, and afterwards in the thighs, body, arms, cheeks, and eyelids. There is usually at the same time great coldness of the lower extremities, with sallowness of the complexion, and general emaciation.

The Purpura hæmorrhagica has not any regular, or stated termination. It was protracted, in the cases under my own observation, from fourteen days, to twelve months and upwards. The disease did not, in any of those cases, prove fatal. We are, however, informed by respectable authors, that the hæmorrhage has, on some occasions, been so violent as to produce sudden death.*

Of seventeen patients, whom I have seen affected with this disease, two only were men ; nine were women, three boys, and three infants, not more than a year old. Four of the women were beyond the age of fifty. I will here

* Lister Exercit. Med. de Scorbuto. Act. Nat. Cur. &c.

describe the progress of one case, which exhibited some striking appearances. A lady, aged thirty-six, of the sanguine temperament, after experiencing for several days a painful inflation of the stomach, was seized, on the seventeenth of June 1792, with violent vomiting, which continued almost incessantly through the eighteenth and nineteenth, and was accompanied with excruciating pains in the bowels. The fluid discharged was clear, and strongly tinged with green bile, the quantity of it being not less than three or four quarts every day. On the twentieth, the vomiting abated, and she had several loose stools, of a green colour, and mixed with black coagulated blood. The diarrhœa continued in this form until the twenty-fifth, producing great languor, and faintness. During that time, the pulse was remarkably slow, and the skin cool; the urine was of a straw colour, and deposited a white mucous sediment; the tongue was moist, but covered with a yellowish fur; she was always very thirsty, and restless. On the evening of the twenty fifth, her extremities became suddenly cold, her pulse was scarcely discernible, a cold sweat trickled down in streams from every part of the body, her voice was indistinct, and her breathing very laborious. From this alarming state she recovered in the course of the night, and on the following day a rash appeared over the whole body, in small red circular patches, confluent on the neck, shoulders, and nates, but in other places distinct. On the twenty-seventh and twenty-eighth, the eruption was less extensive, but of a livid colour: her hands swelled, and she was faint and languid, but free from internal pain. The discharge of blood ceased at this time. On the twenty-ninth and thirtieth she was in better spirits, but complained much of pains in the limbs, particularly near the knee joints. July first and second, she was sick, weary, and

restless, but had not any disorder of the bowels: her tongue was brownish and clammy, and she felt considerable pain in the wrists. The rash began to fade on the following day. On the fourth she was easy, and able to sit up in bed. Slight vestiges of the livid spots remained on her arms only. Two spots on the back of the left hand terminated with gangrenous sloughs. The complaint was succeeded by large anasarcaous swellings of the legs, thighs, and hands, which were not reduced till the latter end of August, and during that time she continued in a weak irritable state.*

The Purpura hæmorrhagica, occurs at every period of life, and chiefly affects persons of a weak and delicate habit. Women and boys appear to be most liable to it: in the latter, the hæmorrhage usually takes place from the nose.

A sedentary mode of life, poor diet, impure air, and anxiety of mind, are the usual exciting causes of this disease. Several of the female patients above-mentioned were confined to laborious work, in close situations. One patient, aged forty-six, who, with the purple eruption, had weekly returns of menorrhagia, was the principal teacher in a crowded school. A young woman aged nineteen, and a boy about twelve years old, whose gums and tonsils were livid, spongy and tender, and whose skin exhibited numerous petechiæ intermixed with vibices, had lived for a number of years almost constantly on tea, and coarse bread. An infant at the breast, aged six months,

* This case exemplifies a well known aphorism, quoted by Celsus from the Greek physicians; *Quibus magni lienes sunt, his gingivæ malæ sunt, et os olet, aut sanguis aliquâ parte prorumpit; quorum si nihil evenit, necesse est in cruribus mala ulcera, et ex his nigra cicatrices fiant.* Lib. ii. 7. Compare Hippocr. de intern. affect. sec. 34. Paul. Ægin. iii. 49.

was similarly affected, the mother not being able to procure sufficient nourishment. One of the men, mentioned page 345, referred his complaint to excessive fatigue in sultry weather, and to the want of proper food. In the other, the hæmorrhage was brought on by taking large quantities of ardent spirits undiluted. Some singular circumstances, which occurred in this case, I have elsewhere stated.*

In the treatment of this disease, we should recommend moderate exercise in the open air, a generous diet, and the free use of wine, Peruvian bark, Vitriolic acid, &c. Without air, exercise, and an easy state of mind, the effect of medicines is very uncertain. Of this I had a sufficient proof in the case of M. C. whose sufferings were of long duration. While confined to a close apartment in White-friars, she took for two or three months Peruvian Bark in considerable quantities, the Vitriolic and marine acid, and wine, without much advantage. The periodical shiverings, and the hæmorrhage, were afterwards stopped by the Angustura Bark; but the purple spots continued till after she had been some time in the country.

2. PURPURA URTICANS. This form of the Purpura begins with hard, reddish, and rounded elevations of the cuticle. These small tumours gradually dilate, but within twenty-four hours they subside to the level of the surrounding cuticle. They are then succeeded by livid spots of the same extent.† During the night, the spots are somewhat elevated, and exhibit a little redness intermixed with the livid colour;‡ towards morning, they

* See Reports on Diseases, page 167.

† Hoffman, Consult. et Respons. page 316, &c. &c.

‡ See the case of a nun, in Johan. Udalric. Rumleri Obs. Med. 45, ann. 1580. Monialis, nullâ prægressâ, febre, nec artuum im-

constantly resume their former state, being dark-coloured, and without elevation. The patches are not permanent, but succeed each other in different places, chiefly on the legs, but sometimes on the thighs, arms, breast, &c. On the legs and arms, they are frequently intermixed with petechiæ. The duration of this complaint is from three to five weeks, in the course of which time, the hands and ankles are affected with œdematous swellings. The most distressing symptoms are, a sensation of great languor and debility, and a loss of appetite. I have not, in any case, observed hæmorrhage or fever.

The *Purpura urticans* generally appears in summer and autumn, affecting, 1. Those who are exposed to daily fatigue from hard labour, and who subsist on a meagre diet. 2. Delicate young women, who live luxuriously, but use very little exercise. In the latter, before any livid spots appear, and before the anasarca is perceptible, the legs are sometimes hard, and enlarged, so that their stiffness or weight impedes the freedom of motion, and very soon occasions fatigue.

This complaint is removed by the exhibition of Peruvian bark, mineral acid, or muriated tincture of iron, with the assistance of gentle exercise in the open air.

The *Purpura* was noticed by Amatus Lusitanus, about the year 1550, under the denomination of *Morbus Pulicaris sine febre*. *Curat. Med.* 70. *Cent.* iii. “*Puer ad me delatus absque febre, totus maculis quibusdam, pulicis puncturis similibus, scatebat, et ipsis quidem nigerimis, ut mirari satis sit talem morbum absque febre, vel animi anxietate, aut pueri ipsius detrimento, ad cutem*

becillitate, subito exanthematibus correpta est . . . quæ non, ut in aliis, tota rubentia conspiciantur, sed nigredine quâdam quodammodo virescebant.

prorupisse....Cæterùm duobus interpositis diebus, puer hic sanguinem multum, nigrum fæculentum, malè olentem, egressit, et sanus ac liber evasit."

Eugalenus is perhaps the first writer, who has given a clear description of this disease. Under the general title, *Scurvy*, he furnishes three or four distinct cases, wherein the purple eruption was connected with a hæmorrhage, from the gums, from the lungs, or from the bowels. See *Obs.* 2, 33, 59, 62, 68, 69, 72. He refers the complaint to a putrid diathesis, produced by gross food, salt or stagnant water, and a moist cold atmosphere.

Riverius, in addition to the observations formerly quoted, describes the appearance of purple spots, combined with an hæmorrhage from different parts of the body: *Apparent aliquandò in aliis affectibus, citrà febrem pestilentem, maculæ quædam petechiis consimiles, sed a diversissimâ causâ prodeuntes. Illæ potissimùm solent contingere in iis, qui sanguinis fluxum patiuntur, ex eo quod ille factus tenuior et aquosior....tum etiâm in lienosis, ictericis, iisque omnibus qui, propter viscerum debilitatem, sanguinem generant aquosum, et in cachexiam proclives sunt. In his enim, sanguis tenuior factus, modò per nares, modò per aliam partem effluit, modò etiam a capillaribus exiens venis in partes cutaneas transmittitur, ubi retentum proprium amittit colorem, et vel lividus vel niger, vel puniceus efficitur, variasque macularum differentias profert, quæ tamen a maculis febrium pestilentium diversissimæ sunt, et nihil aliud quàm sanguinis tenuitatem aquosam, atque imbecillitatem jecoris præ se ferunt.**

* *Prax. Med. lib. xvii. cap. 1. de Febre pestilenti.* See also cases by *River. Cent. ii. Obs. 18.* and *Cent. i. Obs. 21.* Compare *Diemerbroeck de peste, l. iv. Ægr. 41.* *Hoffmann Suppl. par. ii. page 493,* *de Purpurâ Scorbuticâ, &c.* *Cusson de Purpurâ, Sauvages de Phænigmo, et Burserii Instit. Med. ii. cap. 10.*

Dr. Lister, *Exercitat. Med. de Scorbuto*, 1680, affords several cases analogous to those above quoted: the first, fifth, sixth, seventh, eighth, ninth, tenth, eleventh, and twelfth, exactly coincide with my own observations on the *Purpura hæmorrhagica*. The disease proved mortal in four of these cases, though in some of them no alarming symptoms had occurred. *Ægrot.* 7, 9. *Juvenis quidam, exeunte Decembri, subitò et sine aliquâ causâ manifestâ, narium hæmorrhagiâ correptus est: id malum aliquot dies, per intervalla, duravit; mox totum corpus maculis ferè ex nigro-purpureis eleganter depictum est; etiam earum aliquot ex internâ laborum parte observavi: Huic tamen nec febricula, nec pulsus justo debiliior; urina qualis sanorum, nec ullum grave aliàs symptoma. At funesta illa pictura fuit.**

The remedies on which Dr. Lister depended for the cure of this disease were, scurvy-grass, cresses, vegetable acids, and, occasionally, blood-letting. Experience, however, soon taught him that bleeding, and likewise purging, were highly detrimental. He mentions the state of the blood drawn in one case: *Is refrigeratus cute crassâ ex fusco flavescente obductus est.*

In the *Ephemerides* and *Acta Naturæ Curiosorum* many cases of the *Purpura hæmorrhagica* are recited, which deserve attention. See *Tom* i. obs. 35 and 79. *Tom.* iii. 79. *Tom.* iv. page 468. *Tom.* V. obs. 30. *Tom.* vii. obs. 110 and 131. In *Tom.* ix. obs. 21, is a complete history of the disease under the title of *Petechiæ mendaces*.

† Page 96-7. Horstius states *Obs.* 17. *lib.* v. that this disease terminated fatally in a pregnant woman, by a hæmorrhage from the gums. Hot-baths and sudorific medicines were employed in the case, but they produced, he says, a bloody sweat (*sudorem sanguineum*.)

Cases of the Purpura seem to have been studiously multiplied in periodical publications, and in medical or chirurgical miscellanies.* I consider it, under all the forms described, as pertaining to the Scurvy, though it is not always attended with sponginess of the gums, and a discharge of blood from them, according to the definition of Scorbutus in Nosology.† Whether my readers agree with me in this opinion or not, they will, I think, allow that a general view of the symptoms and causes of either the Sea-Scurvy, or Land-Scurvy, cannot properly form a part of the present work.

* Hist. Morbor. Vratislaviens. Ann. 1702. Philosophical Transactions, vol. liii. Casp. Pezoldus. Obs. ch. select 6. Werlhoff, de Variol. et Anthrac. cap. iii. sec. 15, and in Commerc. literar. Norimberg. Bøehrens de Affect. a Mitylis, 1735. Hebd. 2 & 7. Act. Helvet. vol. v. 1762. Strack, Obs. Med. de Morbo cum petechiis, Carolsruhæ, 1767. I. A. P. Gesner, Obs. Med. Phys. tom. iii. page 205. Nordlingæ, 1771. C. J. Damilan. Sopra le Malatt. delle Migliari in Piemonte, &c. 1774. Graff?. Dissert. Inaug. de Petechiis sine febre, Gottingæ, 1775. Act. Hafnensia, vol. ii. Profr. Duncan's Medical Commentaries for 1774, and Medical Cases, 1778. Vechner, Petechiarum benignissimæ indolis singulare exemplum, Trajecti ad Viadrum, 1780. J. H. Schlichthorst. Dissert. de Petech. Gottingæ, 1783. Adair Dissert. Inaug. de Hæmorrhæa petechiali, Edinburgh, 1789. Medical Facts, vol. ii. Memoirs of the Medical Society of London, vol. iii. page 393. Annals of Medicine, vol. ii. page 231, &c. &c.

† See Sauvages, Nosol. Method. Sa.

Dr. Sydenham's account of the Scurvy does not materially differ from that of the purpura, above given.

Dr. Camerarius, de Scorbuto endemio Hornbergæ (Act. N. Cur. tom. ii. 153.) observes; Scorbuti hujus, neque enim eadem est semper, ac ubique, morbi funesti facies, hæc sunt symptomata; lassitudo ingens, vertigo, cephalalgia, frequentes parulides, cruentatio, atque ulceratio gingivarum, sicca scabies, maculæ modò lividæ, modò rubræ, lancinantes artuum dolores, in morbi cumprimis exordio. Compare Willis, de Scorbuto, cap. iii.

4. *PURPURA CONTAGIOSA*. I apply this title to an eruption of petechiæ frequently seen in the Typhus, or malignant Fever, occurring in crowded ships, prisons, and other very close situations.

When malignant Fevers are epidemic in London and its vicinity, the proportion of cases, in which Petechiæ appear, is not * considerable. A full eruption of them is, according to medical writers, generally accompanied with hæmorrhage, and vibices; † but none of the cases admitted into the Fever-House, during the last three years, have exhibited these appearances, either combined, or in succession. The patients, however, are usually covered with flea-bites, and it is not always easy to distinguish these from Petechiæ, since, in consequence of the extensive and almost constant irritation on the skin, the dark specks remain for some time after the central punctures have been healed.

Formerly, the Typhus, with Petechiæ, &c. often occurred in our prisons, and proved fatal to those who were under confinement in close cells, or who lodged in crowded apartments. Mr. Box, Surgeon of Newgate, informs me, that the Fever has

* Reports on Diseases, &c. page 162, 232, &c. Hoffmann, in his *Historia Febris malignæ petechizantis Halæ grassantis*, observes, *Quidam exanthematis et Petechiis planè carebant, quorundam autem corpora ipsis erant refertissima, &c.* Supp. ii. P. ii. page 56. Compare Foresti, Op. page 190. De Haen, Theses, and ch. p. 27.

† “The large black or livid spots, in Fevers, are almost always attended with profuse hæmorrhages. The small dusky brown spots, like freckles, are not much less dangerous, though fluxes of blood do but seldom attend them.” Huxham, page 42.

Si cum iis vibices nigricantes, aut liventes concurrunt, exitium significant Nec absunt a peticulis hæmorrhagiæ narium, uteri, ani, interdum etiam oculorum, quibus natura nititur morbum depellere. Burserii Inst. Med. vol. ii. page 367, 378, &c.

been rendered less frequent there, and less virulent, by removing the persons first affected into airy rooms or wards, and by a general attention to ventilation, cleanliness, &c. so that, at present, Petechiæ do not appear in more than one case in thirty.*

Fracastorius would persuade us that he was the first observer, in Italy, of the Petechial Fever,† but it was known in that country there, a hundred years before his time, to Ingrassia.‡ Petechiæ and Vibices were

* “Of three hundred and seventy-nine patients admitted into the London House of Recovery, nine only, or about one in forty-two, were affected with Petechiæ. In all but one, the Petechiæ had appeared before admission. In the case excepted, an eruption, at first papular, terminated in purple spots not elevated. All the patients on whom petechiæ were observed, with the exception of one woman, recovered: this woman died on the fourth day of the disease. On the preceding evening, large vibices appeared over the whole surface of the body; and after her death the skin became universally livid.” Dr. T. Bateman.

† *Hæ Febres mediæ quodammodò sunt inter verè pestilentes et non pestilentes, quoniam ab iis multi quidem pereunt, multi etiam evadunt. Contagiosæ autem sunt, et idcirco naturam pestilentum sapiunt. Appellari autem solent malignæ magis quam pestilentes, quales illæ fuere quæ annis 1506 et 1508, in Italiâ, primùm apparuere ætate nostrâ, non priùs notæ, certis vero regionibus familiares, ut Cypro et vicinis insulis, majoribus etiam nostris cognitæ. Vulgus lenticulas aut punctulas appellat, quod maculas proferant lenticulis aut puncturis pulicum similes: quidam mutatis literis peti-culas dicunt. De morb. Contag. lib. ii. Compare Foresti de Febribus, lib. vi. obs. 35. Sennert. de Feb. iv. 13. Hoffm. tom. ii. page 75. Pringle on Diseases of the Army, page 301-3.*

I have only mentioned the Petechial Fever incidentally; a full and satisfactory account of it is given in De Haen's *Ratio Medendi*, and *Theses de Feb. divisionib.* page 27, and in *Burserii Inst. Med. Pract.* vol. ii. cap. 10.

‡ *Neapoli, rubras, et lenticulares quasdam, sine tumore, maculas, quæ in pestiferis et malignis febribus repentè nonnunquam per uni-*

observed even by Hippocrates, in the Fevers of Thrace and Thessaly; See Epid. Lib. vii: they are also mentioned by Galen * and Aëtius.† The latter says, “At an early period of Fevers, which are not simple, but originate from a depraved state of the humours, livid spots, (*μολωπεις*) resembling gnat-bites, appear over the whole body, whereas in malignant and pestilential fevers there are Phlyctænæ, some of which assume the form of carbuncles.”

Purple spots occasionally appear in the Small-pox, Measles, Scarlatina maligna, &c. and are often accompanied with an hæmorrhage. Their appearance has also been remarked, by various authors, in Agues, Remittent Fevers, Paralysis, Dropsy, and Atrophia.‡ In the last stage of Pulmonary Consumption, they occur as the immediate forerunners of death. Tulpius, in a singular case, describes a temporary purple eruption, which succeeded violent fits of coughing, and which seems referable to some disease of the heart or lungs.§

versum corpus dispersæ apparere solent, pesticias vocant, De Tum. præt. nat. Tr. i. cap. 1. page 195.

* De Atrâ Bile, cap. 12.

† Tetr. ii. Serm. 1. cap. 129.

‡ See Sauvages de Variolâ, Tertianâ, Hydrope, Atrophiâ. Mead de Variolis et Morbillis. Eugalen. Willis, and Lister, de Scorbuto. Wedel de Febre pestilenti, &c. &c.

§ Filius Senatoris, Henrici Hudde, tussit aliquando tam vehementer, ut retracto spiritu, et excluso aere, incideret in præsentissimum suffocationis periculum, dispersis jam tum per habitum corporis lividis quibusdam maculis, simillimis exanthemati pestilentiali. Sed momentanea ipsarum eruptio, utique præcedens tussis, docuere satis luculenter, colorem illum provenisse, non tam a contagio, quam ab imminente spiritûs vitalis extinctione, quo intereunte, mirum non est perire utique partibus vividum colorem, et illi e vestigio succedere luridum, ac emortuum livorem. Obs. Med. lib. i. cap. 55.

ORDER III...IV. ERYTHEMA.

THE ERYTHEMA is a nearly continuous redness of some portion of the skin, attended with disorder of the constitution, but not contagious. This appearance, though in general symptomatic, merits our attention, as it should be carefully distinguished from other eruptions, particularly from the contagious Exanthemata. Sauvages and Plenck have included under the generic title Erythema, the effects produced on the skin by burns, scalds, slight wounds, and punctures, by the irritation of certain vegetable substances, and by the stings or bites of insects and serpents. In conformity to the definition above given, I propose to take a more limited view of the subject, under the subdivisions, Erythema fugax, Erythema læve, Erythema marginatum, Erythema papulatum, Erythema tuberculatum, and Erythema nodosum.

1. The ERYTHEMA FUGAX is characterised by red patches, of an irregular form, and of short duration. These patches appear successively, but with different intervals, on the face, neck, breast, arms, &c. in some cases of bilious diarrhœa, and of the Synochus or Summer Fever.* I have also seen them in slow Fevers, usually

* Reports on Diseases in London, page 25-8, and 283.

termed Nervous Fevers, in the Typhus, and in Puerperal* Fevers. They generally denote that the disease, to which they are annexed, will be tedious and dangerous. The Erythema fugax is likewise an occasional symptom

* “ In dangerous cases of the Puerperal Fever, I have observed broad, red patches, on the arms, legs, and neck. They appear at first like a mere redness from pressure, especially as they often begin about the elbows. Distinct livid spots appeared in the middle of these patches, in the following case:”

“ Mrs. A. of Great New-street, after a severe but natural labour, was delivered on the tenth of December, 1798, the Puerperal Fever not being at that time epidemical. On the thirteenth, she took some opening medicine, which operated well, but, both before and after the operation, she complained of violent pain in the region of the uterus. From this time, she was affected with fever. I did not see her till the sixteenth, when she had considerable pain in the abdomen, without general tension; a defined hard tumour was however to be felt, as from the half contracted uterus: she appeared comatose, being with some difficulty roused to give any account of her feelings; her skin was hot; pulse one hundred and twenty, regular, and tolerably firm; tongue furred, brown in the middle, and deep red on the sides; her hands appeared to me to be swollen, and covered with a minute rash, hardly appearing through the skin, but this the nurse attributed to her having just before washed with warm water. She was very delirious during the night; the stools and urine were discharged involuntarily. On the seventeenth, several red patches appeared, especially from below the elbows, over the arms; no elevation of the skin was perceptible by the touch; but to the eye, when closely inspected, the patches seemed to consist of a minute rash, somewhat elevated. In the midst of these patches, there were several livid spots, some of them nearly the size of a six-penny piece. There was the same appearance round the ankles, extending up to the calves of the legs. The nurse had observed similar patches over the abdomen in the preceding night. Her breathing was, on the seventeenth, laborious, her tongue extremely brown and cracked, pulse indistinct; she talked incoherently, but answered the questions put to her when roused. She died before the morning.” Dr. John Sims.

in chronic complaints, particularly in Hysteria,* Dyspepsia, Hemicrania, and Gravel. It sometimes appears to be a consequence of irritation in the urinary bladder, and urethra.

Hippocrates† mentions patches of redness (*ερυθημαλα*) about the nostrils, on the cheeks, the edge of the jaw, and on the neck, as occurring in Fevers, Diarrhœa, Hæmorrhage, and Sore throat; he observes, that, in acute diseases, Erythemata on the hands and feet denote the approach of death, and that broad patches of redness (*ερυθημαλα ιποπλαλαια*) on the chest, have the same import in Peripneumony.

3. In the ERYTHEMA LÆVE, the surface is uniformly smooth, and shining: it chiefly appears on the lower extremities, at first, with red patches, which are distinct, and of different forms, some being angulated, others round, and varying in size from that of a shilling to that of a crown-piece. In a few days they become confluent, or have but small interstices: at the same time, the limbs are generally affected with considerable anasaruous swellings. This complaint occurs, often with a slight fever, in young persons, who have applied too closely either to study or business. The duration of it is uncertain: in some cases, the redness continues for several weeks. It disappears gradually, and terminates in extensive desquamation, as soon as the anasaruous swelling

* Sauvages misquotes the following account of Erythema or Flamma volans: Est accidens fugax, Hysteriæ et Menostasiæ non rarò comes; subitus sc. color et rubor, ut in verecundiâ, identidem a pectore ad faciem assurgit, citò transiturus, quandoque levem sudorem et vertiginem excitant.

† Epidem lib. i. 89, 14, Coac. Prænot. 215, 231. ditto, page 126, 138, and 185. Ed. Fœs.

has been reduced by proper exercise, diuretics, and corroborant medicines.

Persons of an advanced age, labouring under anasarca from debility or long-continued illness, often produce, by fatigue and exertion, an increased swelling of the legs or ankles, with a sudden and extensive appearance of the Erythema læve. The pain, tension, and stiffness, which attend it, may be removed in a short time by a horizontal position, and by the exhibition of Peruvian bark, diuretics, &c. Under this mode of treatment, the redness in two or three days changes to a darker hue, and then gradually disappears. Those who, by excess in drinking spirituous liquors, have brought on considerable œdematous swellings, and stiffness, of the lower extremities, are sometimes affected with a general redness of the surface of those parts, which continues for many days, but at length changes to a purple or livid hue: this appearance is usually succeeded by gangrenous ulcers, in persons whose intemperance cannot be restrained.

The Erythema læve occurs, in some cases, without dropsical swellings, or any pressure on the cutaneous veins, especially after violent pains in the stomach, attended with bilious vomiting and diarrhœa. These internal disorders cease or abate considerably, as soon as the redness appears; which is chequered by interstices, and extends round the ankle, with much pain and tension. I have observed a similar redness on the ankle and instep, in some delicate females, on almost every return of the Catamenia.

3. In the ERYTHEMA MARGINATUM, the patches are bounded, on one side, by a hard, elevated, red, border. This border, which gradually elongates, does not form circles, but appears tortuous: it is slightly furrowed, and, in some places, papulated. The convolu-

tions of it are large, and the redness or efflorescence takes place within the sinuses, but has not a regular boundary on the open sides. These patches are situated on the outside of the arms, legs, and thighs, and on the loins; they do not appear and disappear successively, like the longitudinal wheals and redness in the Urticaria, I have seen them continue, in different cases, from three to six weeks: for several days before it disappears, the redness changes to somewhat of a livid colour, and the margins subside slowly, without desquamation.

The Erythema marginatum does not seem to produce pain, or irritation in the skin: it is, however, usually connected with some internal disease, and, from the event of the cases which have been presented to me, I think it an unfavourable appearance. I have observed it only in persons at an advanced period of life. A woman, aged sixty, after having been affected for several weeks, with a severe cough, difficulty of breathing, pains or stitches in the side, &c. was at first relieved by the appearance of the patches on her arms and thighs, but when they declined, about a month afterwards, the cough, pain, and dyspnœa returned, with fever, loss of sleep, and emaciation, and soon terminated her life.

4. In the ERYTHEMA PAPULATUM, the surface, as far as the redness extends, is at first rough or papulated. The eruption is diffuse, and without any regular boundary. On the second or third day, when the colour becomes vivid, the Papulæ disappear, but the skin continues red, and furrowed, for ten days or a fortnight. As the efflorescence declines, it assumes a bluish or livid hue, and soon after terminates by desquamation. In one case, the redness was succeeded by a slight effusion of lymph, which occasioned a yellowish appearance of

the surface. No vesications were, however, formed, the cuticle separating gradually without any discharge of fluid. This eruption appears chiefly on the upper part of the breast, on the neck, and on the fore-arms. It differs from the *Lichen agrius* in the following particulars: 1. The *Papulæ* are obscure, and presently subside. 2. The redness continues undiminished long after the disappearance of the *Papulæ*. 3. There is less disorder of the constitution, and a less painful sensation in the skin. 4. The *Erythema papulatum* does not terminate by fissures, excoriations, or a leprous state of the skin.

I have observed the *Erythema papulatum* in labourers of both sexes, whose arms had been carelessly exposed to sudden alternations of heat and cold. Intemperance in drinking spirituous liquors, or spirits combined with strong malt-liquor, may also be considered as an occasional cause of this disease. It is generally relieved by washing with tepid water, or thin gruel, by light coverings, by a temperate regimen, and by the vitriolic or muriatic acid, taken internally.

In an appearance which occurred in a Syphilitic case, attended with ulceration in the throat, the *Papulæ* remained, after the *Erythema* had disappeared, till they desquamated under a mercurial course. Hence the redness, accompanying the first eruption of them, was perhaps analogous to the efflorescence in Venereal cases.

We may rank under the present article that species of *Intertrigo*, which is produced, in some persons, by the attrition of contiguous surfaces,* as beneath the breasts,

* Ancient medical writers have chiefly noticed the galling and inflammation produced by narrow shoes, sandals, &c. or by riding on horseback. Παράρισμαλα, Αποτριμμαλα, Oribas. Synops. l. vii. cap.

round the axillæ, in the groin, and at the upper part of the thighs, and is attended with a glairy and fetid secretion. The Intertrigo is most troublesome when it affects the thighs: it commences where they are in contact with the scrotum, and extends upwards to the groin and nates, round the scrotum, and downwards to the hollow of the thigh. In places where the friction is strongest, the redness is continuous, but it terminates at the edges in a mixed colour, such as characterizes efflorescences generally. This complaint is most frequent in very warm weather, and affects persons of the sanguine temperament, especially those who are corpulent.* It sometimes terminates in the Prurigo or Proriasis scrotalis. An appearance, analogous to the Intertrigo, is produced by acrimonious discharges in persons labouring under Dysentery, Gonorrhœa, &c. in females affected with Fluor albus, or Uterine scirrhus, and in infants.

Frequent ablution, with tepid water, is necessary to allay the heat, and uneasiness, which attend this complaint, to remove the viscid secretion upon the surface,

5. Aetii Tetrab. iv. s. 11. Cap. 67. and Tetrab. i. s. 1. de Lycio. Paul. Ægin. De Re Med. lib. iv. cap. xiv. Compare Scribon. Larg. cap. 88. de Liparâ ad Intertrigines et exasperationem, and Marcellus de Med. cap. 32-3. Intertrigines, Exulceratio Intertriginum, Porrigo Intertriginum, C. Plin. Nat. Hist. lib. xx. cap. 14. xxi. c. 18. xxiv. c. 8. &c. Intertrigo et alarum vitia, attrita corporis, &c.

* Intertrigo, seu pustulæ genitalium *ιδρωα* Hippocrati dictæ, oriuntur ab earum partium sudore bilioso, mordaci, ex incessu frequentiore, æstatis tempore, orto, qui perfacilè iis in partibus putrescens, pruriginem movet, cutemque veluti ulceribus exasperat, accedente attritu, qui ex eodem incessu fit. Plater. De Superf. Corp. dol. Causis, page 702.

and to prevent excoriation.* When the skin is fretted by the discharge of a thin acrimonious fluid, some relief is obtained by the application of dry absorbent powders: in case of abrasion and fissures, the *Unguentum foliorum sambuci* may be applied with much advantage.

A species of *Intertrigo* takes place occasionally, at an advanced period of the *Lues venerea*, on the upper and inner part of the thighs, on the scrotum, and between the nates. It is attended with heat, pain, itching, and an acrimonious viscid discharge, which partially excoriates, but which at length forms a smooth whitish incrustation, over all the affected surface. I have thought this appearance referable, in some instances, to the use of mercury. If such an opinion was wrong, I am at least correct in observing, that the *Venereal Intertrigo* is not always removed by the mercurial course, while it is generally relieved by preventing, as much as possible, the attrition of the surfaces, by repeatedly washing with warm water, or with soap and water, and by the application of mild restringent ointments to the parts excoriated.

5. The *ERYTHEMA TUBERCULATUM* exhibits irregular patches of red efflorescence, diffused, at first, round tumours slightly elevated. The small tumours are not so hard as *Tubercles*, they are not attended with pain or uneasiness, nor do they seem disposed to suppurate. They subside in seven or eight days, but the patches of *Erythema* continue a week longer, then turn livid, and gradually disappear. This eruption ex-

* *Hafsnreffer* (l. i. cap. 18.) *Plater*. (p. 678.) and *Plenck* (p. 103.) after some of the ancients, rank *Intertrigo* with *Excoriation*, or superficial *Ulceration*. I have often before noticed the impropriety of characterising a disease from incidental circumstances.

tends over the arms, neck, shoulders, thighs, and legs. It commences with fever, sometimes in paroxysms as severe as those of a quotidian ague. In the intervals of the paroxysms, the patient is affected with great languor and faintness. During the second week of the eruption, the fever gives place to a state of weakness, morbid irritability, and restlessness, which is sometimes succeeded by hectic symptoms.

6. In the *ERYTHEMA NODOSUM*, many of the red patches are large and rounded: The central parts of them are very gradually elevated, and on the sixth or seventh day, form hard and painful protuberances, which are often taken for imposthumes, but from the seventh to the tenth they constantly soften and subside, without ulceration. On the eighth or ninth day, the red colour changes to bluish or livid, and the affected limb appears as if it had been severely bruised. This appearance remains for a week or ten days, when the cuticle begins to separate in scurf.

The *Erythema nodosum* usually affects the fore part of the legs. I have only seen it in females,* most of whom were servants. It is preceded by irregular shiverings, nausea, head-ache, and fretfulness, with a quick unequal pulse, and a whitish fur on the tongue. These symptoms continue for a week, or more, but they usually abate on the appearance of the *Erythema*, so that in the

* I do not remember to have seen this complaint in young children. Dr. Underwood says that it occurs, "while the double or eye-teeth are cutting," and that "it has sometimes been mistaken for the Measles." He adds, "the tumours are preceded by large spots or patches, at first of a bright red colour, but afterwards of a darker hue, resembling *Petechiæ* in bad Fevers." "The tumours, I believe, never come to suppuration, but disappear again in a few days: they are not peculiar to scrophulous habits." Vol. i. p. 88, and 207.

latter stages of the disease, the only sensations of uneasiness are, languor, thirst, and disrelish for food.

The remedies prescribed by me in this complaint were calomel, or sometimes a milder purgative at first, and afterwards Peruvian bark, in considerable doses, either alone, or combined with vitriolic acid, wine, &c. These medicines were effectual in every case of the Erythema nodosum, but they proved fruitless in the Erythema tuberculatum. I have seen but three cases of this latter disease, all of which terminated fatally. Two women, affected with it, became hectic, and died in a few weeks. A girl, six years old, died of the Hydrocephalus internus, about a month after the eruption had disappeared.

ORDER IV...BULLÆ.

BULLA (Bleb.) A large portion of the cuticle detached from the skin, by the interposition of a transparent watery fluid. Soon after the water is discharged, the excoriated surface is covered with a flat yellow or blackish scab, which remains till a new cuticle is formed underneath. When Bullæ have a dark-red, or livid base, they are denominated *PHLYCTÆNÆ*.

Of this fourth Order I have constituted three genera, Erysipelas, Pemphigus, and Pompholyx. Whether the two latter might be properly united, or whether the Pemphigus should be considered as a distinct idiopathic eruptive Fever, I do not wish absolutely to decide, but wait for the opinion of judicious critics.

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; the redness disappears on pressure, and immediately returns when the pressure is removed.*

• Erysipelas. Macula rubens, urens, pressione dissimulanda, tumidiuscula, superficialis, dilatabilis, desquamazione finienda. Febris Synocha, initio, acuta, cum inquietudine. Linn.

Erythema is distinguished from Erysipelas, as it resembles an efflorescence, and is not attended with swelling, vesication, or any regular fever.

Medical and chiralurgical writers generally agree in their statements of the characteristics of Erysipelas. Ancient authors, however, appear more anxious to distinguish it from Phlegmon, than to give a minute description or history of it.

According to Galen,* “Heat and tumefaction are symptoms common to both diseases, but the colour in them is different, that of Phlegmon being a vivid, permanent red, that of Erysipelas a pale red, inclining to yellow, which is easily obliterated by a touch of the finger, and which returns when the pressure is taken off. In Phlegmon the tumour is circumscribed, hard, tensive, and painful: in Erysipelas it extends diffusely, with considerable heat and uncasiness, but without tension or throbbing: Phlegmon is seated deeply in the flesh, whereas Erysipelas does not penetrate far below the skin.” He adds, that Erysipelas is in some cases attended with ulceration, and that, in others, it has a tendency to gangrene; and he

* Meth. Med. cap. 14. initio, and de Arte Cur. ad Glaucon. l. ii. and Comment. in Aph. 20. l. vi. See Oribas. de Morb. Cur. lib. iii. cap. 47. Aet. Tetrab. iv. 2. 59. Celsus v. 26. Galen’s account of the varieties of this disease is founded on the doctrine of the four humours, supposed to exist in the body. When the disease is caused by yellow bile, he terms it an exquisite Erysipelas: when a small quantity of blood is mixed with the bile, he calls it Erysipelas phlegmonodes: if the blood predominate over the bile, it is then Phlegmone erysipelatodes, but if these fluids are mixed in equal proportions, they form, in his opinion, an intermediate disease. When the disease originates from lymph or phlegm, he terms it Erysipelas œdematodes: a hard, permanent swelling, he thinks is occasioned by an afflux of black bile, and this he denominates Erysipelas scirrholes.

Paulus Ægineta considers these distinctions as of little importance in medical practice, and calls our attention to the most dangerous species of Erysipelas. . .that which affects the head and face. De Remed. lib. iv. cap. 21.

thinks, with Hippocrates, that it often affects internal membranes, as well as the skin.

I. F. Serapion* and Avicenna,† who have copied the preceding observations, notice the eruption of Bullæ, or Blebs, in Erysipelas (Almesire) as an usual appearance, resembling the vesications produced by fire.

Without being influenced by the hypothesis or opinion of Galen on the subject, I propose to describe Erysipelas under four varieties; viz. Erysipelas phlegmonodes, Erysipelas œdematodes, Erysipelas gangrænosum, and Erysipelas erraticum.

1. The ERYSIPELAS PHLEGMONODES generally affects one side of the face, or one of the limbs. In the former case,‡ the disease begins with coldness and shiverings, which alternate with irregular flushes of heat: on the second and third days, the pulse is increased in frequency, oppressed, and somewhat hard; the tongue is covered with a whitish crust; there is a sensation of

* Et accidit cum Almesire ut plurimùm Vesicatio: et fortasse incipit absque vesicatione, sed ut plurimùm vesicatur. Breviar. Tract. v. cap. 22.

† Quando fuerit ejus malitia major, habet inflationes et vesicas, et combustiones, et crustam. Avicen. lib. iv. Fen. 3. Tract. 1. cap. 1.

Quandoque ex caliditate Erysipelatis pervenit ad hoc ut comburat cutem atque virulentiâ ejus vesicet. Id. cap. 4.

‡ Avicenna, l. iv. F. iii. l. 4. Actuarii Med. ii. 12. Amb. Parè, l. vi. c. 12. Fernelius de Extern. Affect. vii. 4. Amat. Lusitan, page 17. Tagaultii Chirurg. lib. i. cap. 8. Sennert. Pract. lib. ii. cap. 16. & lib. v. l. 7. Sydenham, sec. vi. c. 6. H. F. ab Aquapendente op. Part. ii. lib. 1. Hafenreffer, lib. iv. cap. 2. Plater de Superf. Corp. dolor. cap. 17. Hoffmann, de Febr. Erysipelac. Wiseman's Surgery, l. i. c. 6. Platner Inst. Chir. sec. 156. De Haen, Theses de Febr. divis. page 19. Callisen Inst. Chir. Mod. sec. 216. Burserii Inst. Med. Pract. vol. ii. cap. 2.

languor, and general soreness, attended with thirst, loss of appetite, and a disposition to sleep. Dull aching pains are also felt in the head, neck, and back. The swelling usually appears in * the second night, or on the third day, at the side of the nose,† and on the cheek, or sometimes near the ear. It is of a dark red colour, smooth and soft, and attended with a sensation of heat and tingling. This redness, and the swelling, extend gradually over the side of the face, and spread, in some cases, to the scalp, and to the side of the neck, or upper part of the breast. The face then appears much disfigured; the mouth is drawn to one side; the eyelids are turgid, and close up the eye; the symptoms of fever become more violent, and are attended with delirium. On the fourth and fifth day, vesications arise on different parts of the diseased surface, especially at the central part of the swelling. They have an irregular base, and are of various sizes. The fluid contained in them is at first clear and watery; it becomes afterwards straw-coloured and opaque, or sometimes slightly livid, without losing its transparency. Soon after the fluid has been discharged from the vesications, the excoriated surface is covered with a yellowish or black irregular scab. The Bullæ usually break on the fifth or sixth day, when the swelling begins to subside, and assumes a yellowish hue. At this time, also, there is a considerable remission of the fever. On the eighth day, both the fever and swelling ge-

* Ex viginti subjectis hoc morbo affectis, et quorum historiam ex Instituti clinici diariis coram oculis habemus, nonnisi duo, priusquam febricitassent, sex verò post primum jam caloris ingressum, cæteri vero duodecim vel secundâ vel tertiâ a febris principio die, Erysipelate notabantur. Frank. Ded. Cur. Hom. Morb. ii. page 33.

† Incipit a lepore nasi, et augmentatur apostema, et expanditur in facie totâ. Avicenna.

nerally disappear. I never saw this disease terminate fatally : it is, however, observed by authors, that some patients die in a comatose state on the seventh, eighth, or ninth day. When the redness changes to a brown or yellowish hue, a separation of the cuticle commences at the edges of the tumefaction, and is continued over the whole of it : a new cuticle is formed on the tenth day, and the scabs fall off about the same time.

The following variations occasionally take place in the symptoms of this disease.

1. In young persons of the sanguine temperament, the tumour is sometimes completely formed on the second day of the disease, and vesications appear upon it the same evening. The disease, in this case, terminates on the sixth or seventh day.

2. Old persons are seldom affected with the swelling and redness till the fourth day of the febrile stage of the complaint. The disease is then usually protracted to the tenth or twelfth day, and desquamation is not finished before the fourteenth or fifteenth day. The vesications are not succeeded by scabs, but for several days discharge profusely an acrimonious lymph.

3. I have seen, in one or two instances, both sides of the face affected, at the same time, with Erysipelas. More frequently the morbid side of the face is separated from the other, by an exact line drawn across the forehead down the middle of the nose to the chin.

4. Sometimes the disease, after it has disappeared on the eighth day, suddenly returns, with the same violence as at first, and continues two or three days.

5. The swelling, in some cases, terminates with a partial suppuration.* This takes place chiefly at the upper part of the cheek, and in the eye-lid.

* " A circumscribed cavity, containing laudable pus, is never seen in the legitimate Erysipelas. Where a purulent effusion hap-

6. The parotid and sub-maxillary glands enlarge, and become highly inflamed, sometimes with the swelling of the face, but more frequently on its decline: these glandular tumours often end in tedious and painful suppuration.

The Phlegmonic Erysipelas, affecting the lower extremities,* commences with violent shiverings, succeeded by heat of the skin, and flushing of the face, a sensation of lassitude, sickness, thirst, a white tongue, a frequent sharp pulse, general uneasiness, and loss of sleep. The tumour, which appears on the third day of these symptoms, extends on the fore-part of the leg, from a little below the knee, to the instep, or sometimes to the sides of the foot: its colour is an intense shining red, nearly continuous: it is likewise attended with a sensation of burning heat, and with excruciating pain, so that no pressure, not even the weight of a sheet, can be borne upon it. Large Bullæ or Vesications appear over the whole diseased surface on the fourth day. They break spontaneously in about twenty-four hours, and a prodigious quantity of acrid lymph is discharged. The febrile symptoms continue long after this period; the pain is very severe, especially during the night, and, if the cuticle has been extensively detached, the consequent ulceration, which has an uneven and very irritable sur-

pens in any considerable degree, it affords, when the part is examined, a sensation similar to that excited by a quagmire or morass. In that sort of suppuration, which sometimes supervenes to Erysipelas, the cellular membrane suffers great injury, and not uncommonly the part is in a gangrenous condition." Pearson, Principles of Surgery, sec. 289.

† Rudius, de aff. extern. l. 16. Plater. Obs. lib. ii. page 483. Le Dran's Surg. vol. ii. page 344. Wiseman, chap. vi. case 4 & 5. Amat. Lusitan. Cur. Med. 25. Cent. ii. Gabelchover. Curat. Med. Cent. iii. &c. &c.

face, requires the attention of the surgeon for several weeks.

It is observed by many writers, that the Erysipelas * affecting the lower extremities begins in the inguinal glands, and extends from thence to the feet. I have seldom remarked this progress of the disease, but I have seen the glands of the groin swell, and become inflamed secondarily, when the Erysipelas has been for some time seated in the leg, as above described. It has also been said, that erysipelatous tumours often suddenly disappear, in consequence of which, a violent disorder of the brain, lungs, or other internal parts, is immediately produced: such instances of metastasis, however, I believe, seldom happen, if the disease be properly treated.

When the Erysipelas phlegmonodes is seated in the hand, it first affects the thumb, or one of the fingers, with a painful swelling, redness, and vesication, and then gradually extends to the wrist and back of the hand, and to about the middle of the fore-arm. One or two erysipelatous patches are sometimes formed near the joint of the elbow. Loss of appetite, with a white tongue, and febrile symptoms, attend this complaint: the pain is always exasperating, and during the night it is much aggravated, so as to preclude rest till towards morning, when some alleviation of it usually takes place. The disease continues thus for ten, twelve, or fourteen

* Gravi Erysipelate affecti, primo tumorem, ruborem, ac dolorem, sentiunt in inguinum adenibus, unde postea materia ferventissimæ & adurentis quasi naturæ ad pedes descendit. Hoffman. See Frank. ii. 52.

Qui in cruribus afficiuntur Erysipelate, prius circâ inguina ejusdem partis dolent, cum glandularum nonnunquam tumore. H. Fabricius ab Aquapendente, and Burserius, vol. ii. sec. 22.

days, when the pain and swelling begin to abate, the cuticle desquamates, and for some time afterwards the skin of the parts affected remains tender, and slightly discoloured. In some unfavourable cases, matter * forms, during the second week, on the fingers, on the back of the hand, and on the arm: I observed, in one instance, a pouch formed near the elbow, from an effusion of serous fluid under the aponeurosis of the biceps muscle. The pain and irritation kept up during the suppurative process are extreme: when irregular sinuses take place, some of them communicating from one ulceration to another, the patient's misery is protracted for many weeks, and the muscles or tendons chiefly affected suffer a material injury.

2. The *ERYSIPELAS œDEMATODES* usually affects the face, the breast, or some of the extremities. It has not so distinct an accession as the foregoing species, being only preceded by general debility, languor, sickness, and flying pains. The swelling extends very gradually, and is three or four days in arriving at its height. It is of a pale red, sometimes of a yellowish brown colour, and has a smooth, shining surface: if it be strongly pressed with the finger, the pit remains for a short time afterwards. Vesications are formed on the second, third, or fourth day from the commencement of the swelling, being in general numerous, of an irregular form, and but little elevated. They are presently succeeded by thin, brown, or blackish scabs, from the edges of which a clear lymph exudes in great abundance.†

* See Wiseman on Erysipelas, Cases 3 and 6.

In ulcerato plus utique periculi metuendum, et ægris, et medicis, et per longum sæpe tempus detinet, ægrè consolidandum. Hoffmann, de Febre Erysipelatosâ, sec. iv. and Obs. i.

† Altera verò species minori ardore et rubore se offerens, extuberantiâ tamen majore, magisque expansâ, Erysipelas œdematodes

As the swelling advances, a more considerable disorder of the constitution is produced. The tongue becomes white, the pulse is soft, frequent, and sometimes irregular. The face, under this complaint, is much enlarged, so as almost to resemble a bladder distended with water: the eyes are often totally closed; at the same time delirium takes place, and is soon after succeeded by coma. These symptoms, in many cases, terminate fatally about the eighth day of the disease. In other instances, the tumour, the serous discharge, and the oppressed state of the brain, continue to the twelfth, sixteenth, or perhaps to the twentieth day. Some patients die, after lingering to this late period; others recover strength and health very slowly.

A slighter kind of this complaint occurs every spring and autumn, or perhaps at shorter periods, in some persons, chiefly females, of a weak constitution.* It seems to be a sequel of long continued pains in the head, or of other internal disorders.

3. The *ERYSIPELAS GANGRÆNOSUM* begins sometimes in the same manner as the phlegmonic,† some-

dicitur, in quo vesicæ quoque interdum prodeunt subalbidæ, e quibus apertis, serosus humor vel saniosus, tandemque pus, effluit. Plater. de Superf. Corp. dol. page 663.

* Senibus cachecticisque corporibus, vel et mulieribus quæ menstruorum suppressione laborant, Erysipelas interdum habituale redditur, et verno imprimis vel autumnali tempore, aut quod vidimus mense quovis periodicè redit, ut plurimum impetu febreque carens, sed cum crura frequentius petierit, ulcera non rarò in iisdem rebellia, aut duritiem cutis cum tumore pedis nec per vitam solvendam, inducit. Frank. ii. 43.

† Procedente morbo, uti primùm Febris dolorem, tumorem, ac alia peperit symptomata, quæ indies ingravescentia nonnunquam in Gangrænam terminantur, ità hæc invicem haud mediocrem ad febris augmentum operam conferunt. Sydenham.

times like the œdematic Erysipelas. It generally affects the face, and is attended with a small and weak pulse, a brown fur on the tongue, and delirium; this, in a few days, is succeeded by a comatose state, which remains through the whole course of the disease. The swelling exhibits a dark red, inclining to a livid hue. It is puffy or soft to the touch, and extends from the face sometimes to the breast, shoulders, and arms. Scattered Phlyctææ form upon it, within a day or two: they contain lymph of a brownish colour, or slightly livid, and the skin at their bases frequently becomes black and gangrenous. On the cheeks and other parts, deep ulcerations sometimes take place, with lived edges, and diffuse a thin purulent matter in the cellular membrane around them. Mr. Pearson observes, "In the Gangrenous Erysipelas we meet with little caverns, and intercurrent sinuses in the tela Cellosa, containing an ill-conditioned pus; and in those cases, considerable sloughs, formed by the cellular membrane, &c. are evacuated from the ulcer."* The upper eyelid frequently becomes hard, and brown, or blackish, and at the latter end of the disease sphacelates: from the injury done to the skin and ciliary muscles, the eye cannot afterwards be perfectly closed.

The dangerous tendency of this species of Erysipelas is noticed by Hippocrates.† It does not prove universally fatal, but it is always tedious and precarious. The swelling and the febrile symptoms are protracted to the twentieth day of the disease, or in some cases beyond it: two or three weeks more elapse before the gangre-

* Principles of Surgery, sec. 308.

† *Ἐπι Ερουσιπελαῖσι σπινδασι, ἢ εκπυησις, (κακοι.)* Aph. 20. lib. vii. See Galen Comment.

nous sloughs separate, and before the ulcerations manifest a disposition to heal.

Sauvages has arranged under Erysipelas, the fatal epidemic disease, termed by the French historian Mezeray, and others, Feu sacrè, Feu St. Antoine, Mal des Ardens,* &c. I need not enter minutely into the history of this singular and most dreadful distemper, which is now known to originate from ergoted† rye, used as food. The symptoms of it may be divided into three series or stages.

* The first regular account of this disorder was published by the Medical Professors at Marburg, in the year 1597 See Hildanus, Obs 69 Cent. ii. Act. N. C Dec. iii Ann iv. Obs 234, &c Miscel. Nat. Cur Cent. v. Obs 82. and Hoffmann, vol. i. Part. ii cap. 9. A full investigation of the subject, with references to authors, may be found in the Philosophical Transactions, vol. lv. page 110, and in the Memoires de la Societè R. de Medicine, for 1776, page 303.

† *Secale cornutum*, Ergot, solum secale, vel duas aut tres alias plantas graminaceas Alpinas, infestans Vegetatio est irregularis grani secalini. quod substantiam quasi mediam inter granum et folium adipiscitur, coloris fusce viridis, irregulariter compressi, sæpe xiv vel xv lineas longum, ii latum. Tissot from Haller.

A minute description of the Ergot in rye is given by M. Tessier, who, by feeding or cramming Turkeys and other animals with it, produced in all of them the dry gangrene, and death.

The Morbus Hungaricus (Sennert. de Feb l. iv. cap. 14.) and some other diseases, reputed pestilential, might be added to the list of epidemics, occasioned by the Ergot, or by a similar degeneration in other grain. The Sweating-sickness, which occurred more than once in England, at the beginning of the sixteenth century, was perhaps owing to some disease or depravation in wheat, or to some noxious vegetable, growing with it in particular situations. This disease extended chiefly over the northern counties, but neither affected the inhabitants of Wales, nor of Scotland, who did not, at the period mentioned, eat wheaten bread. "Qui montana Cambriæ incolunt, caseo, lacte, pane avenaceo atque hordeaceo vivunt: Hiberni autem et Scoti duriùs, &c. Car. Claromontii, de Aere, loc. & aq. Terræ Angliæ," page 36. A similar disease appeared, A.D. 1529,

1. Distressing heat, with tensive pain in the stomach, a sensation of creeping and prickling under the skin, succeeded by violent contractions of the muscles, and most excruciating pains in the limbs.

2. Fever, severe pain in the head, terminating in Phrenzy, Epilepsy, Apoplexy, Palsy, or Lethargy, and sometimes in a total loss of hearing and sight.

3. Glandular swellings, and tubercles in different parts, swelling of the hands, legs, and feet, with an Erysipelatous redness, and Phlyctænæ, &c. succeeded by gangrene and sphacelus, under which, in some cases, the limbs fall off, joint by joint.

The duration of these symptoms varies, in different cases, from three weeks to three months: and in some persons, the gangrenous Erysipelas, or, as it is called, the dry Gangrene,* comes on, and even destroys the limbs, without fever, and without any previous suffering.

in Denmark and Norway, Holland and Flanders, at Hamburgh, Bremen, Lubeck, Dantzic, Cologne, &c. See Forestus, de Feb. page 157. Sennert. lib. iv. c. 15. It is observed by Schiller (De Peste Britannicâ) that birds at that time fell dead from the trees "passim," with small abscesses under their wings. This he refers to a poisonous quality of the air; but was not the effect, more probably, produced by damaged grain taken as food, according to the result of abbè Tessier's experiments? See Schenckii Obs. page 764. Galen has remarked (De Alim. Facult. lib. 1. cap. 37.) that the seeds of *Lolium temulentum* mixed with wheat, or the degenerated grain, called blackwheat, will produce fever, head-ache, delirium, and gangrenous ulcers. This subject is not closely connected with my present undertaking, but it appears so interesting, that I hope some physician of abilities will find leisure and inclination to prosecute the research.

* La Gangrène sèche est caractérisée par la mortification de quelques unes des extrémités, et quelquefois de toutes. Souvent est elle précédée d'une rougeur qui n'est point inflammatoire, et de quelques Phlyctènes. Le membre s'engourdit, devient doulou-

4. In the *ERYSIPELAS ERRATICUM*, red patches, of an irregular form, having all the characteristics of Erysipelas, appear, one after another, on different parts of the body. When it affects adults, this complaint extends, in some cases, progressively, from the face* to the extremities, the patches above declining, as fresh ones appear below. In other instances, the red patches arise in various situations, without any certain order, those which first appeared remaining till the whole eruption be completed. Some part of the face is usually affected with redness and tumefaction during the course of the disorder. The crup-

reux, et éprouve un sentiment de froid, ou plus souvent d'une ardeur insupportable. Les vaisseaux s'oblitérent, les chairs se noircissent, se durcissent, la gangrene pénètre jûsqu' aux os, et le malade aux prises avec la mort, ett encore heureux, si, la partie gangrénée se separant d'elle-même, il sùrvit a la perte de ses extremités. Soc. de Med. 1776.

The *Malum mortuum*, mentioned by Constantine, Gordon, &c. after some of the Arabian physicians, seems to have been either this dry Gangrene, or the Gangrenous ulceration in the last stage of scurvy. Foresti Obs. Chir. 14. lib. v. Sennertus, lib. i. p. 1. cap. 27. Engalenus, de Scorbuto, Obs. ix. Fernel. de Abd. rerum causis, l. ii. cap. 15. page 635.

* *Extrema materiæ ex unâ in alteram partem volubilitas, sæpe ex leviori istiusmodi affectu, mox gravissima in aliis symptomata minatur. Præter alia non pauca inconstantis morbi exempla, aliud nuper in fæminâ conspeximus, cui Erysipelas, ad decimam tertiam adèò morbi, diem, ex facie ad pedem; ex hoc verò post paucum tempus ad coxam; mox iterùm ad vultum; ex isto ad intestina; ex abdomine ad eundem iterùm pedem; nunc ad costas et pulmonem; ultimo verò, ac lethali affectu, in cerebrum conversum est.* Frank de cur. hom. morb. ii. page 38.

The account of Erysipelas typhodes in Sauvages, Cl. iii Ord. i. 2. seems to be taken from a particular case of erratic or gangrenous Erysipelas. The patient, a delicate lady, was repeatedly vomited and purged, and was bled fourteen times; she lived however, to the thirtieth day of the disease.

tion is attended with a quick pulse, a white tongue, and great debility. It terminates, for the most part, favourably, in about a week. I recollect but one case, in which the disease proved fatal. A labouring man, aged forty, after much fatigue and exposure to cold, was affected with a cough, shortness of breath, and febrile symptoms. Five days afterwards, an erysipelatous patch appeared on his left shoulder, and another on the left leg. On the seventh day, similar patches appeared above and below the knees. On the eighth, his eye-lids became tumid and red. About this time, the other swellings assumed a livid hue: the febrile symptoms increased, and were attended with deafness and coma. On the ninth day, the tumour of the right eye extended to the temple, upon which small Phlyctænæ soon after formed. On the eleventh and twelfth, the patient seemed totally insensible; his pulse became feeble and irregular, and he died on the following day.

There is a singular species of Erysipelas, which affects infants newly born. In some instances, the disease has been connate: more frequently, however, it appears a few days after birth,* on one side of the face, or on the neck, back, and arms, but especially about the navel, being attended with redness, and a painful tumefaction. It soon extends, in irregular patches to the genitals, to the thighs, and down to the feet, and the swellings are succeeded in a day or two by Phlyctænæ. During their progress, the child is feverish, restless, and unwilling to suck. The complaint often terminates favourably in ten or twelve days. It is, however, to be observed, that the Erysipelas, thus affecting infants, assumes in many cases

* In a few cases, it has occurred in the third, fourth, and even as late as the sixth month. Dr. Underwood, p. 34, & Act. Nat. Cur. vol. vii.

the gangrenous form, the redness soon changing to a purple or livid colour, after which the integuments of the abdomen, nates, and lower extremities, exhibit sphacelated spots. If the child live, under this state, a sufficient length of time, some of the toes or fingers, or even the genitals, are nearly destroyed by the mortification. The disease, however, usually terminates in death, before any slough or separation can take place.*

The *Maculæ volaticæ infantum* of Sennertus, which, it has been observed, seem to coincide with the *Strophulus volaticus*, described in a former part of this work, are thought by some authors to refer likewise to the *Erysipelas* affecting new born infants. Sennertus's † account of them is as follows: " *Libelli practici Germanici, ut in Gabelchoveri Practicâ, et Promptuario medico Wittichii, et aliis, videre est, faciunt inter morbos pueriles mentionem affectus, Der Flug appellati, quem nunquam vidi. Describunt autem, quod sint Maculæ quædam volaticæ, rubræ, vel purpureæ, in cute hinc inde serpentes, quæ si orificium aliquod, os puta, nares, oculos, aures nates, attingant, et eousque penetrent malum, lethale fieri: quæ Maculæ, si dantur, procul dubiò Erysipelatis species sunt.*"

In the *Miscellanea Curiosa* ‡ for the year 1684, a distinct case of the infantile *Erysipelas* is given by Dr. J. Burgius, in which all parts of the body were affected suc-

* Umbilicalem regionem in infantibus frequentius infestat, ac indè per abdomen spargitur, cum gravibus pathematibus, funesto ut plurimum eventu. Hoffmann.

† Lib. v. Part. iii. sec. 1. cap. 6. Compare Sebizzii Manual. Part. vi. cap. 32. De Volaticâ.

‡ Dec. ii. Ann. iii. page 334. The case is quoted, *Medical Communications*, vol. ii. page 42.

cessively, excepting the breast, the chin, and the prominent part of the forehead. The disease terminated favourably, by desquamation, in about three weeks.

This complaint is denominated *Herpes erysipelatosus seu volaticus infantum*, by Dr. Buckner, *Miscellanea-Physico-Medico-Mathematica*, Ann. 1727; and by Dr. J. H. Furstenu, (*Act. Nat. Curiosor. Tom. iv. Obs. 35.**) both of whom have noticed the fatality of it, and have favoured us with several interesting observations. A case of the *Herpes erysipelatosus*, occurring in a child six months old, is given by Dr. Schlierbach, *Tom. vii. Obs. 66.* He says, *Erysipelas cum efflorescentiis a facie, pectus et humeros ulterius serpendo occupabat, hisque relictis, dorsum et abdomen pervagabatur successivè, cum insigni scroti intumescentiâ, multumque tunc negotii facessebat, siquidem etiam vesiculæ pelucidæ hinc indè interspersæ adparebant, donec spatium hebdomadum totum corpus derelinqueret, pristinaque sanitas rediret, postquam internè usus alexipharmacorum et temperantium, unâ cum decoctis ex lignosis et anti-catarrhalibus paratis; externè verò leniter exsiccantia et camphorata simul, in subsidium vocata fuerant. Battenbergæ d. 4 Jun. 1724.*

An enlarged account of this disease, with cases and observations, appears in the second Vol. of *Medical Communications*, published by the Society for promoting Medical Knowledge; London, 1790. Dr. Bromfield states the case of a child, "born with its whole face swelled and inflamed, particularly the left side of it, which

* Compare tom. viii. Obs. 97. where he observes, the disease was less fatal to female children than to boys. *De scroto funesto eventu affecto, passim observationes prostant; genitalia in puellis, natesque, impunè affecta, subindè vidi.*

had the true erysipelatous appearance. The legs, feet, and hands, were likewise swelled and inflamed, and, on each tibia, there was a dark-brown or livid slough, of an oblong form ; that on the left extended almost two-thirds of its length, was nearly an inch in diameter, and had a granulated appearance ; that on the right was not so large. The ends of the toes felt cold, and were covered with black sloughs." On the third and fourth day, numerous vesications formed on the face and legs, which, when broken, discharged a sanious fluid. On the seventh day, a yellow slough appeared on the metatarsus of the left foot, near the lesser toes ; this in a day or two became quite black. On the ninth, the sloughs began to separate : on the tenth day, the cuticle and some of the nails of the toes of the left foot came away with the dressings, leaving the toes covered with a new cuticle. On the fifteenth and sixteenth, the thick sloughs came off from the tibiæ, and left the denuded parts of a florid good colour. On the sixteenth and seventeenth, the sloughs were separated from the cheek and forehead ; that on the metatarsus did not come away till the nineteenth. On the eighteenth some aphthæ were observed on the tongue and lips, but they soon disappeared. " On the twenty-fifth, the sloughs from the hand separated, when the little finger, and two joints of that next to it, came away on the dressings. Five days after, one joint of the middle finger came away in like manner. On the thirty-second day, the child was removed from the Hospital." Dr. Bromfield saw this infant ten days afterwards, in perfect health.

In the cases recorded by Dr. Garthshore, the disease chiefly affected the genitals, and the abdomen, near the umbilicus. More than two thirds of the patients recovered. Of eight who died, five were carried off suddenly in less than forty-eight hours. In one, who had the Ery-

sipelas on the left arm, suppuration took place at the back of the hand, and also near the elbow: the other arm and the legs were soon after affected with redness and tumefaction; and on the eleventh day, the abdomen, as high as the navel, became tumid, and of a dark red, or purple colour. On the twelfth day, the skin of the nates and loins was variegated with gangrenous spots and pale interstices, and the redness extended round the neck to the roots of the hair. This child died on the thirteenth day. "In two other cases, the inflammation seized the genitals with such violence, that vesication and mortification came on so rapidly, as to render all endeavours to relieve the complaint ineffectual. One of these patients died on the third, the other on the fourth day." Dr. Garthshore further remarks, "More children have died when the genitals were first affected, than when the disease attacked any other part."

To these accounts of the infantile Erysipelas, Dr. Underwood adds, "Upon examining several bodies after death, the contents of the belly have often been found glued together, and their surface covered with inflammatory exudation, exactly similar to that found in women who have died of puerperal Fever. In males, the tuniçæ vaginales have been sometimes filled with matter, which had evidently made its way from the cavity of the abdomen, and accounts for the appearances of the organs of generation just now described: in females, the labia pudendi are affected in like manner, the pus having forced a passage through the abdominal rings.* "In a few instances, the disease has been attended with some varieties. Infants have not only come into the world with several hard and sub-livid inflammatory

* On the Diseases of Children, vol. i. page 35.

patches, and ichorous vesications about the belly and thighs, but with other spots already actually in a state of mortification. A large eschar has soon spread upon the spine of the tibia, with smaller ones about other parts of the legs, and on several of the toes and fingers." Page 37.

An appearance, which has taken place in a few cases, soon after inoculation with variolous matter, seems referable to Erysipelas. The arm inoculated becomes, within thirty hours, red, and considerably swollen, from the shoulder to the elbow. On the fourth or fifth day of the inoculation, the redness and swelling appear on the fore-arm, and before the end of the sixth day they extend in patches down the back. On the eighth and ninth day, the hands are much swollen, and sometimes vesicated, and the redness is diffused over the legs and insteps, with symptoms of Fever, difficulty of breathing, and violent irritation. Of two infants, thus affected, one died on the fourteenth day after inoculation, the other on the fifteenth, the Small-pox not having appeared. One of them, aged four months, was inoculated from the confluent chrystalline species of Small-pox; the other, aged three months, with recent fluid, taken from a favourable subject in the Hospital. A similar complaint occurs, about a fortnight after the variolous eruption has begun to decline, in some cases, both of the natural and inoculated Small-pox :* it continues for a week or two, extending gradually in large and elevated patches over the whole body, with partial vesication : during its

* All the appearances described have been likewise observed two or three weeks after Vaccine Inoculation. See the cases stated by Mr. Maddock, Dr. Clutterbuck, and Dr. Barry, in the Medical and Physical Journal for 1801; and by Mr. Morrison, in the Medical and Chirurgical Review, vol. ix. page 389.

progress the patient suffers greatly from heat, fever, loss of sleep, and frequent nausea or vomiting.

I have observed, in some cases, at nearly the same period after the Small-pox, another appearance, which is attended with fever, and in general considered as erysipelalous,* but which, perhaps, may be properly ranked with the *Erythema marginatum*. A circle is formed round the vertex, with a dark-red and elevated circumference, including an area of a more dilute red colour. The area gradually dilates, the border advancing a little daily. Thus, in six days, it passes over the face and scalp to the neck, and produces a considerable swelling of the face, and of the eye-lids. The red border then proceeds from the shoulders and axillæ, down the arms, and along the trunk of the body, which it nearly surrounds; at the beginning of the third week it reaches the groin; afterwards it encompasses the thighs, and in a few days extends to the feet, producing a considerable tumour of the instep. The hands in like manner, when the border has passed on to them, become hard, swollen, and contracted. For two or three inches behind the elevated border, the skin remains reddish, or streaky, so that when the abdomen is affected, it appears as if encompassed by a pink sash or girdle. At a greater distance, the skin becomes of the usual colour, unless it be chequered with patches of redness, which in some cases appear, from time to time, but do not continue long. The parts over which the border has passed desquamate in succession. A month, reckoned from the beginning of the complaint, sometimes elapses, before a new cuticle is formed.

In one case, the red circle first appeared round the

* "The redness has the appearance of an erysipelas, and is attended with swelling and hardness of the skin." Dr. Winterbottom.

neck, with much pain and swelling of the lymphatic glands; it then advanced over the face and scalp, and at the same time another red border proceeded downwards, over the chest and trunk of the body, to the lower extremities. Mr. Wachsel shewed me lately, at the Inoculation Hospital, a case of this kind, differently modified. About twenty days after the decline of the natural Small-pox, he observed on a child two red circles, advancing as above described, one from the vertex downwards, the other from the ankle or instep upwards. On the day in which these circles met, in their progress over the trunk of the body, the child died.

The chief exciting causes of Erysipelas are intemperance, and exposure to cold after violent exercise, particularly in summer.* The disease appears in different forms, according to the age and constitution of the persons affected. Those who are young and robust have the phlegmonic Erysipelas: women, old men, children, or, in general, persons of a weak habit, are mostly affected with the œdematous, gangrenous, or erratic Erysipelas. Respecting the causes of Erysipelas occurring in infants at their birth, or soon afterwards, Dr. Garthshore observes, page 40, "We found that, in several instances, the mothers had indulged themselves in the use of spirituous liquors; but, in many others, we

* *Inter hæc primum locum sibi vindicant animi affectus vehementes, ira præsertim, ac terror . . . Excludit dein Erysipelas aer nimis calidus, et intensior solis ardor, nec non vicissim subita & vehemens corporis vel pedum refrigeratio. Idem facit cibus calidus, potus exæstuans, crebra ebrietas, nec non balneum fervidius . . . Speciatim capitis Erysipelas frequentius accidit his, qui diù noctuque in aere humido & pluvioso degunt: item senibus & puerperis, a frigidioris venti in unam magis partem ac fortiori actione, sæpissimè hic morbus originem agnoscit. Hoffmann, de Febre Erysipelaceâ, & Frank. ii. 47.*

could discover no such cause, nor indeed any other; though, upon the whole, it has chiefly attacked the delicate children of weakly mothers." This disease seldom appears but in Hospitals and Work-houses, where only those women can be supposed to repair, who have no hope of domestic comforts and support, during the pains of child-birth, or in the state of weakness after it. Insufficient diet, in addition to the anxiety and distress often endured previously to admission, will fully account for the reduced state of constitution in many of the mothers, and in their offspring.

It does not seem necessary to consider an appearance resembling Erysipelas, occasioned by the sting or bite of certain insects, or by other causes of irritation, which have a temporary effect on the skin, without always affecting the constitution. The eruption produced by several animal and vegetable poisons, and described by authors * as an universal Erysipelas, should perhaps be ranked under the genus Urticaria. I think it likewise unnecessary to describe the symptomatic Erysipelas, produced by wounds, or punctures, in the head or extremities, especially when the periosteum has been injured. This severe and dangerous complaint is noticed by all systematical writers on Chirurgery, since the time of Hippocrates; † and an efficacious mode of treating it seems to be now established in our Hospitals.

When the acrimonious lymph, contained in the Phlyctænæ or vesications of a genuine Erysipelas, is inoculated, or casually applied to any slight wound in a person otherwise healthy, it produces febrile symptoms,

* See Sauvages Nosol. Method. Erysipelas.

† Sect. vii. Aph. 19.

with a red and painful but diffuse swelling, analogous to that of the disease, from which the virus was derived. The Erysipelas, however, more especially the form of it intitled Erysipelas phlegmonodes,* is not, in general, ranked by medical authors among contagious disorders. Dr. Wells has stated "several facts, which seem to prove that it may, sometimes at least, be communicated from one person to another."† We should scarcely expect that the erratic form of Erysipelas, occasionally affecting new-born infants, could be either communicated, or received, by contagion; but the following instance, adduced by Dr. Wells, on the authority of Dr. Pitcairn, deserves consideration. "A lady, immediately after delivery, was attacked with a fever, which was accompanied with an affection of her skin, somewhat like Erysipelas. Her child, about three days after its birth, was seized with that species of Erysipelas the French call *la gelure*, which first appeared about the pudenda, and afterwards extended itself to other parts of the body, among the rest to the face. Both the lady and her child died after a few days illness: and about eight days after the death of the child, the lady's mother and the servant maid, both of whom had attended it during its illness, were attacked

* In the year 1785, I saw a young girl, severely affected with this species of Erysipelas, in consequence of exposure to cold. Her mother, a healthy woman of about forty years of age, who had been her only nurse in the complaint, was suddenly affected, on the eighth day of her attendance, with symptoms of fever, and with an erysipelatous tumour on one side of the face. No satisfactory conclusion can be drawn from a single instance, and I have not met with another in three-and-twenty years which have elapsed since the period mentioned.

† Transactions of a Society for the Improvement of Medical and Chirurgical knowledge; London, vol. ii. page 213.

with Erysipelas of the face, from which both of them recovered." In Hospitals, even the symptomatic Erysipelas, produced by a wound, or a puncture, has sometimes become contagious, and proved fatal to several persons in the same ward. The disease, in such instances, is probably combined with the Typhus or malignant Fever. In like manner this Fever is often complicated with an ulcerated Sore throat, and has thus been extensively communicated from one person to another, as it were under a double form. A similar complication may be supposed to take place, when the puerperal Fever* spreads by contagion.

All the ancient writers, except Galen, recommend blood-letting as a principal remedy in the treatment of Erysipelas. This practice must evidently be improper in the three forms of Erysipelas last described, and even in the Erysipelas phlegmonodes, it does not always appear necessary. When the blood drawn is sisy, practitioners are often induced to bleed a second time ;† but

* The contagious puerperal Fever chiefly occurs in Lying-in Hospitals. See M. Pouteau's Observations, in the Mem. de l'Acad. des Sciences. This disease has been observed at Paris, Lyons, Dublin, London, Edinburgh, &c. and was generally fatal. On dissection, there appeared in the womb, peritoneum, or omentum, some degree of inflammation, with patches of gangrene. At Edinburgh, in 1774, the contagion was suppressed by ventilating the wards, by white-washing the walls and ceilings, and by cleansing the floors, bedding, and furniture. See Dr. Hull's remarks on Phlegmatia dolens, page 46-8. Manchester, 1800.

† Sanguis, copiâ satis largâ, quam primùm mittendus est, &c. Mead, Monita Medica, sec. vi.

Prof. Cullen, at Edinburgh, "employed blood-letting, according to the urgency of symptoms," to the eighth, ninth, or tenth day of the disease. Sec. 563. First Lines, and Lectures on the Practice of Physic.

we generally find, in London, that repeated blood-letting aggravates the symptoms, and protracts the disease.* In a comatose or apoplectic state, the application of leeches, or cupping glasses, at the nape of the neck, may be advisable.

Many physicians object to blisters in Erysipelas: I have applied them occasionally, between the shoulders, with manifest advantage, when the face and scalp were affected. I must, however, observe, that it is not safe to put either blisters or leeches on or near to the diseased surface. Saline medicines, and preparations of antimony, or the compound powder of ipecacuanha, may be employed as diaphoretics, according to the circumstances of the disorder. The effects of Camphor and the dulcified acids, in allaying the febrile symptoms, and preventing too great a determination of blood to the head, seem to have been much overrated by Hoffman and other writers.† It is requisite, every other day, to administer a gentle purgative, since costiveness is an usual symptom of the Erysipelas phlegmonodes. Dr. Friend thinks the use of active purgatives indispensable in this disease, and has made some general remarks on the subject, which deserve attention.‡

Est et aliud morbi genus, idque satis periculosum, in quo etiam, cum minimè deferbuerit febris, ità mirificè proficiunt purgantia, ut aliquandò sine iis ad sanitatem perveniri non possit. Morbus is est capitis Erysipelas.

* See Bromfield's Chir. Obs. vol. i. page 108.

† See Hoffmann, de Feb. Erysipel. &c. &c. Riverii, Obs. Med 18. Cent. xi.

‡ Commentarii de Febribus, page 135-137.

. . . . Satis mihi experimentis edoctus esse videor ut pronuntiem, siquandò cerebro tentato oboriatur coma, delirium, nervorum distensio, aut nullam subesse spem salutis, aut purgantia maximè profectura : neque in his rerum angustiis expectandum esse, quod et in Variolis experimur, dùm vel febris lenita sit, vel tumor planè subsederit. Quodsi morbum jam ad extrema perductum submovere possit purgatio, certè eadem temporius adhibita, ne is ità longè serpat, præcavebit. Compare Rodericus a Fonseca Consult. Med. 44.

In the Erysipelas œdematodes we should employ blisters, diaphoretics, volatile alkali,* and purgatives, during the first three or four days, and afterwards Peruvian bark, conjoined with diuretics. By these means, the duration of the complaint may be considerably shortened.

In the Erysipelas gangrænosum, a free use of the bark† is necessary throughout. The mineral acids, and opium in moderate doses, are likewise of great utility. In other

* "In these disorders, as well as in the Scarlet fever, whether common or malignant, I generally give about six grains of the volatile alkali (carbonate of ammonia) at a dose, either in a state of solution, or made into pills, ordering the dose to be repeated every two, four, six, or eight hours, as the degree of disorder, or the urgency of symptoms, may seem to require." Dr. Peart's Practical Information on Erysipelas, Erythema, &c. London, 1802.

† "It would be imprudent in me to say positively that the volatile alkali is a specific in these disorders, but I certainly can say, that its effects have constantly been such, in my practice, as powerfully to incline me to think so, and to excite me to hope it will be found so." Do. page 24.

† "Dr. George Fordyce, for upwards of twenty years, had been accustomed to give, at St. Thomas's Hospital, a drachm of the Peruvian bark in powder, every hour, in dangerous states of the Erysipelas." Dr. Wells.

respects, the plan and regimen is the same as in malignant Fevers.

The *Erysipelas erraticum* requires nearly the same treatment as hath been already directed for the *Erysipelas œdematodes*. When this disease affects infants, and shews a tendency to gangrene, the powder of Peruvian bark, or some preparation of it, should be diligently administered. Besides this remedy, the Physicians of the British Lying-in-Hospital applied spirituous embrocations, particularly the camphorated spirit of wine, with signal success. Dr. Garthshore * observes, "I know but one instance, wherein this mode of treatment, when early and regularly pursued, has not proved successful; and even in that, its efficacy in protracting life seemed considerable." He adds, "There is no disease, in which I can speak of the apparent good effects of the bark with more confidence than in this. Besides what I have seen of its efficacy in the Hospital, I have had several opportunities of prescribing it for the same appearances (though in a milder degree) in private practice. I have often seen the disease, after attacking successively all the different parts of the trunk and extremities, at length yield to the continued use of this remedy."

"Saturnine applications, in some of our first cases, where the bark was given internally at the same time, were thought to be useful; yet, from a variety of instances which have occurred since, I think I am justified in concluding, that, when used by themselves, they were so far from suspending, that they seemed to accelerate, the fatality of the disease. For this reason they have been laid aside at the Hospital for many years."

† Med. Communications, vol. ii. page 34, 37.

External applications are seldom necessary in the other forms of Erysipelas. In order to allay the irritation produced by the acrid discharge from the broken vesications, we may, from time to time, advantageously foment or wash the parts affected with milk, bran and water, thin gruel, or a decoction of elder flowers and poppy-heads.

ORDER IV....II. PEMPHIGUS.

THE PEMPHIGUS * is an acute disease, characterised by an eruption of Phlyctænæ, or Vesications with an inflamed base, appearing in succession on different parts of the surface of the body, and sometimes in the mouth. It differs from Erysipelas in its progress and duration, but it is more particularly distinguishable from that disease, as it does not exhibit any tumefaction, or redness, of the parts on which the vesications appear.

The varieties of Pemphigus, described by medical writers, may be arranged under the titles, Pemphigus vulgaris, Pemphigus contagiosus, and Pemphigus infantilis. Having never myself seen an instance of either of the former, I cannot do more than state what has been said respecting them by authors.

1. The PEMPHIGUS VULGARIS coincides with the Pemphigus major of Sauvages, and the Febris vesicularis

* This disease is termed by the German physicians, Febris bullosa, ampullosa, or, vesicularis.

In Febre pemphygode, ampullosâ dictâ, tam facies et os, quam caput et aliæ partes corporis, bullulis hinc indè protuberantibus interstinctæ observantur. Etmuller de Febris acutis, page 288. Compare Delii Amæn. Med. Dec. i. Vogel, de Morb. cogn. et curand. sec. 159. Burserii Institut. Med. Pract. vol. ii. cap. 7. Macbride's Introduction, ii. 389.

catarrhalis of Delius.* From the different accounts of this complaint, it appears, that after a series of febrile symptoms, as shiverings, heat of the skin, head-ache, thirst, nausea, a sense of oppression, with anxiety in the stomach and chest, difficulty of swallowing, and often a delirium, the Bullæ arise, with a slight redness at their bases, generally on the second or third day, but, in some cases, on the fourth, fifth, or sixth day. They are, at their first appearance, very small, but within forty-eight hours they increase to the size of a filbert or a walnut, and are surrounded by a dark red border: they are distributed over all the surface of the body, and sometimes over the tongue, fauces, and inside of the cheeks. The eruption of them takes place successively, and is, in different cases, completed in four, six, or eight days: during that time, the febrile symptoms, in which there are only short remissions, denote considerable danger. As the bullæ or phlyctænæ decline, the contents of some of them become yellowish, of others slightly livid. When they are broken, the ulcerated surface appears also livid, and discharges a thin serous fluid for some days, being finally covered with a black or yellowish scab. Two or three weeks elapse before these scabs dry off, and the cuticle is restored.

I quote the following case at large, as it seems to have been the prototype of the descriptions of Pemphigus in several Nosologies.

D. Ch. Seliger, de Febre Pemphygode, seu Bullosa.

“Minimè rectè eos sentire autumat Cous (de rat. vict. in acut.) qui morbos in minutioribus differentes, uno eodemque nomine nuncupare nefas esse ducunt.

* Amænitates Medic. Dec. i. Cas. 9.

Licitum itaque erit, sequentem casum ad Febres bullosas referre, quantùmvis ampullæ non tantùm fauces sed alias etiam corporis partes externas occuparint Anno 1667, 25^o Augusti, Frid. Klimpel, quinquagenarius, et in suburbio nostro degens, vicino suo in tegendâ novâ domo suppetias fert: in culmine autem constitutus, malignâque quâdam aurâ percussus, inopinatò dolorem capitis gravissimum, cum calore præternaturali conjunctum, persentiscit. Sequenti mane accersitus audio patientem de intensissimo calore, capitisque dolore immanissimo, cum interiorum horripilatione quâdam, querelas agentem. Rebus ergo sic stantibus, pro more mihi consueto, ad nobiliora bezoardica, et alexipharmaca præcipitantibus mixta, statim confugiebam, præscriptis aliis pro calore et fermento febrili compescendo, et pro levando capitis dolore. Circâ olis occasum advolat uxor ejusdem, faciemque mariti mirum quantùm intumuisse refert. Ego, cùm virium naturalium præsentiam exquisivissem, eandem bono animo esse jubeo, et continuationem prædicti pulveris impero. Aug. die 27^o: Patientem rursus visito, faucesque ejusdem, et faciem bullis adedè defædatam deprehendo, ut vix cognoscibilis esset: immò ipse etiam collum, manus, thoracem, tibiasque, et alias corporis partes, quæ libero jovi fuerant expositæ, bullis majusculis instar globulorum quibus pueri ludunt contactas monstrabat, ut ne hilum genuinæ et naturalis cutis dignoscere possim: calor verò præternaturalis nonnihil remiserat, reliquaque symptomata non adedè urgentia erant: ideòque a medicaminibus non destiti, et sic intrâ octiduum patientem, Deo benedicente, pristino vigori restitui.*

* See Ephem. Ac. Nat. Cur. Dec. i. Ann. viii. Obs. 56. A similar case is recorded by Schenckius, Obs. Med. 2. l. vi. p. 771.

The first author, who employs the term Pempbigus, is Sauvages. To the history of the disease, abstracted from the above narrative, and from the *Amœnitates Medicæ*, he has added some slight particulars of a case under his own observation. “*Primùm illum observavi Anno 1725, in Nosocomio Monspeliensi, apud militem cui, in Febris acutæ continuæ initio, numerosæ in abdomine et femoribus exoriebantur vesicæ hemisphæricæ, pellucidæ, in ambitu rubræ, quibus correptus fato cessit.*” The title Pempbigus is likewise applied in Sauvages’s *Nosology*, and in several *Medical Journals*, &c. &c. to an eruption of *Bullæ*, without fever. Cases of this kind I propose to consider under the next genus.

Dr. Winterbottom, physician to the colony at Sierra Leone, described to me an eruption, resembling that of Pempbigus, which he had observed on the second day of an intermittent or remittent Fever. “A black woman, aged about forty, was affected, in the afternoon of the fourteenth of August, with a paroxysm like the cold fit of an ague, for three quarters of an hour. This was succeeded by great heat, restlessness, and anxiety, which symptoms continued nearly through the night, and then terminated by a profuse perspiration. On the fifteenth she felt a troublesome itching on one arm, and observed there an eruption of vesicles or bullæ. The size of them presently equalled that of a filbert nut. In the evening she had a return of the febrile heat, followed by strong perspiration, but not preceded, as before, by a cold stage. When I saw her on the sixteenth she was free from complaint, but much alarmed at the appearance of the bullæ, of which there were six on the right arm, one above the inner condyle, the rest on the inside of the fore-arm. When opened, they discharged each about

half a tea spoonful of a thin yellowish fluid, and in a few days the superficial ulcerations were skinned over : the paroxysm did not return, though the only medicine administered was a dose of salts."

In the case of Pemphigus reported by Dr. Dickson to the members of the Royal Irish Academy,* a middle-aged delicate woman, who had been much fatigued by attending her husband through a low Fever, was herself affected with symptoms of Fever, and with a sore throat. On the fourth day of the fever there were large vesications on the tongue and insides of the cheeks, filled with yellowish serum. On the fifth and sixth days similar vesications appeared successively, on her chest, right arm, neck, and cheek. Others, of different sizes, appeared on the ninth, tenth, and thirteenth days, chiefly over the abdomen. Each set of vesicles continued four or five days, when the lymph was discharged, and the cuticle became shrivelled. The fever was, at first, attended with delirium, and, at the latter end, with considerable disorder of the stomach and bowels ; these symptoms abated on the fifteenth day, on the appearance of the catamenia, and the patient was soon afterwards restored to health.

Dr. Dickson mentions, as a peculiarity of this disorder, observed by him in two instances, " that the vesicles took possession of the internal parts of the body, and proceeded in succession (some rising, while others decayed) from the mouth downwards, through the whole alimentary canal." The principal remedies employed by him in this case were, Peruvian Bark and anodynes.

2. PEMPHIGUS CONTAGIOSUS. The only circumstantial account of an epidemic and contagious disease, answering to the definition of Pemphigus, is given by

* Transactions, vol. i 1787.

a Swiss physician, Dr. Langhans, in the *Acta Helvetica*,* Tom. ii. pag. 260. Dr. Cullen thinks the disease there described must have been the malignant Sore throat, and Dr. Frank refers it to the *Scarlatina anginosa*. They are not, however, sufficiently warranted to make this conclusion from Dr. Langhans' statement of the symptoms, which is as follows.

“Towards the end of the last winter an epidemical disease of a very peculiar nature, hitherto undescribed and unknown, made its appearance in this country, and prevailed, through the whole succeeding summer, in so violent a degree, that all persons affected by it died. It was so highly infectious, that no person escaped it, who had for any length of time been exposed to the contagion; hence it spread through whole families, with great rapidity.”

“This disease bears more resemblance to the Venereal disease than to any other with which we are acquainted, but with this difference, that the former proves fatal in twenty-four hours, while the latter may continue for years. It begins with a slight, almost imperceptible, pain, with a sense of tension in the fauces, extending from behind the ears to the anterior part of the thorax, accompanied by shivering, cold, and nausea, as in intermittent Fevers, but with little or no heat. In some cases, in the beginning of the complaint, a greenish bilious matter is brought up by vomiting. The pulse is weaker than natural. The neck is often swelled externally; and internally in the fauces, about the uvula and the muscles of the pharynx, bullæ, or pustules, about the size of a filbert, are

* His Essay is entitled, *Brevis delineatio Morbi qui, Anno 1752, in Valle Simmiâ, epidemicè grassatus est*: The annexed translation of it was made by my friend Dr. Cooke.

observable, which however, are not accompanied with much pain. They often contain a yellow ichor, of a very disagreeable smell. In other parts of the body also, as in the groins, between the thighs, about the pudenda, on the fingers, the lips, &c. similar pustules arise, from which an ichorous matter issues, whether the pustules burst spontaneously, or be opened by a lancet, which is sometimes necessary, in order to prevent the ichor from injuring the skin, or subjacent parts. As the disease proceeds, on the second, third, or fourth day, the pustules in the fauces collapse, and in their places whitish crusts appear, a sense of anxiety in the thorax is experienced, and the external tumour of the neck either begins to recede, or it increases and degenerates into an abscess. If this abscess be immediately opened, the life of the patient will be preserved ; but, on the contrary, if a sense of weight be perceived in the thorax, before the swelling of the neck and the pustules in the fauces have disappeared, or the abscesses have been formed, the patient dies, as if suffocated by the bursting of an empyema.”

“ It is curious to observe, that persons sometimes die suddenly on the retropulsion of the matter of the pustules, without any preceding suppuration. The following are the usual circumstances observable, when the disease terminates favourably. Whenever it happens, that the poisonous matter by some febrile action is driven from the fauces to the external parts of the body, the danger ceases. Thus the disease is terminated by abscesses in the inguinal or axillary glands, or in those, which, under the name of conglobate glands, begin behind the ears, and, following the course of the jugular veins, descend into the thorax, and to the sides of the *aspera arteria*, and *œsophagus*, to the stomach, and to the lungs. Pustules arising in other external parts also afford relief.

The fingers often are surrounded with a sort of vesication, in which the whole of the poisonous matter is collected, and thence at length expelled. This virus affects no part of the body more than the above mentioned conglobate glands. It leaves the blood almost entirely untouched, but it so changes the lymph and serum, that the latter, after remaining a very short time pent up in the glands, is changed into the matter of an abscess."

"The inhabitants of the district, where this virulent disease prevailed, are of opinion, that it derived its origin from the fogs, which, about the end of the last winter, infested their whole country, and which are so unusual at that season. Their mode of living, no doubt, renders them more susceptible of this atmospheric poison. They indulge much in the use of spirituous liquors, such as malt-spirit, cherry-brandy, &c. and they are in the habit of eating a very fat and acrid kind of cheese."

"The mode of treatment which I adopted, with a view to cure this disease, was as follows. I ordered venesection to the extent of from ten to fourteen ounces, in order that the matter absorbed into the blood might be diminished, the circulation rendered more free, and the fluids be determined from the centre to the external surface. In some cases, the bleeding was repeated on the second day. After venesection, a large blister was immediately applied to the sinciput, and the neck was covered with bread and milk poultices, which were renewed about every second hour, and at the same time the patient was ordered to take the following draught.

R. Oxymel. scillit.

—————helleborat. \overline{aa} drach. ij

Mellis ros.

Spir. nitri dulc. \overline{aa} drach. j

Superbibatur alius haustus

R. Aq. Scordii unc. iij

Mixt. Simpl. s. campli. scrup. j

“ After taking these medicines, the bed-clothes being properly arranged, the patient, in about a quarter of an hour, began to fall in a profuse perspiration, which I encouraged for four or six hours, by administering sage-tea or milk whey. By this treatment, the patients, on the following day, found themselves greatly relieved, the external tumours almost entirely disappearing, together with the pustules, which the day before had been so conspicuous in the fauces. In order, however, to secure them from a return of the complaint, I prescribed, on the following day, a resolvent powder of sal ammoniac and nitre, to be taken every three hours in sage-tea, of which large draughts were likewise afterwards to be administered, and in the evening I ordered a dose of Theriaca Andromachi, with Aqua Scordii, by which means profuse perspirations were again induced. After health had thus been restored, I kept the bowels open constantly for some days, with a decoction of black hellebore, and Seidlitz salt.”

“ It frequently happened, however, that my assistance was not called for, till after the pustules in the fauces had collapsed, and the subjacent flesh had become corroded by the ichor, and the glands of the neck and thorax had suppurated. In such cases, I found it necessary to proceed in a different way, and to recommend that the tumours should be softened, and brought forwards, till they were fit to be opened, and that the external ulcers of the fauces should be kept clean, by a gargle, consisting of a solution of the powder above-mentioned, by which means the healing process was best promoted, where the lungs had not been corroded by the ichor.”

“ Thus, I flatter myself, I have accurately described the nature of this disease, and have pointed out a method

of cure, which, although I at first employed it with anxiety and hesitation, I can now with pleasure recommend to all persons labouring under the complaint, with the most sanguine hope that it will effect a speedy cure."

In the opinion of Dr. Langhans, this disease is without a parallel in medical writings, either ancient or modern. Sauvages, under the title *Pemphigus castrensis*, has quoted from M. Thierry,* an account of a contagious epidemic Fever, attended with vesications. I will insert his description of it, but must at the same time observe, it is so deficient and unsatisfactory, that the nature or character of the disease cannot be decided upon with any degree of certainty.

Il régnoit en 1736 une maladie fort contagieuse a Prague: les ressources et les reflexions le la faculté étoient épuisées. Toutes les methodes échouoient contre la ferocité du mal. Un grand praticien de cette ville, qui n'étoit pas plus avancé que les autres, considerant un jour les vésicules qui s'élevoient sur le peau (j'en ai vu aussi grosses que des noisettes) il trouva qu'elles ressembloient a celles que forment les vésicatoires: il soupçonna que le ferment acré, qui dominoit dans les humeurs, pouvoit étre du meme caractère que celui que fournissent les mouches cantharides. D'après cette idée, il ordonna le vinaigre bézoardique a ses malades, et les sauva tous, tandis qu'il n'en échappoit presque aucun entre les mains des autres médecins.

It seems proper here to mention the pestilential *Pemphigus*, or a symptomatic appearance of bullæ and phlyctænæ, in pestilential Fever, a distinct account of which may be found in Dr. Hodges's *History of the Plague in 1666*,†

* *Medicine experimentale*, page 134. Paris, 1755.

† *De Vesiculis Pestilentialibus*, Anglicè, Blaines. *Papulis his in vesiculam exurgere solenne erat cum dolore lancinante et exquisito*,

also in Barbette and Etmuller on the Pestilence.* This appearance differs from the vesicular eruption, which sometimes precedes carbuncles, as mentioned by Galen,† and by all the ancient physicians, and lately described by Assalini,‡ &c.

Galen is of opinion, that the “dreadful appearance of the Febres pemphigodes,” mentioned by Hippocrates, consisted in an eruption of phlyctænæ, with ulcerations.§ As an instance, he quotes, from Thucydides’s History of the Plague at Athens, a passage, where such

humore intus seroso, seu ichore, coloris ut plurimum citrini, et velut straminei, circulo diversicolori, pluries rubicundo, munitis & circumdati. Pustulæ hæ in quavis corporis parte emergerunt, quarum uti statio varia, ita eorum numerus omnino incertus; in quibusdam paucæ, plures in aliis; unam sexus sequioris vidi totam iis scatentem; quoad magnitudinem, nulla regula assignari poterat, vesiculæ enim plurimæ fabam minorem adæquabant quandoque tamen intumuerunt grandiusculæ nuci myrasticæ haud impares. Liquor inclusus suppurationis omnino incapax erat, qui utpote salinus, et fere causticus, post tantillam moram eruptâ vel corrosâ cysti effundebatur, cujus color nunc citrinus, nunc lividus, nunc nigerimus: circulus insuper tuberculum ambiens, non semper unius faciei erat, inflammatio licet summa in principio hujusmodi eruptionis apparuerit. De Pest. Lond. Page 120.

* Barbette, Tractat. de Peste; op. page 300. Etmull. Colleg. Pract. page 361.

† De Tum. præt. nat.

‡ On the plague, &c. See Dr. Neale’s translation, page 54.

§ Διίως γὰρ ἰδεῖν πεμφιγωδίας πυρέλους εἰρησθαι προσθεῖν εἶπεν ἐν μέλει φλυκταιῶν, καὶ ἰλλωσῶσι λινούλαι. The author of the “Medical Definitions,” attributed to Galen, defines Febris emphysodes or pemphigodes, as follows: “It is a Fever, which by the intenseness of the heat produces blisters (φλυκτιδίας) in the mouth.”

an eruption is particularly noticed.* A similar appearance occurs, in some cases of the Typhus or contagious malignant Fever, especially during the summer. Vesications with a livid base, containing a blackish lymph, arise in succession on the legs, feet, and arms. They are about the size of hazle-nuts, and usually intermixed with patches of the Erythema fugax, or with petechiæ and vibices. I have seen them on the fourth day of the fever, and observed, when they appear thus early, that the disease has always a fatal termination.†

3. The PEMPFIGUS INFANTILIS exhibits irregular oblong vesications or phlyctænæ, of a considerable size, and generally flattened at the top. They are at first small and transparent, but, as they enlarge, the fluid contained in them assumes a purplish hue, and finally becomes turbid, from a slight admixture of pus. They are also surrounded by an inflamed border, of a livid red colour. This eruption sometimes appears in infants two or three days after birth,‡ on the neck, and upper part of the breast, on the abdomen, the groin, the scrotum, and inner part of the thighs. When the fluid is discharged, after the vesications break, the ulcerated surface is not disposed to heal, but spreads beyond its original boundary, and becomes extremely painful. As the vesications arise one after another in different places, and are all succeeded by ulcerations, the disease continues, with little remission, for several days, generally till the patient ex-

* Και το μὲν ἐξῶθεν ἀπὸ τοῦ σώματος, εἴτε ἀγὰρ θέρμον ἢν, εἴτε χλωρόν, ἀλλ' ὑπερυθροῦ, πελιδνοῦ, φλυκταίταις μικραῖς, καὶ ἰλκεσὶν ἐξήνθηκος.

† See Medical Commentaries for 1774, and Reports on Diseases in London, July 1794, page 107.

‡ In one case, it occurred ten months after birth.

pires, under the complicated distress arising from pain, loss of sleep, and violent fever. The children thus affected are often weak and emaciated, with a dry shrivelled skin. In the few cases which I have seen, the mode of treatment above recommended in the Erysipelas of newborn infants was adopted, but with little success.

This complaint is ranked with the *Herpes erysipelatosus seu volaticus infantum*, in the *Acta Natur. Curiosor.** and by Dr. Buckner, *Miscellanea Physico-Medico-Mathematica*, Ann. 1727. It is properly described in the *Commentaria Med. Lips*, from Dr. C. J. Cæhme's *Dissertatio inauguralis*, Lipsiæ 1773.

Inter vitia integumentorum Cl. Cæhme contemplatur exanthema illud quod Germanis Schälblassen appellatur, et creberrimè in recens natis apparet. Sunt vesiculæ majores limpidam aquam continentes, quæ marginem inflammatoriam ostendunt. Apparent primò ad inguina, indè ad umbilici viciniam, axillas, et digitos deferuntur, et post tres quatuorve dies, exsiccatae decidunt. Servant hæc exanthemata typum morbi quasi epidemici, ut uno anno frequentius & copiosius occurrant quam in altero.

The Pemphigus infantilis, though different in appearance, is certainly analogous to the Erysipelas of infants, and seems to originate from the same causes.

The Pemphigus Indicus, of which Sauvages has taken his idea from Bontius, de Epidemiis in Indiâ morbis, Obs. 3. was merely a symptomatic eruption of phlyctænæ in the malignant Dysentery, accompanied with petechiæ and gangrenous ulcers.† In the same place, he im-

* The case stated by Dr. J. R. Zuinger, vol i. Obs. 81. differs, in some particulars, from the cases presented to my own observation.

† Rev. ac doctiss. vir Joannes Cæhmerius, circa idem tempus correptus est Febre ardente, superveniente Dysenteriâ atrabiliarîâ, quæ

properly cites Morton's *Pyretologia*, (Appendix, pag. ult.) as referring to a similar eruption of vesicles, in the Fever of the year 1691, which was attended with diarrhœa, or a slight dysentery. Dr. Morton, however, seems to express, by the terms *Vesiculæ aqueæ*, a miliary eruption scattered over the neck and breast, in some cases, at the latter end of the disease.

The eruption of *Hydroa* or *Hydatides*, mentioned by Carol. Piso, Obs. 147-150, pag. 439, has been likewise termed *Pemphigus*, by Sauvages and others, but it was evidently nothing more than a symptomatic appearance of miliary vesicles, which occurred in the last stage of a Fever (*Synochus putris*) and which terminated by desquamation, not, according to the account of *Pemphigus*, by scabs, or extensive excoriations.

Sauvages's fifth species, *Pemphigus Brasiliensis*, is said to be produced by handling the *Coluber bicephalus*, either alive or dead; but we might as reasonably assign a place in nosology to the appearance excited by rubbing the skin with the *Meloë vesicatorius*,* or with the shell of the cashew nut.

cum per aliquot dies continuasset, eruperunt sub axillis, in tergo circâ lumbos, et inguinibus, etiam in collo, pustulæ ac vesicæ quædam, plenæ ac distentæ pure viridi, et subjectam cutem ad carnem usque erodente, quæ nobis primâ facie spem criseos faciebant; sed Dysenteriâ non cessante, nec febre, cum phrenitide ingravescente, probissimus simul et doctissimus juvenis ex hac vitâ ad cœlos raptus est.

* This has been occasionally done, and with a striking effect, by persons who wished to attract attention, and to benefit by the commiseration they excited. Some time ago a woman applied to Dr. Meyer for medical advice and assistance, and shewed on her arms, &c. an extensive eruption of bullæ, of the size of hazle-nuts. Her account not being very consistent, some suspicion arose, and on the second or third visit she was betrayed by the shining particles of cantharides, which, on a close examination, were observable in the furrows of the skin.

A case in the *Act. Nat. Cur.* vol. ix. Obs. 18. entitled *Febris acuta, vesiculososo-erysipelacea*, has also been considered as a case of *Pemphigus*; but, on closely attending to the symptoms,* we shall find that the disease was the *Scarlatina anginosa*.

The cases stated in the first volume of *Medical Facts and Observations* (page 205) by Mr. R. B. Blagden, do not agree with other accounts of the *Pemphigus*: I am inclined to think the disease described was the Swine-pox, entitled by Sauvages, after Cusson, *Hydrachnis*, and by other writers, *Chrystalli Variolæ spuria*, *Variolæ aqueæ* or *lymphaticæ* *Varicella*, &c. Some of the vesications, in this complaint, increase to a considerable size, and they are often succeeded by ulcerations, and cicatrices or pits, as Mr. Blagden has mentioned. The appellation he has given to it is countenanced by Dr. Frank, who denominates the Swine-pox, *Pemphigus variolodes*.

On concluding the account of *Pemphigus*, as given by medical authors, I take the liberty of proposing the following queries.

1. Whether the case quoted from Seliger is not a case of the *Erysipelas phlegmonodes*, with some incidental variations?†

* *Insignis in totâ corporis superficie rubor; deglutitio difficilis; mox inflammatio et suppuratio in ore et faucibus; delirium summum; plenaria virium prostratio, &c. &c.* page 57. *Sexto morbi die, multæ vesiculæ in toto corpore, imprimis circâ digitos manuum pedumque, adparebant, quæ forfice apertæ purulentam tenuem materiam fundebant, cuticulâ deindè squamularum more secedente, &c.* page 58.

† Compare the case in *Schenkii Obs. Med.* page 771. Another case in the *Acta Soc. Reg. Med. Hauniensis*, vol. i. has been quoted as a case of *Pemphigus*, although the author himself, Dr. Gulbrand, termed the disease he described *Erysipelas vesiculosum*.

2. Whether, in the cases quoted from Sauvages and Thierry, and from the Transactions of the R. Irish Academy, the eruption was not symptomatic, and connected with the Typhus or pestilential Fever.

3. Whether the disease described by Dr. Langhans was not rather endemic, than epidemic or contagious,* and referable to some local cause, like the *Mal des Ardens*, &c.

Not having been able to procure the *Amœnitates Medicæ*, to which Sauvages refers, I do not possess all the evidences respecting the existence of the *Febris bullosa*, or *Pemphigus*, and cannot, therefore, properly give a definitive opinion upon it. I must, however, observe, that if the *Pemphigus* had ever existed in Europe, according

* No mention being made of this disease in the succeeding volumes of the *Acta Helvetica*, or by any other author, we have not the means of reconciling Dr. Langhans's contradictory account of it. In the first paragraph, he informs us the disease was universally fatal: *Per totam æstatem, æquali vehementiâ, duravit, itâ ut omnes, qui eo corripiebantur, obierint.* In the second paragraph, he compares it to the *Lues venerea*, noticing, however, one striking difference....that it proved mortal in less than twenty-four hours. Notwithstanding these unqualified observations, he enumerates, in the succeeding page, the usual and favourable modes, in which the disease terminated. *Ordinarii ac salutare morbi exitus, quibus ægri ab omni malo liberari solent.* He also says, that, in many cases, his attendance was not requested, till the vesicles in the throat were collapsed, and the glands had suppurated, circumstances, which, according to his own statement, took place on the second, third, or fourth, day of the disease (*prout morbus inceptit.*) Dr. L's account of the causes is likewise unsatisfactory. If thick fogs, cherry-brandy, whiskey, and rancid cheese, could produce so singular a disorder, we should long ago have had reason to lament its existence and devastation in the British Isles. Respecting the treatment, medical readers cannot fail to remark how inadequate the plan proposed by Dr. Langhans would be to arrest the progress of a contagious Fever, so virulent, and so fatal, as that which he has described.

to the nosological definition of it,* as an idiopathic, epidemical, and contagious disease, like the Pestilence, Small-pox, or Scarlatina, it could not now have afforded us a subject of controversy.

* **PEMPHIGUS.** Typhus contagiosa; primo, secundo vel tertio morbi die, in variis partibus, Vesiculæ, avellanæ magnitudine, per plures dies manentes, tandem ichorem tenuem fundentes. Cullen.

MORTA. Phlyctænæ aliquot in abdominæ, sive artubus, magnitudine avellanæ : Febris diaria, malignissima, funestissima. Linn.

ORDER IV....III. POMPHOLYX.

THE POMPHOLYX is an eruption of Bullæ, without any inflammation round them, and without fever.* This complaint is termed by Sauvages Pemphigus sine pyrexia, and by Plenck, Pemphigus apyretos; but as it differs in the most material points from Erysipelas, and from the Pemphigus described by Nosologists, I have applied to it a new generic title. The terms Pomphos, and Pompholyx, originally signified an air-bubble, but were afterwards employed in medical language, to express reddish and rounded elevations of the cuticle, containing a watery fluid.† Pemphix, from whence is derived the word Pemphigus, denoted a small vesicle or Phlyctæna.‡

I propose to consider three varieties of the Pompholyx; Pompholyx benignus, Pompholyx diutinus, and Pompholyx solitarius.

1. The POMPHOLYX BENIGNUS exhibits distinct transparent bullæ, of about the size of a pea, or, in some cases, as large as a hazel nut. These appear, in succession, on the legs, arms, chin, temples, or cheeks, and

* See Plater, de Phlyctænis, tom. ii. page 673.

† Επαρσασεις το δερματος οχθωδεις το ακρα και πλαδαραι, και ενερευθεις.
Galen Exeges. And. lib. 2. de Mulier.

‡ See Galen Comment. 6. in Epidem. lib. 1.

break in three or four days, discharging the lymph* they had contained. The excoriations presently heal, and the cuticle is restored, without a pit or cicatrix. This eruption, which is not attended with any manifest disorder of the constitution, arises from very different causes. Boys are sometimes affected with it for a week or two in hot weather. I have known it occur, in the same person, three times during one summer. A similar appearance has been observed in some young persons of an irritable constitution, after taking a few grains of mercury; in others, the eruption has been produced by the action of acrid vegetable substances on the stomach. Infants are often affected with the Pompholyx benignus during the period of dentition: the bullæ generally appear on the face, thighs, arms, and sides of the abdomen, and are soon removed, without any disagreeable consequence.† An

* According to Mr. Gaitskell's experiments, "the fluid contained in the vesicles of Pompholyx is less saline, and contains a less proportion of coagulable lymph, than the serum of the blood, there being only two grains of coagulum in thirty-two grains of the vesicular fluid." Mem. of the Med. Soc. of London, vol. iv. art. 1.

† Foresti Obs. Chirurg. 8. lib. ii. Lond. Med. Journal, vol. xi. page 234.

Dr. Underwood remarks, "that this eruption takes place both in bowel complaints and teething." On the Diseases of Children, vol. i.

"I have often seen what I suppose to be a milder form of the Pemphigus infantilis, above described. Solitary vesications arise in different parts, chiefly about the neck, and fingers, and on the inside of the thighs. These are filled with a thin yellowish fluid; the edges of the base appear reddish, but the redness extends a very little way from the blister. When the vesication is broken, the surface underneath appears red, but does not ulcerate extensively. Children, thus affected, are sometimes pale and languid, but they do not appear to suffer much pain. A cordial plan of treatment usually restores them to health." Dr. John Sims.

eruption of the same kind has been observed, in a few instances, after Vaccine Inoculation. * This might be owing to the application of dried matter, which had undergone some change in its conveyance from one place to another, for no such eruption, so far as I can learn, has occurred in London, where recent fluid is generally employed.

2. The *POMPHOLYX DIUTINUS* is a tedious and painful disorder, chiefly affecting persons of a debilitated constitution, and particularly severe in those who are of an advanced age. It commences with numerous bullæ or vesications on the face and arms, and is diffused, by a gradual progression, to the neck and breasts, and round the body, to the groins, thighs, and legs, and sometimes to the tongue, fauces; and the inside of the cheeks. † The vesications seem to arise from red tingling elevations of the cuticle, nearly resembling the larger sort of papulæ: within twenty-four hours they are of the size of a pea, and perfectly transparent, but if permitted to dilate, they afterwards become as large as a walnut, sometimes assuming a yellowish hue. If the fluid be discharged from any of them by a small orifice, they are again filled with lymph during the succeeding night. When the vesications are rubbed off, or otherwise removed prematurely, the excoriated surface is extremely sore and inflamed, and does not heal for a considerable time. Ulcerations of this kind being multiplied as the disease advances, a slight febrile paroxysm occurs every night, and the patient suffers much from pain, loss of sleep, and

* See Appendix to the Treatise on this subject, page xii. Also the Rapport du Comité central de la Vaccine a Paris.

† Occupant quoque pustulæ, nasi, oris, et faucium, interiora. Hoffmann, Suppl. ii. 489.

confinement. Since the bullæ or vesications arise in succession upon different parts of the body, and often re-appear on the parts first affected, we are not able, at the beginning of the complaint, to judge, with any degree of certainty, what will be the extent or duration of it. In some cases under my own observation, it continued two months, in others three, or four, or even five months, so that the whole number of bullæ amounted to several thousands. After a cessation of some weeks, or months, the eruption frequently returned again, and proceeded in the same manner as before.

In a man aged forty-six, the vesications first appeared on the scrotum and about the groins, during the month of October, 1789: the eruption afterwards extended to other parts of the body, and to the tongue: it was removed in about two months. He continued free from the complaint till February, 1790, when a few vesications appeared on his wrists; others arose on his arms, neck, sides, scrotum, and lower extremities. Those on the legs were slightly inflamed, and their contents became turbid, from an admixture of pus: the rest were pellucid, and without any redness or inflammation round them. The disorder continued nearly three months: after it had disappeared, the patient enjoyed good health, but he was again affected with the eruption, at the latter end of June, in the year 1790.

In a widow, aged thirty-eight, the vesications began to appear on the cheeks and round the eyes, at the latter end of December, 1786. About the middle of January 1787, the eruption took place on her neck and breasts, and afterwards affected successively the shoulders, arms, back, and lower extremities. The vesications then arose, from time to time, on different parts, without any regular order; some of them, which were nearly an inch

in diameter, were succeeded by large painful ulcerations. The complaint wholly disappeared in April, but returned again on the twelfth of May, and continued for about a month.

The Pompholyx diutinus is usually preceded, for several weeks, by sickness, head-ache, and pains of the limbs, with a sensation of languor and lassitude. These symptoms do not always abate, on the appearance of the vesications. The causes of this disease, or the circumstances under which it appears, are not uniform. In some of the cases presented to my own observation, it was imputed to fatigue, anxiety, watching, and low diet: in others, it seemed referable to intemperance in eating, and excess in drinking spirituous liquors.* A young woman was severely and repeatedly affected with it, during five successive summers, from the age of eighteen to that of twenty-four. The only peculiarity in her case was, that the catamenia had never appeared.

* Hoffmann gives, at great length, the case of a lady, aged fifty, “of the Sanguinco-choleric temperament,” in whom the disease recurred four times, through passion and intemperance. 1. From drinking largely (“cum summo appetitu et delectatione”) of elicampagne wine. 2. By eating too much fruit, &c. and by fits of anger. 3. By taking large draughts of cold water, in order to refresh herself after a paroxysm of rage (“cum, vehementi irâ excandesceret.”) 4. By again indulging her inveterate habits, “post errores in diætâ rursùm commissos, animique commotiones,” &c. &c.

On the two first attacks, the disease continued a month, many fresh vesications appearing every evening, with symptoms of Fever. They differed, in magnitude, from the size of a bean to that of a hen’s egg. Some of them, which had become confluent, resembled the small intestines when in an inflated state: others contained lymph of a greenish or livid colour, and were succeeded by spreading ulcerations. All of them, according to the patient’s account, began to rise with a hissing noise (cum sibilo.) De affectu raro Scorbutico Pustulari. ed. ann. 1704.

Eugalenus describes the Pompholyx diutinus as a species of Dropsy (*Hydrops vesicalis*) connected with Scurvy.* Cases are also related in the *Acta Nat. Cur.* which prove the frequent coincidence of the Pompholyx diutinus with Purpura, and Anasarca, or general Dropsy.†

In the *Memoirs of the Medical Society of London*, vol. iii.‡ we have an account of the case of a lady, who, in the fifth month of pregnancy, was affected with the Pompholyx on her arms, hands, and chest, and in the throat, &c. She had previously undergone much fatigue and anxiety, the consequences of which were, great languor, with loss of appetite, head-ache, and an uterine hæmorrhage. Within two months she recovered her health and strength in some degree, but during the latter stage of her pregnancy, she had a general swelling of the body and lower extremities.

In a case recorded by Dr. D. Stewart,§ this disease

* *Vulgus nostras, a vesicarum prominentium formâ, bonk-water appellat Hâc Hydropis specie plures apud nos corripiuntur, imprimis lerò qui malâ victûs ratione utuntur, aquisque nostris putridis, crudis, et corruptis, vel cerevisiis ab his decoctis. De Scorbuto, Obs. xx.*

† *A. N. C. vol. viii. page 19. De universali humorum dyscrasiâ Scorbuticâ, gravissimis et planè insolitis symptomatibus stipatâ, ex abusu spirituosorum, et fœculentorum, prognata. By J. de Boetticher.*

Vol. x. Obs. 76. page 260. *De peculiari quâdam Febris malignæ, catarrhalis, exanthematicæ, purpuraceo-pustularis specie, vesicali ulcerosæ. By O. F. W. Frenzel.*

This disease continued five or six weeks.

‡ Appendix : case of Pemphigus, by J. Upton.

§ *Medical Commentaries, vol. vi. History of a case of Pemphigus major of Sauvages, by Dr. David Stewart, physician in Aberdeen.*

appeared on a young soldier, soon after a sudden retropulsion of the Measles, occasioned by exposure to cold while he was marching to Aberdeen. He was at the same time affected with great lassitude, and stiffness of the joints, head-ache, thirst, nausea, difficulty of swallowing, costiveness, and a sense of oppression about the chest: his tongue was foul, his pulse from a hundred and ten to a hundred and twenty, his eyes dull and languid, but he was not delirious. The bullæ or vesications were diffused over the whole surface of the body, the distance from one to another being, in some places, half an inch, in others three or four inches: there was not any redness round their bases. With proper care and attention in the Hospital of Aberdeen, from the fifteenth to the twenty-seventh of April, the complaints of this young man were removed, and he was enabled to return to his duty.

The description of the cases of Pemphigus given by Mr. Christie,* and Mr. Gaitskell,† does not differ from the foregoing account of Pompholyx. The patients, who had been engaged in laborious occupations, were affected with the eruption for several successive weeks.

An eruption, resembling the Pompholyx diutinus, appears in some cases of the Prurigo formicans and senilis, and greatly aggravates the symptoms of those complaints. The bullæ are of about the size of a pea.‡ A similar eruption may also be occasionally observed in the

* London Medical Journal, vol. x. Part. iv.

† Memoirs of the Medical Society of London, vol. iv. Mr. G. ascertained that this disease is not communicable by inoculation.

‡ An appearance, somewhat similar, is produced by the bites of bugs. The bullæ, however, are mostly elevated upon small tumours, or wheals.

scaly Tetter,* (Psoriasis diffusa, &c.) and even in that species of it, with which washer-women are affected, from the irritation of soap. But the Pompholyx occurs in its most extensive and distressing form in persons at an advanced age, when the skin becomes dry and rigid, and when perspiration is considerably diminished. Under these circumstances, the vesications are numerous, and some of them are distended with clear lymph the size of a turkey's egg: others appear livid or black, and when they are broken, the excoriated surface seems to be in a state of mortification. I have not, however, in any case, seen this appearance succeeded by actual gangrene, or deep ulceration: but such consequences of the disease are noticed by authors.† Many fresh vesications daily arise, with a sensation of heat and tingling in the skin; and even the cuticle, which has been formè

* A case, in which the Pompholyx (especies d'Ampoules, remplies de serosité, &c.) supervened to a scaly disease of the skin (Psoriasis inveterata?) is related at large, in the *Journal de Physique*, tom. ii. page 2. Observations par Mons. de la Motte, Médecin de Bourdeaux, sur une maladie singulière de l'Epiderme, 1775.

An eruption of Bullæ sometimes takes place in Ichthyosis.

† Humor virulentus (a bullis majoribus missus) cutim substratam a quâ cuticula secesserat, ulceratione et corruptione ardebat, non sine fœtore. Præterea aliæ minores pustulæ, sub-obscuri nigri coloris, sanguine concreto refertæ, hinc indè dispersæ in abdominis regione, visebantur, quæ sphacclosam corruptionem minabantur. Hoffmann.

J. Boschius, vir patricius, octagenario proximus, repente aliquot hujusmodi ampullis, variis in corporis partibus, sine febre, correptus est. Ruptâ epidermide, plaga subter, primum rubra, dein livida, et nigricans apparuit. His, sine alio symptomate, intrâ quatuor vel quinque dies, paulatim extinctus est. Burserius, de Pemphigo. Compare the case, entitled Pemphigus, by Dr. Miroglio, *Journal de Médecine*, tom. 81.

over recent excoriations, is, in many places, soon raised again by lymph effused under it. The patient thus suffers nearly as much as if blisters were applied in succession to different parts of the body, and from time to time repeated. This painful affection continues, in some cases, for five or six weeks, in others, for as many months. When very restraining lotions, or ointments, are applied, so as to suppress the eruption, some internal disorder usually follows, as head-ache, pain of the stomach and bowels, bilious vomiting, or diarrhœa, with symptoms of fever. In cases where nothing of this kind has occurred, the eruption sometimes terminates in another form of disease,....by swelling and inflammation about the larger joints, or by nodes, incurvation, and stiffness, of the smaller articulations.

A few cases of Pompholyx, in old age, have been stated to me, in which a cure was obtained by the administration of sulphur and nitre, Peruvian Bark, or Plummer's Pill, with the decoction of Sarsaparilla, Dulcamara, Elm-bark, &c. After repeated trials of these medicines, I have not been fortunate enough to observe any permanent advantage from them. According to my own experience, the warm bath, used every second day, affords a more immediate alleviation of the symptoms, and contributes more to remove the disease, than any other application. It is, however, singular, that this remedy does not prove of equal advantage to young persons affected with the Pompholyx. In some instances, it has aggravated the tingling in the skin, and appeared to increase the eruption. The disease is seldom very severe at an early period of life. In children, or in persons under forty years of age, I have seen it generally removed, within three weeks, by Peruvian bark com-

bined with diuretics, especially with the powder or tincture of *Digitalis*.

3. *POMPHOLYX SOLITARIUS*. In this form of the disease, large vesications arise on some part of the body, one after another, at nearly equal intervals of time. A disagreeable tingling is felt, for several hours before the vesication arises, which is usually in the night. It enlarges rapidly, so as sometimes to contain, on the following day, a tea-cup full of lymph. Within forty-eight hours the cuticle breaks, the lymph is discharged, and a superficial ulceration remains. Near this, another vesication arises in a day or two, and goes through the same process as the first. A third, fourth, fifth, and sixth vesification will sometimes appear, and proceed in like manner.

The *Pompholyx solitarius* is attended with sickness and languor, though not with fever. It is a disease which rarely occurs, and seems only to affect women. I have seen three cases of it: in one, the left arm was affected, in the other two, the breasts. The excoriations occasioned pain and irritation, with partial hardness in the substance of the breast.* Peruvian-bark was given with evident advantage. Poultices made with linseed powder were first applied to the sores, and afterwards light dressings. The complaint was thus removed in eight or ten days, but, in one case, it appeared again at the end of a fortnight, the patient having exposed herself to a stream of cold air, when over-heated by labour.

* Professor Lorry has remarked, that vesications of this kind portend Cancer. De Morb. Cut. Art. ii. Part 2.

ORDER I. PAPULÆ.

	Page.
I. STROPHULUS.....1. intertinctus - - -	14
2. albidus - - -	18
3. confertus - - -	19
4. volaticus - - -	22
5. candidus - - -	24
II. LICHEN.....1. simplex - - -	30
2. pilaris - - -	33
3. circumscriptus - - -	ib.
4. agrius - - -	34
5. lividus - - -	40
6. tropicus - - -	42
III. PRURIGO.....1. mitis - - -	55
2. formicans - - -	57
3. senilis - - -	63
4. podicis - - -	68
5. præput - - -	70
6. urethræ - - -	71
7. pubis - - -	72
8. scroti - - -	73
9. pud. muliebris - - -	74



ORDER II. SQUAMÆ.

I. LEPRA.....1. vulgaris - - -	83
2. alphoides - - -	94
3. nigricans - - -	98
II. PSORIASIS.....1. guttata - - -	117
2. diffusa - - -	119
3. gyrata - - -	123
4. palmaria - - -	125
5. labialis - - -	126
6. ophthalmica - - -	127
7. præputii - - -	128
8. scrotalis - - -	ib.
9. unguium - - -	129
10. infantilis - - -	ib.
11. inveterata - - -	130
III. PITYRIASIS.....1. capitis - - -	145
2. rubra - - -	146
3. versicolor - - -	147
IV. ICTHYOSIS.....1. simplex - - -	151
2. cornea - - -	157

ORDER III. EXANTHEMATA.

			Page.
I. RUBEOLA.....	1. vulgaris	-	164
	2. sine Catarrho	-	177
	3. nigra	-	179
II. SCARLATINA..	1. simplex	-	193
	2. anginosa	-	198
	3. maligna	-	208
III. URTICARIA...	1. febrilis	-	301
	2. evanida	-	314
	3. perstans	-	318
	4. conferta	-	319
	5. subcutanea	-	320
	6. tuberosa	-	324
IV. ROSEOLA.....	1. æstiva	-	328
	2. autumnalis	-	330
	3. annulata	-	331
	4. infantilis	-	333
	5. variolosa	-	335
	6. vaccina	-	340
	7. miliaris	-	341
V. PURPURA.....	1. simplex	-	343
	2. hæmorrhagica	-	ib.
	3. urticans	-	348
	4. contagiosa	-	353
VI. ERYTHEMA....	1. fugax	-	356
	2. læve	-	358
	3. marginatum	-	359
	4. papulatum	-	360
	5. tuberculatum	-	363
	6. nodosum	-	364



ORDER IV. BULLÆ.

I. ERYSIPELAS.....	1. phlegmonodes	-	368
	2. œdematodes	-	373
	3. gangrænosum	-	374
	4. erraticum	-	378
II. PEMPHIGUS....	1. vulgaris	-	394
	2. contagiosus	-	398
	3. infantilis	-	405
III. POMPHOLYX..	1. benignus	-	411
	2. diutinus	-	413
	3. solitarius	-	420

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Willan, Robert

Philadelphia: 1809

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