

ease at Martigues;* Dr. Bancroft, senior, states its occurrence in the Elephantiasis of South America;† and Professor Niebuhr attests, that it appears in the Dsjuddam of Bagdat.‡ But Dr. Adams observed, on the contrary, in the island of Madeira, an actual wasting of the generative organs in the men, who had been seized with the malady subsequent to the age of puberty, and a want of the usual evolution of them, in those who had been attacked previous to that period. Is the Elephantiasis in Madeira now less virulent than that of former times? has it undergone some change in its character? or, is the ancient account of the disease incorrect?"

Dr. Bateman's Synopsis, p. 298.

It is painful to be so often under the necessity of reminding medical writers of that logical precision which is gradually gaining ground in the other sciences. To the casual reader, it may seem as if the substance of the last paragraph was collected into the three queries which form its concluding sentence. Yet, on a re-perusal, it will be seen, that virulence, *virus* or contagion; change of character in the disease, or incorrect account of *ancients*, all relate to the preceding para-

* "M. Vidal particularizes the case of Arnaud, a sailor, who had been afflicted with the tubercular Elephantiasis six months, when he died of putrid fever. "Il n'avoit cessé, presque jusqu'à sa mort, de ressentir les ardeurs d'un assez violent Satyriasis."

† "Lepers are notorious for their salacity and longevity." Nat. Hist. of Guiana, p. 385.

‡ "Loc. cit. The story related by Niebuhr, of a lazar gratifying this propensity by infecting a woman by means of linen sent out of the Lazar-house, and thus obtaining her admission, appears, however, to be entitled to little credit."

graphs. I shall, therefore, leave them for the present, to consider the evidence concerning that symptom, which "is affirmed by most *modern* writers, with the exception of Dr. Adams." The names opposed to mine are, M. M. Vidal and Joannis, Dr. Bancroft, senior, and Professor Niebuhr.

M. Vidal and Dr. Joannis, though they describe the Leprosy of the same town, differ exceedingly in their history. The former speaks of tubercles in the face as the first symptom; the latter assures us, that the *leaven* of the disease first appears by a swelling in the calves of the legs. The words of the former only are quoted by Dr. Bateman, who describes the disease as the *tubercular* leprosy. My readers will determine the probability of such a symptom as that mentioned by Vidal, in the last stage of putrid fever! Not less remarkable is that related by Joannis, whose patient, twenty-four hours before his death, *plus quam semel cum uxore coivit*. Dr. Bancroft, by the brevity of his language, seems only to have given the popular report, which, from the nature of his work, was as much as was required. For the value of Niebuhr's evidence, see the note quoted from the "Synopsis."

The result of the whole is, if we even admit the very questionable symptom mentioned by Vidal and Joannis, it is by no means certain that they ever saw the true Elephantiasis. The accounts of both are confused and contradictory. Dr. Bancroft does not mention any personal observation; and Niebuhr is not allowed to be a credible witness. It must be admitted, that the above are only a few of the many names which might be produced in proof of the salacity of lepers. How then, it may be asked, has such an opinion re-

mained uncontradicted from the days of Aretæus till the second edition of "Adams on Morbid Poisons." And what greater credit is due to the latter than to such a host of witnesses? The first question is readily answered in the too high respect we are apt to pay to names deservedly great, which is well illustrated by Dr. Bateman in the first of the three quoted paragraphs, and in the note concerning the learned Dr. Hillary. The second I should feel more difficulty in answering, were it not that Dr. Bateman has assisted me, by the manner in which he has thought my name worthy of a place in the New Cyclopædia.* "The Elephantiasis," says he, "was *accurately examined* by Dr. Adams, in the Lazaretto, near Funchall.

In the Second Edition of "Morbid Poisons," to which Dr. Bateman here refers, it will be found, that the examination was made in the presence of four Gentlemen, three of them public functionaries of the island; and that the result was laid before the Governor, by his order. From a proper respect to the sex, even in this degraded state, and that the report might be duly authenticated, a midwife (the most experienced of her order) was procured, to assist in the examination of the women. The drawings annexed to the descriptions show that the males were in a state of

* See article *Elephantiasis*, which, Dr. Bateman informs us, was written by himself. (Synopsis, p. 233, Note) The copious extracts in the Cyclopædia from my "Observations on Morbid Poisons" are, in many other respects, incorrect. In this place, I shall only notice a great error in the number of subjects contained in the Lazaretto. Dr. Bateman says ten. The numbers mentioned in the "Observations" are ten women and eighteen men, all of whom were *accurately examined*; and also some who were not in the Lazaretto.

perfect nudity. When enough were examined in this manner for every satisfactory information, the inspection of the rest was less irksome to the patient, but not less minute in whatever relates to the peculiar marks of the disease. The description begins with the hairy scalp, and is continued seriatim to the toes. Yet, after having perused all this, and admitted the *accuracy* of the examination, Dr. Bateman concludes his account with observing, that an *accurate* history of the Elephantiasis which occurs in hot climates, must be still deemed among the *desiderata* of *pathologists*.—*Synopsis*, p. 304.

It has been well remarked by Sir Isaac Newton, that, excepting in mathematics, “to demand any thing beyond well ascertained facts and fair inductions, is to reduce all philosophy to mere scepticism, and to exclude all prospect of making any proficiency in natural knowledge.” “Hence, he concludes, whatever is thus collected ought to be received, notwithstanding any conjectural hypothesis to the contrary, till such times as it shall be contradicted or limited by further observations on Nature.”*

Where then are the further observations which contradict or limit the facts contained in my second edition? Dr. Bateman offers none from himself or any subsequent writers. The only two documents that have come to my knowledge, are Dr. Christie, in his account of vaccination at Ceylon, and Dr. Gourlay’s *History of the Island of Madeira*. The first of these refers his reader to “Adams on Morbid Poisons, for a good account of Elephantiasis;” and

* Pemberton’s Introduction to Sir Isaac Newton’s Philosophy.

Dr. Gourlay notices those peculiar changes of the organs described by me, in contradiction to all former writers, as "a leading character of the disease."

It may be asked, by those who have not read the "Synopsis," or who do not take the trouble of referring to the passages quoted, Why so much time should be spent in explaining a thing so clear? But it may be questioned, whether it will appear so from a mere perusal of the Synopsis, for between the ambiguous set of queries at the conclusion of the paragraphs quoted above, page 92, and the pathological *desideratum* of "an accurate history of the disease," there is interposed a long discussion concerning the Lazaretto's of the middle-ages; the leprosy of the Jews, and Dr. Winterbottom's mistake, who, Dr. Bateman informs us, instead of the Elephantiasis, has described the *Leuce* of the Greeks; the *Barras*, and not the *juzam*, of the Arabians; some learned notes are subjoined on Hippocrates, Celsus, and Lucretius; Avicenna, Aëtius, Paul Aginet, Actnarius, and others, concerning the Alguada (Alphos) and white Barras—Barras with the epithet black of Avicenna.—The disease described by Alzaharavius, which, when arising from putrid phlegm, and commencing with Barras, or with white Bohak, (Alphos of the Greeks) becomes juzam in its advanced stage. The last of the notes tells us, that if Dr. Winterbottom was *correctly* informed, (by the bye, after the remark in the text, his report must be very doubtful) the *Foolas*, on the coast of Africa, employ the Arabian terms in an *inverted* sense. 1. The *damadyang*. 2. The *didyam*, (sometimes written sghidam, dsjuddam and juzam) and, 3. The *barras*. But if I understand the text, the whole is erroneous in

Dr. Winterbottom, which very well prepares the reader for the conclusion of the paragraph, "Accurate Histories of the Elephantiasis, Leuce, and other modifications of the formidable cutaneous diseases that occur in hot climates, and especially where agriculture and the arts of civilization are imperfectly advanced, must be deemed still among the *desiderata* of the pathologist."

We may now return to the three queries which were before passed over as misplaced; but which, forming the conclusion of a paragraph relating to Dr. Adams, ought not to be left unnoticed. 1st. "Is the Elephantiasis of Madeira now less virulent than that of former times? 2dly. Has it undergone some change in its character? or, 3dly. Is the ancient account of the disease incorrect?"

Two of these questions are answered, not indeed without some reserve, in the quotation from the Synopsis. In the first of the three paragraphs, great suspicion is thrown on the accuracy of the ancients. In the second, we are told, "there is great reason to believe that Elephantiasis is *not contagious*. The other question, concerning *change of character*, is involved in much difficulty, because we know no means of describing a disease but by its character. The following paragraph, transcribed from another part of the Synopsis, still further shows the intricacy in which the subject is involved.

"Surely then," says Dr. Bateman, "the imperfection of the knowledge of the ancients, respecting the nature of these eruptive fevers, affords no just inference against their existence; while, on the contrary,

the brief, but repeated notices which they have transmitted to us, of eruptions resembling nothing that we are now acquainted with, except the contagious maladies in question, lead to the fair and legitimate conclusion, that *the diseases of mankind*, like their physical and moral constitution, *have not undergone any great and unaccountable change*; and that the eruptive fevers have prevailed from the earliest ages.*

A wish to preserve accuracy in medical reasoning, induces me much more than any personal concern, to mark the haste with which the preceding paragraph has been published. The object is to prove, that the small-pox and other "eruptive fevers have prevailed from the earliest ages." The proofs are— That no inference to the contrary is to be drawn from the imperfect knowledge of the ancients respecting such fevers; and that frequent notices of eruptions, resembling nothing we are now acquainted with but such contagions, lead to the conclusion—of what? "That the diseases of mankind, like their physical and moral constitutions, have not undergone any great or unaccountable change;" that is, ancient ignorance does not disprove, and imperfect description leads us to conclude, what no one will attempt to dispute. But because diseases do not undergo any unaccountable change, does it follow, "that the eruptive fevers have prevailed from the earliest ages." Is there no difference between a *change* which we cannot account for in the *same* dis-

* Synopsis, p. 68. See also p. 66 et seq. of the same work, for the author's opinion of the inaccuracy of the Arabians, and of the learned Sinnertus, and the intelligent Dutch Professor Diemerbroek, and others.

ease, and the introduction of a new disease? Have we not witnessed in the cow-pox, a sufficient cause for the introduction of a new contagion? Lastly, Would the ancient Greeks, with all their inaccuracy, have overlooked what has been noticed by the Arabian and succeeding writers, namely, that these eruptive fevers attack the same person only once during life?*

The reader may be tired of this attempt at close reasoning; still, a regard to my own reputation and the interest of humanity, obliges me to detain him on a most serious part of this Inquiry. The difficulty of fixing the exact bounds of contagion, and the important interests in which the question is involved, are equally great. Yet we are told, there is great reason to believe, Elephantiasis is *not contagious*; and the authorities brought in support of this opinion are, M. Vidal, Dr. Heberden, and Dr. Adams.

Why are not MM. Vidal and Joannis, on this occasion coupled, as in the succeeding paragraph? If either of them is omitted, should it not be the former, who pleads that the account was extorted from him, and the almost intire extinction of the disease when he began his enquiries. M. Joannis tells us, that the *leprous infection* is different from that of the pox, and that it is not so easily communicated. Dr. Heberden is more cautious in his conclusions than he has credit for.† In my own defence, I must again refer to the

* See Observations on Morbid Poisons, p. 360; and Inquiry into the Laws of Epidemics, p. 22.

† His words are, "It is certainly not so contagious as is generally imagined."—Medical Transactions, vol. i. p. 23. In the "Synopsis," no reference is made in the notes to this passage.

Cyclopædia. Here we are told, "Dr. Adams is *disposed* to deny altogether the contagious nature of the disease;" but the paragraph concludes with a just caution. "It must not be omitted, however, that the wife of the married Lazar just mentioned, was also diseased, and that Dr. Adams heard of two other couple in a similar condition; and also, that the porter of the house had become a Lazar, since his residence in the Lazaretto."

That the reader may be acquainted with both sides of the question, let him turn to the *Cyclopædia*. Besides the justice there done to my caution, in relating four possible cases of contagion, he will find the article commence with Dr. Bateman's definition of Elephantiasis, "a loathsome *contagious* disease;" and afterwards, "*contagion* is another source to which Elephantiasis is attributed. *It is not to be doubted*," adds the author, "that contact with the diseased will excite Elephantiasis, as in other chronic diseases, where *a morbid poison is generated*." Avicenna's opinion is quoted, that "it may be communicated by effluvia, as in acute diseases; but this, it is added, seems *questionable*." "The disease seems to have prevailed throughout Christendom, more particularly in the South, but not confined to the warmer countries, as it was prevalent in England." Mathew Paris's authority is quoted without any reserve, "that 19,000 Lazarettos were erected for this disease only in Europe." Professor Niebuhr's story of the infected linen is related with as little reserve; and we are told, "the disease imported into the West India Islands from Africa appears to have been one of the punishments which that

abominable traffic the slave trade inflicted on the inhabitants."

It will naturally be asked, What should have given rise to this change of opinion? Has any new light been thrown on the subject, since the publication of this article in the Cyclopædia? The suspicious testimony of Aretæus and his copyers, including Dr. Hillary, must have been well known at that time, as Dr. Adams's work, which is spoken of so favourably, and from which such copious extracts are made, contains the same opinion, and almost in the same words.* The change of sentiment, concerning the 19,000 Lazarettos in Christendom may indeed have occurred since, as the 'Inquiry into the Laws of Epidemics' was not then published. The only difference between the passages contained in that work and in the Synopsis is, that the language of the latter is the most decided.†

The question whether Elephantiasis is contagious, is too important to be hastily passed over. Careful as we should be, not to excite unnecessary alarm, which must render the condition of the unhappy objects still more deplorable, we are scarcely warranted in asserting, that there is no contagion in any kind of intercourse with Lazars.

It appears probable, that in this country at least,

* Compare Observations on Morbid Poisons, p. 284, with Dr. Bateman's Synopsis, p. 296, note. In the Cyclopædia, Hillary's account is called a transcript of Aretæus, but without any mention of inaccuracy in either.

† See the first note at the end of "Inquiry into the Laws of Epidemics," in which the subject of Leprosy, and particularly of these Establishments, is considered much at large.

little is to be apprehended ; and if so, less inconvenience may happen from the security expressed in the Synopsis, than from the terrors contained in the Cyclopædia. It must be admitted too, that about the time that article appeared, a very general opinion prevailed, that contagions might be exterminated. As a proof, it was urged, that Elephantiasis, under the name of Leprosy, had been exterminated from England by the prudent caution of our ancestors ; and some apprehension was expressed lest it should be reimported. During this period, a Lady, native of Ceylon, arrived in London, with the disease on her. In the same vessel came a very experienced Army Physician, who being consulted on the case, entertained several doubts, whether he should denominate it *Leuce* or Elephantiasis ; but in either case, expressed his alarm, lest this dreadful contagion should be spread through the British Islands. With the best intentions in the world, therefore, he proposed that a guard should be immediately set over the patient, her husband and child ; and that all three should be sent back to India by the first opportunity. The husband was a most respectable character, the confidential servant of a nobleman at the head of one of the Governments in India, who not wishing to be deprived of a faithful Secretary, desired the advice of Dr. Baillie before any other measures were taken. That gentleman having seen my description of Elephantiasis in manuscript, had no difficulty in ascertaining the case, but very politely referred it to me. The nobleman, with the humanity that does credit to his rank, honoured me with a call, full of anxiety, to know the event ; his secretary attended him, who was said to be already infected. On a

careful examination, however, only a trifling efflorescence could be found on any part of his skin, not at all characteristic of the disease. The poor Lady was dreadfully afflicted; she afterwards retired to Bath, and died in one of the Lodging-houses, without being injurious to any one.

I have given this little history, to show how important it is, as far as possible, to ascertain the laws of contagion. Yet, by some passages in the Cyclopædia, particularly some quotations, which stand uncontradicted, one might apprehend every thing. By the Synopsis, we are divested of all caution, and a quotation from Vidal would lead us to conclude, that there is no danger even in the sexual intercourse with lepers. Surely, this passage ought to have been contrasted with the account of the three couples mentioned in the Cyclopædia.

Five cases of Elephantiasis have fallen under my notice since my return to London. It is probable, that many others may have appeared, not only in the metropolis, but in other sea-port towns. The description of the disease is, therefore, a matter of importance. To those who are in possession of the last edition of the Cyclopædia, nothing need be added to what the writer calls "the latest account of Elephantiasis occurring in Europe, and the history transcribed of its "minute examination." In the Synopsis, the author, after professing never to have seen the disease himself, adds, "I should have omitted the subject altogether, had it not appeared to me, that some comment on the mistakes of translators and their followers, as well as on the history of the disease in general, might contribute to

put the matter in a clearer light than it now stands." It cannot be necessary to remark, that the attempt to make an accurate account clearer, may tend to obscure it. Such is certainly the case. Besides the number of notes already transcribed from the Synopsis, many more are affixed, and in such a manner, that the reader is left in the dark, whether the quotations are to be considered as containing faithful descriptions or not. The history of the disease in the text is also erroneous, in the omission of symptoms which form its strongest characters, and in the addition of others which are not to be met with. All this is now readily decided, without any reference to a warm climate. The case of an adult has already appeared at St. Bartholomew's Hospital, and another of a boy is to be seen there at this time. Mr. Ashburner, the house-surgeon, recognized the disease at first sight, and the examination of every part of the body confirmed his suspicion, as well as the faithfulness of the account given in the "Observations on Morbid Poisons."

In the passage which immediately follows in the Synopsis, as part of the same subject, the name of Dr. Adams might, with as much propriety as in the former, have been opposed to most of the moderns. "By the surgeons of the present day, we are told, the appellation of Elephantiasis is appropriated to an enormously tumid condition of the leg," &c.* This appropriation of the word is not confined to surgeons. It is so general among medical men of all descriptions, that in the paper before-mentioned, as submitted to the

* See Synopsis, p. 304, with the learned Notes annexed.

London College of Physicians, I did not scruple to enter minutely into the confused application of the terms *Lepra* and *Elephantiasis*. I might offer an epitome of this paper; but if my reader feels, like me, nothing less than minute descriptions of local diseases will satisfy him. To hurry over twenty or more at a sitting, is an entertainment which may be often repeated, because they will be forgotten as soon as perused. But the slightest inaccuracy will, to an enquiring mind, render the whole perusal unsatisfactory, and even painful, whenever a doubtful case presents itself. We shall then gain little by learning the opinions of *Haly Abbas*, *Avenzoar*, or *Alsaharavius*, with many others, whether their language is quoted or their works referred to. That the reader, however, may not be at a loss, if he wishes to examine the original authors on *Leprosy*, and the various senses in which the above terms have been used, I shall insert a short paragraph.

“ To pursue the subject through the whole controversy, would be more ostentatious than useful. Those who wish to follow it beyond the quotations produced by *Lorry*, may consult *Sebastian Aquilianus*, *Nicol. Leonicenus*, and several others, preserved in the *Luisinian Collection*. To do justice to these writers, we should recollect, that the works of *Aretæus* were not recovered from the rubbish under which they were concealed for near half a century after that time. The *Italians*, therefore, could only discover the meaning of the *Asiatic Greeks* from the writings of *Galen* and his commentators, whose descriptions are very

obsure, and scattered in different parts of his works." *Observations on Morbid Poisons*, p. 290, 2d. edit.

The succeeding article in the Synopsis is Yaws. This, the author says, has "been imperfectly investigated by European practitioners;" and afterwards, in a *Note*, that "it is not easy to discover the precise character of this eruption from the varying language of authors." I have been more fortunate. By visiting my patients daily for several months, and sometimes two or three times a day, and taking frequent opportunities of dissecting the pustules† or breaking the scabs, in order to view the bottom in different stages of the disease, it was easy to reconcile the accounts given by different authors. Though they can scarcely be called incorrect, yet none of them are sufficiently minute; some describing appearances and symptoms omitted by others, yet without contradicting each other. Every appearance is most minutely detailed in the Levitical description of Leprosy. This part of the controversy is, in the Synopsis, confined to a few symptoms, chiefly contained in *notes*. The following comprehends most of the arguments.

"The anonymous writer in the *Edin. Med. Essays*, and after him Dr. Hillary, and others, have deemed the Frambœsia to be the Hebrew leprosy, described by Moses. (*Leviticus*, chap. xiii.) In some respects, and especially in the appearance of what is called

† See *Observations on Morbid Poisons*, p. 207. It is remarkable that we have no instruction for such a mode of ascertaining the character of a morbid poison, but in the Levitical Law; if we except Mr. Hunter's account of *Connate Small-pox*, published in the *Philosophical Transactions*.

'raw flesh,' in the leprous spots, together with *whiteness of the hair*, the description of the Leprosy of the Jews is applicable to the Yaws. But the leprosy is described by the great legislator as beginning in several varieties of form, in only one of which this rising of 'raw flesh' is mentioned: and the two circumstances, which all these varieties exhibit in common, were a depression of the skin and whiteness of the hair. Now this change in the colour of the hair is common to the Frambcesia, and to the Leuce, as stated; and it is conjoined, in the latter, with cutaneous depression. It seems pretty obvious, indeed, that the term Leprosy was used, in the Scriptures, to denote several diseases of the skin, against which the law of exclusion was enforced, and others, to which it did not apply. An instance of the latter occurs in Gehazi, whom we find still in the employment of Elisha, and even conversing with the king, after the leprosy had been inflicted upon him, "and his seed for ever." (2 Kings, chap. v. and vi. and chap. viii. ver. 4.)

Synopsis, p. 311, Note.

It might have been presumed, that the anonymous author and *others*, comparing what passed under their own eye with the accurate description of a disease, might be able to judge of the identity of the two. My own opinion has been given more at large than would be consistent with the present undertaking. I shall, therefore, only notice the objections made in the Synopsis. What the author speaks of as "beginning in several ways, or appearing in a variety of forms, relates to the different stages of the same dis-

ease. To the end of verse 8 (Levit. xiii.) the Divine Legislator gives directions for examining the pimple, pustule, or scab. In verses 9, 10, 11, he describes the old [the confirmed] Leprosy, in which the fungus or raw flesh, renders the disease no longer doubtful. From the 12th to 17th verse inclusive, we are taught the marks of returning health, which are similar to those described by the anonymous author and others, as the termination of Yaws, excepting that more caution is required in the examination by the priest, before the person was allowed to reside in the camp. What the *Leuce* was, I pretend not to determine; but if *cutaneous depression* means a loss of substance below the skin, the same is implied as the early appearance of Yaws by the anonymous author, by Dr. Winterbottom, and I believe by every other writer; for how can there be a slough or sordes without a loss of substance, or, as described by Moses, a plague deeper than the skin of the flesh? In *Leuce*, I cannot find that the hair was changed white, though the surface was covered with white hairs like down, *In ea pili sunt albi lanugini similes*. In the Synopsis, it is said silky. Whichever it might be, the change, if it was such, was more than merely that of colour.— Lastly, “*Leuce* was of an incurable nature,” which is different from the Levitical leprosy.— See Synopsis, p. 30 and 31, note; p. 55, note; p. 269, note; p. 299, note; p. 311, note; and probably some other notes.—By referring, however, to the above, the reader will determine, whether he can reconcile the *Leuce* of Hippocrates with the *Leuce* of Celsus, or either of them with the Hebrew Leprosy.

At the close of the last quoted note, it is said, “we still find Gehazi in the service of the Prophet,

and even conversing with the King, after the Leprosy had been inflicted upon him and his seed for ever." (2 Kings, chap. v. and vi. and chap. viii. verse 4.)

If, during this interview with the king, Elisha was not on a journey, I can at least find no proof that Gehazi continued in his service.

This history, as it respects morbid poisons, at one time engaged much of my attention; and if what I now presume to offer, is not new, it may not have met the eye of those, whose studies, like the author's, have been for many years purely professional.

Writers have remarked, that white people rarely catch the Yaws, because their skins are entire and their bodies covered. The Mosaic account of the Egyptian bondage informs us, that the Isrealites were striped by their masters, and doubtless badly covered. Egypt, from its close population and settled climate, has always been famous for its cutaneous and contagious diseases. No wonder, therefore, that the Divine law-giver should very early direct his attention to their extermination; and if, as is generally believed, Yaws can only be communicated by inoculation in some form, we may readily conceive that this, and many other similar diseases, were exterminated by those wise institutions; and the accurate description of them shows the antiquity of the writings ascribed to Moses. I am aware it has been said by some, that the Jews were only that part of the Egyptians which were separated from the rest, on account of the Leprosy; and even Dr. Mead seems to admit, that they are to this day particularly subject to cutaneous ulcers; but nothing can be more unfounded. The Jews, though numerous and poor, are much more free

from such diseases, than the nations among whom they sojourn. This was long ago remarked by the two Buxtorfs, who, though no way friendly to their general character, seem reluctantly to admit "*Lepra revera non tam frequens est apud eos quam apud Christianos,*"* which is very reasonably imputed to their attention, as far as possible, to the Mosaic instructions. That they are of one family can hardly be questioned, from the correspondence of their features; and what could be more preposterous, than to suppose, that an army of invalids could have accomplished so long a march, and under such difficulties.

It has often occurred to me, that the instructions they received, to avoid every nation, if possible, and to destroy those they were obliged to encounter, arose not only from the necessity of preserving the purity of their race, but to prevent the introduction of contagious diseases; and this seems confirmed by the description of those among the conquered Midianites, who were to be spared.

If by these means, the Jews became free from contagions, perpetuated by contact only; still they could expect no exemption from Elephantiasis, a disease excited by climate. It is not to be wondered, however, if the law of exclusion was continued, and gradually moulded to the condition of the sick. Accordingly, we find King Uzziah, when the Leprosy was discovered upon him, confined to a lone house, not "during all the days of his Leprosy," but as long as he lived. The poorer class, the most numerous and the most liable to the disease, seem only to have been for-

* *Synogoga Judaica*, cap. xlv.

bidden to enter the towns. Thus we read, "at the *gate of Samaria* there were four lepers;" and in the 17th of St. Luke, *at the entrance of a village*, there met Jesus ten lepers, *which stood afar off and lifted up their voices*. Such was probably the manner in which Gehazi conversed with the King. That this disease was different from the Leprosy mentioned in Leviticus, and for which a *temporary* exclusion only was required, is evident, inasmuch as it was incurable.—Am I a God, says the King of Israel, that this man expects me to heal a leper! [2 Kings, chap. v.] and the cleansing of lepers was admitted among the most extraordinary of our Saviour's miracles.

If Gehazi's disease was really Elephantiasis, it explains at once the import of the prophet's words. We must recollect, that though they seem to imply a curse; yet this may be imputed to the manner in which the future tense is formed in the English language. In the Septuagint, the two verses taken together, produce a very strong and pointed effect. "And you were now grasping at (*νῦν ἐλαβεις*) silver and garments, and olive yards and vineyards, and sheep and oxen, and men servants and maid servants, and the leprosy of Naaman, *κολληθήσεται*, shall or will cleave unto thee and unto thy seed for ever." At such times as these, are you thinking of the aggrandizement of yourself and family? recollect the troubled state of your country, and that you have an incurable and hereditary disease upon you! Whether the words of inspiration were really directed to that peculiarity in the disease, which would preclude the possibility of any posterity (*τῷ σπέρματι σου*) it is not necessary for us to enquire:

Before I take leave of the Synopsis, I cannot help congratulating the writer, as well as the public, on the temporary injunction concerning its sale. I doubt not, it will be productive of a new work, more worthy of the author. The present, besides evident marks of haste, shows an attempt at more than can be accomplished. To shorten the accurate description of any eruptive disease, is to render it unsatisfactory, and consequently useless; besides, that the labours of men, who have devoted a life to any branch of a profession, should be touched with extreme caution. Their text should be preserved, and whatever elucidation or correction may be thought necessary, should be offered in commentaries. Some arrangement is required in every undertaking; and as Dr. Willan proposed one, it was necessary to pursue it, in offering an abstract of his proposed classification. But I should rather wish to see an original work from Dr. Bateman, on a plan purely his own, in which he might refer to Dr. Willan in common with others. I could wish also to see him less shy of modern authors, and much more so of the Greeks, Latins, and Arabians. Dr. Cullen remarks in his Preface, that as he could make nothing of *Synonyma veterum*, he has omitted them. The venerable Heberden speaks of them in much the same manner; and we should, least of all, have expected the revival of them by one who conceives, not only that the Greek and Roman writers were incapable of describing small-pox, but that even the Arabians, tho' not ignorant of the disease, confounded it with others, to which it bears no resemblance; an error which was continued to the close of the 17th century. If Dr. Bateman would favour us with a distinct Essay on the

probable application of ancient terms, or recommend it to a junior, or an *emeritus*, as an exercise or recreation, some entertainment, if not use, might be made of such a work, and the young reader need not be perpetually surprised or discouraged, by meeting with hard words, or being referred to authors he is not likely to find in his library.

I was much pleased to see the attention paid in the Synopsis to names and distinctions among the vulgar, p. 67, and 204, notes. This is also remarked in the text, under the article Itch, in which the vulgar names are neatly Latinized. On this occasion, I wish the author had availed himself of information from the same sources from which he derived his names. Few of the Irish labourers who apply for relief at the Carey Street Dispensary, would be found ignorant of the *flesh-worm*, of the difference between the disease it excites, and the *itch*; and even of the different manner in which each may be cured. The experiments made in Madeira, and confirmed in Ireland,* have lately been repeated at Paris; but whether the vulgar were consulted, does not appear.† In the Synopsis, we are referred to Abinzoar of the 12th, and others of the 15th and 16th Centuries. Without questioning the accuracy of either, let me remark, that Ambrose Paré, about the last date, gives a very accurate account of these insects, and says, the patient may be

* See Observations on Morbid Poisons, 4to. edit. p. 292.

† See the 3d Number of the Medical Repository. Without a sight of the Original Paper, and consulting those who are intimately acquainted with the most vernacular French, it would not be fair to offer any other conjecture.

cured by extracting them; after which he advises stavesacre, aloes, or salt, to be rubbed on the parts.* Savaages† and Plenck‡ both advise extracting the insect. Can this be the disease in which Swammerdam, Canton, Baker, Heberden, and Hunter, never could discover an insect with the best microscopes?

It must be admitted, that since philosophers interfered in this question, it has been involved in much obscurity. Bonomo took half his lesson from the galley slaves; and of his crude materials Dr. Mead published a mutilated account in the Philosophical Transactions. From that time, philosophers and physicians have been much puzzled; some having seen the insect, which never could be detected by others, who searched for it with the best microscopes, in the most marked cases of Itch. Savaages, who distinguishes the two diseases in his octavo edition, confounds them in his later quarto edition. Dr. Willan, who was full of candour, was aware of these difficulties, and thought he could reconcile them, by finding that Sinnertus, Mercurialis, and some other writers of their date, had described *pruritus* or *prurigo* as the frequent forerunner of Scabies. His words are, when persons affected with the above disease neglect washing, "the eruption grows inveterate; and at length, changing its form, often terminates in the Itch. Pustules arise among the papulæ, some filled with lymph, others with pus. The *acarus scabiei* begins to breed in the furrows of the skin, and the disease becomes

* Oeuvre de Ambrose Paré, 1746, edit. 12th, livre xxvi. chap. 6, page 476.

† Nosol. Method. vol. ii, p. 23, edit. 8vo, 1763.

‡ Plenck de Morbis Cutaneus, p. 119, edit. 2, date 1783, Viennæ.

contagious."* This was published before I had given him the history of the disease, and shown him the insect, of which he procured me a drawing by the late Dr. Shaw. Had my friend Willan lived to complete his work, I have no doubt that he would have corrected this passage, and done justice to the sources of his information, as he never failed to do on other occasions.

In the Synopsis, there are two attempts at reconciling the difficulty. The first is, by approving Savaages arrangement, in making a separate species of *S. Vermicularis*; the other is, by "supposing that the breeding of these acari in a scabious skin, is a rare and casual circumstance, like the individual instance of a minute pulex in Prurigo, observed by Dr. Willan; and that the contagious property of Scabies exists in the fluid, and not in the transference of insects."

Does the expression "generated in some species of Scabies only," mean that Scabies is necessary for the generation of such an insect, or that there is a species of itch occasioned by the acarus gyro? The latter seems the meaning of Savaages; but, were it as Dr. Bateman afterwards expresses himself, "a casual circumstance," it could not be "like the individual instance of pulex mentioned by Dr. Willan;"† We have then only to enquire, whether they will breed under the cuticle of a skin free from Scabies? and whether the disease may be cured by extracting them? Both these facts have been experimentally ascertained. The conclusion is, that an eruptive disease, independent of the Itch, is excited by an insect

* Cutan. Diseases, p. 75.

† Id. p. 85.

called in Ireland the flesh worm ; in France, the cyron ; in Portugal, ouçãõ ; once well known in England by the name of wheal worm, and still sometimes occurring. That the disease which it excites, from some resemblance, from situation, and from yielding to the same remedies, may be mistaken for itch ; but that the insect has never been discovered when searched for in the most marked cases of true itch.

In the Synopsis, we have four varieties of Scabies. These four consist of the true itch only, and another disease, which I have called the *herpes pauperum*.* This is the Scabies Cachectica of the Synopsis, a term which, if contagion were not attached to the *Genus*, would be unexceptionable. It has been noticed by Sir John Pringle, by Dr. Gillespie, and by many other writers on camp and prison diseases. It occurs in confined nurseries, if change of air is not introduced, but without extending to other parts of the house. I have seen it in two or three misguided youths, who have returned to their parents, after a temporary absence, in the lowest order of society; in these instances, it has never been communicated to any of the family.† I have called the disease Herpes, from its disposition to spread along the skin. This etymology of the word is ad-

* See Observations on Morbid Poisons, p. 325 and 326.

† See also Epidemics, chap. 1. From the last mentioned circumstances, I was led to suppose, that the disease is only infectious in that kind of air in which it is generated.

If the reader is unacquainted with these distinctions, and has not leisure or inclination to refer to the arguments by which they are enforced, I must request him to give me credit for them. One illustration, however, occurs from this passage in the Synopsis. "The most ordinary cause of scabies, we are told, p. 196, is contagion."

mitted in the Synopsis (from *epithem serpene*). Yet, in the same work, "the appellation is limited to a vesicular disease, which, in most of its forms, passes through a regular course. Such is particularly the case with one "local variety," which, we are told, p. 233, "was not noticed by Dr. Willan." It is incidentally mentioned under a different name in Observations on Morbid Poisons, 2d edit. p. 94, and is most minutely described by Mr. Royston, in the Medical and Physical Journal, vol. xxiii. p. 446.

These remarks on names, somewhat abruptly introduced, may serve to show how careful we should be in changing commonly received terms. Whether we use psora or scabies for Itch, may seem of little consequence, as it is not certain that those from whom we derive the words were acquainted with the disease to which we now apply them. But whenever a name is changed, some regard should be paid to etymology, as the great use of nosology is, that we

—"It seems, however, to originate in crowded, close, and uncleanly houses."—"When the contagion has been introduced, however, into families where every attention to cleanliness is enforced, it frequently spreads to all the individuals, children and adults," &c. All this is correct, if the genus *Scabies* is to include diseases arising from different causes, and different in their character, and even different in their mode of cure. But, in my opinion, it would be more correct to say, *Itch and Herpes pauperum* are both common in close and uncleanly houses—the former must be introduced into, but the latter may be generated in, such places, and both are communicable in such places. The former, when introduced into a family, may be communicated before the parties are aware of it; and will only yield to certain local remedies. The latter is never generated in such families, nor communicable when introduced; and is curable without the local remedies necessary in the former.

should all be acquainted with each other's language. If we expect more than this, there will be great danger of misleading ourselves. The first person who proposed an arrangement of diseases, similar to what is made of plants, was Sydenham. He, however, rather looked to it with a wish than an expectation of its accomplishment, and seems not aware that the arrangements of Botanists were, in many instances, artificial. It is certain, that he lived to lament the application of practice to names, declaring, in the most advanced period of his practice, that "the invention of the term, or opinion of malignity had been far more destructive to mankind than the invention of gunpowder." I leave it to the decision of those who have had most experience, in the comparative effects of disease and gunpowder, how far the introduction of the term Typhus may be liable to a similar charge. We may at least remark, that the very fever which drew this expression from Sydenham, is, by Dr. Cullen, included among the Synonyma of Typhus.* As the illustrious Professor refers to every original author, it would be unreasonable to accuse *him*, if such sources of information are not studied by his readers; and if he made his nosology a text-book for his lectures, we cannot doubt that his hearers were often apprized, that the same mode of practice could not be applicable to fevers arising from so many causes, assuming so many forms, appearing in such different climates, and under habits of life so different as to comprehend near fifty synonyms. Still, we may lament the influence of a term, in a work which, from

* *Febris nova anni, 1685, Syden. Scedul Monitoria.*

the just celebrity of the writer, and its connection with the "First Lines," may hereafter become the text-book of less enlightened Lecturers, as it is already of Physical Compendiums.

Diseases of the skin being more immediately the objects of our senses, may be thought more easily reducible to orders and genera. Let us try this in Itch and Syphilis; because, in these we are most frequently required to give a decided opinion. Of the first, if enough has not been said, to show the difficulty which attends such an attempt, we may add from the Synopsis, that "from its affinity with three orders of eruptive appearances, pustules, vesicles, and papulæ, it almost bids defiance to an artificial classification."—The above orders, comprehending only fifteen genera with their species and varieties, may be less alarming to a modest enquirer. But the eruptions of Syphilis are said to "bid defiance to arrangement, according to external character;" that, "in fact, they possess no common or exclusive marks, by which their nature and origin are indicated:" and that "there is no order of cutaneous appearances, and scarcely any genus or species of chronic eruption *already described*, [and this is the last] which these secondary symptoms of Syphilis do not occasionally imitate."—"Nevertheless," continues the author, "there is in many, a difference which a practised eye will recognize between the ordinary diseases of the skin and the syphilitic eruptions to which the same *generic appellation* might be given; this is often observable in the shade of colour, in the situation occupied by the eruption, in the mode of its distribution, and in the general complexion of the patient. Hence, to a per-

son conversant with those ordinary diseases, a degree of anomaly, in these respects, will immediately excite a suspicion, which will lead him to investigate the history of the progress of such an eruption, and of its concomitant symptoms. And it will frequently happen, that the most experienced observer can only arrive at a satisfactory conclusion, by comparing the cutaneous appearances with these concurring symptoms, and with the previous history of the disease." Fortunate are those tyros and practitioners who are within the reach of consulting a person conversant with those ordinary diseases, as the discriminating marks between half a score such and syphilis, can afford little assistance to the common reader.

This Note may seem extended to an unreasonable length, and no longer connected with hereditary diseases. But it is most intimately connected with whatever relates to medicine as a science. For if two not uncommon diseases, the progress of which is slow enough to admit the most accurate observation, are reduceable to no laws, or to none that can be described, it is evident that our present mode of investigation must be defective, or that we must give up every prospect of progressive improvement. We are told, from very high authority, that the faculty of tracing actions, so as to discover a law, makes the whole of philosophy.* In medicine this must be more difficult, and more as well as closer observations must be necessary, than in any other branch of natural knowledge; because diseases are modified by constitutions, and their progress interrupted by remedies. Hence, it is not easy to bring men to a general agreement; yet, some progress has been made towards such an event. In

* Nov. Organ.

the Small-pox, Sydenham has taught us to look for certain laws, which were never established till his time.* In gout, he has not been less successful; and the instructions he has given in tracing fevers, have become almost oracular. Fothergill has been scarcely less successful in Scarlatina. Though in the treatment of these diseases, improvements may be expected, and changes necessary under different circumstances, yet the phenomena of the diseases themselves, as marked by those writers, are now so familiar to us all, as to admit of no dispute. If this can be accomplished in fevers, shall we despair of arriving at the same certainty in diseases, whose progress is slower? It must be admitted, that for so desirable an event, we require the same talent at observation, the same persevering diligence, with the same integrity as existed in the man who, after establishing such laws, should declare that there are small-pox cases, which the errors of a nurse could not render fatal; and others, which the skill of no physician could cure. When, therefore, we possess the fruits of such mens' labours, let us learn how to value them.

Having made these general remarks, I shall trace very shortly the progress of Mr. Hunter's inquiries, in a disease which is said "to possess no common or exclusive marks."

For a long succession of ages, the term Leprosy was generally applied to all cutaneous complaints, which had no other appropriate title. About the close of the 15th Century, a new morbid poison was in-

* See Mead's Discourse, chap. 2.

roduced, which, from the various forms in which it appeared, excited universal consternation. It was at length found, that in all its forms, it would yield to mercury, the free use of which had been at that time, only recently introduced into Europe. Hence, other local diseases, not well ascertained, were soon confounded with Syphilis, merely because they yielded to the same remedy; and we find Professor Pitcairne very archly remarking, that nothing more was heard of Leprosy, " *Lepra ante famam morbi Neapolitani Hydrargyro cessit, nunc nomen amisit.*" Opera, p. 315, edit. Lugd. Bat. 1737. So convenient a disease, however, could not long be confined to such limits. It now appeared in every shape, and in some that would not yield to mercury, or were even exasperated by it. Lest it should seem strange, that the same disease should produce such different effects under the same remedy, a most convenient term was introduced, to stifle all enquiry. For who could pretend to fix bounds to a *Proteiform Disease*? Hence, we find Lancisi tracing an aneurism to that source, for which he is quoted by some respectable names. — At length, the diligence of Astruc introduced something like order; but in endeavouring to reconcile the various accounts, he supposes that diseases, like empires, undergo changes; as if the laws of Nature were fluctuating, like human institutions. After him Howard, and some other writers of our own country, did much towards improving the practical treatment. Still, however, the disease retained its poetical name, so that every one felt at liberty to include under it whatever he pleased.

Whilst Mr. Hunter was engaged in reducing this

chaos to order, but before he thought his labours sufficiently mature for the public, we were told, that the Island of Otaheite was almost depopulated by the importation of that morbid poison. Such was the candour of this author, that though he found it difficult to reconcile such an event with his opinions, he never ventured to dispute it. All this while, it should be remarked, that no accurate description was given of the South Sea Disease, as it was thought enough to give it a name. At length, the surgeon who attended the expedition under Peyrouse, confining his letters to his own department, could not fail of being somewhat particular in his description; and it is but justice to his countrymen to add, that their accounts of diseases are generally more minute and accurate than ours. Still the same error remained, for if he did not consider the appearances he described, as the effect of that morbid poison, he never expresses a contrary opinion; and seems, in many places, tacitly to admit it. This is less to be wondered at, in one who could only read Mr. Hunter in a translation or a foreign tongue. From an accurate examination, however, of all the cases described by the French Surgeon, I had no scruple in suspecting, that none of them were venereal. This led me to examine all the accounts of those voyages, and confirmed me in the belief, that Syphilis had never been known in Otaheite.

Without any knowledge of my opinion, and even without any intercourse between us, Mr. Wilson, a Surgeon in the Royal Navy, landed at that island, full of anxiety for the health of his crew, who were to complete a long voyage after their departure. His

uneasiness was much increased by the dismal tales of the Missionaries. This induced him to be particularly attentive to the condition of the natives, as well as of those intrusted to his care; and the result of his most minute enquiries was, that the venereal disease had never been known in Otaheite. After this, shall we say that Syphilitic eruptions possess no common or exclusive mark? or discourage the student by shades of colour, and a general complexion, which cannot be described? But I have said enough to show that medicine is a science; and that, like other sciences, it may be progressive; though it is not as yet sufficiently advanced, to admit of artificial arrangement, without danger to the student.

NOTE to Page 39.—“*That connate diseases or privations are not hereditary.*”

The extensive correspondence these Inquiries have led to, have furnished me with several other instances of fathers born deaf, whose children hear perfectly. I have also been informed of a single instance of deaf offspring from a deaf mother. It is remarkable, that this is the only female I have been able to learn born deaf, who is married and become a mother. It may be proper to mention, that her husband was as near in consanguinity as the canonical law will admit. After carefully tracing the history of deafness in this family, I have learned that it was truly hereditary, having occurred in three generations out of four; though in the last only in a single individual. Such is the present result of my Inquiry, which, from the distance of time and place, cannot be perfectly satisfactory, without any imputation on the accuracy of those to whose kind attention I am so much obliged.

I have many reasons for believing, that some cases of supposed connate deafness are not really such, but commencing so early, that the subjects can have no recollection of sounds. My principal reason for this opinion arose from hearing, that Mr. Stevenson had succeeded in relieving some of those unfortunate sufferers. Highly as I valued the abilities of that gentleman, my doubts on so extraordinary an event induced me to make a personal application to him, when he informed me, that he had three subjects born deaf and dumb then under his care, in a progressive state of improvement, to each of whom he politely offered to introduce me. Now it is difficult to conceive connate deafness, without such an organic imperfection as would admit of no relief. These remarks can only be made in the hopes of being favoured with further Communications, which, from any quarter, will be thankfully received. If, however, such imperfections are really connate and hereditary, it very much lessens the terror of them, that they are not absolute privations, but in some instances admit of a cure.

THE END.