CHAPTER III

Of the distinction commonly made into a land and sea scurvy

THIS disease has been always most common at sea. It is well known there in the present age, by reason of the frequent voyages to the most distant parts of the world. The symptoms, though numerous, are yet observed to be regular and constant; so that the most ignorant sailor, in the first long voyage, becomes well acquainted with it. But as many were supposed to die at land of the scurvy, though none of the most equivocal and uncertain, much less the usual symptoms of the marine disease, appeared ; it became necessary, in order to save the credit of the physician, and to justify his opinion of the disease, to pronounce it *the land-scurvy*, or a species of scurvy different from that at sea.

This is a distinction often made in conversation, and sometimes in books. In order to judge of the justness and propriety of it, we shall here consider, what certainty we have that this distemper is the same on both elements ; and what particular proof can be brought at any time, to ascertain the identity of two diseases, afflicting different persons, in different climates, and at different times.

The phænomena or appearances in any disease, which are obvious to our senses, or by their assistance may be made evident to our reason, are the symptoms or diagnostics of it. Whether they be the immediate causes or effects of the malady, they are properly called *symptoms*; a symptom being part of the disease; and the whole symptoms taken together constituting the whole disease ; from the aggregate or assemblage of which we draw conclusions.

Such appearances or symptoms, then, as are peculiar to the nature of the malady, and are more constantly experienced to accompany it, are called *pathognomonic* or *demonstrative signs*; and these constitute the greatest medical evidence which can be obtained of the existence and identity of diseases. Besides which, it is a corroborating proof of their identity, if they proceed from similar causes : And, lastly, if they are removed by the like medicines or method of cure.

Ist. As to the pathognomonic signs of this disease : If we compare its symptoms as described by Echthius, Wierus, and all other authors till the time of Eugalenus,¹ with the accounts given of them in books of voyages, particularly the extraordinary narrative of what happened to the great Lord Anson's crews in their passage round the world,² we shall perceive an entire agreement in the essential signs of the distemper, (making a proper allowance for the different descriptions that may be expected from seamen and physicians), and appearances so singular as are not to be met with in any other. Thus, putrid gums, swelled legs, and spots, accompanying each other, and in their progress usually attended with rigid tendons in the ham, are observed in no other distemper. It is also peculiar to it, that persons thus afflicted, though otherwise apparently healthful, are upon the least motion,

Vid. part III.

² Ibid.

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or exertion of strength, apt to faint, and do often suddenly drop down dead.

This evil the medical writers have described as peculiar to certain countries. They tell us of its being epidemic one year over all Brabant;¹ some years in Holland.² Forrestus, though he had frequent opportunities of seeing it in sailors, yet in all his histories gives us but one case of a mariner. His most faithful accounts of this malady, are illustrated by patients who had always lived at land ; some of whom must have been infected in a very high degree, when they dropped down dead suddenly, to the surprise of their relations ; of which he gives an instance. Dodonaeus,³ a very accurate writer on the scurvy, relates no cases of it in sailors, but in people on shore, particularly in a person who contracted it in prison.⁴

It is indeed remarkable, that the first just description published of this disorder in Europe, was in an account of its raging in besieged towns, by the historian Olaus Magnus,⁵ where it was attended with such symptoms as occur always at sea. We have likewise about the same time a very elegant picture of it drawn by Adrian Junius, a physician and historian in Holland, cotemporary with Ronsseus.⁶

¹ Dodonaeus, Forrestus. ³ *Praxis medic, et observationes.* ² Ronsseus.

⁴ Yet elsewhere, Angli maritimis commerciis dediti, et nauta potissimum, stomacace affiguntur. Sive id fit cerevisiae potu ex palustribus aquis cocta, sive ex aeris putredine, calique nebulis, aut vaporibus, hujus nostri instituti explicare non est. Historia stirpium.

Vid. part III, chap. I.

⁶ Hollandiae itaque peculiari dono Natura dedit proventum latum Britannicae herbae, (which he afterwards calls cochlearia), quam prasentanei remedii vim prabere in profliganda scelctyrbe et stomacace experiuntur, cum incolis, exteri quoque: quibus malis dentes labuntur, genuum compages solvitur, artus invalidi fiunt, gingiva putrescent, color genuinus et vividus in facie disperit, livescunt crura, ac in tumorem laxum abeunt. Histor. Bataviae, cap. 15.

Moreover, the sea-scurvy is called by several authors the *Dutch distemper*; especially by the celebrated Francis Gemelli Careri, who has wrote the best voyages in the Italian language. And indeed the symptoms of the malady are at this day uniform and the same, both at sea and land; in Holland,¹ Greenland,² Hungary,³ Cronstadt,⁴ Wiburg,⁵ Scotland,⁶ &c.: which sufficiently evinces the absurdity of the assertion advanced by several authors, that since the first accounts of it were published, the face and appearances of the calamity have been greatly changed.

2dly, As to the causes of this disease ; they are the same on both elements : for it will be fully proved,⁷ that there is not to be found any one cause productive of it at sea, which is not also to be met with at land ; though such causes, by subsisting longer and in a higher degree, usually give rise to its greater virulence in that element.

It is indeed a sufficient and just confutation of many writers on the scurvy, that they pretend to describe a malady to which seamen are peculiarly subject, and which they say proceeds from the *nauticus victus*, putrid water, and sea-air. Yet their assertion, That the disease described by them, (*viz*. Eugalenus,⁸

¹ *Vid.* Dr Pringle's observations on the diseases of the army, p. 10.

* Act. Haffnien. vol. 3, obs. 75.

³ Kramer. ⁴ Sinopraeus. ⁵ Nitzsch. ⁶ Vid. Dr Grainger's account of the scurvy at Fort-William, part II, chap. II. ⁷ Part II, chap. I.

⁸ Eugalenus practised at Embden, and other places of East-Friesland ; where the cold, thick, and moist air, the raw unwholsome waters used by the inhabitants along that tract of the sea-coast, and the *crassus et nauticus victus*, (as he terms it), occasioned the scurvy to be a universal disease. But it must be granted, that the scurvy never was so epidemic or fatal there as in ships and fleets. All the causes he assigns as productive of it, do subsist at times in a much higher degree at sea than at land. I have had 80 patients out of the number of 350 men afflicted with it; and have seen a thousand scorbutic persons together in an hospital,

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Willis, and their followers), is properly a marine disease, is refuted by the observation of all practitioners at sea. And the same may be said of the different species of scurvies alledged by Boerhaave to proceed from the causes above mentioned.

But a heavier charge lies against them. When the true scurvy does really occur, their writings, so far from being useful, are rather hurtful to practitioners ; which I think needs no farther proof, than Kramer's letter to the college of physicians at Vienna. Their doctrines have perverted the judgment of even some of the best writers. I shall instance only in Sinopæus. That author has taken his description of the disease from nature and observation ; but, unluckily, his medicines from those authors ; otherwise I am morally certain, the calamity would not have arisen to the height it did at Cronstadt, and usually does every spring ; where it seems to be abated annually more by change of weather than, the skill of physicians.

but never observed one of them to have the diseases described by Eugalenus. Nor did I ever hear of a practitioner at sea, where it would have been most allowable, who assumed his principles ; and supposed, that almost all diseases there must be complicated with the scorbutic virus; that the most extraordinary and uncommon which occurred at sea, (as was supposed at Embden and Hamburg), were, this mischief lurking under deceitful appearances ; and that such diseases could not be cured without a mixture of antiscorbutics, which seldom failed to remove them. This last, surely, could never have escaped the observation of our many ingenious navy-surgeons, and of our physicians and surgeons to naval hospitals ; some of whom had seldom less than a thousand patients from the sea. Mr Ives's ingenious journal, (placed at the end of chap. I, part II), is a proof of the variety of diseases which occur there, without the least connection with the scurvy. If it often killed the patient (as it would seem always to have done in Friesland) before the gums and legs were affected, or the spots appeared ; this likewise must have escaped our observation. But though Eugalenus may be justly condemned as the parent of these absurdities, greater mischief, however, has been done by succeeding authors, from their digesting them into a system. Such remedies and cures have been directed, as air not only altogether unserviceable, but for the most part highly pernicious.

3dly, The cure of scorbutic diseases contracted either at land or sea, is entirely the same. This will appear to any person who peruses Backstrom's and Kramer's observations, and several other histories related in this treatise. And every practitioner who has treated such cases, must be further convinced of it; as the first remedies which were casually found out by the vulgar, and are recommended by the first and purer writers on the subject, have preserved their reputation and esteemed virtues even to this day.

Lastly, If to such convincing proofs it may be necessary to add authority, I shall beg leave to quote a very great one. The learned Dr Mead¹ informs us, that incited by the extraordinary events published in Lord Anson's voyage, to make a full inquiry into this whole affair, he held not only the honour of discoursing with his Lordship upon it, but had also been favoured with the original observations of his ingenious and skilful surgeons ; and, upon the whole, he found, that this disease at sea was the same with the scurvy at land ; the difference being only in the degree of malignity.

If objectors should reply, That tho' the sea-scurvy often occurs at land, and, as has been demonstratively proved, is the only disease that was described by the first writers on the subject, as a malady peculiar to the marshy and cold countries which they inhabited ; yet that they, nevertheless, understand by what may be termed, in contradistinction to the other, a *landscurvy*, a disease, or class of diseases, different from the appearance of the marsh or marine scurvy : then it is incumbent upon them, and would be much for the

¹ Discourse upon the scurvy, p. 97.

benefit of mankind, to define, describe, and characterise this singular species, and distinguish it from the appearances of the said disease, either at land or sea. This they must know has not been attempted by any author in physic. The greatest modern writers, *viz*. Boerhaave, Hoffman, and Pitcairn, have made no such distinction, either in the causes or diagnostics of the disease, nor indeed in any part of their description of it. And I mention these last, as having had a very extensive practice, besides the advantage of perusing all books wrote before them on the subject.

It may be said, That there are certain disorders, viz. many cutaneous eruptions, ulcers, a species of toothach, &c. which, for a considerable time, have passed under the character and denomination of *scorbutic*; a term introduced by our predecessors in the science, and which most practitioners have agreed to make use of at this day, and which there may perhaps be a necessity of retaining, as it is not easy to assign a proper appellation to every disease, or case of a patient.

This reason is commonly urged. In answer to which I shall, *first*, inquire, how or when this term came first to be so generally applied ; or whence such ulcers, the itch, &c., were denominated *scorbutic*? I think it will admit of no doubt, that it was first applied to such ulcers and eruptions on the skin as did not readily yield to the skill of the practitioner.¹ Dr Musgrave ² informs us, that all Europe was so much alarmed with the apprehensions of this evil in the last century, as appears from the *Recipe's* of practitioners in those times, that the whole art of physic seems to have been employed in grappling with this universal calamity, which was supposed to mingle its malignity with all

¹ Vid. Sydenham. ² De arhritide symptomaica. p. 98.

other diseases whatever.¹ Thus the term was originally imposed through ignorance, and a mistaken opinion of the prevalence of the scurvy. There would indeed be some difficulty in conceiving how men of such wild fancies, as were they who have been deemed the principal authors on the scurvy, and to whom we are indebted for this general name, could ever get into possession of that degree of fame which they have acquired, did we not experience how much the world is disposed to admire whatever surprises ; as if we were endued with faculties to see through ordinary follies, while great absurdities strike with an astonishment which overcomes the powers of reason, and makes improbability even an additional motive to belief. There are few now who set so small a value upon their time, as to read these authors ; and by that means their merit is little examined into, and is admitted upon the credit of others.

2dly. If it be urged, That the denomination of such diseases ought still to be retained, as being now generally adopted ; I answer, That, upon the same principles, the most ridiculous terms in any art may be vindicated. Lord Verulam, and the first reformers of learning in Europe, met with this very objection. The learned ignorance of that age lay concealed under a veil of unmeaning, unintelligible jargon. But, in order to make way for the restoration of solid learning, it was found necessary to expunge all such terms as were contrived to give an air of wisdom to the imperfections of knowledge.

It may be believed, that there are few people who have had opportunities of reading more upon this subject than I have done ; and that there are few

¹ *Vid.* note, p. 30.

books or observations published upon the disease, that have not fallen under my inspection. If I could, with any manner of propriety, have characterised any other species of scurvy than that which is the subject of this treatise, I should have consulted the security of my character more, than in advancing an uncommon doctrine, as all novelties are exposed to opposition. But, in attempting a thing of that sort, I did not find two authors agree who founded their doctrine upon facts and observations. I observed, that ten different practitioners pronounced ten cases to be scorbutic, which, upon examination, did riot bear the least resemblance or analogy to each other. Upon this occasion, I might have followed the example of some writers ; and, disliking the former distinctions made, might have introduced others, accommodated either to the opinion of the country, and thus, by adopting vulgar errors, have endeavoured to establish and confirm them ; or to some new principles ; and so might have multiplied absurdities, in like manner as every private practitioner does, who thinks he has a right to term what he pleases a scurvy ; though the propriety of the appellation cannot be justified from the acceptation of it, by the most authentic authors ol facts and observations, nor has any foundation in the

It may be said, That the world would reap great advantage by having a compleat treatise of the causes, cure, &c. of the many diseases which commonly go under the denomination of the *scurvy*. But this is not an easy task : and it might as well be expected, that an author, who lived in a country, or at a time, when the most obstinate and uncommon appearances were ascribed to witchcraft, and had taken pains to banish

genuine principles of physic.

such ignorant conceits, should be able to account for the various distempers and phænomena ascribed to that imaginary evil. It has been usual for ignorant and indolent practitioners, to refer such cases as they did not understand, or could not explain, to one or other of these causes ; according to the observation of a very learned and late practitioner.¹

With regard to the necessity of retaining the name, as if an unmeaning term was as requisite in physic as pious frauds in certain religions : *Si vulgus vult decipi, decipiatur*. If the good of mankind will have no effect upon these gentlemen, I am afraid no other argument will. We shall however lay before them a view of the fatal effects produced by the use of such vague and indefinite terms.

1st, On young practitioners and students in physic ; who being provided with such a general name as that of the scurvy, comprehending almost all diseases, think themselves at once acquainted with the whole art of medicine ; as they may be furnished with numerous cures for it from the many Pharmacopœias with which the present age abounds.

2dly, Older practitioners, by referring many various and uncommon diseases to such imaginary causes,² deprive the world of the true improvement of their art : which can only be expected from accurate histories

¹ Mos adeo invaluit, ut hodie medici imperitiores, si quando ex certis signis neque morbum nee causam ejus rite possunt cognoscere, statim scorbutum pratendant, et pro causa scorbuticam acrimoniam accusent. Deinceps non raro accidit, ut adfectus quidam saepe plane singularis, cui portentosa spastico-convulsiva junguntur symptomata, in artis exercitio occurrat; et tum usu receptum est, ut illam vel ad fascinum vel ad malum scorbuticum rejiciant. Fred. Hoffman, med. systemat. tom. 4, p. 369.

² Notandum est, quod quando multa symptomata numerantur, tune esse cogitandum de nomine congeriem morborum indicante, ut scorbutus. Waldschmid praxis nicdicinae rationalis.

of different cases, faithfully and honestly stated ; and distinguished from each other, with the same accuracy that botanical writers have observed in describing different plants. The ancients have been at great pains to distinguish the diseases of the skin, which at this day make up a very numerous and considerable class, and have indeed treated that subject with prolixity. But the moderns have classed almost all of them under that one very improper denomination of the scurvy,¹ even from the highest degree of the leprous evil, to the itch and common tetters ; and with these have confounded the pimpled face, scall head, most cutaneous eruptions usual in the spring, the erysipelas, &c. ; nay dysepulotic ulcers, especially on the legs, and various other ailments of the most opposite genius to the true scurvy, have been supposed to proceed from it. The different causes of which various distempers cannot be with propriety reduced under any division of the scurvy as yet made, nor from thence the peculiar and distinct genius of each known and ascertained ; which, however, is absolutely necessary towards undertaking their cure.

3*dly*, and *lastly*, It has a most fatal influence on the practice. Thus the original and real disease has been

In his Appendix he observes, that the muriatic and putrid scurvy are properly the same thing, and that the supposed species of arid scurvy is at least very improperly denominated.

¹ Dr Pringle very justly observes the impropriety of the appellation of *scurvy* generally given to the itch, various kinds of impetigo, &c. ; and remarks, that in the marshy parts of the Low Countries, where the true scurvy is most frequent, and of the worst kind, the itch is a distemper unknown. A real scurvy (says he) imports a slow, but general resolution or putrefaction of the whole frame ; whereas the scabies, impetigo, or leprosy, will be found to affect those of a very different constitution. The true scorbutic spots are of a livid colour, not commonly scurfy, or raised above the skin, &c. *Vid.* chapter on the itch, in Observations on the diseases of the army.

lost and confounded amidst such indefinite distinctions and divisions of it, that it is sometimes not known by the best practitioners, when it really occurs. *To this* was owing the loss of so many thousand Germans in Hungary,¹ not many years ago; where the physician to that army, together with the whole learned college of physicians at Vienna, assisted by all the books extant on the subject, were at a loss how to remedy this dreadful calamity. And for this reason many unhappy people are daily injudiciously treated at land, as must have been observed by every one acquainted with the distemper. Thence likewise pernicious methods have been recommended at sea, and too often put in practice.

Vid. Krameri epistola de scorbuto.