An essay on the symptoms and history of diseases : considered chiefly in their relation to diagnosis / by Marshall Hall.

Hydrogen 1

Oxygen 8

Carbon 6

Chlorine 36

Boron } 14
Nitrogen }

Water ..... 9 { Hydrogen 1
Oxygen 8

Acetic Acid { Hydrogen = 2
Oxygen = 24
Carbon = 24
50

Boracic (Citric) Acid { H. 2
O 32
C 24
58

Muriatic Acid Gas { H. 1
Chlorine 36
37

Dry Nitric Acid { O. 40
Boron 14
54

Liquid Nitric Acid { Acid 54
Water 18
72

Tartaric Acid { Oxy: 40, Hyd 3, Carbn 24 } 67

Crystals of Tart: Acid { Acid 67, Water 9 } 76

Ammoniacal Gas { Hyd: 3, Nitro: 14 } 17

Liq: Ammonia { Ammon: Gas 1[illegible], Water — 9 } 10

Tart: of Ammonia { Carbon: Acid 6, Ammonia 3, Water — 1[illegible] } 11

Subtart: of Potash { Tart: Acid 22, Potash — 4[illegible] } 7[illegible]

Tart: of Potash { Tart: Acid [illegible] 2[illegible], Potash [illegible] 4, Water [illegible] } 19

Potassa fusa / Hydrate of Potash { Potash 40, Oxygen 8, Water 9 } 57

To the Secretary
with the last regards
of the Author

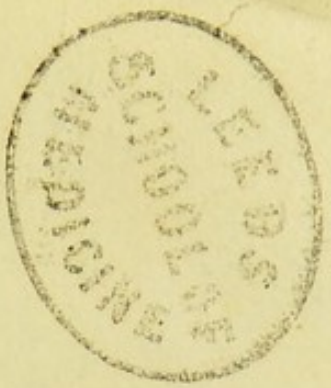
AN ESSAY

ON THE

SYMPTOMS AND HISTORY

OF

DISEASES.



AN

ESSAY

ON THE

SYMPTOMS AND HISTORY

OF

DISEASES;

CONSIDERED CHIEFLY IN THEIR RELATION TO DIAGNOSIS.

BY

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LONDON:

PUBLISHED

BY LONGMAN, HURST, REES, ORME, AND BROWN.

1822.

Wheelhouse, Printer,
Nottingham.

TO

MATTHEW BAILLIE, M. D.

F. R. SS. L. AND E.

&c. &c.

THIS LITTLE WORK IS INSCRIBED,

WITH EVERY SENTIMENT

WHICH

RESPECT AND GRATITUDE

CAN INSPIRE,

BY

THE AUTHOR.

Nottingham, Jan. 25, 1822.

ADVERTISEMENT.

I HAVE endeavoured, in the following pages, to present my observations on the Symptoms and History of diseases, in as concise and cheap a form as possible. With this view, I have treated those subjects which had not particularly engaged my attention, very briefly; whilst I have entered very minutely into the description of those appearances, to which, from their having been less observed by others, I have devoted a more particular attention.

I need scarcely observe that this little volume is a second edition of the first part of the work on Diagnosis. To Diagnosis I intend to devote a continued attention, with the hope of publishing an Essay upon it, at some future day, more worthy of the magnitude and practical importance of the subject.

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PART SECOND.

ON THE

HISTORY OF DISEASES.

CHAPTER I.

CHAPTER II.

AN ESSAY

ON THE

SYMPTOMS AND HISTORY

OF

DISEASES.

ON THE SYMPTOMS AND HISTORY OF DISEASES, IN GENERAL.

1. THE immediate and ultimate objects of Clinical Medicine are *the Identification of Diseases and the Appropriation of Remedies.*

2. The sources of evidence for the Identification of Diseases, are the *Symptoms*, the *History*, and the *Morbid Anatomy*. The two former form the objects of the present Essay. I refer to the Index for an enumeration and arrangement of the points which they severally embrace.

3. The observation of the Symptoms and History of diseases, is strictly *clinical*, and can alone be beneficial to our *immediate* patient. On them are founded the diagnosis, and consequently, the mode of treatment.

4. The examination of the Morbid Anatomy may be considered the proper *corrective* of our previous clinical opinions, whilst it contributes, perhaps more than any other species of investigation, to the advancement of the *Science* at large.

5. It is by the Morbid Anatomy that we are chiefly taught to establish correct distinctions of the *genera* of disease; but the Symptoms and the History still constitute the *channel* through which the benefit of these distinctions must eventually flow to our individual patients. And whilst the late progress of the Science of Medicine has doubtless been chiefly effected by the investigations into Morbid Anatomy, the advancement of Physic as a *practical Art*, can only have kept pace with that of our knowledge of the Symptoms and of the History of diseases.

6. And, in effect, the value and importance of the Symptoms and History of diseases, and of Morbid Anatomy, depend *alike* on a due and correct *association*. The most perfect knowledge of Symptoms would be utterly useless unless considered as signs and indices of the internal disease; and the most perfect knowledge of Morbid Anatomy would be inefficient unless we were enabled by the Symptoms to ascertain its existence in the living body. Our object in both these studies ought, therefore, to be to make them useful by the establishment of distinct associations of the Symptom or the sign, and of the morbid state as the thing signified. It is in this manner only, that the diagnosis and identification of diseases in the actual practice of physic will become more and more correct and complete. The study of the Symptoms and History of diseases and of Morbid Anatomy, should then, to use Sir Gilbert Blane's words in relation to the question

of dogmatism and empiricism, be regarded, not as competitors, but as *allies.*

7. The objects embraced in the Symptoms and History of diseases, are certainly more transitory and less palpable, and require more caution and reserve in the association as effects of diseases than those of Morbid Anatomy. But from the observation already made, that it is only by association of the Morbid Anatomy with Symptoms indicative of the morbid change, that even this becomes cognizable in the living body and useful in the *practice* of medicine, it is plain that the same difficulties apply in fact to both.

8. The study of the Symptoms and History of diseases also embraces an object unconnected with Morbid Anatomy, —such instances of morbid affection as consist in derangement of function and leave no trace under the scalpel of the anatomist.* And it is one of the objects of the History of diseases to trace the *transitions,* in mixed cases, of deranged function into deranged structure, the *extensions* of diseases of structure from one organ or part to another, and the *superinductions,* from accident or natural consequence, of one disease upon another.

9. It is a point of great importance, but of great difficulty, in the study of the Symptoms and History of diseases, to determine the *times* of these transitions and extentions of disease.

10. It is an object of the Symptoms and History of diseases to ascertain, in the coincidence of different morbid affec-

* See Baillie's Morbid Anatomy, *Pref. p.* 1.

tions, whether their co-existence be accidental, or the result of their relation as *cause and effect*.

11. Such is an imperfect sketch of the objects and relations of this department of Medical Science. It would be wrong to argue against the importance of the study of the Symptoms and History of diseases from the imperfect manner in which they have hitherto been treated; whilst to consider perfection in this study to be *unattainable* would be to suppose that Medicine cannot exist as a safe and useful Art. It would be wiser and truer to say that, hitherto, we have been too apt to form and to state our opinions, and to regulate our practice, on *insufficient evidence*; and then to turn our attention to the real nature of the evidence for facts in medical science and especially in clinical medicine, and to inquire whether its sources may not be multiplied, and its results rendered more sure and conclusive.

12. It is in this way alone that we can hope to remove from Medicine the reproach of vacillation and uncertainty, of futility and contradiction.* The *first* step is clearly to distinguish and to identify the disease; the *second*, to appropriate the remedy, in its purity and simplicity, and with a due attention to the strength and constitution of the patient. When *experiments* have thus been carefully instituted, and the results collected by an assiduous *observation*, we may expect to become acquainted with the real effects of those agents which we consider as remedies,—both good and bad. An investigation conducted in this spirit, would, I feel convinced, lead to some important results. We still want an essay on *the mor-*

* The reader will readily recall to mind all that has been written at different periods on Typhus and Puerperal Fevers.

bific effects of remedies,—1. when misapplied, 2. when even appropriately, but perhaps injudiciously, administered, and 3. from idiosyncrasy. I may instance bloodletting, and purging, and opium, as productive of morbific effects of the most serious character, to which my attention has been particularly directed; it is needless to add to the list, mercury, digitalis, cantharides, &c. with which every practitioner has learnt to associate certain morbid conditions of the system. The subject of the effects of remedies, curative or morbific, will be again noticed in the Second Part of this work, when treating of the History of diseases.

13. In the study of the characters, the symptoms, and the history of diseases, *every* circumstance which can become the subject of observation, and which is at all characteristic, must be considered as important.

14. It is with this view that I have carefully examined the *countenance* and the *attitude* of patients, as well as those other points which are more usually considered amongst the class of symptoms.* I am assured by experienced physicians, that although these subjects may be somewhat new perhaps in medical literature, they are old to them; and that the attempt to analyze, distinguish, and describe all the external appearances of disease cannot fail to assist the clinical student and the young practitioner, whilst it serves only to recall to the mind of the experienced, those sources of evidence on

* Soon after the publication of the first edition of this work, these subjects, together with the comprehensive study of Diagnosis, were particularly recommended to the attention of the army medical officers by Sir James Macgrigor, in a circular address by Dr. Hennen, dated October 18, 1818. May I not consider this recommendation as an expression of the importance of these subjects in that gentleman's estimation?

which his judgments have been ever, though perhaps unconsciously founded. For without having undertaken any distinct analysis of the general appearances in disease, the experienced physician has, notwithstanding, been struck with them in the coup-d-œil he has taken of these appearances and of the general manner of the patient. By these means he has recognized and identified the affection, when he may have been almost unconscious of the sources from which his discrimination flowed.

15. The countenance of the patient, although a source of information too much neglected by writers on medicine, is very peculiar and highly characteristic in many diseases, and affords to the physician of experience and observation an important mean of diagnosis. The kind, the stage, the changes, the mitigation and the progress of many morbid affections are accompanied and denoted by corresponding states of the countenance. Let us recall to mind the varied and distinctive appearances in the different kinds and stages of fever, in affections of the head,—of the thorax and of the heart,—in inflammation in the abdomen and in colic and other affections accompanied by spasmodic pain,—in icterus and in chlorosis and the class of morbid affections which I have elsewhere denominated the mimoses, especially the different appearances in the mimosis decolor, &c. It is impossible not to be impressed with the importance of changes in the countenance so observable, so diversified, and so characteristic, with a view to every practical purpose in the art of medicine.

16. Hippocrates,* and Celsus,† and other ancient writers, have, in their great attention to the study of symptoms, paid

* *Vide* Προγνωστικον † *Lib.* 2. *Cap.* 2. 6.

particular regard to the appearances of the countenance. Celsus observes, 'medicus neque in tenebris, neque a capite ægri debet residere; sed illustri loco adversus eum, ut omnes notas, ex *vultu* quoque cubantis, perspiciat.'*

17. The observations made above, relative to the attention claimed by the different conditions of the countenance, are equally applicable to the subject of the attitude and motions of the body in general, in different diseases. For although the attitude, in certain diseases, is so remarkable as absolutely to have challenged observation, yet, in general, this point has been too little noticed, and its indications too little explored.—Hippocrates† and Celsus‡ have particularly noticed the attitude of patients.

18. It is useful to examine the state of the *hands* and *feet* of the patient, in connection with that of the *general surface*.—But it is not my intention to enumerate the subjects of the following pages in this place. I proceed, therefore, to notice in a cursory manner, some points rather connected with the investigation of the Symptoms of diseases than forming a part of them.

19. It is proposed, in the first place, to make each particular symptom the object of distinct and separate inquiry, and, considering it as a general phænomenon occurring under numerous and different circumstances of disease, to investigate, distinguish, and arrange its *varieties, modifications, and peculiarities,* in each.

* *Lib.* 3. *Cap.* 6. † *Vide* Προγνωστικον. ‡ *Lib.* 2. *Cap.* 3, 4, 6.

20. It is insufficient to give to a particular symptom a particular name, and notice its occurrence in particular diseases; it is necessary to describe each symptom in general, and to distinguish each modification and peculiarity of it in particular. Dyspnœa is noticed as a symptom of inflammation within the chest, of hydrothorax, of asthma; but how widely different is the dyspnœa of pneumonia from that of asthma,—how distinct the difficulty of breathing in asthma from the dyspnœa of hydrothorax, and from that of the numerous other affections in which this symptom is observed! How desirable then must it be to seize and describe these distinctions, and make the application of them to the discrimination of diseases.

21. It can seldom be said that any particular symptoms of disease are truly pathognomonic; but the *kind* and character of the symptom are frequently so. To ascertain, therefore, the form of each symptom as peculiar to different diseases, would be to establish that system of pathognomonics so much desired by the more ancient physicians.*

22. The varieties and modifications in the form of symptoms must be traced too, *in immediate reference to particular instances of disease.* Much has been written on the different states of the pulse; and numerous artificial divisions of this symptom have been formed; but in general this has been done in too *abstract* a manner. To study the pulse to any practical purpose, it should be constantly considered in relation to some individual disease, its character noticed, its changes traced, and its indications ascertained. Every thing must be as little general and as little abstract as possible.

* Cullen Nosologia Methodica, *p.* vii.

23. A proper and full *arrangement* of the Symptoms and their varieties must be of great importance in the investigation and identification of diseases. Some *symptoms* have been considered as real *diseases,* and it must be absolutely necessary to draw just distinctions between them, with a view to their cure. A similar arrangement and discrimination of the *varieties* of each symptom is of essential importance to the diagnosis, and of greater moment in this place, because the investigation has been hitherto pursued in a very partial and inadequate degree. Dyspnœa, icterus, hydrops, &c. must be distinguished, as symptoms merely, from real diseases, and each form and variety of these affections must be carefully distinguished from the rest, and accurately associated with its particular cause.

24. In viewing diseases, there are some other circumstances which claim attention. The particular *combination* of symptoms, and influence of one symptom in inducing and modifying the others, are observed to be characteristic of certain affections and stages of disease.

25. In our clinical visits, we naturally resort to the principles of *Analysis* and *Synthesis,* in order, first, to seize some particular points, such as several prominent and important symptoms,—from which we proceed, in the second place, to collect such other symptoms as usually concur and complete the character of the disease we have in view. We are thus confirmed or corrected in our opinions by the *congruity* or *incongruity* of the several parts; we perceive that the disease is simple or that it is complicated; and we trace its progress in itself, or its extension, and involution of other diseases, or of parts of the system not originally affected. It is, indeed, comparatively easy to observe and describe symptoms,—or

appearances in morbid anatomy, abstractly;—the task of difficulty, as well as of utility, is the proper and just association of them as signs and diseases.

26. Some symptoms are not only incongruous but *incompatible,* and by a careful and patient *observation* we often satisfy ourselves on a point which we could not decide by any *inquiries.* When a patient has complained of pain of the side for instance, and it has been doubtful whether the pain were inflammatory, a spontaneous sigh has decided the question. In the same manner writhing of the body is unusual if not incompatible with inflammation. At least, although as Celsus observes, 'vix ulla perpetua præcepta medicinalis ars recipit,' these circumstances afford great assistance in the investigation of diseases. We are thus frequently enabled to circumscribe our inquiries by ascertaining what the disease *is not,* before we have actually discovered what it *is.*

27. But without entering so minutely and carefully into this subject, there is something in the *coup-d'œil* or general sum of appearances which is of great utility to the experienced physician.

28. There is in practical medicine a circumstance of the first importance, the *recognition of a disease.* The general appearance of the patient,—the peculiar modification, the particular combination, and the mutual influence of the symptoms, give a *general* character of the whole disease, which is recognized and *felt* by the physician of experience and observation. 'Every practitioner of medicine is continually engaged in the business of diagnosis as the very groundwork of his professional duties, and I fear the soundest and most enlightened

are in the daily habit of acting upon views that they would be at a loss to describe and have not time to analyse.' This passage is quoted from the letter of a physician at once learned and experienced. It alludes distinctly to that general source of diagnosis constituted by the combination of *all the circumstances* of a disease. I have had repeated opportunity of observing an eminent physician, on approaching a patient, and that even during sleep, express his opinion respecting the nature of the morbid affection, the justice of which time and the event have verified. This circumstance first convinced me that there was something in the *general* aspect and appearance of diseases, on which the experienced physician founds a diagnosis, and which it would be of the greatest utility to analyze and describe.

29. Accurately to discriminate the symptoms of diseases, and their various forms, is to apply to the objects of clinical medicine, the principle of *Analysis,* and accurately to describe them, will be to render the knowledge of them and of medical experience in general more *communicable* to others. It has long been remarked and regretted that practical knowledge in medicine, is peculiar in this respect,—that it cannot be taught, and that the precious fruits of experience, necessarily die with their possessors.* How unfortunately true this remark is to a certain extent, must be universally acknowledged. And from this admission the importance of devising the means of rendering medical knowledge more capable of being imparted from one person to another, is sufficiently manifest. Now it has appeared to me that the difficulty in effecting this object may be in some degree obviated. On considering the nature of experience in medicine, it is plain that it

* See Pearson on Cancer, *Pref. p.* vi.

consists, in a great measure, in an acquired capacity for receiving and acting on general impressions induced in the mind by the repeated contemplation of disease. The inexperienced practitioner is incapable of receiving these general impressions; the experienced are, in general, incapable of explaining them. Is it not however probable that, by presenting to the young clinical student an *analysis* of those general impressions which constitute the object of experience, he may be very materially assisted, and that experience may not only thus become more communicable, but that the young practioner may thus also sooner become experienced, and earlier capable of acting on similar general impressions? If this be true, such an analysis of the general impressions of experience must prove highly useful. But such an analysis implies the observation and detail of every particular constituting the general sum of morbid appearances,—the enumeration and description of every phenomenon which can be presented to the observation of the physician.

30. I am aware that the kind of knowledge embraced in this *general* view and impression relative to the disease, is *inadequate* to the purposes of practice; it is, however, of great assistance and utility; and the most experienced must not rest satisfied with his general knowledge, but must make the most *particular* inquiries, in the case of *each individual* patient; 'etiam vetustissimus auctor Hippocrates dixit, mederi oportere et communia *et propria* intuentem.'* The general impression in question is chiefly useful by contracting the circle of our inquiries, and by leading us nearer that centre which consists in the individual case before us. It is especially useful in Dispensary practice, in which many patients must be seen in

* Celsi, *Præf. Lib.* 1.

a short time, and in which there is not, consequently, sufficient opportunity for entering fully into particulars.

31. There are some circumstances of importance more particularly embraced by the History of diseases, as the cause, —the progress, the stage,—the effect of remedies,—the season of the year, the prevalency of epidemics,—the constitution, and habits, and previous diseases of the patient, &c.

32. We naturally associate a certain course with each disease, and it is of importance to remark whether this course, which may indeed be considered as characteristic and one of those means by which we confirm or correct our opinions, be accurately observed; for otherwise we must suspect the agency of some unknown cause to modify, or some other morbid affection to change its wonted progress, and our attention is directed to the renewed investigation of the case.

33. From the History of diseases some most useful *rules for Dispensary practice* may be gathered. I have attempted this at the close of the present volume.

34. The objects of the Symptoms and History of diseases, may be divided into those of *observation* and of *inquiry* on the part of the physician: the former are the more satisfactory; the results of inquiries are apt to partake of the vagueness and incorrectness of the answers of the patient. In conducting these inquiries, we ought to be careful not to put *leading questions* and not to receive the reply implicitly, but to try the truth of them by ascertaining their congruity or incongruity with the character and history.

35. In conclusion I beg to observe that I wish the following statements to be regarded as the result of my own observation; not that I lay claim to every remark contained in them as original; but that I have been more anxious to consult *nature* than *books*, and to present a *faithful* copy from the former than a *complete* compilation from the latter.

PART FIRST.

ON THE

SYMPTOMS OF DISEASES.

CHAPTER I.

ON THE MORBID APPEARANCES OF THE

COUNTENANCE.

36. The particular circumstances embraced in an examination of the morbid states of the Countenance, are the changes induced in the *cuticular surface, the cutaneous circulation, the cellular substance, the muscular system, some particular features, and the general expression.*

37. The cuticular surface is morbidly affected in some long continued disorders, chiefly of the digestion, especially round the eye and the mouth, giving a peculiar appearance to the *complexion.*

38. But the complexion, as well as the surface of the countenance, is principally affected by the condition of the

cutaneous circulation; on this depend chiefly the state of pallor or flushing, and of the sallow and icterode hues of the complexion observed in some disorders,—the state of tumidity or shrinking,—of heat or coldness,—of dryness or moisture, or cutaneous exudation.

39. The state of *emaciation*, so important to observe and trace in chronic diseases, depends on the loss of cellular and muscular substance, and must be always distinguished from mere vascular shrinking.

40. The muscular system is principally affected by diseases attended with *pain*, by languor, and by paralysis.

41. Amongst the particular features it is of moment to observe the eye, the prolabia,—the brow, the nostrils, the lips, &c. The eye, in particular, affords the opportunity of judging of the degree in which the serum is loaded with bile in cases of icterus, and of distinguishing that disease from those morbid affections in which the complexion becomes sallow and icterode from the state of the cutis and cutaneous circulation. The state of the prolabia affords an index of other states of the blood,—as of a too serous condition, or of a defective arterialization. The nostrils, carefully observed denote the condition of the respiration.

42. Of the general expression of the countenance I shall rarely venture to speak. It affords an important and essential source of information in Dispensary practice, § 30, and assists the experienced physician in discerning the nature of the disease where the superficial observer only sees the general look of indisposition.

43. The morbid conditions of the cuticular surface, § 37, and of the cutaneous circulation, § 38, are accompanied with peculiar affections of the *hands*, and of the *general surface*, and of the *tongue*. These associations it will be my object to trace in the subsequent pages. I now proceed to describe the appearances of the countenance in reference to particular diseases; I have already stated, § 22, that it is with such reference alone that the knowledge of symptoms becomes of *practical* utility.

44. In the *Common Acute Fever** there is a diffused, vivid flushing of the countenance, frequently with considerable turgidity, especially in the young and sanguineous, the tunica albuginea is apt to be suffused, and there is great febrile heat. There are also general anxiety,—tremor of the lips in speaking,—and a rapid movement of the nostrils from hurry in the respiration.—The appearance of tumidity diminishes as the fever runs its course, and either declines or assumes the slow and protracted character.

45. In the *Acute Symptomatic Fever* the countenance has a very different aspect, which it is important to observe, especially in a diagnostic point of view. The heat, turgidity, and flushing, the suffusion of the eyes, the tremor of the lips, and the *hurried* movement of the nostrils are absent, whilst the surface is frequently affected with perspiration.—There is also usually an appearance peculiar to the primary disease.

46. From the state of countenance described § 44, the transition is often imperceptible to that observed in the *Com-*

* This form of Fever usually arises from cold, exertion, fatigue, anxiety, watching, disappointment, grief, want, poverty, &c.

mon Slow Fever; sometimes, on the contrary, the appearances of this febrile affection come on insensibly from similar causes, without being preceded by the acute form.—Instead of tumidity and suffusion, there are shrinking, partial flushing of the cheeks only, emaciation, and frequently a pallid and sallow hue; the cheeks become fallen, and the malæ, maxillæ and other bony parts appear prominent; the surface becomes warm, dry and rough; the lips, like the tongue, are dry and tremulous, and not moved with the usual freedom in articulation; the teeth are frequently somewhat affected with sordes or mucus.

47. In *Chronic Symptomatic Fever* the appearances are peculiar. There is a characteristic expression of disease which strikes the common observer, and, still more, the experienced physician; the surface and complexion are cool and pale, or affected with transient or partial heat and flushing, usually without sallowness, frequently with slight lividity, sometimes with cool moisture; there are emaciation and shrinking, the cheeks falling in, the action of the muscles becoming apparent, and the skin forming into greater or smaller folds.—These appearances of the countenance are however greatly modified by the nature and seat of the original disease, as will be particularly noticed hereafter.

48. In the milder form of *Typhus Fever* the countenance is equally unattended by deep flushing and tumidity, or with shrinking; but it is highly characterized by an expression of languor, feebleness, anxiety, and indisposition, and by tremor observed in the lips and on speaking; the eyes are frequently suffused; the cheeks slightly flushed; the surface affected with a moderate degree of warmth.*

* See Currie's Medical Reports, Vol. 1, p. 12. Bateman on Contagious Fever p, 28.

49. In the severe forms of *Typhus Fever* the countenance is marked by great debility and tremulousness of the muscles, and by great shrinking; the bones are more prominent, the intervening spaces more sunk and depressed than natural; the surface is sometimes slightly flushed, and sometimes cool and clammy. The eye-lids are frequently partly closed, and the eyes suffused, dull, and covered with a film of mucus; the mouth is apt to be partly open, the teeth and lips affected with dark coloured glutinous sordes; the articulation is difficult and imperfect and attended with great effort, and with tremor and an inadequate action of the lips and of the tongue which is put out with the same tremor and difficulty.—There is often superadded the appearance of delirium, or of coma,—of congestion,—or of collapse or sinking.

50. The countenance in *Idiopathic Fevers* is liable to receive a modification from their complication with a morbid affection of the head, the viscera of the thorax, or of the abdomen, the detection of which is amongst the most important objects in the study of these diseases.

51. The different stages of *Intermittent Fever* are attended by peculiar states of the countenance and especially of the cutaneous circulation. In the *cold stage* there are shrinking and paleness,—pale lividity of the prolabia,—trembling of the lips and maxillæ: in the *hot stage* there are heat, flushing, and tumidity, and suffusion of the eyes, and the features are restored from their collapsed condition: in the *sweating stage* the surface, complexion, and heat become more natural, whilst there is greater or less perspiration. In the *interval* there are at first languor and slight paleness,—after a time, paleness, shrinking, and emaciation.

52. The different Fevers are so varied in themselves, and so various in their different stages, and in different individuals, ages, and habits, that the countenance, together with the symptoms of the disease, must necessarily be much diversified. But of all the diagnostics of the different Fevers, and of all the indications of their *progress, stages, and changes,* none is more distinctive and characteristic than the appearance of the countenance. From this source the diagnosis and prognosis of Fevers equally flow, and it cannot, therefore, be too strongly recommended to the attention of the clinical student and young practitioner.

53. The same remark may be extended to some of the Febrile Cutaneous Diseases, in which there is, exclusively of the rash, a characteristic modification of the features.

54. In *Rubeola* the eye-lids are frequently red and swollen and the eyes injected, *before* the appearance of the rash, and there is usually catarrhal affection; the rash *begins* in spots on the face; and there are sneezing, intolerance of light, &c.

55. In *Scarlatina* the rash becomes more general and less interrupted, and it is accompanied with more general tumidity and fulness; there is frequently an appearance of fulness about the throat and the voice is affected; but the symptoms of catarrh are usually absent.

56. But it is not my intention to pursue this subject. My object at present is to select a few instances of morbid affections particularly distinguished by the state of the countenance, in order to invite the attention of the medical student

more particularly to a source of judgment and information applicable also to *those fainter shades of diversity and change*, the perception of which so much distinguishes the physician of observation from the mere practitioner. I proceed to notice some morbid appearances chiefly of the *complexion* which appear to me not to have obtained hitherto the degree of attention they deserve.

57. The appearances to which I allude, occur in the very varied forms of disorders of the digestion, to which I have given, in another work, the denomination of mimoses, from their multiform and imitative character, but to which the more usual term of *Dyspepsiæ* is perhaps sufficiently applicable.

58. The most severe or *acute form* of this affection is accompanied with some paleness and sallowness, and a dark hue about the eye; the cutaneous vessels exude a little oily perspiration; the prolabia are slightly pale and livid; the muscles of the face and especially of the chin and lips are affected with a degree of tremor, particularly on hurry or surprise or on speaking. With this state of the countenance there are *conjoined* peculiar morbid states of the tongue, and of the hands, which will be described in their proper place.

59. A state of sallowness of complexion, unaccompanied with the appearances just described, usually attends the more *chronic form* of this affection, denominated *Dyspepsia*.

60. The next variety of this morbid affection is that which is usually denominated *Chlorosis*, and which I have termed the mimosis decolor. The *incipient stage* is denoted by paleness of the complexion, an exanguious state of the

prolabia, a slight appearance of tumidity of the countenance in general, and of puffiness of the eye-lids, especially the upper one. There is sometimes superadded a tinge of green, or yellow, or of lead-colour, and frequently darkness of the eye-lids. —In the *confirmed stage* the countenance is still more pallid, the prolabia and the gums exanguious, or the prolabia, and especially the upper one, have a slight lilac hue, and the integuments in general are puffy and tumid.—In the *inveterate stage* these appearances are gradually modified by the supervention of emaciation, or œdema. With each of these stages is associated a peculiar state of the tongue and general surface. —These appearances in the different stages of Chlorosis seem to depend partly on the state of the cutaneous capillary vessels, and partly on the state of the blood itself, at least this fluid has become, in some instances, so serous as scarcely to tinge the linen as it has dropped from the nose.

61. In the *more chronic form* of this morbid affection, to which the epithet *decolor* is still more applicable, there is a state of sallowness, of yellowish or icterode hue, of darkness or of lead-colour, of a squalid or sordid paleness of complexion, or a ring of darkness occupying the eye-lids and extending a little perhaps towards the temples and cheeks and sometimes encircling the mouth. There is in this form of the affection little or no tumidity, pallidness of the prolabia, or tendency to œdema; and the tunica albuginea of the eye is free from the tinge of icterus. This morbid state of the complexion appears, indeed, to depend principally on the condition of the cutaneous surface of the countenance. The tongue is apt to be affected chiefly in the *form* of its surface only, in a peculiar manner to be described hereafter; and the general surface of the body is apt to be more or less affected in the same manner as that of the countenance.

62. From this icterode appearance of the complexion it is important to distinguish the different shades of *Icterus* itself; in this disease the tunica albuginea are tinged proportionately to the general surface, and it is in this manner that these two morbid affections are discriminated. The term Icterus is merely expressive of a *symptom* of disease, although it is daily named and has long been arranged as a distinct *disease*. The shade varies from yellow to green or blackish. But the most important and only *practical* distinction with regard to Icterus, is that of its *causes* or of the *primary disease*; the principal of these are 1. *constipation or loaded bowels*, 2. *acute disorder of the digestive functions*, 3. *diseases of the liver*, 4. *gall stones*, 5. *hydatids in the gall ducts*, 6. *organic tumors in the abdomen, situated near the biliary ducts*, 7. *the pregnant uterus*, 8. *diseases of the right kidney*, 9. *or even of the right lung or cavity of the pleura*.

63. Besides the morbid affections of the complexion already mentioned, there are others consisting in different shades of *lividity*, and depending principally on a languid circulation, on a defective arterialization, or on a venous fulness of the blood.

64. In some cases of *Acute Dyspepsia*, § 58, there is a remarkable tendency to a livid hue of the prolabia, nose, and cheeks, as well as of the hands, accompanied with coldness and apparently dependent on languor in the cutaneous circulation.

65. A similar state of lividity, but frequently much greater in degree, is observed in cases of *Strumous Disease of the Mesentery*, attended with great tendency to coldness and great sensibility to external cold.

66. A degree of lividity in the prolabia is frequently though not universally observed in *Tuberculous Phthisis Pulmonalis.* This appearance seems to depend on the *part* and on the *extent* of the pulmonary structure involved in the disease, and on a defective arterialization as well as a languid cutaneous circulation of the blood.

67. Besides the diseases attended with lividity of the countenance already mentioned, this appearance occurs, for the most part together with tumidity, in cases in which the Brain, the Lungs, and the Heart are severally oppressed in *Apoplexy,* in *Pneumonia,* and in some diseases of the principal organ of the circulation. The appearances in these diseases will be noticed immediately.

68. In the attack of *Apoplexy* there is usually, at first, general tumidity, flushing and lividity of the countenance; the pupils are contracted, then dilated and often unequal; the features frequently lose their symmetry, those of one side of the face being unusually acute, whilst those of the other are relaxed; and the whole countenance is drawn or the expression lost in coma.—At a subsequent period, the countenance becomes pale, fallen, cold, and often variously distorted; Heberden observes, 'apoplectici, qui prope absunt a morte, in spirando ambas buccas inflare solent,' and indeed the oppressed state of the respiration always adds a characteristic appearance to the countenance; the pupils are dilated, perhaps unequal, or irregular in form; the eye dull and flaccid; the jaw frequently falls, the saliva flows, the lips are pale, and the mouth is foul.—A similar state of the countenance to that last described sometimes exists from the beginning in cases of what has been termed the serous and nervous forms of apoplexy.

69. *Paralysis* is a usual concomitant or consequence of Apoplexy. The effects of Paralysis on the countenance are very various:—The muscles of one side of the face fall into a state of relaxation, whilst those of the opposite side are unusually contracted from want of power in their antagonists. The forehead is often unequally affected by wrinkles, the eyebrow of one side falls down, the eye-lids do not open or close so readily as usual, or the eyes are not converged on the same object; one nostril, one angle of the mouth, and one cheek fall, whilst the others are unusually drawn, especially on speaking; the tongue is frequently protruded awry, and with difficulty; the articulation is indistinct, and some particular letters, especially the labials as *b* or *p*, cannot be pronounced. Deglutition is also sometimes affected, and there is a danger of choaking; frequently mastication is impeded by the collection of the bolus of food into one side of the mouth; sometimes the saliva flows out of that angle of the mouth which is now become the lower one. There is frequently a difficulty in shaving from the torpor of the skin and loss of power in the muscles which in health put it upon the stretch.

70. The countenance in *Epileptic Coma* has sometimes the deep suffusion observed in apoplexy, but it preserves its symmetry; the lip or tongue is liable to be bitten and wounded, and there is then frequently a bloody foam in the mouth.

71. The coma after *Puerperal Convulsion* is distinguished by the *previous* spasmodic distortion of the countenance, which often surpasses every other appearance of disease even the most shocking.

72. The countenance in *Deep Intoxication* is at first bloated and suffused, then pallid and sunk; the muscular

power is defective, the expression lost, the articulation indistinct, and the saliva flows from the mouth; the sensibility is impaired or lost; the breath tainted with the intoxicating liquor.

73. *Hysteric Stupor* is distinguished by the absence of the suffusion, distortion, and loss of character observed in apoplexy.

74. *Syncope* is characterized by pallor, coldness, cold perspiration, pale lividity, shrinking, and collapse of the integuments and features,—appearances which do but *concur* in the *commencement* of any other morbid affection.

75. In *Inflammation of the Brain* there is generally an expression of pain or uneasiness manifested usually by knitting of the eye-brows,—with delirium or coma; the pupils, from being contracted, become dilated, there are strabismus, grinding of the teeth, spasms or distortions of the muscles of the face, &c. with profound coma, and without the appearances observed in idiopathic fever.

76. In *Inflammation of the Chest with acute Pain,* or *Pleuritis,* the degree of the pain is marked by a proportionate contraction of the features in general and by acuteness and elevation of the alæ nasi; the nostrils are moved and dilated by the alternate acts of the respiration; there is sometimes a degree of vivid flushing, terminating abruptly and bounded by whiteness towards the nose; the heat is inconsiderable, and there is frequently perspiration.

77. In *Inflammation of the Chest with dull Pain,* or *Pneumonia,* there is less contraction of the features, but there is an

appearance of anxiety, and the nostrils are widely dilated before each inspiration; there is little heat, but frequently a degree of perspiration.

78. In *Inflammation of the Chest with great Dyspnœa,* and in cases of *Effusion into the Lungs,* there is usually a general and deep suffusion of the countenance, sometimes amounting to great lividity and conjoined with turgidity, there is great anxiety, the nostrils are widely dilated on inspiration, and drawn in above the lobes; during inspiration too the pomum adami, and even the chin, are sometimes drawn downwards; the surface is cool and sometimes damp.

79. The dawn of *Phthisis Pulmonalis* is marked by a delicate paleness alternated with transient gentle flushing, slight lividity of the prolabia on exposure to cold, an appearance of indisposition, frequently motion of the nostrils from the respiration, and frequently a quivering of the chin and lips on speaking.—Its progress is denoted chiefly by gradual emaciation, in addition to an aggravated state of the other morbid appearances just mentioned.

80. In *Hæmoptysis* there is usually a florid state of the complexion, and frequently the effects of dyspnœa are observed in an acuteness and movement of the nostrils. If the hæmorrhagy has been very great, there may be paleness, lividity, coldness, and a clammy perspiration, with great anxiety.

81. In *Hæmatemesis,* on the contrary, the complexion is generally pale and sallow, and frequently affected as described §§ 58—61; there is less anxiety and an absence of the movement of the nostrils.

82. In *Organic Diseases of the Heart* the expression and complexion are always much affected. In those cases in which the pulmonary circulation is not impeded, the complexion simply becomes unusually vivid and florid. But when the nature of the disease affords an obstacle to the freedom of the pulmonary circulation, this vivid colour passes into livid or violet colour, especially in the prolabia, cheeks, and nose, and there is superadded more or less of turgidity, and frequently, of coldness. There is great anxiety on mental emotion and bodily exertion, with an increase of the appearances just enumerated, and the head, the ends of the patient's cravat, &c. are frequently moved by the violence of the beating of the heart.—During the progress of the disease these appearances become aggravated, the complexion is still more livid, the turgidity of the countenance passes into œdema;—the eyes at length start,—and the head is often moved about denoting great distress and inquietude.

83. M. Corvisart observes, 'la figure, la physionomie, le *facies propria* enfin, sont, pour le praticien exercé, le guide le plus sûr, à mon avis, pour arriver au diagnostic d'un assez grand nombre de maladies tant aiguës que chroniques; mais c'est sur-tout dans les cas de maladies du cœur qu'il importe de considérer attentivement ce signe, qui, je le repète, peut seul, dans bien des cas, les faire reconnaître.' *

84. In the paroxysm of *Asthma* there is the most urgent anxiety of expression, and a great and rapid movement of the nostrils, usually without lividity; the breath is generally tainted, the tongue much affected, and there are frequent eructations.

* Essai sur les Maladies du Cœur, Ed. 2, p. 371.

85. In *Hydrothorax* there is often great anxiety, pallor or pale lividity, thinness, or œdema.

86. In *Inflammation of the Abdomen with severe Pain* there is a continued state of contraction of the muscles of the face, inducing an unnatural acuteness of the features; the forehead is wrinkled and the brows knit,—the nostrils are acute, drawn upwards, and moved by the alternate and irregular acts of the respiration,—the wrinkles which pass from the nostrils obliquely downwards are deeply marked,—the upper lip is drawn upwards and the under one, perhaps, downwards, exposing the teeth,—the chin is often marked with dimples. This state of the features is aggravated on any increase of pain,—from change of position by muscular effort, or from external pressure.—Indeed in cases of abdominal affection it is better to press on the abdomen, or beg the patient to raise the head and shoulders, and *watch* the *effect* on the expression of the countenance whilst the patient's mind is occupied with some other subject, than to ask the direct question whether pressure induces pain—as is usually done; for patients naturally suppose that every *painful* part must also be *tender*, and are therefore apt to answer in the affirmative although incorrectly.

87. In cases attended with *Spasmodic Abdominal Pain* the contractions of the muscles of the countenance are more violent but less permanent; during the paroxysms the distortions of the countenance take place in a degree scarcely observed, —in the interval the countenance recovers a calm unusual, if not incompatible, with inflammation.—The transition of spasmodic into inflammatory pain may often be traced with great distinctness, by carefully observing these changes and modifications in the expression of the countenance.

88. The *degree, increase,* or *diminution* of the disease may also be observed and ascertained by the concomitant increase or diminution of the acuteness and contraction of the features.

89. The *transition* of inflammation into the state of *Sinking,* or the *supervention* of *Gangrene,* is denoted by a fallen state of the features, the muscles becoming relaxed, the surface cold with cold perspiration, shrinking, and pale lividity, the cheeks sunk, the malæ prominent, the nostrils &c. affected by a laboured respiration.

90. The appearance of the countenance affords a valuable source of distinction between the *Chronic Dyspepsiæ,* and *Insidious Organic Disease.* In the former the appearances are as described §§ 57—61; in the latter there is a characteristic, early and progressive loss of flesh, with paleness, perhaps slight flushing, but without sallowness, the bony and muscular parts become exposed, the integuments are drawn into deep wrinkles, and there is often coldness and perhaps lividity.

91. Such a state of the countenance with an expression of pain, uneasiness, or anxiety, often leads to the detection of slow and *Insidious Inflammation of the Pleura or Peritonæum,* as well as of other diseases which would long remain hidden from being unattended with acute pain.

92. *Scirrhus and Cancer* are apt to induce sallowness and emaciation, a circumstance by which they are sometimes distinguishable from other tumors or ulcers.

93. *Polysarcia* is distinguished from Anasarca in the face, by observing that in the former the tumor is deposited with a

certain regularity, so that in general the symmetry of the countenance is not destroyed, nor the features much disfigured; the person is generally recognized after the supervention of the affection; the parts about and under the chin are mostly affected with the elastic tumor.

94. In *Anasarca*, on the contrary, an inelastic tumor is dispersed unequally over the face, the features are obscured, the symmetry of the countenance is destroyed, the expression lost, and the person is scarcely recognized; the posture of the patient during sleep influences the distribution of the swelling, and often occasions one side of the face to be more affected than the other; but the eye-lids, the lips, and the cheeks, and in general the parts of loosest cellular texture, are most distended.

95. In general it may be observed that the *brow* is contracted by pain within the head, the *nostrils* are drawn acutely upwards by pain of the chest, and the *upper lip* is raised and stretched over the gums or teeth in painful affections of the abdomen.

96. Alternate dilations and contractions of the *nostrils* arise from any effort in respiration, and are observed in great debility, in the common and typhus fever, in acute inflammations of the chest or abdomen, in organic disease within the thorax, &c.

97. *Extreme pallor* of the prolabia is observed in excessive hæmorrhagy, purpura, chlorosis, &c; *deep lividity* denotes a defective arterialization of the blood and occurs in

disease of the heart, &c. *pale lividity* occurs in cases in which the circulation at the surface is languid and imperfect.

98. One of the most important points embraced in the symptoms of diseases, and one particularly observed in the countenance, is the circumstance of *emaciation*. It may be said to be the surest index to the detection of those diseases which are characterized at once by their insidious character and serious and dangerous tendency.

99. It may be observed, *in conclusion*, that to notice *every* morbid appearance of the countenance would be almost impossible, and even useless. The object of such an attempt as the present is rather to *lead to observation;* the remarks which have been made are sufficient, I trust, to point out the importance of the inquiry. Many of the morbid appearances of the countenance, like the morbid states of the pulse, respiration, &c. are, after all, to be *observed* and *felt*, and scarcely admit of description.

100. Sufficient has been done, however, to prove that the countenance, in its various morbid conditions, affords characteristics of many diseases, and denotes, in a remarkable degree, the state, course, increase, or decline of nearly all. The *prognosis* is greatly prompted by the condition of the countenance, as may *still* be learnt from the writings of Hippocrates and Celsus; its aspect is often sufficiently marked to strike the common observer, and such as to impress the physician with inward hope or apprehension. How much then may be learnt by an assiduous and continued observation and analysis of these appearances?

CHAPTER II.

ON THE MORBID CONDITIONS OF THE

ATTITUDE.

101. I employ the term Attitude in a rather comprehensive sense, intending to embrace, under this head, the consideration of *the postures and motions of the body, the state of muscular debility, power, contraction, and motion, some particular actions, and the general manner of the patient.*

102. In general the *supine* position, and *tremulous* motions of the body, denote muscular debility,* and distinguish, in an *early* stage, the acute forms of *Idiopathic* from *Symptomatic Fever.*

103. Augmented power and action of the muscular system with quick and forcible changes of position, denote a state of delirium, of spasmodic pain, of internal suffering, or of inquietude.

* I restrict, in this place, the application of the term debility by the epithet muscular, because it is now well known that this species of weakness is frequently the effect of oppression and the associate of increased vascular action; just as a throbbing pulse may accompany the state of exhaustion. The subject of debility will be resumed in the sequel.

104. Certain positions adopted and retained with caution, and restrained movements of the body, are the usual effects of inflammatory pain; other fixed positions depend on the state of the respiration and of the circulation through the heart.

105. Certain movements of the head,—certain actions of the hand,—and certain peculiarities of the general manner, also occur as characteristic of particular diseases, and will be noticed hereafter.

106. The morbid states of the attitude will appear more distinctly marked, by being contrasted with the more usual and natural positions of the body; I shall therefore begin the subject of the present chapter by a description of the attitude in health:—

107. In healthy and undisturbed sleep, the usual posture is that on one side, the body being frequently inclined rather to the *prone* than to the *supine* position; the head and shoulders are generally somewhat raised, and, together with the thorax, bent gently forwards; the thighs and legs are in a state of easy flexion. The position is apt to be changed from time to time, the person lying on one or other side alternately.

108. It may be presumed that, both in health and disease, that posture of the body is assumed, which affords most repose to the system in general, and most relief in the performance of its various functions. It is on this principle that the position just described, as usual in the healthy state of the system, is to be explained, that the attitude in morbid affections becomes *characteristic* of the disease, and that any *unusual* position should immediately excite attention on the

part of the physician. The posture of the body during sleep, in a state of perfect health, is not, as might be on the first view supposed, such as demands the least *muscular exertion*, but such as affords most ease and repose to the different viscera and most facility and disencumbrance in the performance of their functions, and such as allows of the greatest degree of muscular relaxation, compatible with these more essential points. In the posture of healthy sleep in adult persons, it is evident, indeed, that there is much exertion of the muscular system; at length, that part of the muscular system employed in the position first adopted in sleep, becomes fatigued, the posture is changed, and another part of this system is called into action: this frequent change of position is observable in the soundest sleep. In a state of great debility the body uniformly falls into the supine position; and the recovery of the usual position on the side is always a sign of returning strength.—It may also be remarked that scarcely any part of the muscular system is observed to be in a state of *extension*. The supine position is not only uneasy but absolutely painful if long continued, and the knees are universally raised, after a time, to afford relief to the extended muscles of the thighs. This position is still more intolerable if the body be placed in it with the head and shoulders unraised by pillows, as may be observed by trying to lie down on a perfect plane.

109. By far the most urgent reason, however, why the body, during sleep, should assume the position I have described, appears from another consideration,—that of the greater degree of ease and facility with which the different functions are performed, and of the degree of support and relief enjoyed by the various viscera. The gentle elevation and

flexion of the head and chest diminish the determination, and aid the return of blood, with regard to the encephalon, and facilitate the circulation in general through the lungs; in this position too the brain is supported by the falx, the viscera of the chest by the mediastinum, the pressure of the thoracic and abdominal viscera is removed from the aorta, vena cava, and other systems along the spine; the function of respiration is rendered incomparably easier, the inspiration and expiration of air, the deglutition of saliva, and the circulation of the blood throughout the system, are much promoted. If all muscular exertion were avoided and the supine posture adopted, it is manifest how much inconvenience would be experienced in these respects, especially if the stomach were in a state of repletion. The viscera would be unsupported; the aorta and cava subjected to compression; the respiration would be more difficult; the muscles of the neck, chest, abdomen, and lower extremities would be held in a painful state of extension. No wonder that in such circumstances turbulent dreams and oneirodynia should be induced. In the pregnant state there is an additional reason for the assumption of the posture on the side; in this case one side is often chosen to the exclusion of the other.

110. From these considerations, a practical lesson may be deduced for the *treatment* of diseases,—the importance of attending to the position of the patients with the view of alleviating particular morbid affections:—in the threatening of apoplexy, and in affections of the head in general, in hæmoptysis, and in diseases of the chest, in diseases of the heart, in syncope, and in a great variety of morbid affections, the influence of position on the circulation must suggest the great importance of attention to this point with regard to the medi-

cal treatment of these diseases.* When the erect position may be deemed advantageous in the treatment of disease, it may be supported without muscular effort, by placing a pillow covered with the lower sheet, under the ischia and thighs; the body being then supported by a bed chair, will thus be prevented from sliding downwards. It has been assumed, that in diseases in general, that position is adopted in which the patient experiences the greatest degree of relief and ease in the performance of the functions. Often, however, the fatigue undergone in certain positions prevents the adoption of this position, although, if the patient were enabled by artificial support to endure it, much assistance might be afforded in the cure. Often too, a particular posture may be desirable with the view of moderating the tendency to congestion in a particular organ, when no relief to the feelings of the patient would be experienced, and consequently when no tendency on his part to assume this posture would exist, and yet where much relief may be afforded to the disease itself.

111. As a mean of cure, Sydenham used to recommend his patients to get up and remain out of bed, in many diseases even of the acute kind, as in fever, variola, pleuritis, angina, and in inflammatory affections in general. The same author details some of the inconveniences of remaining too long in bed, and gives certain directions and cautions respecting an opposite mode of proceeding.†

112. Lastly, an attention to the position of moribund persons may materially promote the *Euthanasia,* a circumstance

* See the Pathological Researches of Dr. Farre, Essay I, On Malformations of the Heart, *p.* 46.

† Opera Universa, Ed. Lond. 1685, *pp.* 145, 164, 240, 285, 316. Ep. *pp.* 84, 90. 100.

certainly of much interest and importance, and recommended to the attention of Physicians by Lord Bacon himself.*

113. I now proceed to notice the different morbid states of the attitude:—

114. In the *Common Acute Fever* one of the earliest and most characteristic symptoms is a deep sense of debility, with tremor, and an incapability of supporting the erect position; this posture, if assumed, induces also the feelings of vertigo and faintness.

115. In *Acute Symptomatic Fever* there is comparatively little or no tremor or muscular debility, or tendency to vertigo or faintness; the patient is capable of moving and even of walking, even in a late stage of the disease.

116. In the *Common Slow Fever* there is in some cases, for a considerable time, a supine position, with scarcely the ability to change or support the position on the side; there is tremor consisting of less rapid but more considerable movements than those observed in the acute form; the knees are apt to be raised.

117. In the milder form of *Typhus Fever* the patient sometimes gets up or continues out of bed, but appears feeble and trembling, and as if incapable of such a degree of exertion, whilst he draws near the fire from susceptibility to cold.

118. In the severe forms of *Typhus Fever*, the position of the patient becomes gradually more and more supine, and

* Vide Paradisium de *Euthanasia*. Heberdeni Comment. Cap. 51.

the actions more and more tremulous:—from being able to retain the posture on the side, perhaps, the patient falls upon his back, with the lower extremities extended, and sometimes with a tendency to sink towards the bottom of the bed; the hands and arms are moved with effort, and tremor,—and at length there is constant subsultus tendinum. To this state, picking of the bed-clothes or of flocci volitantes, delirium, or coma, is superadded.

119. Hippocrates* and Celsus† have accurately described the posture of Fever. Celsus observes, 'ubi vero febris aliquem occupavit, scire licet non periclitari si in latus aut dextrum aut sinistrum, ut ipsi visum est, cubat, cruribus paulum reductis; qui fere sani quoque jacentis habitus est; si facile convertitur &c.—Contra gravis morbi periculum est, ubi supinus æger jacet, porrectis manibus et cruribus,' 'ubi deorsum ad pedes subinde delabitur; ubi brachia et crura nudat et inæqualiter dispergit.'

120. As this position is occasioned by extreme debility, any change of posture is of favourable omen, as denoting a return of strength. The patient perhaps raises the knees, or puts the arms out of bed, or places them above his head. These movements are amongst the first symptoms of recovery. At length the patient is capable of supporting the position on the side,—a certain mark of returning muscular strength, and an indication of a favourable change in the disease.‡

* Προγνωστικον. † *Lib.* II. *Cap.* 3, 4, 6.

‡ There are two points in the *treatment* of Typhus Fever, connected with the attitude, of the utmost importance :---sometimes the supine position is retained so long, that ulceration takes place on the compressed parts, especially about the sacrum or

121. *Tremor* is amongst the first and most characteristic symptoms of Idiopathic Fevers; but it occurs also in some other morbid affections, united with less muscular debility:—

122. It forms so remarkable a symptom in the *Delirium Tremens,* as to have been adopted as part of its denomination. In one instance the tremor had preceded the delirium several days, and I was enabled to predict the occurrence of delirium; in another case, the effect of drinking, the affection consisted in great tremor, and, being cut short, delirium never occurred; it is scarcely necessary to advert to the more constant state of tremor observed in hard drinkers.

123. Tremor on holding out the hand, in writing, in carrying a cup to the mouth, in walking,—and in articulation, is a usual symptom of *Acute Dyspepsia;* it is generally conjoined with an appearance of nervousness and of susceptibility to hurry and agitation.

124. Tremor is far less and later observed in cases of local inflammation or organic disease; it does, however, occur in *Phthisis Pulmonalis,* and in cases in which the general strength suffers.

pelvis; W. Strutt, Esq. of Derby, has contrived a bed admirably calculated to remedy this evil; the bed is made to turn, so as to change the position of the patient at will, without any exertion of muscular force on his part, and consequently so as to vary the portion of integuments compressed, from time to time, and prevent the bad effects of constant pressure; this change of position too affords much relief to the patient's sufferings, by diminishing the fatigue experienced by constantly remaining in the same posture;---the second point is cautiously to guard against the effects of muscular exertion during the period of *convalescence*; I know by experience, that by far the greater number of *relapses* are occasioned by early and undue exertion and fatigue; the inference is therefore obvious and of the utmost consequence.

125. The form of tremor which I have described seems to depend on muscular debility, and perhaps on a morbid condition of the brain and nervous system. There is a kind of tremor of a more *spasmodic* character, which occurs from various causes, and which I shall notice towards the conclusion of the present chapter.

126. The *effect* of particular postures is of importance to be noticed as distinctive of *Affections of the Head:*—in the idiopathic affections, as in the state of threatening of apoplexy, vertigo and other morbid feelings are apt to be experienced on *stooping;* in the symptomatic affections, as in fever, acute dyspepsia, &c. vertigo is usually experienced on assuming the *erect* position.

127. An attention to the posture of the patient is also of importance in the treatment:—the recumbent position is as injurious in the case of apoplexy, as it is beneficial in that of syncope.

128. It is scarcely necessary to point out the effect of hemiplegia, paraplegia, or partial paralysis, on the attitude. In *Hemiplegia* the patient is apt to lie or fall more or less upon the paralyzed side, and especially upon the paralytic arm. In *Paraplegia,* the posture in sitting is manifestly marked by the defective muscular power, the patient being constantly apt to slide off the chair or sofa. In the *Partial Paralysis,* it is found that the hand cannot be moved so freely or clasped so firmly,—or the foot and toes are lifted imperfectly from the ground in walking.

129. The attitude is peculiar in the different forms of *Inflammation of the Chest:*—when there is *acute pain* a particu-

lar posture is apt to be chosen and retained, any change being cautiously avoided. In those cases which are attended with *much dyspnœa*, the patient is frequently obliged to have the head and shoulders raised, and even to assume the erect position. I have observed in some cases attended with great dyspnœa, that the patient has lain on the side, with the arm of the other side placed upright before the chest, the hand pressing forcibly on the bed: in this manner the shoulder became fixed and afforded a firm attachment from which the pectoral muscles acted to expand the chest.

130. In *Phthisis Pulmonalis* the posture is various; frequently however one particular position is chosen and preserved, cough, dyspnœa, or oppression being induced in any other; sometimes, in an advanced stage, the erect position is assumed.

131. In *Hydrothorax*, whether idiopathic or secondary, the position of the patient is frequently highly characteristic; it is less so, probably, according as the effusion has taken place more gradually and slowly. In the *less severe form* the patient, when in bed, usually lies with the head, shoulders, and chest gently raised by additional pillows; when out of bed, he is often observed to sit up, with the arms placed along the side, and the hands fixed and pressing forcibly on the chair, or sofa, on which he sits; in other cases he leans a little backwards, still supported by the arms and hands, which are placed behind the back. This kind of posture is often constant, or immediately resumed, if any accident occasions it to be changed; it gives rise to an elevation of the shoulders, from which the body is supported, or as it were suspended. In the *severer forms* the attitude varies with the degree

and progress of the disease:—at first the patient lies with the head and shoulders greatly raised;—afterwards the posture becomes more and more erect;—at a still more advanced period and in a more aggravated form of the disease, the patient is sometimes incapable of remaining in bed, and is obliged to sit up with the legs hanging down,—sometimes an arm-chair is obtained on each arm of which the patient presses and supports the hands or elbows, thus *suspending* the shoulders,—sometimes a second chair is required on the back of which the patient reposes the forehead or both hands and forehead, pressing with considerable force, thus *fixing* the upper attachments of the sterno-mastoid muscles.

132. This aggravated state of the attitude is certainly more frequently observed in cases of hydrothorax *complicated* with organic disease of the heart, or lungs, or of the liver or other organ situated in the abdomen. In some cases of hydrothorax in its simpler forms the patient has retained a nearly horizontal position; in cases of complicated hydrothorax he has even expired out of bed, supported by his friends.

133. In *Organic Diseases of the Heart,* the attitude,—at first, the effects of bodily exertion, and afterwards, the particular posture of the patient,—is very characteristic:—in *incipient* and dubious cases the diagnosis is assisted by observing the effect of muscular effort, especially such as involves much change of position and general motion of the body; let the patient be requested to *run up stairs,* the symptoms are invariably produced in cases in which they would be quiescent in a state of repose, or aggravated, if permanent;—in a *more advanced* stage of the disease, the sufferings of the patient become more acute and permanent, a certain restlessness, anx-

iety, and dyspnœa, aggravated extremely by every muscular effort or motion, take place, and distinguish the case from simple hydrothorax in which muscular motion induces far less inconvenience;—in a still *more aggravated* form of the diserse, the patient requires to be raised in bed more and more, until the erect posture, or even a posture *inclined* upon the thighs, becomes necessary, and at length there is an inability to sit erect even while the lower extremities are placed horizontally, and the patient is obliged perhaps to sit on the side of the bed, with the legs hanging down and the feet on the floor; the night as well as day is sometimes spent sitting up in a chair near the fire, sometimes with the head supported on the back of a chair, and the body leaning considerably forwards; in this stage of the complaint there are an inexpressible restlessness and anxiety;—at *any period* of disease of the heart a sudden change of posture from the horizontal to erect, frequently becomes necessary, from the aggravation of the symptoms and general agitation induced by a turbulent or terrific dream; frequently too the patient is obliged to get out of bed and repair to the window to respire the open air.*

134. In the paroxysm of *Asthma*, by which term I designate the cases of sudden attack of dyspnœa arising, *at first*, from a disordered state of the digestive organs, the erect position is usually necessary, and there is great anxiety and urgency of suffering, frequently with active restlessness.

* It need scarcely be observed how important an attention to the attitude becomes, in the *treatment* of Diseases of the Heart:---in the incipient stage the patient ought to *vegetate* as it were, and carefully to avoid every kind of exertion as well as of emotion; in this manner life and a comfortable state of existence may frequently be long insured; --in the later stages every attention should be paid to enable the patient to support with ease the position which affords the greatest relief.

135. In *Inflammation in the Abdomen with Acute Pain*, a certain position of the body is chosen and retained, and all muscular exertion, motion, or change of position, is carefully avoided:—the patient lies on the back with the thighs raised, or he is supported in a somewhat elevated posture by means of pillows placed under the head and shoulders, or he lies on the side with the thorax and the thighs in a state of gentle flexion on the abdomen; if he be desired to raise the head by muscular effort, an expression of aggravated pain is immediately visible in the countenance, § 86; the hands and perhaps the bed-clothes are carefully removed from pressing on the abdomen; the arms are put out and the knees raised or depressed with great caution; the manner is soft and the voice low and plaintive, with moaning, and a suppressed kind of complaining,

136. In *Spasmodic Pain of the Stomach*, or in *Colic*, the reverse of this state of general attitude is observed; the patient usually writhes to and fro, and constantly changes his position or mode of lying, instead of observing the cautious stillness of Inflammation; he often lies on the abdomen, or in the supine position, pressing violently on the bowels, or even grasping a portion of the abdominal parietes with the hands; or he sits in bed, bending forcibly forwards on the thighs; he cries out during the paroxysm of pain, and speaks in a loud and irritated tone of voice. All this violence both in general manner and posture, forms a remarkable contrast with the state of the attitude in Inflammation.

137. *After the paroxysm* of pain in Colic, the patient resumes an easy position; in the absence of an aggravation of pain in Inflammation, the same cautious posture and manner are still observed as before.

138. The transition from Spasm or Colic into Inflammation, may be easily traced by cautiously observing the characters of these different affections.

139. The termination of Inflammation in *Gangrene, or Sinking,* is marked by the fallen and supine position, and extreme debility; the patient lies extended on the back without the flexion and precaution previously observed in the stage of Inflammation; the manner of the patient still remains soft and plaintive.

140. In *Strangulated Hernia* the posture is at first perhaps attended with writhing, but *soon* becomes the same as in Inflammation, especially with the precaution of bending the thighs on the abdomen.

141. In *Inflammatory Disease of the Kidney* the patient, when up, inclines somewhat to the side affected and a little forward, especially in walking; and in a painful state of the affection, he walks with unusual precaution.

142. In *Inflammatory Disease of the Bladder* the patient bends forwards on the pelvis, evidently with the view of giving protection and relief to the parts contained in it, and of using as little as possible those muscles whose action might give pain; he walks cautiously, and often bends forwards still more, during this action of the muscles.

143. *Retention of Urine,* as a symptom in acute diseases, is often denoted by a state of constant elevation of the knees, which is *inexplicable* until the cause is discovered.

144. In *Organic Disease* in general the patient soon becomes affected with a serious, continued, and unvaried debility, stoops in walking and moves with slowness and caution. And deep-seated pain or uneasiness is often experienced from the succussion induced by *sitting down* or making *a false step in walking,* especially when there is a state of tenderness from inflammation.

145. In the appearance of the *Hand* it is often easy to read a state of pain, anxiety, or other suffering,—it is closed or expanded, or variously moved. I do not, however, deem it necessary to enter into any detail respecting points so perfectly obvious.

146. There is another symptom of importance to be noticed,—viz. the state of *jactitation* and *inquietude;* it occurs in different states of the system and in some diseases, but principally in cases of *irritation, exhaustion,* and *sinking,* and in *Diseases of the Heart.** I reserve the consideration of these subjects for a subsequent part of this work.

147. Besides the morbid states of the general attitude already described, there are some other more partial affections, chiefly of muscular action, which deserve to be noticed; these are principally *spasmodic tremor, paralysis,* and *contraction.* And there are some more general affections of a similar kind constituting *convulsion* and *rigidity.* It may be sufficient to enumerate the principal cases of these morbid affections, observing that the subject still presents ample scope for resumed inquiry.

* In all cases of this kind, as well as in the *Erethismus Mercurialis, sudden death* sometimes occurs from suddenly assuming the erect position or from other muscular effort or exertion.

148. Spasmodic tremor occurs in a remarkable degree in the *Shaking Palsy*,* in *Chorea*, as an effect of the *Poison of Mercury*,†—of drinking *Spirits*, &c.

149. Paralysis, the usual consequence of disease of the brain, the spinal marrow, or the nerves, is observed as an effect of the *Poison of Lead*.

150. Contraction, of the hand for instance, is a rather remote effect of *Paralysis*, *Epilepsy*, *Chorea*, *Hysteria*, of the various morbid affections termed *Fits*, &c. and is usually observed on one side of the body only.

151. A singular state of contraction of the hand occurs in children, and is described by Dr. Kellie.‡

152. General Convulsion occurs in cases of *Diseases of the Brain*, especially of the parts about its base, *Epilepsy*, *Puerperal Convulsion*, *Hysteria*, *Hooping Cough*, &c. The *effect* of convulsive action on the circulation within the head, has not hitherto been sufficiently attended to by physicians; hysteric convulsion assumes, from long and frequent repetition, an epileptic character; epileptic convulsion often induces an apoplectic coma; and pertussis, from the violence of coughing, frequently leads to fits, and even to hydrencephalus; &c.

153. General Rigidity occurs in *Tetanus*, and in some cases of *Epilepsy* and *Hysteria*.

* See Mr. Parkinson's interesting pamphlet on this subject.

† Bateman's Reports of the Diseases in London, *p.* 192.

‡ Edinburgh Medical and Surgical Journal, Vol. 12, *p.* 448.

CHAPTER III.

ON THE MORBID APPEARANCES OF THE TONGUE, ETC.

154. The circumstances to be noticed in an examination of the morbid conditions of the Tongue, and in immediate connexion with them, are, *its surface, form, papillæ, colour; its mode of being protruded; the teeth, gums, and internal parts of the cheeks; the taste; the breath, &c.*

155. The surface is apt to be affected with *whiteness, load, fur, dryness, blackness, chaps, &c.*

156. The form of the tongue is frequently modified by its becoming *swollen, indented, fissured, and lobulated.*

157. The papillæ are, in some cases, morbidly *prominent and enlarged,* and in others almost *obliterated,* leaving a smooth and perhaps tender surface.

158. The tongue is protruded with difficulty from dryness, tremor, or paralysis, and is left protruded in cases of imperfect sensibility.

159. The internal mouth, the breath, and the taste, are apt to be affected, conjointly with the tongue, especially when the latter is swollen and indented.

160. In the *Common Acute Fever*, § 44, the tongue is usually extremely white and loaded, with much thirst, an impaired taste, and sometimes a tainted breath, but usually without dryness.

161. In *Acute Symptomatic Fever* the tongue is not *necessarily* much affected; in some cases it has preserved nearly its natural state; it is however frequently whitish or furred; it is frequently moist, and free from indentation, unless it be modified by the conjunction of a disordered state of the alimentary canal.

162. In the *Common Slow Fever*, § 46, the tongue is at first white and perhaps loaded; afterwards it is apt to become clean, red, and dry, and sometimes unnaturally smooth, and perhaps tender; the teeth become a little affected with mucous sordes.

163. In *Chronic Symptomatic Fever* the tongue, mouth, taste, and breath are frequently unaffected; in the later stages, there are frequently aphthæ and soreness of the tongue, internal mouth, and fauces.

164. In the milder form of *Typhus Fever* the tongue is white and rather loaded, with a tendency to dryness; it is generally protruded with tremor.

165. In the severer forms of *Typhus Fever* the tongue becomes dry, parched, cracked, and tender, and dark brown

or black; it is often protruded with great difficulty from its state of dryness and of tremor; the internal mouth is also dry and foul; the teeth are affected with brown mucous sordes; the breath has a peculiar odour. The state of dryness is increased during sleep, the mouth being then usually open. It is important to remark whether, with a given state of the tongue, the *tendency* is to an augmentation or diminution of its morbid character.

166. In *Intermittent Fevers* the condition of the tongue varies greatly in the different stages and in the interval:—in the *cold stage* it becomes dryish and clammy, in the *hot stage* the tendency to dryness is still greater, in the *sweating stage* and in the *interval* the tongue approaches more to its natural state, remaining only whitish and rather loaded.

167. It may be justly remarked that the tongue affords one of the best diagnostics of the different kinds and degrees of idiopathic fevers, of idiopathic from symptomatic fevers, and of their complications. And its changes and tendencies denote, in a particular manner, those of the fever itself.

168, *Scarlatina* is frequently distinguished from Rubeola by numerous, elongated, florid papillæ which protrude through the white load.

169. In *Variola* pustules sometimes appear on the tongue and in the internal mouth. The occurrence of salivation, and of tumefaction of the countenance, followed by swelling of the hands and feet, is familiar to all.

170. I now propose to give a description of those morbid states of the tongue which occur in the varied forms of the Dyspepsiæ; § 57—61.

171. The most ordinary effect of an occasional or accidental derangement in the stomach and bowels, is a loaded state of the tongue, the superior surface of this organ becoming covered with a layer of whitish, soft, mucous substance, admitting of being partially removed by the tongue-scraper; the whole internal mouth is, at the same time, more or less disagreeable and clammy, the taste depraved, and the breath offensive; and frequently the substance of the tongue is a little swollen, œdematous, and marked by its pressure against the contiguous teeth.

172. In the *Acute Dyspepsia* noticed above, § 58, the state of the tongue already described, is observed, with some modifications:—the tongue is in general loaded, the mouth clammy, the taste bitter or nauseous, the breath fœtid, whilst the surface of the face is frequently oily; in some severe cases, the *load* has been very thick, and has eventually *pealed off*, leaving the tongue red, smooth, and tender; the *substance* of the tongue is generally swollen, œdematous, and impressed by the contiguous teeth; the *gums* are often red, tumid, and somewhat separated from the teeth by tartar, and are easily made to bleed; the inside of the *cheeks*, also, frequently partakes of the œdema, and receives, like the tongue, impressions from the adjacent teeth; sometimes the cheeks and the gums of the posterior part of the mouth, have been so swollen as to protrude a little over the teeth, and are either *ulcerated* by the pressure, or *wounded* by being bitten,—circumstances which are apt to be induced or aggravated by

cold. Through the load on the tongue, the red *papillæ* are frequently seen, either over its whole surface, or at its point principally; frequently the tongue is not only *indented,* but formed into *creases* or folds; sometimes deeper and more numerous *sulci* are formed, the edges of which are sharp and the sides in contact and requiring to be separated by the two fingers or by protruding the tongue further; in some cases the tongue is less loaded and indented, and its edges are red and even.

173. In cases of the *Acute Dyspepsia,* I have seen the tongue affected with deep, foul ulcers, resulting from the slow suppuration of hardnesses about the size of a horse-bean or nut, situated just under the surface of the tongue, which is loaded, swollen, and foul, with a copious flow of saliva, and a fœtid breath.

174. In *Chronic Dyspepsia* the tongue is sometimes affected in a slighter degree, in the manner just described, being somewhat tumid, indented, and sulcated; it is in general, however, less pasty and œdematous; it is frequently covered with a sort of viscid mucus; sometimes it is slightly white from numerous, minute, white *points* crowded over its surface; it is also frequently affected with *fur* consisting of short fibres resembling those of coarse velvet, and admitting of being separated by the finger. In this affection the tongue is frequently rather dry; and I have seen it, in several instances, sulcated longitudinally.

175. In very *protracted* cases, the tongue assumes several remarkable modifications of form and surface:—in the *first* case there is a universal *enlargement of the papillæ* over its sur-

face, which is now generally clean;—in two instances the papillæ at the most *posterior part* of the tongue became particularly enlarged, causing pain on swallowing, and some alarm to the patients; in the *second* modification, the surface of the tongue is formed into *lobules*, sometimes deeply intersected and resembling in form those of the base of the cerebellum, at other times, of less regular form, aud, lastly, assuming the form of squares; in the *third* variety, the tongue acquires an absolute and morbid *smoothness* of surface, which appears as if glazed, and is tense and unyielding. In all these cases, the tongue is morbidly clean, the mouth, taste, and breath being nearly natural, and its colour, although perhaps rather paler, frequently little changed; the complexion is usually rather pale and sallow, but the surface of the face is free from oiliness, and the integuments from tumidity.

176. The condition of the tongue in *Chlorosis* is very characteristic:—in the *beginning*, the tongue becomes rather pallid and tumid, and has frequently enlarged papillæ over its surface, it is somewhat loaded, indented, and sulcated, the gums and prolabia are pallid, and the breath is somewhat tainted;—at a *more advanced period*, the tongue becomes cleaner, smoother, still more exanguious, and acquiring a peculiar semitransparency, and a very pale lilac hue; it remains a little swollen and indented, but the papillæ disappear and often give place to a morbid smoothness; the complexion, prolabia, gums, and tongue are alike exanguious, and perhaps a little tumid; the breath is still less tainted, and even acquires an odour of new-milk; and the mouth becomes less clammy and disagreeable.

177. It has already been observed that a particular state of the tongue accompanies a particular condition of the com-

plexion and general surface, and that by observing the latter the state of the former may frequently be anticipated:—the loaded and swollen tongue is usually associated with an oily and swarthy state of the surface and complexion; the pale, tumid, and clean tongue in Chlorosis, is accompanied by a a tendency to tumidity of the integuments in general, and œdema of the ankles; and the clean, papulated, lobulated, fissured, or morbidly smooth tongue is united with a nearly natural state of the general surface. The morbid secretions of the mucous membrane of the tongue and internal mouth, are thus connected with a morbid secretion of the skin; the exanguious and tumid state of the tongue, with a similar condition of the integuments,—both apparently originating in the same state of the capillary circulation; the nearly clean tongue accompanies the *icterode* complexion without tumidity or extreme pallor; and the morbidly clean tongue is attended with little change of the complexion and general surface.

178. The appearance of the tongue in these cases denotes, in a particular manner, their *duration*:—the mere *load* is often soon induced and soon removed; a *swollen* tongue has required a longer time for its formation and demands a longer use of remedies; the states of tongue in Chlorosis, § 176, are of still slower formation and removal; and those described § 175, are often the effect of *years* of disorder, and are probably never totally remedied. By an accurate knowledge of the different morbid states of the tongue and of their concomitant morbid affections, the physician is frequently enabled to speak to his patients in a manner which excites their surprise, by indicating his distinct and accurate information respecting their diseases, especially in respect to the history and symptoms.

179. In true *Asthma* the tongue has, at first, the appearances observed in the *Acute Dyspepsia*.

180. In long continued cases, both of disorders and of diseases, it is not unusual for *Aphthæ* to occur, and they are occasionally seen in acute affections. The tongue, inside of the cheeks, posterior part of the mouth, and the fauces are covered with white, minute, tender vesicles, which are apt to be recurrent, soon assume the form of white exfoliations, and leave the subjacent parts smooth, red, sore, and tender. Sometimes the œsophagus, stomach, and alimentary canal appear affected, and obstinate sickness and diarrhœa occur, with a sense of burning. The affections in which aphthæ are most apt to occur, are *protracted* cases of the more serious forms of *Dyspepsiæ*, §§ 58, 61, in *Phthisis, Mesenteric Disease*, and *Chronic Inflammations of the Pleura or Peritonæum*.

181. As an effect of *cold*, and especially in conjunction with disorder of the digestive organs, there is frequently an eruption of one, two, four, or more *aphthæ*, or *small circular ulcers*, of from one to three or four lines in diameter, on the inside of the lip or cheek, on the point or near the root of the tongue, &c.; there is great tenderness, and a minute slough surrounded by an inflammatory border; the state of tenderness continues several days, and the whole course of this affection, like the one about to be mentioned, occupies from six to ten days.

182. With or without the last noticed affection, and from *similar causes*, there is frequently an emption of *Herpes*, or of a cluster of small vesicles, occupying some part of the prolabium or the angle of the mouth. It generally denotes that the patient has taken cold.

183. There is a chronic affection of the *Prolabium* and immediately adjoining skin which I have not seen described:—it consists of a repeated dry, splitting and exfoliation of the cutis of these parts, and occupies a ring of about one fourth of an inch across, all round the mouth; it varies in severity at different times and in different cases; it is in general long continued, and appears to result from a protracted state of disorder of digestion.

184. *Fur,* with a tendency to dryness of the tongue, usually denotes great local irritation,—such as violent inflammation,—from an accident,—of a joint, &c. This appearance is also common in cases of intestinal irritation. It occurs in some forms of the *Dyspepsiæ,* especially the chronic and cachectic. The state of fur of the tongue appears to arise from very different causes from that of load, its indications are therefore very different too; it is also in general more difficult of removal.

185. In *Disease of the Heart* with great lividity of the prolabium and countenance, the tongue and internal mouth frequently participate in the general discoloration.

186. There are sometimes great peculiarities in the *odour of the breath.* I have named the *fœtid* odour observed in *Acute Dyspepsia,* § 172; in some very protracted cases of *Chlorosis,* § 176, I have observed an odour of the breath resembling that of *new-milk*; in some morbid affections of the *Lungs,* the breath has an extremely offensive taint; and there is occasionally in some diseases, and I may particularize *Dysentery,* a *cadaverous* odour affording a most unfavourable prognosis.

187. An attention to the odour of the breath is of great use in detecting the case of intoxication,—and even of some cases of poisoning.

188. The *mode of protruding and of withdrawing the tongue,* is often worthy of notice. I have already named the tremor of idiopathic as distinguished from symptomatic fever. In cases of *stupor* from fever, or from disease of the brain, the tongue is sometimes protruded imperfectly and not immediately,—and sometimes it is left out until the patient is told in a loud voice to draw it again within the mouth.

189. In cases of *Paralysis* the tongue is often protruded to the opposite side to that affected with the paralytic weakness, and frequently the saliva flows from the angle of the mouth of the affected side.

190. In *Epilepsy* the tongue is frequently severely bitten during the fit, and becomes swollen and bloody.

CHAPTER IV.

ON THE MORBID CONDITIONS OF THE

GENERAL SURFACE.

191. The objects comprised in this chapter are *the temperature, the state of dryness or moisture, of tumidity or shrinking, or of roughness or smoothness of the skin, the colour, the occurrence of emaciation, or of œdema or anasarca, and the condition of the hands and feet.*

192. The temperature of the general surface and of the hands and feet is greatly modified by febrile, functional, and organic affections, and has been found, in some affections of the heart, to form a striking contrast with that of the internal mouth or of the rectum.*

193. The state of heat, tumidity, dryness, and roughness seems to characterize the idiopathic fevers and to distinguish them from the symptomatic, in which an opposite state of the surface is more usual.

194. The colour is modified by the condition of the cutaneous circulation, of the blood itself, and of the cuticular surface.

* Farre's Essay on Malformations of the Heart, *p.* 32, et seqq.

195. It is of the utmost moment to remark the occurrence of emaciation or of œdema, as important sources of the diagnosis of functional and organic morbid affections.

196. The condition of the Hands and Feet, and the appearance of the Nails especially, vary with the state of the blood, and of the circulation, of which they afford a sort of index, and, in some protracted cases, with that of the cuticular and cutaneous surface.

197. The *Common Acute Fever* is characterized by a tumid, smooth, soft, and dry state of the surface, with a sense of glowing heat, and a florid colour; this state is apt, however, to be modified by the occurrence of perspiration.

198. In *Acute Symptomatic Fever* the surface is, on the contrary, frequently nearly natural,—of moderate heat, and inclined to perspiration.

199. Profuse perspirations have been particularly observed in the acute fever symptomatic of *Rheumatism, Inflammation of the Mamma,* and in some affections of the *Kidney.*

200. In *Common Slow Fever* the surface gradually becomes dry, rough, and harsh, the cellular substance shrinks, the skin communicates a sense of acrid heat, and the cuticle is often in a state of exfoliation, and sometimes raised on the neck and breast into miliary vesicles.

201. In *Chronic Symptomatic Fever* there is usually an absence of this state of the surface, copious perspirations being opposed to the constant dryness, and a natural warmth or even coldness to the acrid heat;—the perspirations are apt to

be peculiarly profuse in *the last or early morning sleep*,—the coldness, often joined with lividity, is sometimes constant, at other times, the consequence of the least exposure to cold.

202. The chronic symptomatic fever is, however, much modified by the nature of the *primary* disease;—in *Tuberculous Phthisis* there is often the alternation from chilliness, to hectic heat, and perspiration during sleep; in *Strumous Disease of the Mesentery* there is greater chilliness and sensibility to cold, and cold lividity, with early morning perspirations; and in organic *Disease of the Liver* there is frequently little or none of these symptoms.

203. In *Typhus Fever* the state of the general surface is various, and usually less distinctly characterized than in the morbid affections already mentioned. In the *milder form* the temperature is moderately augmented, especially in the young or plethoric, but there is rarely great heat or dryness. In the *severer form* the surface is sometimes a little parched and the cheek flushed; sometimes cool and affected with clammy perspiration; sometimes there is an eruption of miliaria with a dry skin; and sometimes there are petechiæ; in the state of *sinking* a cold and clammy perspiration affects the nose, cheeks, hands, and general surface.—In the fever described by Dr. Currie, 'the temperature rose in one case, to 105° Fahr., but was in general from 101° to 103°, and towards the latter end of the disease scarcely above that of health.'* Dr. Bateman observes 'the heat seldom exceeded 99° or 100°.'†

* Medical Reports, *Vol.* I. *p.* 11. Dr. Currie observes with regard to continued fever, that 'one exacerbation, and one remission in the twenty-four hours, seem generally observable. The exacerbation usually occurs in the afternoon or evening, the remission towards morning. These exacerbations are marked by increased flushing, thirst,

† On Contagious Fever, *p.* 36.

204. The three stages of *Intermittent Fevers* are highly characterized by the state of the general surface;—in the *cold stage* there is great shrinking and the skin becomes pale, cold, and rough, and in the state termed cutis anserina, and the temperature has been observed as low as 74°; in the *hot stage* the integuments become tumid, and injected, and the skin is hot and dry, and the temperature has sometimes been as high as 105°; in the *last stage* the tumidity, heat, and injection cease and yield to a general perspiration.

205. It is in the *Scarlatina Anginosa* that the greatest degree of tumidity, injection, and temperature is observed; the rash is continuous and imparts a deep red hue, and the surface in general is turgid, hot, smooth, soft, and dry, a state which is succeeded, on the decline of the fever, by dryness, roughness, and exfoliation. There is much diversity in the *degree* of these appearances, as in that of the fever itself; but in severe cases the heat and tumidity are greater than in any other febrile affection of this climate; the thermometer applied to the surface of the body rises to 105° and 106° even in mild cases, and in the more violent cases to 108°, 109°, 110°, and even 112°,—the greatest heat ever observed in the human body by Dr. Currie.*

and restlessness. If the heat of the patient be, at such times, taken by the thermometer, it will be found to have risen one or two degrees in the central parts of the body above the average heat of the fever, and still more on the extremities.'---Dr. Currie adds, 'the safest and most advantageous time for using the aspersion or affusion of cold water, is when the exacerbation or fever is at its height, or immediately after its declination is begun; and this has led me almost always to direct it to be employed from six to nine in the evening; but it may be safely used at any time of the day, *when there is no sense of chilliness present, when the heat of the surface is steadily above what is natural, and when there is no general or profuse sensible perspiration.*---These particulars are of the utmost importance.'

* Medical Reports, *Vol 2. p.* 46.

206. In the *Scarlatina Maligna* there is frequently an entire absence of tumidity, injection, and heat of the surface; sometimes there are shrinking, cold moisture, and a pale or livid rash.—It is of the greatest importance to attend to the state of the surface, in a curative as well as a diagnostic point of view.*

207. After the decline of the tumidity and rash of Scarlatina, an anasarcous swelling of some parts of the surface is occasionally observed; it usually affects the extremities and face; and sometimes the sole of the foot has been raised into one entire blister.

208. In *Rubeola* there is comparatively little tumidity, injection, and increased temperature of the general surface; the face, and especially the eyes and eye-lids are, however, often considerably tumid; the heat of the skin is in this disease, and in the *Influenza*, from 99° to 101° and 102°.†

209. In the *Variola Discreta*, except in its mildest forms, there are considerable general tumidity and heat, frequently a warm perspiration, a full state of the pustules, and a soft condition of the intervening portions of skin.

* Dr. Currie observes, 'before I conclude the subject of Scarlatina, I must *again* enforce the superior advantage of using the 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. It has come to my knowledge, that in two cases of Scarlatina, of the most malignant nature, the patients have been taken out of bed, under the low delirium, with the skin cool and moist, and the pulse scarcely perceptible. In this state, supported by the attendants, several gallons of perfectly cold water were madly poured over them, on the supposed authority of this work! I need scarcely add, that the effects were almost immediately fatal.' *Vol.* 2. *p.* 76.

† Ibid. *Vol.* 2. *p.* 78.

210. In the *Variola Confluens* the surface is shrunk and flaccid, the temperature little or not at all augmented, and the skin is frequently affected with a clammy perspiration, whilst the pustules are flat and flaccid, participating apparently in the state of the cutaneous circulation.

211. In the course of Variola, and usually about the *eighth* day, there is frequently a state of tumefaction of the face and eye-lids, with a flow of saliva; this state recedes, and about the *eleventh* day the tumefaction affects the hands and feet.

212. In the morbid affections already noticed, the temperature of the surface is, for the most part, augmented. There are some diseases, however, in which there is a tendency to *diminished temperature* and frequently great sensibility to cold.

213. There is a certain degree of this tendency in *Acute Dyspepsia*, § 64, and perspiration is excited by the slightest hurry or fatigue.

214. But the case in which this peculiarity is most observed is the *Strumous Disease of the Mesentery;* in this disease the patient is greatly sensible to external cold and to the least draught of air, and, in cold weather especially, constantly draws near or hangs over the fire,—until the hands and legs assume a brown colour from the influence of its heat. With this sensibility to cold, there is also frequently a great tendency to *early morning perspirations*, which appear to be induced by *sleep*, and to be in part avoided by keeping awake, which is often done purposely.

215. A slighter degree of chilliness is observed in *Phthisis Pulmonalis,* and in other organic diseases, together with a greater or less tendency to perspiration.

216. In *Diabetes* the surface is often peculiarly dry, harsh, rough, and exfoliating, and deprived of perspiration.

217. In the study of *all,* but especially of *chronic* diseases, there is no point of greater importance than that of *emaciation,* § 98; much might certainly be learned by a constant attention to this subject, and when it can be done, to the actual *weight* of patients.

218. The degree of emaciation which takes place in patients, depends in part on the nature of the *disease,* and in part on the nature and office of the *organ* affected.

219. Emaciation is more observed, in a given space of time, in *Idiopathic* than in *Symptomatic Fevers.*

220. Loss of flesh takes place in the *Acute Dyspepsia,* but is scarcely observed in the *Chronic* forms of that disorder,—a circumstance by which they are therefore distinguishable from *Insidious Organic Diseases* or *Protracted Inflammations.* It is interesting to trace, in the first case, the gradual and weekly return of flesh, under a judicious treatment.

222. Emaciation is the usual effect of *Tuberculous* and *Scirrhous* affections in any organ; it is *less* early observed in some other diseases, as in the encephaloïdes,* &c.

* Laennec de l' Auscultation mediate, ? 344.

223. Emaciation is little observed in diseases of the *Head, Heart,* and even the *Lungs,* compared with those of the *Mesenteric Glands,* the *Stomach* and *Bowels,* the *Liver,* the *Pancreas,* &c.

224. In *Diseased Mesentery* the emaciation and loss of strength are nearly if not absolutely *progressive;* in *Disease of the Liver* there may be, for some time, even for years, a degree of recovery, and weakness and loss of flesh and even icterus and anasarca occasionally disappear.

225. There are some highly interesting remarks on this subject, in Dr. Pemberton's excellent work on the Diseases of the Abdominal Viscera.* Dr. P. observes that in the organic diseases of the Liver, the Pancreas, the Mesenteric Glands, the Stomach, the Small Intestines, and the Spleen, as "glands of supply," there is considerable emaciation; whereas in the diseases of the Kidneys, of the Breast, and of the Large Intestines, which are "glands of waste," the loss of flesh is less, and less rapid.

216. This subject will be partly resumed in treating of the History of diseases, in the second part of this volume.

227. Next to emaciation as a consequence of disease, it is important to remark the occurrence of *œdema,* or of its aggravated form of *anasarca.*

228. The principal causes of this affection are *Organic Disease of the Heart,* or *Lungs, Enlargement of the Liver,*

* Chapter VI.

Phthisis Pulmonalis, Organic Tumors in the Abdomen, Pregnancy, &c.

229. Anasarca is frequently observed in the later stage of *Chlorosis*. It is often, indeed, an effect of debility merely, and occurs, consequently, in the last stages of chronic diseases in general,—from want of nourishment,—and in old age,—and as an effect of profuse hæmorrhagy or purging. Anasarca is also occasionally the effect of long exposure to cold and wet.

230. The causes of anasarca, sometimes induce other kinds of dropsy, as *Hydrothorax, Ascites*, &c. which are, indeed, like anasarca itself, far more frequently *effects* of diseases, than *primary* diseases themselves. It is important to trace the succession of links in this chain of causes and effects; but it is to be observed that these morbid states come at length to constitute diseases, and produce, in their turn, their peculiar effects and symptoms.

231. The appearances of the general surface in cases of *Cachexia* are peculiar; but they do not appear to require description in this place.

232. There is a singular morbid affection of the surface, which has not I think been noticed by any practical writer:—*the face, and some parts of the surface of the body, become suddenly and remarkably puffed and swollen;* this affection appears to be occasioned by the presence of some indigestible substance in the stomach, and generally yields to the operation of an emetic and purge.

233. I now proceed to notice some morbid states observed chiefly in the *Hands and Feet*, although partly too over the general surface. The *nails*, like the prolabia, § 41, afford an opportunity of observing the state of the blood; the *hand* in general, often denotes by the condition of its surface, the degree of force or feebleness of the circulation, at least in the capillary vessels, and by its steady or tremulous movements, the strength or weakness of the muscular system.

234. *Idiopathic* and *Symptomatic Fever*, in general, are distinctly characterized by the morbid affection of the surface and by the state of tremor, so generally observed in the former, and so little, comparatively, in the latter.

235. In the *Common Acute Fever*, there is generally considerable tremor, and burning heat; in *Acute Symptomatic Fever* these affections are usually absent.

236. In *Common Slow Fever* the hand is still more tremulous, and its surface becomes dry, parched, and exfoliating; in *Chronic Symptomatic Fever* the surface is generally totally different and there is only the tremor of weakness.

237. In *Typhus Fever* the tremor frequently assumes the aggravated character of subsultus tendinum. It is scarcely necessary to make any allusion to the circumstance of the picking of the bed-clothes, flocci volitantes, &c.

238. There is one morbid affection in which tremor is so characteristic as to have been chosen for its denomination, —the *Delirium Tremens;* from the occurrence of this sym-

ptom in a remarkable degree, I was enabled, in one case, to *foretell* that delirium would follow.

239. In *Acute Dyspepsia,* a degree of tremor is observed on desiring the patient to extend the hand and arm; the surface of the hand is apt to be cold and clammy, and the nails to assume a lilac hue, and their tips to become white and opaque. These appearances are, in some instances, very long continued, and they are always very characteristic.

240. In *Chlorosis,* the hands, fingers, and nails become characteristically pale and exanguious;—the skin is frequently opaque and puffy, and usually dry;—there is a tendency to œdema, and, at length, to anasarca,

231. In *very protracted* cases of the morbid state described § 61, the skin becomes gradually dry, branny, and sallow, or brownish, and the nails become brittle, break off in lamellæ, —so that the patient is incapable of taking a pin out of her dress,—and sink in irregularly in their middle part. This state of the nails is by no means unfrequent.

242. In common *Dyspepsia* even, the hands, feet, and nose are apt to be cold.

243. In *Organic Disease of the Heart,* the hands, like the nose and cheeks, frequently become deeply livid and very cold,—whilst the heat within the rectum and under the tongue is sometimes even higher than natural;* in young subjects the finger ends become expanded, especially laterally.

* See Dr. Farre's Essay on Malformations of the Heart, *pp.* 32, 34.

244. The finger ends are swollen, and perhaps affected with a sense of tingling, especially in young subjects, in some cases of *Organic Disease of the Liver*, and sometimes in *Tuberculous Phthisis Pulmonalis*, and in the latter disease they become adunque.

245. In *Inflammation of the Bowels*, and in *Cholera* and *Dysentery*, there is a characteristic tendency to a cold, clammy, and livid state of the surface of the hands, and feet, and of the nose, whilst the pulse is frequent and small.

246. I have already named the tendency to coldness and lividity of the extremities in *Strumous Disease of the Mesentery*; sometimes the skin is burnt until it becomes brown from the patient's sitting near the fire.

247. There is a loss of temperature in cases of Paralysis, sometimes with lividity and shrinking.

248. In the *action* of the hand and fingers we may frequently observe the expression of pain, of anxiety, or of suffering;—but this subject properly belongs to a subsequent chapter.

CHAPTER V.

ON SOME MORBID CONDITIONS OF THE GENERAL SYSTEM.

249. Before I proceed to notice the symptoms of disease referrible to the functions of the Encephalon, and of the Viscera of the Thorax, and Abdomen, I wish to call the attention of the reader to some morbid affections of the system at large.

250 In the first place I shall just refer to those various morbid states of the general system denominated *Fever*. But I shall principally though briefly notice some other conditions of the system, which have not hitherto obtained the degree of attention they demand, and which may be denominated *the states of irritation,—of exhaustion,—of erethismus,—and of sinking.*

251. All these morbid states are characterized by affecting *many or all* of the organs and functions of the body at once; although one particular organ frequently suffers much more than the rest.

252. *Idiopathic Fever* is particularly distinguished from *Symptomatic Fever* by the characteristic just mentioned, § 251:

—the contrast has already been drawn between the states of the countenance, of the attitude,—including the muscular system, of the tongue, and of the general surface, in these different affections; and differences not less marked will be observed in the functions of the encephalon, and of the organs of the thorax and abdomen.

253. A similar remark applies to the dissimilar but characteristic effects of local *Irritation* and *Inflammation*, on the general system. These effects, although in general sufficiently distinct, are frequently confounded. How often have I known that symptom stated as evidence of the existence of inflammatory action, which, in fact, was connected with irritation, and with nothing so remotely as inflammation!

254. It is perhaps of still greater moment to observe that some affections of the system in general, resembling, and often mistaken for, local inflammation and effects symptomatic of inflammation, are, in fact, effects of *Exhaustion!* The mistake in both these cases, is full of danger; the investigation of the diagnosis is, therefore, of the utmost importance.

255. It is a remarkable circumstance, as I shall observe hereafter, that the phænomena and effects of Exhaustion are *extremely similar* to those of *Erethismus*, and especially of the *Erethismus Mercurialis*.

257. Lastly, there is a state of constitutional affection, which may be termed the state of *Sinking*, which occurs in various diseases, and is characterized frequently by inducing

false appearances of amendment,—dissolving, as it were, the series of morbid actions, and in a certain sense curing the disease,—but subsequently leading to sudden or at least early dissolution.

258. I shall now proceed to *sketch* the principal phænomena observed in these states of the constitution. It would require too great a space to enter into their *detail,* and it is the less necessary because I have, in part, attempted this in other works, to which reference will be made hereafter:—

259. The principal sources of *Irritation* to which I shall allude here, are, the presence of indigestible substances in the stomach and especially *Intestinal Disorder or Load.* The *effects* of these sources of irritation, are either *gradual* or *sudden.* The gradual effects are, I think, fully detailed in a work lately published,* to which I beg to refer the reader. It is the more sudden effects of intestinal irritation to which I wish to direct the attention in this place.

260. The more sudden effects of Intestinal Load and Irritation are, *acute pain of the head,—of the side,—of the loins,—of the iliac region, or of some other part of the abdomen;—attacks of vertigo,—of dyspnœa,—of palpitation,—of vomiting,—of hickup;*—there are often *great anxiety and distress,—clammy perspiration,*—or, on the contrary, great *febrile heat,* &c. The attack is apt to be mistaken for a disease of the organ principally affected, and bleeding is injuriously prescribed when

* See an Essay on Disorders of the Digestive Organs and General Health, and particularly on their numerous Forms and Complications; by Marshall Hall, M. D. &c.

enemata and purgative medicines are the only remedies. The effects of intestinal irritation are particularly apt to occur after any exertion, or agitation,—after the pain and fatigue of delivery,—and especially when this cause is conjoined with any cause of exhaustion,—as misapplied or undue bloodletting,—hæmorrhagy,—or purging;—and in *the course of diseases*; and I am persuaded that their influence in these circumstances is still only half apprehended.

261. The principal sources of Exhaustion are undue bloodletting, and uterine hæmorrhagy, especially when they concur with intestinal irritation,—over purging, and diarrhœa. The effects of exhaustion may be referred to the Head, Heart, the viscera of the Thorax and of the Abdomen, and the Muscular System*—The symptoms which affect the *Head* are, severe pain; beating and throbbing; rushing, or cracking noises; vertigo or turning round of the room, especially on raising the head or assuming the erect position; intolerance of light, and of sound; wakefulness; starting during sleep; awaking hurried and alarmed, with faintiness, palpitation, feeling of sinking, of impending dissolution &c.; being overcome by noise, disturbance, or thinking even; and delirium. The *Heart* is, in different cases, affected with palpitation, fluttering, irregular and feeble action; there are beating and throbbing of the carotids, and sometimes even of the abdominal aorta; a frequent, bounding, and sometimes irregular *Pulse;* faintishness or fainting, urgent demand for the smelling-bottle, fresh air, fanning, bathing of the temples; feeling of impending dissolution; incapability of bearing the erect position, and sometimes early fainting from the use of the lancet. The

* See an Essay entitled, Cases of a Serious Morbid Affection arising from various causes of Irritation and Exhaustion; by Marshall Hall, M. D. &c.

Respiration is affected in different cases, with panting, hurry, sighing, great heaving, gasping, blowing, moaning, catching, &c. and, as has been stated, with urgent demand for fresh air. There is sometimes a sense of great and alarming *oppression* about the *Chest*. There is in some cases, an *Irritative Cough*, —in violent fits,—or in the form of continual hacking; this cough appears to originate in the larynx or trachea. The *Stomach* is liable to become affected with irritability, sickness, retching, vomiting, hickup, and eructation; the *Bowels* with constipation, or diarrhœa, pain, flatus, distension, &c. There are very frequently urgent restlessness, tossing about, and jactitation. In some cases, various *Spasmodic Affections* have occurred.—We have often to combat the effects of exhaustion in the *puerperal state*, and in cases in which bloodletting has been improperly employed for diseases not inflammatory, or too lavishly in cases of inflammation.

262. There is an extraordinary similarity, as I have already observed, between the effects of exhaustion as just noticed, and the symptoms of the disease termed *Erethismus Mercurialis*, so well described by Mr. J. Pearson,* and so painfully experienced, and so amply and accurately detailed, by the late Dr. Bateman.† The descriptions of these authors do not, however, enumerate the affections of the *head;* otherwise they would be almost identical with that of exhaustion just given; disturbed sleep, hurried wakings, palpitation, languor, fainting, feeling of impending dissolution, want of air, fits of coughing, and of retching, &c. occur in both of these morbid states, and *sudden and unexpected death* from muscular effort, has *alike* terminated the patient's sufferings.

* Observations on Lues Venerea, 2*d Ed.* Chapter XII.

† The Medico-Chirurgical Transactions, Vol. 9, *p.* 220.

263 The morbific effects of *Digitalis,* and of some other vegetable remedies, are also not dissimilar from those of Exhaustion and Erethismus.

264. The constitutional symptoms in some cases of local disease, as in the *Phagedenic and Sloughing Ulcers,* appear also to partake of the characters of Erethismus.

265. The state of Sinking occurs under very different circumstances and accordingly presents very dissimilar phænomena:—it occurs sometimes as a gradual and simple feebleness, decline, and cessation of the functions of circulation and respiration; at other times it takes place with the more active symptoms of inquietude and jactitation, catching respiration, hickup &c; sometimes it has the remarkable effect of dissolving the chain of morbid actions and sensations constituting the disease under which the patient has laboured, and of presenting to his friends, and perhaps to his unwary physician, the appearance of amendment, when life is soon to terminate in an unexpected dissolution; lastly, the appearances of sinking quickly follow the accession of gangrene.

266. The gradual decline of the powers and functions of the heart and of the respiration scarcely requires any description;—the breathing becomes irregular, the pulse small and feeble, and the extremities and the nose and cheeks cold.

267. In the second form of sinking, § 265, there are constant restlessness with throwing about of the arms, and throwing off of the bed-clothes, delirium or incoherency of mind, catching, sighing, or gasping breathing, a frequent small pulse, hickup, an indescribable feeling of approaching dissolution,

a constant necessity for the windows to be opened, and for the fan, and sal votatile; &c. the countenance becomes pallid and sunk, and, with the extremities, cold, clammy, and perhaps livid,—especially the prolabia.

268. In the third case, § 265, the pain and symptoms of the disease often cease, and the patient has even got up or enjoyed sleep, and yet dissolution has been at hand,—the pulse perhaps suddenly becoming very frequent and the extremities cold. This phænomenon is, I think, most frequently observed in cases of *Inflammation and other Diseases of the Intestines*, as I had remarked long ago.* It also occurs in other states of disease;—delirium and pain have ceased, and suppression of urine has yielded, under the influence of the state of sinking.

269. That extraordinary man, Mr. J. Hunter, had accurately observed the state of sinking, and has described it under the term dissolution.† 'The first symptoms, he observes, are those of the stomach, which produce shivering: vomiting immediately follows, if not an immediate attendant; there is great oppression and anxiety, the persons conceiving they must die. There is a small quick pulse, with every sign of dissolution in the countenance; as it arises with the symptoms of death, its termination is pretty quick.' 'I have seen dying people whose pulse was full and strong as usual, on the day previous to their death, but it has sunk almost at once, and then become extremely quick, with a thrill: on such oc-

* See an Essay on Diagnosis, Part I, *p.* 47. See also Dr. Abercrombie's paper in the Ed. Journal, Vol. XVI, *p.* 22.

† Hunter on Inflammation, Part II, Chap. IX, Sect. 3.

casions it shall rise again, making a strong effort, and after a short time, a moisture shall probably come on the skin, which shall in this state of pulse be warm; but upon the sinking of the pulse, shall become cold and clammy: breathing shall become very imperfect, almost like short catchings, and the person shall soon die.' 'It would appear in many cases, that disease has produced such weakness at last, as to destroy itself: we shall even see the symptoms, or consequences of disease, get well before death.'—Sir Henry Halford has also noticed this subject in a late paper published in the Transactions of the College of Physicians,* and has applied it to the *Prognosis* of diseases.

270. The symptoms of sinking in cases of *Gangrene* are familiar to every observer.

271. From the preceding observations it will appear that there is a similarity in the symptoms attending intestinal irritation, exhaustion from loss of blood, the erethismus mercurialis, the morbific effects of digitalis and other poisonous vegetables, sinking, and dissolution, which is really remarkable. It is a question of great importance how far the existence of one of these states, tends to the superinduction of another:—the effects of exhaustion are certainly very apt to supervene in cases of intestinal irritation, and, I think, are far less liable to occur, from the same application of its causes, during the existence of internal inflammation; a given degree of intestinal irritation, on the other hand, produces unusual effects in cases of exhaustion. I do not know whether the same relation exists between irritation or exhaustion, and the erethismus of mercury or of digitalis.

* Vol. VI, Art. 15.

272. The symptoms of Irritation or of Exhaustion are are not only particularly apt to supervene when the cause of the other state respectively, co-exists; but it appears to me that the *causes* of one state are also apt to induce those of the other. Thus the state of intestinal disorder and irritation, at least, is very liable to steal on in cases of exhaustion from loss of blood; and when it exists primarily, it is extremely apt to induce diarrhœa, and even some kinds of hæmorrhagy, as epistaxis, hæmatemesis, and melæna, and even uterine hæmorrhagy or discharge.

273. When the state of *Exhaustion* terminates fatally, it is either by *sudden death*, or by more or less *gradually* passing into that of *Sinking*:—Sudden death is apt to occur from any muscular or bodily effort in a change of the position; one patient rose up to make water, sank down and soon afterwards expired.—The transition of the state of exhaustion into that of sinking, I have an opportunity of witnessing at the moment of writing these lines;—great pain of the head with beating, throbbing of the carotids, agitation from sudden noises, as knocks at the door, violent palpitation of the heart, with fulness and bounding of the pulse, alarm and hurry on awaking, &c. have gradually subsided and passed into a tendency to dose, first with snoring, then with blowing up of the cheeks and lips, and moaning; slight ruttling or crepitus heard in the trachea during respiration, becoming gradually augmented; —slight, catching, laryngal cough, especially when asleep,— gradually increasing and becoming painful and almost incessant, but afterwards almost ceasing; oppression in breathing with blowing through the mouth and lips, the nostrils being very acute, and dilated below and drawn in above the lobes; much flatulency;—at length the fæces are passed at each

attempt to void urine;—the countenance is pallid and sunk, the features acute, there is much inquietude, sometimes jactitation, and delirium, especially on awaking, and, to employ the patient's own expression, '*such a dying feel.*'

274. The subjects sketched in this chapter, I do not hesitate to say, are of an importance quite stupendous. I should not, however, have used so strong a term, did I not consider it an imperative duty to call the attention of the profession to them in the most earnest manner of which I am capable. I shall have occasion to recur to them in future chapters;—and I shall continue to pursue the investigation.*

* See an Essay intended for early publication, on the *Effects of Loss of Blood*, and on the *Use of the Lancet*.

CHAPTER VI.

ON THE MORBID STATES OF THE FUNCTIONS OF

THE BRAIN.

275. The consideration of the morbid affections of the functions of the Brain, embraces a view of the derangements observed in *its energies in general, the sleep, the mental faculties and the temper, the senses and sensations, and the motions,—voluntary, functional, and sphincter.*

276. It is extraordinary that the *Energies* of the brain should become affected in a very similar manner from the two opposite states of *fulness* and of *depletion* of that organ. Stupor, and morbid obtuseness of the nerves and senses, on one hand, and delirium, and morbid sensibility, on the other, occur alike,—varied only in form and degree,—in each of these states of the encephalon; and the remark equally applies to the function of respiration as influenced by these different and opposite conditions of the brain;—indeed, the affections of the respiration just described as obtaining in the state of sinking from exhaustion, § 273, bore the most marked *resemblance* to those observed in apoplexy, the difference being chiefly observed in the state of the countenance, general surface, and pulse, and in the *degree* of the mental stupor.

277. *Augmented energy* of the brain, denoted by delirium and augmented sensibilities, occurs in cases of *Fever*, and of *Irritation*, and in the opposite states of this organ observed in *Phrenitis* and *Exhaustion*.

278. *Diminished energy* of the brain, on the other hand, occurs in *Apoplexy* and in the state of *Sinking* from exhaustion; in both cases there are stupor or dosing, ruttling in the breathing from defective absorption of the mucus of the bronchiæ, oppressed and laboured respiration, snoring, blowing up of the cheeks and lips, defective power of the sphincters, &c.

279. In regard to *Sleep* we observe, in different morbid affections, the opposite states of *lethargy*, and *wakefulness*, the occurrence of *frightful dreams and hurried wakings*, and various *effects* on the functions of the *skin*, of the *heart*, &c.

280. The return of sleep must, in general, be deemed a good sign:—but a *longer sleep* than usual is frequently an effect of exhaustion, and the patient awakes from it '*overcome*'; *dosing* and sleep again are frequently observed in the state of *sinking* and then only give rise to a false hope of amendment.

281. Drowsiness is frequently an antecedent sign of *Apoplexy*; but it may also arise from a loaded or disordered state of the stomach. It is, in other cases, and especially in the diseases of children, one of the first symptoms to awake alarm and fear of disease within the head.

282. Profound sleep, which has received various names, as somnolentia, coma, lethargy, veternus, cataphora, carus, &c. according to its degree, usually denotes a state of oppres-

sion of the brain from vascular fulness, effusion, &c. and occurs as a *symptom* in *Apoplexy* and *Organic Disease of the Brain* in general;—as a *complication* in *Typhus and other Fevers;*—as an *effect* of the convulsive efforts in *Epilepsy, Puerperal Convulsion, Fits, Hysteria, the Hooping Cough; &c.*

283. Heaviness for sleep also occurs, as has been stated already, in a state of the brain the opposite to fulness, and is observed in some cases of exhaustion, in the state of sinking, and in syncope.

284. *Wakefulness* and *restlessness* occur in *Mania,* in *Puerperal Delirium,* in the *Delirium Tremens,* &c. in connexion with delirium, as their names import; but they also arise, independently of delirium, in cases of great *irritation,* or *exhaustion,* especially *intestinal* irritation and exhaustion from *loss of blood;* the same observation applies to the *Erethismus Mercurialis,** which, as I have had occasion to remark before, resembles in so many particulars, the morbid effects of the causes just mentioned.

285. But perhaps the most extraordinary phænomena belonging *alike* to these three morbid affections, in connexion with sleep, are *frightful dreams* and *hurried wakings;* these circumstances sometimes occur in the form of *incubus,* sometimes with great *palpitation* of the heart and hurry, and sometimes with the *feeling of impending dissolution.*

286. There is often much starting in the sleep in cases of indigestion; and children frequently start, get up in bed or

* See Dr. Bateman's case, Med. Chir. Trans. Vol. IX, *p.* 223.

even out of bed, or perhaps scream violently and are affected with fright or temporary delirium.

287. Hurried wakings, with a sense of suffocation, or of impending dissolution, also occur in *Organic Disease of the Heart*; the patient, agitated and alarmed, hastens to the open window for air.

288. Sleep would appear to exercise a peculiar influence over the circulation:—many children perspire profusely during sleep,—especially in a state of weakness; sleep often induces flushing during the progress of febrile complaints; and in cases of *Hectic*, or *Slow Symptomatic Fever*, the last morning sleep, as I have already observed, § 214, is particularly apt to be attended with profuse perspiration, to prevent which many patients keep themselves awake.

289. The effect of sleep, in some cases, on the action of the heart, has been already noticed, §§ 279, 285, &c.

290. The *Mental Faculties* and the *Temper* are affected in various ways,—by *delirium, stupor, imbecility, unfounded hope or despondency;* &c.

291. Delirium occurs in *Fevers*, in most violent affections general and local; and in *Inflammation or Disease of the Brain*. In the former cases delirium is often long continued; in the latter, it usually earlier or later passes into stupor, as increased action passes into fulness or effusion.

292. Not only fever, and any severe derangement of the general health, but a violent accident, a severe operation, the occurrence of *gangrene*, &c. are generally attended by delirium.

293. It is scarcely necessary to allude to the occurrence of this symptom as a frequent puerperal affection, and as the effect of habits of drinking; see § 284.

294. Stupor also occurs in *Fevers*, but especially in *Apoplexy*, and towards the termination of all affections of the brain inducing compression of that organ.

295. Imbecillity of mind, with talkativeness, or with lethargy, is not unfrequent in old age. In these cases is there a state of chronic inflammation of the substance or of the membranes of the brain?—Paralysis is apt to be superadded to the other symptoms.

296. After attacks of *Apoplexy* a state of mental imbecility often remains, with loss of memory, unmeaning laughter, proneness to tears, &c.

297. The temper of the patient is singularly modified by different disorders and diseases. The state of despondency in cases of indigestion forms a remarkable contrast with that of hopefulness in phthisis pulmonalis and other serious organic diseases.

298. Despondency on the part of the patient may however excite a well founded alarm in cases of great debility and inquietude.

299. In cases of serious and fatal disease, and especially, I think, in inflammation of the bowels, the patient frequently expresses his conviction of an approaching dissolution—'tanquam conscia foret natura, vitam ad finem properare.'

300. The *Senses and Sensations* become preternaturally acute or defective:—

301. Acuteness of hearing and of sight, and intolerance of sound and of light, are usual symptoms in the *dawn of Inflammation of the Brain*, and frequently occur in *Idiopathic Fevers;* but they occur in the most remarkable degree as effects of *Intestinal Irritation*, and of *Exhaustion*, as I have intimated before, § 261.

302. The physician is often called to cases in the following circumstances:—*Straw* is spread before the door, the *knocker* is tied, the *lights* are screened, or the *room* is darkened, and every source of *noise* or *disturbance* is carefully avoided. The cases in which these precautions are necessary are principally those of *Intestinal Irritation* and *Exhaustion*;—but they are also frequently necessary in the *Common Acute Fever*, § 44, and in some forms of *Puerperal Affection;**—and the precautions respecting noise and disturbance are sometimes requisite in *Diseases of the Heart*, not from increased susceptibility of the nervous system but of the action of the heart itself.

303. The sense of hearing becomes defective and obtuse in some cases of *Typhus Fever;* defective vision is a usual occurrence in *Diseases of the Brain*; and torpor, or defective touch, is a usual precursor or consequence of *Apoplexy* or *Paralysis*, and occurs in some instances of *Hysteria*. I need scarcely allude to the *flocci volitantes, tinnitus*, the *epileptic aura*, &c.†

* See the "Cases," quoted in the note at *p.* 74.

† See Gregory's Conspectus Medicinæ Theoreticæ, &c.

304. I have already noticed the unusual sensibility to cold observed as a peculiar and very early symptom in *Strumous Disease of the Mesentery,* and, in a less degree, in some other morbid affections, §§ 212–215. In the present place I may observe that *shivering,* as a symptom, is observed in the commencement of *Typhus and the Common Acute Fever,* of the paroxysms of *Ague,* and of the formation of *Pus.*

305. Under the head of deranged *Sensations* may be noticed *pain,* and *vertigo.* Pain of the head in the recumbent, and and vertigo in the erect posture, are usual and early symptoms in *Typhus Fever* and *Common Acute Fever,*—in cases of *Intestinal Irritation,* and of *Exhaustion,*—and in the *Dyspepsiæ;*—and they are frequently precursory and admonitory signs of *Apoplexy,* or *Paralysis.*

306. Pain of the head, *alone,* is usually amongst the first symptoms of *Inflammation of the Brain.* Severe pain of the head occurs in the *Dyspepsiæ,* and especially in *Chlorosis;* it is then attended by the *other* symptoms of those affections; but it is frequently so severe as to lead to the erroneous employment of the lancet.

307. I need scarcely advert to the frequent occurrence of headache and vertigo in *Hysteria, Hypochondriasis, Asthenia, Syncope,* &c. It is important, however, to remark that they rarely occur in local or organic diseases, except those of the head itself.

308. Pain of the head is sometimes a severe symptom in *Organic Disease of the Heart.*

309. *Intermittent headache* constitutes a peculiar affection, and is removed by the arsenic.*

310. There is a singular stomachal affection denoted by vertigo, sickness, and syncope; it has been mistaken, in some instances, for epilepsy; and it has been mistreated, in others, by the lancet.

311. I have already noticed the state of power and paralysis of the voluntary muscles, as connected with the state of the brain, §§ 102, 128, &c. The movements of the chest in respiration, and of the heart, are also influenced by the state of the encephalon, as will be noticed hereafter. From the same causes occur retention of urine,—or relaxation of the sphincters. These symptoms are particularly observed in *Typhus Fever,* and in *Idiopathic Diseases of the Brain.*†

* See the Essay on Diagnosis, Part II, *p.* 306.

† See § 143.

CHAPTER VII.

ON THE MORBID AFFECTIONS OF THE FUNCTION OF

RESPIRATION.

312. In treating of the morbid affections of the function of Respiration, I shall attempt a description of the different *kinds of dyspnœa, of cough, of the effects of a full inspiration and expiration, of the affections of the voice and articulation,* &c.

313. Healthy *Respiration* is performed with ease and freedom, and without the aid of the auxiliary muscles, in any of the usual positions of the body. It is effected by a nearly equal elevation of the ribs and depression of the diaphragm, except in females, in whom the thorax is observed to move more than in men; each side of the thorax moves also in an equal degree; and inspiration and expiration occupy nearly equal spaces of time.

314. The *kinds of Dyspnœa* and the other morbid affections of the *act of respiration,* are so numerous, that it would be difficult even to enumerate them fully. In treating the subject I shall proceed on the *practical* principle pointed out § 22, and describe the different modifications of the respiration in reference to *particular diseases.*

315. In the *Common Acute Fever* there is generally a little hurry in breathing, and sometimes a degree of anxiety and of panting.

316. The respiration in *Typhus Fever* is generally anxious and tremulous; when the fever is complicated with stupor, the respiration becomes still more affected,—frequently deep and sibilous, irregular and unequal, still more tremulous, and sometimes each inspiration is begun by the diaphragm and completed by the thorax; in the other complications of this fever the respiration is variously affected according to their seat and nature.

317. In *Apoplexy* the respiration becomes irregular, slow, deep, frequently suspended, and sighing,—with ruttling, or stertor, or blowing up of the cheeks and lips, or with catching in the larynx;—M. Serres observes that when there is *Paralysis* the two sides of the thorax are moved unequally, the muscles of the paralytic side having lost their power.*

318. I have already noticed the similarity which obtains between the breathing in apoplexy and that observed in the state of *Sinking*, § 276.

319. In other *Diseases of the Head* with congestion or compression, as *Inflammation*, or *Hydrencephalus*, the breathing gradually becomes irregular and unequal, with alternate suspension, and sighing;—the *duration* of the interruption appears sometimes to be commensurate with the *degree* of oppression of the brain.

* Annuaire Medico-Chirurgical, 1819.

320. In *Inflammation of the Chest with acute Pain,* the respiration is sometimes performed exclusively by the diaphragm, the chest or the part affected being quite motionless; the alternate movements of the respiration are also short, cautious, and suppressed. This peculiarity of the breathing is proportionate to, and varies with, the degree of acuteness of the pain.

321. In *Inflammation within the Abdomen with acute Pain,* the respiration is, on the contrary, performed principally and often exclusively, by the chest, the abdomen remaining unmoved;—this peculiarity of the breathing may be distinctly observed by looking on the chest and binding the bed-clothes tight over the abdomen; the respiration has sometimes the appearance of *heaving* of the chest; every movement of the diaphragm is cautiously avoided. In this disease the patient is also frequently observed to rest, for a few seconds, on a full breath.—The abdomen begins to move as the pain diminishes, —whether from a *mitigation* of the disease, from *sinking,* or from *gangrene.*

322. By an attentive observation of the modifications of the respiration, inflammation of the pleura is distinguished from inflammation of the peritonæum covering the liver, &c.

323. Inflammatory pain within the abdomen is, in the same manner, distinguished from spasm or colic, in which there is a state of breathing altogether *incompatible* with inflammation attended with acute pain and tenderness.

324. In *Inflammation of the Lungs* the respiration is characterized by labour, and by crepitus heard on applying the ear

near the chest; these peculiarities are augmented as congestion and effusion take place; and when much mucus is secreted, ruttling is superadded. In severe cases the labour becomes extreme,—the shoulders are elevated, the pomum adami is drawn downwards, and the lower part of the sternum is retracted towards the spine, on each inspiration,—the abdomen being, at the moment, suddenly protruded and the upper part of the chest raised.

325. In *Tuberculous Phthisis Pulmonalis* an *effort* is *early* visible in the respiration, and its *effect* seen in a movement the alæ nasi; the breathing is also *early* observed to be short on any muscular exertion, especially on going up stairs; at a late period of the disease there are generally constant labour in breathing and sometimes attacks of suffocative dyspnœa.

326. In the later stages of *Hydrothorax* there is, in connexion with the peculiar state of the attitude, § 131, a characteristic affection of the respiration:—the acts of respiration are performed with very unusual degrees of labour; inspiration is often quick and sudden, effected with great effort, principally or exclusively by an elevation of the thorax, and afterwards by a forcible contraction of the auxiliary muscles of respiration; in expiration these movements are reversed, the chest appears to *fall* spontaneously and without effort; the action of the auxiliary muscles,—the sterno-mastoids, the pectorals, &c. is seen or may be felt on applying the finger, the head is often moved, and the chest has, in protracted cases, the appearance of being unusually *high*.

327. A state of the respiration not dissimilar from that just described is observed in cases of complicated disease in

the thorax and in the abdomen,—the latter giving origin to what may be termed the *thoracic* breathing, and to a suppression of the action of the diaphragm. A painful affection of the upper portion of the peritonæum would be apt to induce the state of breathing observed in *Hydrothorax;* whilst the latter affection, by pressing the diaphragm downwards, has often been mistaken for *Disease of the Liver.**

328. In *Diseases of the Heart* the dyspnœa is generally first experienced, and it is ever particularly aggravated, by any muscular exertion or mental emotion, and especially on going up stairs; it appears therefore to be particularly liable to recur in paroxysms, and it is thus distinguished, in some degree, from the dyspnœa of hydrothorax, which increases progressively perhaps, but more uniformly and slowly.

329. Besides the kinds of dyspnœa already described, there are others which require to be accurately distinguished from them:—

330. In the *Acute Dyspepsia,* § 58, and in the more accidental cases of indigestion, a paroxysm of dyspnœa often takes place, and appears to me to constitute, in the greater number of instances, the *first* attack of *Asthma.*

331. The dyspnœa of *Asthma* is extremely peculiar:—there are great anxiety and almost gasping; the inspiration is quick, the expiration longer, laboured, and wheezing. In *extreme* cases, the chest is raised, the scrobiculus cordis retracted, and the abdomen protruded, with abruptness, on inspiration; expiration reverses these movements and is attend-

* See Portal's Mémoires sur plusieurs Maladies.

ed with labour and wheezing. In *protracted* cases a state of *constant* dyspnœa is observed, denoted by labour and wheezing, with a peculiar cough. At length organic *disease* of the heart and of the lungs is superadded to the primary state of *disorder* of function.

332. In the other forms of *Dyspepsia*, and especially in *Chlorosis*, paroxysms of *Hysteric* dyspnœa are observed, frequently attended with pain and tenderness of the chest or of the abdomen; it combines a degree of *hurry* and *heaving* in the respiration, altogether *incompatible* with inflammatory pain. With this state of the respiration there is often a total loss of voice, and occasionally the cough and crowing of *Croup*.

333. In the cases of *Intestinal Irritation*, and in those of *Exhaustion* from loss of blood, or other causes, the respiration becomes affected with hurry, panting, sighing, heaving, and moaning, and there is an urgent demand for the fan and the fresh air.

334. As these states pass into that of *Sinking*, catching, laryngal cough, snoring, blowing, slight ruttling in the larynx or trachea, &c. supervene, and increase as the energies of the brain, heart, and lungs decline.

335. A similar state of catching in the respiration occurs, as a *fatal symptom*, towards the termination of many diseases.

336. *Ruttling* occurs not only in *Apoplexy*, *Pneumonia*, &c. but also in the last and fatal stages of *debility*, and *sinking*, and of many diseases.

337. The different modifications of the breathing described from § 315 to § 336, might be designated and distinguished by some epithet chosen from their most prominent character. But I have avoided this from the fear of fixing the attention too exclusively on one point, which, however prominent, still only obtains in common and in connexion with others little less remarkable.

338. There is one remark respecting the respiration which I think important. In some instances of *Chronic Inflammation of the Larynx* or *Trachea*, I have observed that the patient is incapable of performing the action of snuffing up the nostrils so as to draw in the alæ nasi;* this was not observed in some cases of *Ulcer of the Larynx*. The remark may not only lead us to determine the *degree* but the *diagnosis* of the morbid effects of *Laryngitis*.

339. I now proceed to notice some of the more remarkable *varieties of Cough*;—

340. This symptom is modified by the *seat, and nature, of the disease*, and, in the same disease, by the state of *pain*, or of *expectoration*, and by the *strength of the patient*.

341. By observing the character of the cough the seat of irritation or disease is often distinctly observed to be in the *larynx*, in the *trachea*, in the *bronchia*, or in the *cellular structure* of the lungs.

342. Not only the seat, but the nature of the disease, is frequently ascertained by an attention to the peculiarity of

* See the Medico-Chir. Trans. Vol. X.

sound of the cough. *Ulcer* in the *larynx* induces a very different sound from that of *inflammation* of the same part; the sound of the cough in *Tuberculous Phthisis* is very different from that of *Catarrh* or of some forms of *Bronchitis;* the cough in *Asthma* has a very peculiar *dull* sound; and the sound of the cough, or rather the resounding of the chest on coughing, frequently serves to indicate a healthy state of the lungs and thorax in general, and to distinguish it from various morbid conditions. The presence of mucus or of pus in the bronchial passages also gives a characteristic sound to the cough.

343. The *effort* of coughing is sometimes *repressed.* This occurs in *Acute Inflammations* of the *Pleura,* of the *Peritonæum,* &c. in *Rheumatic* and *Hysteric* affections of the muscles about the thorax; &c.

344. Sometimes the cough assumes a *spasmodic* character. This occurs in *Pertussis, Hysteria,* in cases of *Intestinal Irritation,* or of irritation about the *larynx* or *trachea*; &c.*

345. In other cases the coughing is *continued,* but not sufficiently violent to be termed spasmodic. Cough of this character is observed in some cases of less severe irritation in the intestinal canal, or in the larynx or trachea; it occurs also from circumstances of *Exhaustion* and *Sinking* and appears to originate in the larynx; it is observed in some instances of *Pneumonia,* of *Hydrothorax,* and of *Asthma* and frequently when the strength of the patient is too much reduced to enable him to expectorate.

* 'Hujus generis tusses, ut et illæ quæ a destillatione nascuntur, vehementiores sunt, et magis sonoræ, quam quæ fiunt ex tabe, sive incipiente, seu deplorata.' Heb. Com. Cap. 92.

346. In *Catarrh* the cough is often *violent*, and there is an abundant resonance of the thorax; in *Tuberculous Phthisis* the cough is less frequently violent, but when it is the sound is flattened and as it were tearing.* The cough is generally violent with a thin and scanty expectoration, and becomes easier as the expectoration becomes more viscid and copious.

347. Cough may be said to be a *symptom* in all cases. But it by no means always denotes an affection of the organs of respiration originally. Perhaps no circumstance, however, illustrates better the transition of a sympathetic and functional affection into one of real disease:—in some instances a disordered state of the stomach and digestive organs induces cough; this state of things, if neglected, leads to a copious secretion from the mucous surface of the air passages and ultimately to actual disease.

348. In some instances a state of *inanition* of the stomach, like other circumstances of exhaustion, induces cough; one patient termed such a cough a '*want-cough*,' and always removed it by eating. I have already alluded, § 345, to the catching, laryngal cough observed in the state of *Sinking*.

349. Every one must have remarked the peculiarity of the cough which affects very old persons and especially old asthmatics.

350. With the consideration of the different kinds of cough is naturally conjoined that of the varieties observed in the *Expectoration*:—

* Heberdeni Com. Cap. 92.

351. *Mucous* expectoration appears to arise from various sources of *inflammation* and *irritation* of the bronchial membrane. It occurs in *Bronchitis* and *Pneumonia;*—frequently from the effects of *intestinal irritation* long continued,—or from the *irritation* of a *diseased Liver,*—or of *Tubercles in the Lungs* in an uninflamed state,—or of other sources of irritation, near or remote. Slight mucous expectoration is frequently observed in protracted cases of *Exhaustion,* combined, of course, with cough, and with ruttling; § 334.

352. In all these cases, if the diseased action be continued, the mucus gradually assumes more and more of a *puriform* character, and at length the texture of the membrane breaks and real *pus* is excreted.

353. In some instances I have observed a copious, mucous expectoration *alternate* with one more puriform, on different days,—even in *Tuberculous Phthisis.*

354. It frequently happens that large globules of puriform expectoration are observed to float amidst a fluid of a more aqueous or mucous appearance,—especially in *Tuberculous Phthisis.*

355. In all these cases an expectoration of *blood* is frequently observed;—in many, especially in *Bronchitis,* this appearance gradually declines without serious consequence; it is generally, however, of a most unfavourable augury,* and the more so, I think, as the previous disease is more protracted. The expectoration of blood is also very alarming when it occurs without previous symptoms, and without muscular effort.

* Heberdeni Com. Cap. 84.

356. Besides the mucous, puriform, and bloody expectoration, there is an appearance occasionally observed, of a serious nature; it is that of a scanty, and, if the term may be allowed, friable, and whitish matter, easily divided with a probe; it occurs in some cases of *Tuberculous Phthisis.*

357. I proceed to make a few remarks on the effects of a *Full Inspiration and Expiration* on the part of the patient.

358. The former is useful in the detection of slight attacks of *Inflammation* of the *Pleura* or of the *Peritonæum,* and in determining, by comparison at different periods, its increase or decline.

359. A deep inspiration is *apt* to induce cough when the structure of the lungs is affected with inflammation or disease. But this morbid state is more distinctly ascertained by an attention to the effects of a *full expiration.*

360. In many cases of morbid affection of the lungs, indeed, in which a deep inspiration induces neither cough nor other inconvenience, a full expiration not only occasions cough but other effects which vary according to the *nature* of the pulmonary disease;—in *Inflammation of the Bronchia,* or of the *Lungs,* in *Tuberculous Phthisis,* &c. cough and ruttling or crepitus are induced; these effects are also induced in some cases of chronic affections of the lungs arising either from slight but protracted inflammation or from disorder of the digestive organs; in cases of *Asthma* too, in which the ordinary breathing, or a deep inspiration even, is unattended with any peculiarity, a full expiration excites both cough and the wheezing sound so characteristic of this affection.

361. It is particularly useful to watch the efforts of a full expiration in the slighter affections of the pulmonary structure, and in the decline of pulmonary disease.

362. Of these two modes of ascertaining disease of the lungs, I have long considered the deep expiration the most valuable but the most neglected; I therefore strongly recommend it to the attention of the clinical student.

363. The modifications of the *Voice and Articulation* as symptoms in diseases may be considered as denoting, 1. the state of *strength, debility,* or *sinking*; 2. the existence and the kind of *pain* in the chest, abdomen, &c.; 3. some affections of the mouth, palate, throat, nose, &c.

364. The voice is also modified in some cases of *Typhus Fever, Cholera Morbus,* and *Dysentery*, in which it is apt to become feeble and *husky,*—in *Phthisis* and *Diseases of the Larynx and Trachea,* in which it frequently becomes extremely *hoarse,*—and in *Hysteria* in which it is often suddenly and sometimes long *lost* and inaudible.

365. The articulation is affected by *Paralysis* and *Spasmodic Diseases,* and, like the voice, in cases of great debility.

366. These hints may assist in an examination of the subject, and the reader will find an account of some other affections of the voice in the works of M. Portal.*

* Mémoirs sur plusieurs Maladies, Tome I, *p.* 273; II, *p.* 109; III, 159, 165. Anatomie Medicale, Tome IV.

CHAPTER VIII.

ON THE MORBID AFFECTIONS OF THE

CIRCULATION.

367. The morbid affections of the function of the Circulation are observed *in the pulse,—in the pulsations of the heart,—and of the carotids and abdominal aorta,—and, sometimes, of the jugular vein,—and in the capillary or extreme vessels.*

368. The *varieties in the Pulse* have formed the subject of many and even voluminous works. In the present place I shall pursue my accustomed plan of noting down those varieties of the pulse which have struck me as being of most *practical importance,* leaving the more minute and scholastic divisions of the subject to writers of greater leisure.

369. The first point to be noticed in this place, is the *frequency* of the pulse:—

370. I have generally observed that the pulse is much more frequent in the early periods of *Idiopathic Fever,* than of *Symptomatic Fevers.*

371. In Idiopathic Fever with *congestion of the brain*, there is frequently an unnatural *slowness* of the pulse.

372. In Idiopathic Fever complicated with *inflammatory* affections, the pulse is, on the contrary, more frequent than in the simpler cases of fever.

373. In *Acute Inflammatory Diseases* in genera the pulse is usually slightly frequent and hard. But it is modified by various circumstances, of which the principal are *the part affected, the stage of the disease, and the treatment.*

374. In *Diseases of the Brain* the pulse is often very peculiar and characteristic. In the first stage of *Inflammation* of this organ, the pulse is *frequent* and sometimes of *unequal frequency;* as effusion and compression take place, the pulse becomes *slow;* and it attains a still greater frequency than before towards the conclusion of the disease. In *Apoplexy* the pulse is slow, and often irregular, in the beginning, and more frequent in the later periods.

375. In *Inflammation of the Bowels,* I have known the pulse to remain of nearly its natural frequency until the stage of *sinking* has taken place; so that the pulse must be regarded as a very unsafe guide in this morbid affection. It is more usually, however, of increased but variable frequency, and small and feeble.

376. In *Pleuritis* and *Peritonitis,* and most other inflammatory diseases, the pulse is generally increased in frequency.

377. The pulse is generally more frequent as the disease is more advanced, unless its violence has been subdued;—the peculiarities in the cases of *Phrenitis* and *Enteritis* have been already noticed. In the later stages of inflammatory diseases the pulse is also apt to become or to remain unnaturally frequent as an effect of the *loss of blood* from repeated venæsection; it is therefore important to observe every symptom, not to be misled by a continued frequency of the pulse.

378. It is not unusual to observe that in various diseases the frequency of the pulse remains, when the morbid actions have apparently subsided; in such a case it is necessary to continue our attention, and watch and wait for the diminution of the frequency of the pulse, and, if this event do not take place in a moderate space of time, to ascertain whether the disease be in fact subsided, or only mitigated and pursuing its course in an insidious form. This watching is particularly necessary in cases of *Pleuritis* and *Peritonitis*.

379. Frequency of the pulse is the effect of *repeated blood-letting:*—the first effect of a copious blood-letting is a state of syncope with slowness and feebleness of the pulse; the cumulative effect of repeated bleeding, when there is reaction of the system, is a frequent, full, and throbbing or bounding pulse; but if the powers of the system be broken, the pulse is frequent and feeble, with the other symptoms of the state of sinking, already repeatedly noticed. In the case of sinking the pulse very often retains its frequency until five or ten minutes before the patient expires, when it suddenly falters and soon ceases altogether.

380. I now proceed to remark the degree of frequency of the pulse in morbid affections of a more *chronic* character:—

381. The frequency of the pulse affords an important diagnostic mark of *Disorder of Function* from *Organic Disease*, and of different organic diseases from each other.

382. In all the chronic forms of the *Dyspepsiæ*, § 57, the pulse, in general, retains its natural frequency; it is apt to be frequent in the *Acute Dyspepsia*; and it is apt to become frequent in the *later stages* of the *Chronic*, when the affection leads to great loss of flesh, to dropsical affections, or to organic changes,—and the case may be considered as assuming an alarming character as the pulse thus becomes unnaturally frequent.

383. Some *Organic Diseases* induce an early and characteristic frequency of the pulse,—especially *Tuberculous Phthisis*, *Strumous Disease of the Mesentery*,—and *Chronic Inflammation of the Pleura* and of the *Peritonæum*.

384. Others often proceed with very little frequency of the pulse,—as *Organic Disease of the Liver*, of the *Ovarium*, &c.

385. There is a variety of the pulse which may properly be termed the *nervous*; it consists in great frequency on the first arrival of the physician which generally subsides during his stay. It is often of importance to observe this peculiarity of the pulse, and with this view, to wait and count its beats several times during the visit. It is indeed to this state of things that the elegant observations of Celsus particularly ap-

ply:—he observes, ' venis enim maxime credimus, fallacissimæ rei; quia sæpe istæ leniores celerioresve sunt, et ætate, et sexu, et corporum natura: sæpe eas concitat et resolvit sol, et balneum, et exercitatio, et metus, et ira, et quilibet alius animi affectus: adeo ut, cum primum medicus venit, solicitudo ægri dubitantis quomodo illi se habere videatur, eas moveat. Ob quam causam, periti medici est non protinus ut venit, apprehendere manu brachium: sed primum residere hilari vultu, percontarique, quemadmodum se habeat; et si quis ejus metus est, eum probabili sermone lenire; tum deinde ejus corpori manum admovere. Quas venas autem conspectus medici movet, quam facile mille res turbant!'*

386. The frequency of the pulse in *Phthisis, Mesenteric Disease*, &c. is on the other hand, permanent, neither easily augmented, nor becoming diminished.

387. The next peculiarity of the pulse is its state of *irregularity*:—

388. This affection of the pulse occurs principally from *Disease within the Head, Disease of the Heart*, and *Disorders of the Digestion*, and from various diseases affecting the respiration, as *Hydrothorax, Pneumonia*, &c.

389. In *Inflammation of the Brain* the pulse is frequently of *unequal frequency*;† in cases of *compression* it is frequently irregular.

* Lib. iii. *Cap.* 6.

† See Dr. Abercrombie's excellent paper, Ed. Med. Journal, Vol. XIV, *p.* 267.

390. Irregularity of the pulse is very usual in *Diseases of the Heart*, especially when the valves are affected; it is sometimes merely *intermittent*, and sometimes extremely *irregular* in its beats and in its size and force. In these diseases the peculiarity of the pulse is generally *permanent*.

391. Nothing is more common than *occasional* intermittence and irregularity of the pulse from *indigestion*, and from the various disorders of the bowels, as *diarrhœa*, &c.

392. *Dyspnœa* in general, is frequently attended with intermissions in the pulse, probably from its mechanical effect upon the action of the heart. A very deep inspiration and a full expiration have, in some persons, the effect of arresting the action of the heart in a temporary manner. The pulse is, probably from a similar cause, frequently irregular in cases of *Asthma*, or *Hydrothorax*, and in very corpulent persons,—an interruption being often observed on inspiration.

393. Irregularity of the pulse is apt to occur in cases of *Erysipelas, Gangrene*, &c. in the state of *sinking*, and in the last stages of many diseases.

394. The next peculiarity in the pulse, which I shall notice very briefly, is its state of *fulness* or *smallness*:—

395. The pulse is frequently very full on the attack of *Apoplexy*, but gradually loses this character as it becomes more frequent.

396. In *Organic Disease of the Heart* the pulse is either full or small according to the nature of the affection. En-

largement of the heart with *thickening* of its parietes induces a full and strong pulse; whilst mere dilatation of the heart is attended with a soft and feebler pulse; and in some other diseases of this organ, especially of its valves, the pulse becomes very small and sometimes almost imperceptible.

397. The next morbid affection in which the size of the pulse is peculiar, is *Inflammation of the Intestines,* in which there is a characteristic smallness of the pulse.

398. In cases of *Exhaustion* with reaction of the system, I have already stated that the pulse is large and bounding; this characteristic ceases as the reaction subsides and the state of *Sinking* occurs.

399. The smallness of the pulse has, in some instances been so remarkable as to have given origin to the terms 'thready' or 'wiry.'

400. The subject of pulsation of the heart, carotids, abdominal aorta, &c. requires to be noticed in connexion with *Diseases of the Heart,* with the state of *Exhaustion with reaction,* with *Intestinal Irritation* and, *perhaps,* with some morbid affections of the head.

401. In *Enlargement of the Heart* with thickening of its parietes, the pulsation of the heart is forcible and circumscribed and attended with pulsation of the carotids and other large arteries. In the case of *Dilatation of the Heart* with diminished thickness of its parietes, the heart beats more feebly but its pulsations are felt over a greater extent of surface; the carotids are free from pulsation.

402. But the most extraordinary degree of palpitation, and of pulsation of the carotids, and even of the abdominal aorta, is observed in some cases of *Exhaustion from reiterated loss of blood.*

403. Palpitation is a common symptom in cases of *Hysteria* and other nervous disorders; a still more frequent symptom is a feeling of '*fluttering*' at the heart and in the region of the stomach.

404. In similar cases there is sometimes a preternatural *pulsation in the epigastric region;* Dr. Baillie observes, 'it is perhaps difficult to ascertain, in many instances, the cause of this increased pulsation of the aorta in the epigastric region; but in most cases it will be found to be connected with an imperfect digestion, and an irritable constitution.'

405. A similar pulsation is sometimes the effect of *Aneurism of the Aorta or Cœliac Artery,* or of a *tumor* situated over the aorta. In this case the general health is unimpaired.

406. Pulsation of the Jugular Veins has been observed in some cases of disease of the *Valves* of the heart.*

407. In the *capillary circulation* we are enabled to observe a characteristic symptom of certain diseases, and to ascertain, in some degree, the *powers of the circulation* and *the state of the blood.* We are presented with an opportunity of observing the condition of the capillary circulation by examining the condition of the extremities,—the nose, the cheeks, the ears, and the hands and feet,—the prolabia and the fingernails.

* Ed. Med. Journal, Vol. XII, *p.* 194.

408. Some diseases have a peculiar influence over the capillary circulation,—inducing coldness and lividity of the extremities. This is particularly observed in some cases of *Enteritis*, of *Cholera Morbus*, and of *Dysentery*,—in the *Acute Dyspepsia*, in *Mesenteric Disease*, &c.

409. In other diseases, the same tendency to coldness of the extreme parts, denotes a failure in the general strength of the system, and should be carefully watched. It is to be observed, however, that flushing and heat sometimes occur during a state bordering on that of *Sinking*.

410. In some old persons I have observed a remarkable tendency to lividity of the finger-nails.

411. It appears to me to be from defective powers of capillary circulation that *cold* is so difficultly borne by infants and very old persons.

412. Whilst a livid hue of the prolabia and nails denotes feebleness of the circulation, an exanguious paleness is the frequent attendant on an *aqueous state of the blood*, or the effect of some morbid affections as *Chlorosis*, *Purpura*, &c. or of considerable *loss of blood*.

413. There is in the capillary circulation a peculiarity which may be denominated the *tendency to hæmorrhagy*. This state is sometimes the effect of intestinal disorder and irritation, and then it leads to *epistaxis*, *hæmatemesis*, *melæna*, *menorrhagia*, and even *hæmaturia*.* In other cases the state of exanguious paleness precedes and forebodes the hæmorrhagy,

* See an instance of this in Bateman's Reports of the Diseases in Londo *p.* 123.

as in some instances of *Purpura*, in which the tendency to extravasation of blood is more general, and occurs, in different cases, in all or each of the cutaneous and mucous textures, together or singly.

414. Another effect of an enfeebled capillary circulation is *œdema* or *anasarca*. This is a frequent occurrence in protracted cases of *Chlorosis*, of repeated blood-letting or protracted hæmorrhagy, and of the failure of the vital powers in disease, and in old age.

CHAPTER IX.

ON THE MORBID AFFECTIONS OF THE FUNCTIONS OF THE

ALIMENTARY CANAL.

415. In this chapter I shall briefly notice the symptoms which may be taken from the morbid affections of the *pharynx and œsophagus,—the stomach and bowels,—and the sphincter ani.*

416. The act of deglutition is performed by the pharynx and œsophagus with the aid of the cheeks, fauces, &c. Sometimes this act is liable to be interrupted by diseases of some part of the canal itself, or of the adjacent organs.

417. By observing the *kind of effort* made by the patient, we may often ascertain pretty nearly what is the situation of the cause of obstruction. If the fauces be defective, the substance attempted to be swallowed is often forced through the nostrils; if the cardia be obstructed, the patient frequently regurgitates a large quantity of food apparently swallowed.

418. In cases of tumors, as *Scirrhus, Aneurism,* &c. the trachea is often compressed, and dyspnœa is conjoined with dysphagia.

419. There is much difficulty of swallowing in the last stages of *Typhus Fever* and in the state of *Sinking* in general; —the attempt is usually attended with painful choaking, coughing, and catching of the larynx.

420. The deglutition has been impaired in some cases of *Paralysis.*

421. Dysphagia is occasionally observed as a symptom in *Hysteria,* and other nervous and spasmodic disorders.

422. I now proceed to notice the principal morbid affections of the functions of the *Stomach and Bowels*:—

423. The functions of the alimentary canal are generally much more deranged in the *Idiopathic* than in *Symptomatic Fevers*:—of the former, anorexia is often the first, and constipation almost a constant symptom, and the alvine evacuation is dark and fœtid; in a late stage of protracted idiopathic fever, aphthæ, diarrhœa, melæna, or a tympanitic affection not unfrequently supervenes:—in *Symptomatic Fevers* the stomach and bowels are not essentially, and often not at all affected,—except indeed in the colliquative stage, when aphthæ and diarrhœa are not uncommon.

424. A similar remark applies to the class of *Disorders* as distinguished from *Diseases*: — in the former there is much, in the latter frequently very little, stomachal or intestinal disorder.

425. The stomach and bowels are apt to be much affected in *Diseases of the Head*;—*concussion* frequently induces

vomiting as its first symptom; vomiting is often a precursory symptom of apoplexy; in cases of *compression* the stomach and bowels are apt to be torpid, and are with difficulty acted upon by medicine.

426. In *Inflammation* and other *Diseases of the Thorax* the stomach and bowels are often little affected.

427. *Inflammation of the Stomach* is attended by irritability and frequent vomiting. In *Enteritis* the bowels are apt to be obstinately costive,—and there is at length, in many cases, much tenderness and tympanitic affection; the latter symptom is also observed in the *Dysentery*.

428. Vomiting, hickup, the ineffective operation of purgative medicine, distension, &c. occur in some cases of *Enteritis, Strangulated Hernia, Intus-susceptio,* &c.

429. Hickup, rumination, and vomiting are frequent symptoms in the *Dyspepsiæ*. Vomiting occurs of course in the *Cholera Morbus,* and in many cases of *Poisoning,*—and frequently as a symptom of *Renal Calculus* or *Inflammation,* and of *Gall Stones.*

430. In some *Chronic Diseases of the Bowels* the convolutions of the intestines are apt to be distended and raised in the form of a transient, painful, spasmodic, and flatulent tumor, —and the passing of the food, or the evacuation of the bowels, is attended with much pain.

431. The substances rejected by vomiting are principally food, mucus, bile, and blood.

432. The morbid appearances observed in the alvine evacuations are chiefly diarrhœa, scybalæ, mucus, and blood; the motions themselves may be scanty or copious, dark-coloured or light-coloured, and disordered and offensive in different degrees; the appearances of the mucus and of the blood are also various.

433. It has already been observed, § 423, that the alvine evacuation is generally much more offensive and disordered in *Idiopathic* than in *Symptomatic Fevers*, and in the class of *Disorders* as contrasted with that of *Organic Diseases*.

434. In some *Diseases* however the alvine evacuations are very morbid, especially in *Diseases of the Liver*, and of the *Mesentery*. In those cases of disease of the liver attended with *Icterus*, as in all other cases of jaundice, the motions are clay-coloured and deprived of the yellow tinge imparted by the bile.

435. In some cases both of disease of the liver and of the mesentery, but especially the latter, the appetite has been great, the food has passed off quickly, and the motions have been copious fœtid and light-coloured.

436. The motions are generally pale and fœtid when the food passes through the alimentary canal rapidly, as in *Lientery*.

437. The alvine evacuations are generally very offensive in all cases attended with rapid *loss of flesh*, but in none more than those in which the powers of life are, at the same time, in a state of decline,—as in the decay of *old age*, in cases of *slow fevers*, &c.

438. *Mucous* evacuations are the effect of irritation or inflammation of the mucous membrane of some part of the intestinal canal, especially the rectum and colon. They occur in the *Dysentery,* as the effect of *Corrosive Poison,* and in cases in which the rectum is irritated by impacted and scybalous fæces, and are often mixed with blood: in the last case there are often severe attacks of pain in the seat of the sigmoid flexure of the colon, and copious discharges of blood, —effects which are relieved by evacuating the rectum by glysters.

439. *Discharges of blood* occur from indigestion and intestinal irritation; *hæmatemasis* and *melæna* are often conjoined, from these causes, in the different forms of the *Dyspepsiæ.*

440. That state of things which gives origin to *Purpura,* frequently conjoins other hæmorrhages, as well as the petechial rash and vibices, with the vomiting and dejection of blood. I have already mentioned the occurrence of melæna as a formidable symptom in *Idiopathic Fevers.*

441. Discharges of blood from *Hæmorrhoids* should be distinguished from the more serious case of melæna.

442. The *Rectum and Sphincter Ani* are apt to be affected with *Tenesmus, Obstruction, and Paralysis:—*

443. *Tenesmus* accompanies some of the diseases of parts in the neighbourhood of the rectum, as *Calculus, Scirrhus of the Prostate Gland, Diseases of the Uterus,* &c. as well as those of the *Rectum* itself. It is unnecessary almost to state how

painful a symptom it is in most cases of the *Dysentery*, of diseases of the mucous membrane of the colon and rectum, of impacted *Scybalæ*, &c.

444. *Obstruction* in the rectum is the effect of disease of the part itself, generally *Stricture, or Scirrhus*,—of the pressure of the uterus in *Retroversio Uteri*,—of *Organic Tumors* affecting adjacent parts, &c.

445. A *paralytic state* of the rectum and involuntary evacuations occur in the last stages of *Apoplexy* and other *Diseases of the Brain*, and in *Disease of the Spine*.

446. Involuntary motions are the frequent effect of the extreme debility observed in *Typhus Fever* and in the state of *Sinking* in general.

447. I need scarcely allude to the case of lacerated perinæum and rectum, and the consequent loss of power to retain the alvine contents.

CHAPTER X.

OF THE MORBID AFFECTIONS OF THE FUNCTIONS OF THE URINARY ORGANS.

448. The symptoms to be drawn from the morbid affections of the functions of the Urinary Organs, relate to the *secretion, excretion, and condition of the urine,—and to the substances which are apt to be mixed and expelled with this fluid.*

449. The secretion of urine is either *too copious,—scanty,* —or *suppressed:—*

450. A too copious secretion of urine takes place in the disease termed *Diabetes,* and a very rapid secretion of limpid urine is sometimes observed in cases of *Hysteria* and other nervous disorders.

451. The urine is apt to be unnaturally scanty in the *Dropsies.*

452. The case of total *suppression* of urine is generally a very serious affection,—leading to coma and a fatal termination.*

* See an interesting paper by Dr. Abercrombie, Ed. Med. Journ. Vol. XVII, *p.* 210.

453. The excretion of urine is apt to be morbidly affected by *strangury, dysury, retention, and enuresis:—*

454. *Strangury* occurs from the application or administration of *Cantharides,* in some cases of *Hysteria,* of *Dysentery,* and of *Calculus,* and other morbid affections of the bladder and adjacent parts.

455. *Retention* of urine is more frequently a *symptom* of disease. It is observed in the late stages of *Typhus Fever* and is of very unfavourable augury; it occurs in *Diseases of the Brain,* and of the *Spine;* it is observed as an effect of debility and of insensibility in general; it is not unusual after delivery; it is sometimes induced by the action of cantharides; and it is a symptom in *Retroversio Uteri,* and in other cases in which the neck of the bladder is subjected to compression from the state of the viscera situated in the pelvis. In the cases attended by insensibility, I have observed a constant *elevation of the knees* as the effect of the retention of urine and of the distended and tender state of the bladder.

456. *Enuresis,* or the involuntary flow of urine, is also a symptom observed in *Typhus Fever,* and in *Diseases of the Brain,* and of the *Spinal Marrow.* It occurs in the former case from great debility and insensibility; in the latter from insensibility or paralysis. It is sometimes even a rather early symptom of *Chronic Inflammation of the Brain.*

457. *Enuresis* is an effect in some *Diseases of the Bladder,*—and it arises sometimes from injury sustained during delivery.

458. I have once or twice met with cases in which the urine was expelled by involuntary *gushes*, occasioned by sudden contraction of the bladder; they have appeared to be of a hysteric or nervous nature.

459. The *appearances* of the urine, and the nature of its deposits, are subject to great variety, and still afford scope for observation and experiment:—

460. We are still in want of a series of careful observations on the appearances and other *obvious* characters of the urine in the different kinds, stages, and circumstances of *Idiopathic and Symptomatic Fevers*, and of *Disorders and Diseases* in general.

461. In some cases the urine is copious and limpid and remains, on cooling, free from sediment; this is particularly observed in *hysteric* and *nervous affections*.

462. In other cases the urine is so charged with matters in solution, that there is not only a sediment on cooling, but a pellicle on its surface from evaporation or exposure to the air; this has particularly occurred in some instances of derangement of the digestive functions.

463. More frequently there is simply a copious sediment on cooling. These sediments are of different kinds. I am not prepared to distinguish them and characterize them by their proper chemical characters; but I have observed that they are sometimes consumed, and sometimes fixed, in the fire.

464. As deranged states of the digestion lead to deposits from the urine, it is not singular that they should frequently prove the cause of *Gravel.* This connexion I have repeatedly traced. As the subject of Gravel has lately been the object of careful chemical and medical research, I shall only notice a circumstance of great importance with regard to it, in the latter point of view; in prescribing for the gravel, we should be guided, not by the particular *character of gravel* which has last appeared, but by the *actual disposition of the urine* to deposit a red or white sediment.

465, Besides the tendency to deposits on cooling, the urine is sometimes charged with albuminous matters coagulable by heat, especially in certain cases of *Dropsy.** It is almost unnecessary to notice the bilious tinge of the urine in the different cases of *Icterus,* and its saccharine impregnation in *Diabetes.*

466. Discharges of mucus with the urine attend *Chronic Inflammation of the Bladder, Disease of the Prostate Gland, Calculus,* &c. Pus and blood are sometimes observed as the effects of *Calculus* and *Ulcers* of the *Bladder* or *Kidney.*

467. Copious discharges of blood occur in some instances of *Intestinal Irritation,* and of *Purpura.*

468. I have a patient who discharges a quantity of dark-coloured blood on any exposure to severe cold; the affection yields to the genial influence of a warm bed.

* For further information on the changes in the urine, the reader is referred to Dr. Prout's work on the Urine, Dr. Blackall's on Dropsy, Dr. Scudamore's on Gout, &c.

CHAPTER XI.

ON THE MORBID CHANGES IN THE FUNCTIONS OF THE

UTERINE SYSTEM.

469. The morbid changes in the functions of the Uterine System relate principally to the *suppression—the too copious flow,—or the unnatural state of the discharges.*

470. The *retention or suppression* of the catamenia occurs in the second stage of *Chlorosis:* in general, but by no means always, the flow loses its colour and diminishes in quantity very gradually, as the effect of this disorder.

471. In many organic diseases,—in *Phthisis Pulmonalis,* in *Mesenteric Disease,* &c. and in cases attended by great debility and emaciation, the catamenia are very apt to become suppressed.

472. Exposure to cold, and fear, and other causes are apt to induce suppression of the catamenia. Much purgative medicine, and fever, will sometimes induce the same effect; but fever, sometimes, on the contrary, seems to occasion a flow of the catamenia before the proper period.

473. The catamenia are usually suppressed during lactation.

474. *Menorrhagia* is less frequent than suppression of the catamenia; I have known it induced by *Intestinal Irritation.*

475. The *Fluor Albus* is an effect of many states of disorder,—of great weakness, of frequent miscarriages, &c. It is often a source of great debility too,—and of the inefficiency of medicine to remove a series of nervous affectious.

476. *Morbid discharges* from the vagina take place in cases of *Polypus, Scirrhus, Ulcers,* and other diseases of the *Vagina* or *Uterus;* the character of the discharges conduces very much to the diagnosis; when protracted, they ought always to lead to a careful examination per vaginam.

477. Discharges of blood frequently depend on the existence of *Polypus;* such discharges may, however, be the result of *Menorrhagia;* or, during pregnancy, of a partial detachment of the placenta.

PART SECOND.

ON THE

HISTORY OF DISEASES.

CHAPTER I.

ON THE PRINCIPAL POINTS COMPRISED IN THE

HISTORY OF DISEASES.

478. THE principal objects comprised in the History of diseases, are *the cause,—the course,—and the effects of remedies.*

479. I shall not enter into the datail of these different subjects, but shall suppose them generally known, and endeavour to point out some of their *practical applications.*

480. It is of the utmost importance to observe the causes of prevailing *epidemics,*—as contagion,—season of the year,—state of the weather, &c.—and of *endemics,* as marsh effluvia, peculiarity of situation,—prevailing occupations, &c.

481. These causes co-operate variously in inducing and modifying disease. To Sydenham we owe the first attempt to trace the different '*constitutions*' of the atmosphere and their influence on diseases:—*Typhus and Intermittent Fevers* are much modified, and *Cholera and Dysentery* are apparently induced, as well as modified, by the state of the season, the atmosphere, and the local situation.

482. The influence of local situation in inducing *Intermittent Fever, Dysentery, Phthisis Pulmonalis, Bronchocele, Calculus,* &c. is now well understood; the effect of sedentary occupations is to lead to the different forms of the *Dyspepsiæ,* already noticed, §§ 57, 61.—It cannot be doubted that the careful observation of these external causes and of their effects, must contribute materially to a knowledge of the diagnosis of diseases and of their various forms.

483. The next class of causes which I shall briefly notice, are those of the *habits* and of the *constitution* of the patient:—The habits of the patient relate chiefly to the occupation, and are sedentary or active, and to the mode of living with regard to diet, wine, &c. It has already been observed that sedentary persons are subject to the *Dyspepsiæ;* those who eat and drink freely are, of course, exposed to diseases of fulness, as *Apoplexy*; whilst the spirit-drinker is exposed, on one hand, to attacks of the *Delirium Tremens,* or, on the other, to the slower inroads of *Organic Disease of the Liver, Dropsies, Purpura,* &c.

484. The constitutional causes are chiefly those of the form, and of hereditary tendency or taint:—The tendency to *Apoplexy,* to *Phthisis,* to *Gout,* and even to *Calculus,* and *Gall-*

Stones, is sufficient to illustrate the present subject.—Nor can it be doubted that a careful inquiry into these points must materially conduce both to the prognosis and to the diagnosis of these morbid affections.

485. Another circumstance of importance to ascertain is, the habits of the patient with regard to diseases. When there have been repeated attacks of a particular kind, there is a presumption that subsequent attacks will pursue a similar course. Or the actual state of the patient may result from some preceding affection, as we daily see in the syphilitic and syphiloid diseases.

486. Every physician observes that particular patients are liable to particular morbid affections; what we term *cures* are often only imperfect recoveries; the organ or part affected still retains either a slight modification of the disorder or disease, or a tendency to again take on the morbid action. Thus particular persons are said to be *subject* to particular attacks.

487. As former diseases may influence subsequent ones,—and especially the *morbid anatomy,*—it is of the utmost importance to investigate this point in the causes or course of morbid affections.* Thus it frequently happens that one disease becomes the cause of other diseases; *Organic Disease of the Liver* is frequently the cause of *Icterus,* of *Bronchial Disease,* of *Dropsies,* &c. as well as occasionally the effect of a state of *Dyspepsia,* or of *Organic Disease of the Heart.*

488. These remarks lead me to the second point in the History of diseases, or their *course* and general character:—

* Vide Laennec, T. I, *p.* 122.

489. Every observant physician has learned to correct his diagnosis and views of diseases, by examining whether they accord accurately with their subsequent course and general character.

490. It is natural, in every case, to form a *prognosis,* at least in the mind, if it be not expressed. Does the prognosis prove correct? If so, it may be considered as confirming the justness of the diagnosis.

491. The diagnosis of diseases may be corrected then by ascertaining whether there be a strict *congruity in its character and course,* with the disease in question, and whether the prognosis prove correct or erroneous.

492. In some diseases, however, both the character and prognosis, are apt to be modified, by complication, or by changes in the original affection. *Typhus* and other fevers are apt from a simple form to become complicated by some local organic affection. The *Dyspepsiæ* are particularly apt to have their most prominent symptoms removed from one organ to another.

493. In other diseases, as *Inflammation,* and especially *Organic Diseases,* the course is comparatively more regular and uniform.

494. The course of *Tuberculous Phthisis,* although generally progressive, is sometimes interrupted,—at others unusually slow,—and at others, terminated by sudden death. Some patients have survived the threatening of Phthisis for years; other patients have remained in the last stage many months;

and others have died suddenly in the first, or dawn of the second, stage.

495. The course of *Mesenteric Disease* is perhaps the slowest, and most regularly progressive, of all diseases eventually fatal; it usually occupies the space of from three to five years.

496. In many diseases it is necessary to watch the course or *extension* of the primary disease, as it involves different organs; this is particularly necessary in cases of *Chronic Peritonitis,* and *Pleuritis.* I have already alluded, § 487, to certain diseases becoming the cause of subsequent morbid affections.

497. There is a point in the History of diseases which still requires attention, viz. what has been termed the *metastasis* or *conversion* of diseases. This event has occurred in *Gout, Rheumatism, Erysipelas,* some *Cutaneous Affections, Suppressed Hæmorrhoids,** &c. But I think some of the events of the morbid affections which I have termed the *mimoses,* have been mistaken for *metastases* of diseases; and some of the effects of the *treatment,* as will be noticed immediately, are very apt to be mistaken for changes or consequences of the disease.

498. The remedies the effects of which most require to be watched and discriminated are blood-letting, purging, opium, &c.; see § 12.

499. The effects of *repeated* blood-letting, in certain cases, are not yet, I believe, fully understood. I have already alluded to them, § 261, and expressed my intention to pursue the investigation, § 274.

* See the Edinburgh Journal, Vol. XV, *p.* 106..

500. The effects of *active purging* also require to be watched, as they may conduce to the state of *sinking*, or lead to *tympanitic* and other dangerous or painful affections.

501. The effects of opium are peculiar. They appeared, in one case, to resemble the state of *erethismus*. Their effect on the tongue and on the bowels are well known. Some infantile diseases are entirely owing to the laudanum given,† especially a state of restlessness and irritation which has endured for months together.

† Ed. Med. Journal, Vol. XII, *p.* 423.

CHAPTER II.

SKETCH OF A FEW DIAGNOSTIC AND PRACTICAL

RULES

FOR

DISPENSARY PRACTICE.

502. This subject has been already alluded to, § 33. These Rules must be considered principally as an application of the History to the Diagnosis of diseases. It is only however as an *approximation* to the diagnosis, that such Rules can be attempted. It will still be necessary to inquire into the *particulars* of the *individual case*; § 30.

503. *The first question* to be asked of the patient is, 'how long he has been ill.' The reply resolves the case into the *Class of Acute*, or *of Chronic Affections*. The former are principally, *Fevers*, the *Acute Dyspepsiæ*, § 58, or *Acute Inflammations;* the latter, are the *Chronic Dyspepsiæ*, the *Insidious Organic Diseases*, or the *Insidious forms of Inflammation*,—especially of the *Brain*, the *Pleura*, and the *Peritonæum*.

504. Having thus ascertained the *Class* of the disease, we must proceed, in the case of the *Acute*, to investigate the

individual nature of the case. In *Chronic* affections we may ask—

505. *In the second place,* 'whether there be a material and progressive loss of flesh.'

506. The reply to this inquiry divides the cases into such as may subsist without influencing the nutrition, and such as gradually reduce the patient. The former cases are chiefly the *Chronic and Protracted forms of the Dyspepsiæ,* §§ 59, 61, or *Diseases of such Organs as are not engaged in the process of assimilation.* The latter are *Marasmus, Phthisis, Mesenteric Disease, Chronic Inflammation of the Peritonæum,* and in general *Diseases of the 'Organs of Supply;'*—see §§ 217—225.

507. *A third inquiry* is into the state of the pulse. Increased frequency of the pulse is the usual attendant on the *Insidious forms of Organic Disease,* whilst it is not observed in the less serious cases of the *Chronic Dyspepsiæ;*—see §§ 382—384.

508. It is needless to enter more minutely into the subject, as it would be only repeating the observations already detailed on the general aspect of the patient, and the general character and course of the disease.

FINIS.

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Sulphate of Potash { Acid 40 / Potash 48 } 88

Supersulphate of Potash { Acid 80 / Potash 48 / Water 18 } 146

Sulphate of Soda { Acid .... 22 / Soda .... 32 / Water 99 } 153

Carb. of Soda { Acid .... 66 / Soda .... 64 / Water .... 36 } 166

Crystal. Sulphate of Soda { Acid .... 40 / Soda 32 / Water 90 } 162

Alum { Acid / Alumina / Potash / Water }