

Considerations regarding pulmonary consumption / by Thomas Sutton, M.D. member of the Royal College of Physicians, and Physician to the Forces.

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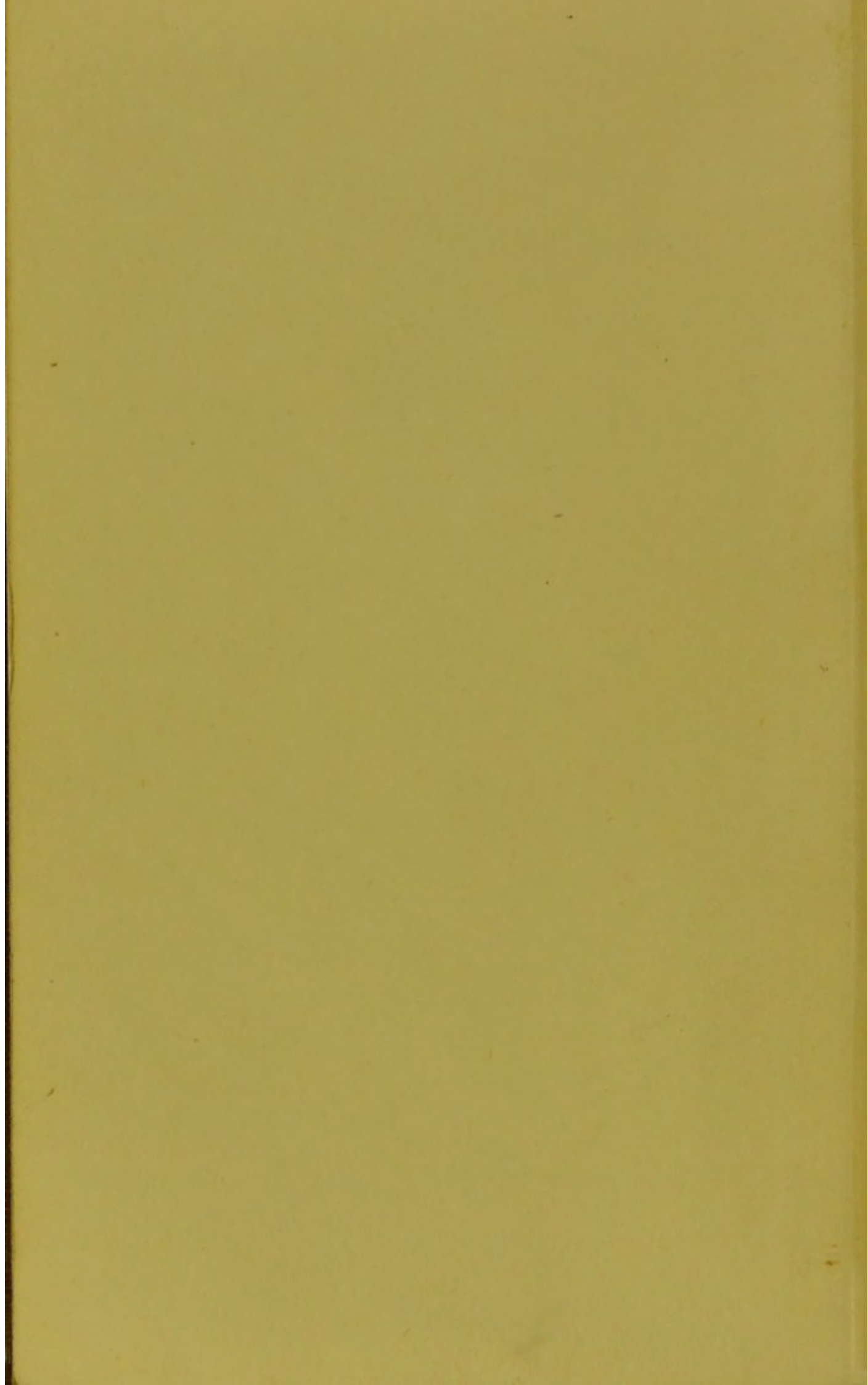
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CONSIDERATIONS

REGARDING

PULMONARY CONSUMPTION.

BY

THOMAS SUTTON, M.D.

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS, AND
PHYSICIAN TO THE FORCES.



LONDON:

PRINTED BY S. HAMILTON, FALCON-COURT, FLEET-STREET;

FOR G. G. AND J. ROBINSON, PATER-NOSTER-RROW.

1799.

ERRATA.

For *Symonds, Read*, being proper names, wherever they occur, read *Simmons, Reid*.

Page 5, line 4, dele *light coloured*.

17, line 3, for *indicator*, read *indication*.

20, line 4, for *inflammation*, read *inflammations*.

28, line 12, for *sometimes*, read *often*.

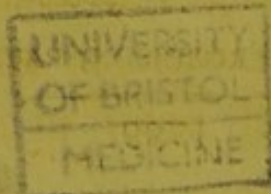
31, (in the Note) line 8, for *scissor*, read *scythe*.

34, line 1, for *principal*, read *principle*.

51, line 2, dele *internally*.

80, last line, for *exercise*, read *exercises*.

81, line 16, for *litte*, read *little*.



P R E F A C E

THOUGH I have not the vanity to suppose, that the Considerations which I now offer regarding pulmonary consumption, will be immediately received by medical practitioners at large, yet I have some hopes that they will be regarded as worthy of deliberate consideration. They tend much to shew the propriety of a different mode of cure than is at present generally adopted, and to place the disease, in many respects, in a new point of view. If, however, what I have written shall not carry so much conviction in it as sufficiently to point out a general and determinate cause, I hope the practitioners in medicine, and the anatomists, will recur to some of my

opinions, when in the immediate discharge of their functions, as from thence I look for some confirmation of them.

That a disease which has hitherto appeared so obscure in some of its phænomena, and so fatal without any precise cause of its fatality having been stated, should appear all at once, in the opinion of the world, as a very simple one, such as I have endeavoured to shew it, is what I cannot wholly expect. The explanations which I have given respecting some hitherto inexplicable appearances attending pulmonary consumption, are so simple (though probably adequate causes are assigned for the evident effects), that I have sometimes thought of entirely omitting some of them. But when I have considered that it has been too much the fashion in medicine to apply causes which none can detect, or render in any way demonstrable for the solution of known effects, I have thought that my errors, if any, being of a contrary nature, were more ve-

nial ; and that, as I had stated such evident causes, I might readily be divested of my imaginary trophies.

The variety of new matter, which will be found in this little performance, is not occasioned by the love of novelty ; but by the conviction of its approximating to truth in as far as my judgment is concerned ; and though I have been, in several instances, under the necessity of stating some theoretical opinions in a very concise way, as introductory to some explanations which I have given, I hope they will be found fairly exhibited, and that I have not made use of partial views of doctrines to support my theory. For, if these opinions had not been thus stated, this publication would have much exceeded its present form.

I may be thought very defective by some, in not bringing a larger portion of experience to found my practice upon ; but when the nature of the disease is considered, and the most material and interesting part of it,

in regard to the cure, as I have stated it, is passed under the directions of practitioners in pharmacy, I might singly never be able fairly to appreciate all the advantages of the practice I have recommended ; for recourse cannot be had too soon, in the incipient disease, to the remedies proposed.

I am aware, that many will think, that I have applied my theory too generally, in endeavouring to explain by it the pathology of most cases of pulmonary consumption : and I cannot entertain a doubt, that more medical men might adopt my opinions, had I applied them in a more restricted way. As, however, it has been my intention to offer my ideas, as they have impressed my mind, I have permitted no other motive to direct me in the arrangement of the present pamphlet.

CONSIDERATIONS

REGARDING

PULMONARY CONSUMPTION.

DR. Cullen defines phthisis pulmonalis, or pulmonary consumption*, in the First Lines of the Practice of Physic, to be
“ an expectoration of pus, or purulent
“ matter, from the lungs, attended with
“ hectic fever.”

* I have employed the terms phthisis pulmonalis, pulmonary consumption, phthisis and consumption, as implying the same disease, and without any reference to my opinion of such disease, but merely to denote an affection in some part of its course, attended with the appearances described in the following definition, and connected with tubercles in the lungs.

He states the causes of pulmonary consumption to be five: 1. Hemoptysis: 2. Pneumonia producing suppuration: 3. Catarrh: 4. Asthma: 5. Tubercles. It is unnecessary to make an abstract of his opinions respecting the effects of these causes, as the volumes now mentioned are in the libraries of most medical practitioners: to them I refer the reader for an accurate description of the disease concerning which I am about to offer my opinions; remarking for the present, that the four first causes stated, when they produce pulmonary consumption, are supposed to be generally connected with a predisposition to the disease in the habits of the patients; and when no such predisposition exists, those diseases are mostly curable.

But though they are more especially stated to be causes of phthisis pulmonalis, probably because they affect the lungs, yet it is known to medical practitioners that they are by no means the diseases, exclusively which precede it: and I have parti-

cularly witnessed this affection to be often, apparently, occasioned by fevers and dysenteries.

As pulmonary consumption observes much the same progress when fatal, though with different degrees of affection of the lungs, and as it has by dissections been discovered to be accompanied by tubercles*,

* I have had opportunities of inspecting the bodies of several who died in this way (by pulmonary consumption), and have never yet found them (tubercles) totally absent. Symonds on Consumption.

I consider tubercles by much the most frequent cause of phthisis; and even in many cases where this seems to depend upon hemoptysis, catarrh, or asthma, it does, however, truly arise from tubercles. It is upon this subject, therefore, that I shall have occasion to treat of the measures most commonly requisite for curing phthisis. Vide Cullen's first Lines, par. 905.

I have inspected the lungs of many consumptive patients, and do not recollect to have found any free from tubercles; though in some there were large suppurations.

I, however, conceive it probable that persons may die of consumption of the lungs, according to this definition, without having tubercles in them. Such a disease may be caused by a large suppuration in the lungs from pneumonia, and the progress of such an affection will be similar

from whatever cause it may have appeared to take its origin, so it is probable that there is one determinate cause, which materially influences the disease in every stage, and that such cause is intimately connected with tubercles in the lungs.

In considering, therefore, pulmonary consumption, apparently originating from no previous disease, or such as follows a preceding affection, we may view both diseases as depending essentially upon one specific cause, though excited by somewhat different occasional causes.

It is the principal object of the following considerations to endeavour to point out that cause, and thereby to account for the chief phenomena observed in this disease ; and to

to that of a large external abscess, where pain, anorexia, and a large discharge of pus, combine to determine the fatality of the disease. Such disease is, however, very different in its cause from pulmonary consumption with tubercles,

recommend a mode of cure obviously derived from a consideration of it.

SECT. I.

A CASE.

The patient aged 32 years was tall, had a narrow chest, light hair, and eyes, light-coloured with other marks of a predisposition to consumption. She was brought to bed in December 1795. From delivery to the fifteenth day, she had been as well as could be expected, except on the ninth day the patient had a slight pain in the bowels, which was soon removed. She had not been able to give suck to the child, who died on the twelfth day. On the fifteenth day after delivery, the patient was attacked with a sudden and violent pain in the bowels. Evacuants and other remedies commonly resorted to in like cases, were employed. The affection of the bowels wore off in the course of a week; at which time

a considerable degree of debility remained and a very slight cough, without expectoration, which had not been at all perceived before ; in the course of another week, the patient spit up, after coughing, a kind of glary mucus. From this time to the end of five weeks after the attack, the symptoms were ; — increasing emaciation ; a cough sometimes by day ; an expectoration of mucus in the evening after coughing ; the pulse 100 ; the appetite good. About this period hectic fever came on, and the disease assumed the appearance of pulmonary consumption, and continued in a gradual train to the seventh month from the first attack, when the patient died, after a slight diarrhœa and a dilirium of three days. During the whole disease the patient was not much troubled with cough, and expectorated very little. She spit up pus without smell, in the fifth month of the disease, but on the whole not exceeding two ounces,* and it

* The spitting, through the disease, was so moderate as to be received upon handkerchiefs, which were of fine cambric, which I always examined ; and I can say with cer-

was twice streaked with blood. Very little difficulty of breathing, or pain in the chest, occurred through the whole disease. To shew the state of her feeling to the last fortnight of her life, she would frequently say, she forgot that she was ill, and was often on the point of endeavouring to remove from the bed, or sofa, with her usual alacrity. Through the disease the emaciation and debility increased gradually, until the patient had lost the power of standing for the shortest space of time. In the fifth month, glandular swellings appeared in the neck, and continued to the death of the patient. These are supposed to be certain signs of tubercles in the lungs in consumption. The treatment adopted in this case, that then accorded with my ideas respecting consumption of the lungs, was, to endeavor to alleviate the symptoms, and mostly consisted of medicines to procure

tainty, that I have rather stated too large a quantity of pus discharged, as I never could discover any expectorated above half a dozen times, and that in very small quantities.

sleep, to relieve the cough, uneasiness in the chest, and to restrain the perspirations. The diet was of milk for a length of time, with the interposition of fish, and asses' milk was drank for the space of the two last months, morning and evening. Exercise was employed, as much as could be borne. Chalybeate medicines were given for a short time; but on account of their occasioning a considerable febrile heat, they were not persisted in.

SECT. II.

OBSERVATIONS RESPECTING THE AP- PARENT SYMPTOMS IN PULMONARY CONSUMPTION.

Having been constantly with the patient during the whole time of her pregnancy, and through the whole disease, except for a few days, and having remarked the peculiar way in which it made its appearance, as well as the mild symptoms that attended it,

I was often led to thoughts during the progress of this case, which were very different from the ideas of the disease admitted at this day. These, however, at this time did not make that strong impression on my mind, as to occasion me to adopt any of the means of cure, that now suggest themselves; though they were so fixed as to occur to my memory whenever I visited consumptive patients; and obtained with me such a degree of credit, by repeated clinical visits, as at last to assume the form in which they will in a concise way be offered in the subsequent pages.

Whether the symptoms, in the case related, were rendered much milder by the palliative method of cure adopted, or the disease, if left to its progress, without the interposition of medicine, would have continued extremely mild, it is not material to consider. But in however easy and tranquil a way it proceeded, to the observation of a medical man, it appeared not to be in the least impeded in its course towards

its fatal termination. In such a disease then, it must be plain that the practitioner cannot rely upon the degree of affection in the lungs, merely, to form his prognostic of the event : and it must be equally clear, that cough, expectoration of matter, and pleuritic stitches, ought not to be regarded as the real causes of the fatality of the disease ; because in cases where these symptoms are extremely mild, death often inevitably ensues.

If then we regard these symptoms, abstractedly considered, as so little connected with the fatality of the disease, we may fairly conclude the cause of them, as far as it acts, merely to excite expectoration of matter, inflammation, and cough, as inadequate to account for the fatality* of pulmonary consumption.

* I do not mean to deny that the deaths of persons labouring under pulmonary consumption, are wholly unconnected with the pulmonic symptoms ; but I am persuaded that in cases where death ensues, it would as inevitably have happened, if no pulmonary disease of consequence

The cause of the pulmonary symptoms in consumption has, with propriety, gene-

had existed. The ultimate cause of the deaths of patients in consumption, in my view of the disease, when they happen without any urgent pulmonic symptoms, is the decrease of the stimulating quality of the blood, in so much, as at last not to be capable of continuing the circulation. For in the last stage of the disease, I have seen blood drawn, which separated more serum than I have observed in any other cases; and therefore I presume that, at the very last, there is not a proper quantity of crassamentum to absorb a sufficiency of oxygene, to continue to excite the circulation. But if that want of stimulus of the blood should appear to be the cause of death, this may be accelerated often by the disease in the lungs. For where considerable difficulty of breathing prevails, there cannot be so much oxygene imparted to the blood; and if its stimulating property be already diminished, by its quantity of crassamentum being much reduced, as stated, and the oxygene be also prevented from being so freely imparted by the difficulty of breathing, the stimulus of the blood may be so much diminished, as often to accelerate the death of consumptive patients, though equally inevitable from another cause.

It may be stated, that the ultimate cause of death, in cases of hectic fever, is such an injury of the vital principle, as to render it incapable of being acted upon by the usual stimuli; that such state may be caused by the repeated attacks of the disease, and the increased heat of the body in the paroxysms of that fever. But to this statement I

rally been referred to tubercles; but the fatal effects of the disease have not been so much attributed to the apparent pulmonary symptoms excited by them, as to the part they are supposed to act, in producing hectic fever.

There is a certain period in this disease which has never been reasonably accounted for, so as to keep up a connected chain of causes with effects produced; though during that time a very important phenomenon may be observed. This period is from the first symptoms of the disease appearing, to the formation of hectic fever.—I know of no appearance so decided or unequivocal in consumption, upon which a prognostic can

can in no-wise submit, as it appears to me contrary to fact; for I have seen, in many cases of surgery, patients in a very emaciated and debilitated state indeed, with hectic fever in its regular type, where the disease has continued for a length of time; who, when the disease has begun to amend, have in a very short time been free from hectic fever, so much so, as to render the supposition of any material injury to the vital principle incompatible with their speedy recovery.

be grounded, as the emaciation and debility of the body; and these are in their progress during the period just mentioned;—for though a physician called to the bedside of a patient in phthisis pulmonalis will enquire respecting the degree of hectic fever, sweating, &c. yet all this information must be referable to the debility produced by these apparent means.

In the case related, how are we to account for the patient becoming more emaciated after the symptoms of disease in the bowels had ceased, to the forming of hectic fever, a space of seven weeks? Again, I wish the reader to consider the description of the incipient disease, as related by Dr. Cullen. “ This disease, arising from tubercles, usually commences with a slight
 “ short cough, which becomes habitual,
 “ is often little remarked by those affected,
 “ and sometimes so little as to be absolutely
 “ denied by them. At the same time their
 “ breathing becomes hurried by any bodily

“ motion, their bodies grow leaner, and
 “ they become languid and indolent *.”

In this stage of the disease, how are we to account for increasing leanness and languor? We cannot conceive them to be occasioned by the only apparent symptom, the cough, as that is “ often little remarked
 “ by those affected, and sometimes so little
 “ as to be absolutely denied by them,” particularly as we find that persons having very troublesome asthmatic coughs remain for years, and often for the greater part of life, without much alteration in their bulk.

The disease having, however, arrived at the second stage, in which considerable emaciation and hectic fever prevail, and in which pus † is often discharged from the

* Cullen's first Lines, par. 889.

† The second stage of the disease may, I conceive, often be considered as commenced without an expectoration of pus: of this opinion Dr. Cullen must have been when in his Nosology he defines phthisis to be “ corporis emaciatio,
 “ et debilitas, cum tussi febre hectica, et plerumque expectoratione purulenta.”

lungs, then it has been thought easy, according to the present idea of hectic fever, to account for the death of consumptive patients; but more especially when joined with urgent pectoral symptoms, no further research has seemed necessary to account for the fatal termination of the disease. And although such symptoms often occur during pulmonary consumption, yet there are many cases like the case related, in which the patients are little vexed with cough, pain, expectoration of pus, or mucus, through the whole disease, yet such affections terminate with equal fatality.

In the latter cases the hectic fever is considered as the cause of the fatal event. This, however, acts in no other apparently evident way than by producing greater emaciation and debility in the patients; and, in proportion to the evident emaciation and debility, so will patients be judged to be in more or less immediate danger. But a great progress in the emaciation and debility of the body is often gradually made,

previous to the hectic fever forming. We may therefore surely conclude, that the cause which is competent to reduce and debilitate the body from a state of health is more competent to effect the same after a degree of emaciation and debility has taken place. Hectic fever, therefore, if it has the supposed tendency, can only act in concert with that cause, as it begins to act subsequent to the other, unless, indeed, it can be proved that the prior cause ceases to act as soon as the hectic commences.

Independent of the considerations offered, it may, I think, be reasonably doubted whether hectic fever produces the great debilitating effects ascribed to it.—It appears to me not capable of bearing the test of strict comparison with other febrile diseases under the idea of its very fatal tendency.—To it some quality must be ascribed not cognizable by the human senses to have supported it so long in the character abstractly of a very fatal disease. Unhappily, indeed, in the affection now treated of, it is

a mark to occasion considerable apprehension for the patients ; but I think it may be considered as an indicator of mischief done, rather than as a formidable agent for future destruction.

We form our judgments of the nature of other fevers by their instantly debilitating effects, by the disturbance they occasion to the performance of the different functions, by the disposition they may have to attack such parts of the body as are immediately necessary to life.—But we certainly have not hitherto judged of hectic fever by the same standards. Of febrile diseases, intermittents have a less fatal tendency than most others ; yet, if we compare an attack of intermittent with that of hectic fever, we shall readily perceive that the former occasions much more apparent debility than the latter.—After perspiration has flowed, and the symptoms have been relieved for many hours, the patient feels, after an attack of an intermittent, a very considerable debility and lassitude ; but

after the perspiration has lowered the heat of the body in hectic fever, the patient feels very little inconvenience from the attack. If, however, each fever had equally debilitating effects, surely the hectic, working upon an already debilitated and emaciated frame, must produce considerably more apparent disturbance. In the latter stage of phthisis pulmonalis, what physician would not tremble for the event, if a smart attack of an intermittent should occur? Can it be thought that those very severe rigors, headach, delirium, pain, heat, and thirst, attendant on the latter disease, could be sustained by so debilitated and emaciated a frame? Fevers, however, of the intermittent kind, have continued often for years without much material mischief being done; at least none such as to have an immediate effect upon life. But such is not the progress of hectic fever; therefore, it is reasonable to conclude that some other cause has a powerful action in occasioning the fatality of pulmonary consumption besides this fever.

It may not be improper in this place to state an opinion regarding the source of those happy feelings, high spirits, and that constant hope of a favourable termination of the disease, which have been observed to attend consumptive patients.

Pleasant and exhilarating sensations are, I believe, common to all persons under a certain state of debility from disease unconnected with uneasy feelings. They may be occasioned by the common stimuli of intellectual exertion, of the circulation of the blood, of food, &c. upon the debilitated body; as it is evident that the same stimulus has a greater effect upon persons debilitated by disease, where no powerful agent continues to occasion further debility, than, *cæteris paribus*, upon those who are in health. I have experienced such sensations after two severe fits of typhus fever, when, being very debilitated, I had the same pleasurable sensations (Dr. Darwin's expression) as if I had been in cheerful company in health, and had drunk moderately

of wine. But striking instances of such effects from debility are observed by medical practitioners, in patients who have been tormented by inflammation in the bowels, which have ended in gangrene. In such cases, it has been often observed, that patients are in remarkably good spirits, and cannot be readily convinced that they are in any danger. These feelings are occasioned by debility, brought on by sickness, pain, want of sleep and of food, which is acted upon by the common stimuli of intellectual exertion, of food, of the circulation of the blood, &c. and have the effect, in the way related, of producing a considerable degree of cheerfulness, though unhappily of short duration. This cheerfulness and hope is more observable in phthisical patients, because the disease is of considerable duration, and because the debility gradually increases; and the patients, at least ten hours in the day, are, during the greater part of their disease, free from uneasy sensations. But, while affected with pain, or tormented with the irritation of heat in the

night paroxysms of hectic fever, there is no more cheerfulness and resignation in them, than in people labouring under equally unpleasant sensations in other diseases.

SECT. III.

SOME OBSERVATIONS ON THE SUPPOSED CAUSES OF HECTIC FEVER.

Though I have stated, according to my ideas of hectic fever, that it is not so destructive an agent as has been imagined, yet it may be necessary to inquire into the probability of its supposed source, as from thence a great part of its fatal character is derived. Hectic fever is generally thought to be occasioned by the absorption of acrid pus; and tubercles are supposed extremely capable of producing such matter; in this way, it is imagined, they cause a disease of the most fatal tendency. But, from what

I have read upon this subject, I find the opinion advanced upon almost hypothetical grounds. It is stated, by Dr. Darwin, that the pus so absorbed must be subjected to the influence of the atmosphere. Again, Dr. Cullen, who is a very great advocate for this cause of hectic fever, does not consider such exposure to the atmosphere as necessary; for he says, “ I have never
 “ seen it (hectic fever), in any case, when
 “ there was not evidently, or when I had
 “ not great grounds to suppose there was,
 “ a permanent purulency in some inter-
 “ nal or external part.”

But if we suppose the pus in consumption to be of so virulent a nature, we ought to expect that it would produce morbid effects upon the absorbents of the lungs, and the glands they pass through, though, as far as I know, no such observations have been made. Nor can I bring to my recollection, when ulcers exist in the extremities, accompanied by hectic fe-

ver, any account of the lymphatics or glands being affected by the virulent matter. In the case related, there was an hectic fever, "exquisitely formed," before any matter was perceptible in the expectoration; and when spit up, there appeared nothing of an acrid quality in it. But in the venereal disease, the first effects of absorption of the virus are evident upon the lymphatic glands, through which it passes; and the same may be observed of the varicellous matter. There are many ulcers, discharging acrid pus, which have evident effects upon the absorbent glands, and do not produce hectic fever: and, again, I would appeal to the observation of medical practitioners, to support me in the assertion, that hectic fever appears, where there is no evidence at all of the existence of matter. From this short statement, therefore, I conceive there is much room to doubt the probability of pus being the constant cause of hectic fever*.

* After writing this article, I was led to peruse READ on Consumption, edition 3d. and was much pleased to find

The theory of hectic fever originating from acrid matter absorbed, has prevailed, until lately, without opposition, during this, and the latter part of the last, century. But after the refutation of this cause of it, Dr. Read proposes another theory of hectic fever, which it does not appear necessary for me to dwell upon, as I conceive the present theory of respiration has sufficiently invalidated it.

a very complete refutation of the generally supposed cause of hectic fever. He has gone much more at length into the subject, than it was my purpose to do. I have, however, curtailed my statement, and reasons for doubting that cause of hectic fever, since I read his work, though I thought it improper to omit it entirely, by merely referring to his book, as a sort of chasm would be left, in this little performance, to those who have not perused Dr. Read's treatise. Surgeons Abernethy and Home have very properly expressed their doubts on the same subject; and I cannot avoid thinking that a short time will occasion that supposed cause of hectic fever to be intirely neglected.

SECT. IV.

THE CAUSE OF PULMONARY CONSUMPTION ASSIGNED BY THE AUTHOR.

As from the above considerations I have expressed my doubts whether pus absorbed was the cause of hectic fever, and whether hectic fever occasioned the fatality in pulmonary consumption; and as from a consideration of the case I have related, regarding the origin of the disease, with circumstances of disease in other cases, I was led to suspect a cause of phthisis pulmonalis, from whence I at present conceive the origin and fatality of the disease to be derived, I shall now point out that cause, and hope to make it appear highly probable. In doing this, I shall endeavour to prove its existence, and afterwards apply it to account for some principal phænomena in this disease; thereby, I presume, strengthening the probability of this cause.

The first symptoms of disease in the case related were in the bowels, and by degrees the disorder became a confirmed phthisis pulmonalis. Hence, through its progress, seeing every pulmonary symptom so mild, I was often led to suspect *the emaciation and debility to be induced by some disease of the abdominal viscera*; which, however, I could not account for in any other way, except by supposing the mesenteric glands to be obstructed, as the symptoms led to no suspicions of any other cause or causes that could be considered as adequate to produce such effects.

SECT. V.

SOME CASES, OBSERVATIONS, AND DEDUCTIONS, TENDING TO FAVOUR THE FOREGOING OPINION.

Since the case I have related came under my consideration, I was consulted about a gentleman who was highly emaciated with

hectic fever, and was struck with the similarity of the two cases in the last stage of each disease; only in the latter there was no apparent affection of the lungs. This disease I conceived to be the *tabes mesenterica*. About a year ago, I was consulted respecting a soldier who had the same complaint; but his was accompanied by more or less of diarrhœa. I gave it as my opinion that the case would end fatally; which happened: but, previous to his death, he was taken into an hospital as curable, under the idea, I suppose, that the diarrhœa was the principal disease. In this case there were increasing emaciation and hectic fever, and in neither of the latter cases were there any signs of pus. During the progress of the case first related, I inspected the bodies of two soldiers after death, at the Southampton military hospital, who had been first affected with dysentery, and afterwards with pulmonary consumption; in both which there were indurations in the mesenteric glands, with tubercles in the lungs *. I have, since

* Since the winter of 1795 and 1796, I have never been attached to a general military hospital, and have, therefore,

then, seen several cases of consumption, where affections of the bowels preceded the pulmonic symptoms. It is a very common thing for patients, in protracted dysenteries, to have pulmonic affections before death: of such cases I have seen many in the general military hospitals; and it frequently happens that diseases of the abdominal viscera are in their latter stages accompanied by pulmonary consumption. By writers on this disease, the *tabes mesenterica* is mentioned as sometimes accompanying it.

From a consideration of these circumstances, I was more strongly impelled to believe that an obstruction of the mesenteric glands was the cause of pulmonary consumption, or at least was the principal cause in occasioning the deaths of the patients*,

not had those opportunities which would have been there afforded of investigating this disease by dissection. Though his little work, now presented to the public, may be more imperfect on that account than I could wish, yet I hope there will be found in it some animadversions worthy of a candid and deliberate consideration.

* I have before stated the ultimate cause of the death of patients in consumption to be a want of proper stimulus in

as no other adequate cause of the fatality of the disease, and of some of its principal phænomena, appeared to me to have been assigned. For, from what has been said of the effects of hectic fever, it was evident to me that it could not be of so pernicious a nature; and the mild pulmonary symptoms in many cases can by no means be taken into account as the causes of death.

From my own observations, as well as the concurrent testimonies of authors, it appears to me evident that mesenteric obstruction is often connected with pulmonary consumption; that *tabes mesenterica* ob-

the blood to carry on the circulation, and that it may be accelerated by a disease in the lungs. But I conceive that ultimate cause to be the effect of an obstruction in the mesenteric glands, and that such obstruction is the cause of all the circumstances belonging to the disease; as at last a deficiency of gluten is occasioned by the nourishing part of the food being prevented from arriving in the blood-vessels, and so much of the solid substance of the body is absorbed, as to leave that source of supply incompetent to furnish a proper quantity for the purposes of life. Mesenteric obstruction may, therefore, be considered as the proximate cause of the disease, and the primary cause of its fatality.

serves much the same progress as pulmonary consumption, in like manner accompanied by hectic fever, which I have seen in other cases besides those related : and therefore I am led to conclude, that the same cause of death, which is acknowledged in the former disease, may exist in the latter ; and as there appears, in many cases of pulmonary consumption, an affection of the mesenteric glands, this affection adequately accounting for the most important symptom, emaciation, I conclude that some such affection is the principal agent in most cases of this disease. That its action is previous to any material disease of the lungs, is evinced by pulmonary consumption succeeding diseases of the bowels which may affect the mesenteric glands, as was the fact in the first case, as well in the cases of the soldiers whose bodies were inspected, and from the frequency of the disease in the last stage of protracted dysenteries, and other chronic complaints of the abdominal viscera. That some disease exists also before the lungs are much affected, is evident by

the leanness and languor preceding pulmonary consumption, with tubercles, according to the history of the disease by Dr. Cullen and others, which may be accounted for by supposing an obstruction of the mesenteric glands to have taken place: which obstruction is allowed by authors, in the progress of the disease, frequently to happen.

Hence it appears to me, that phthisis pulmonalis is caused by a disease in the mesenteric glands, and that the tubercles in the lungs, and some other of its symptoms, are excited by sympathy*.

* It may be here alleged, that a sympathetic consumption arising from diseases in the abdominal viscera has long been admitted, and that it is probable that such disorder may be communicated in the manner just stated; but it will be contended, that the source of phthisis is very often in the lungs themselves; which is evidenced by the affection being excited by extraneous substances inhaled into that viscus; as happens to stone-cutters, scissor-grinders, and others employed in similar occupations. Such opinions I know to have received very considerable credit amongst medical men; and those appear to be the fastnesses in which they may hold out, that the affection of the lungs,

SECT. VI.

GENERAL OBSERVATIONS RESPECTING
THE ACTION OF SYMPATHY IN CON-
SUMPTION.

We are not sufficiently acquainted with the laws of the nervous system, to be able

called pulmonary consumption, is often, or (as will be generally asserted) mostly, an idiopathic disease. Not to dwell upon the circumstance that most medical observations are made in support of some established theory, one might hesitate to admit the probability of extraneous substances of the sort mentioned, being capable of being inhaled into the lungs, by reason of their specific gravity. But are not these substances supposed to cause tubercles by irritation? I ask, then, why snuff-takers and chimney-sweepers are not equally liable to pulmonary consumption, as they are certainly as likely to inspire irritating substances as any other set of men? That men employed in the occupations above-mentioned, said to promote consumption, may be liable to that disease, I will not deny; but it is highly probable that there are some circumstances connected with their employ, that may more reasonably account for their liability to that fatal disorder than has yet appeared. It will be also contended, that nothing is more clear than that pulmonary consumption is an idiopathic disease of the lungs, from its generally shewing itself in cold weather;

to give any idea respecting their mode of action, in occasioning diseases of sympathy,

for then the cold applied to the lungs, by its irritation, causes the tubercles, which are considered as the origin of the disease: and indeed, if it could be proved that the lungs and the parts of them, in which tubercles arise, were in cold weather subject to the application of air of a much lower temperature than in the warmer seasons, then the opinion that cold causes an idiopathic consumption in the lungs, might seem to be grounded upon an immoveable foundation. But nature has guarded this important viscus from the effects of such a pernicious application of cold by the lowered temperature of the air we breathe. For, in its way to the lungs, the air must pass through the nose, through the warm linings of the palate, through the fauces, warmed by the circulation of a considerable quantity of blood, through the trachea; and when it arrives in the lungs, already warmed by its passage, it has to mix with warmed air, which was left after the last expiration; it is then to be applied to the termination of the bronchia, where tubercles arise, while the process of disengaging heat, to supply the blood with a proper quantity, is going on. In this view of the subject, it may, I think, be fairly concluded, that the air which comes in contact with the parts in which tubercles arise, is nearly of the same temperature in all seasons. But the lungs are evidently affected more in the cold seasons of the year; so are the bowels. In pulmonary consumption, it is generally allowed that there are affections of the lungs, and of the mesenteric glands; and it is admitted that pulmonary consumption is sometimes a disease of sympathy, from diseases of the ab-

though there is no principal more generally admitted than this. There are two affections of parts distant from the lungs, which must be accounted for in this way in pulmonary consumption, according to the present idea that the lungs are primarily affected.— The one is the affection of the mesenteric glands, and the other of the glands of the neck : for in no other way can these affections be accounted for, except by the influence of this principle. On this account it will be less surprising, if I introduce it, to connect the disease of the mesenteric glands

dominal viscera ; and this opinion is generally received. Ought we not, then, to be inclined to think that the simplicity of nature is better imitated, by admitting consumption to be always occasioned in one regular way, than that it should be derived from two such different sources ? Besides, if we admit the mesenteric glands to be first affected, the rationale of the disease is tolerably evident ; but if we contend that tubercles are the origin of the disease, we must admit a synchronous affection of the mesenteric glands, or relapse into the vague hypothesis of acrid matter irritating to hectic fever. And in admitting this, contrary to all other observation, we must allow that this matter, so irritating in the blood-vessels when highly diluted, is innocuous to the lymphatics and glands, in a more concentrated state.

as a primary disease with that of the lungs. For, as in the former cases, it has been long admitted, so, in the other, should it appear probable, that the mesenteric glands may be first affected, there can be no difficulty in admitting, that they may by sympathy be capable of occasioning tubercles and other affections of the lungs *. Besides, it has long been allowed that pulmonary consumption is sometimes a secondary disease †.

* In what manner this sympathy may occasion tubercles, their inflammation and suppuration, I pretend not to decide; but it is equally as admissible to suppose them capable of such effects, as that tubercles in the lungs should cause mesenteric obstruction and glandular swellings in the neck: and it is equally as admissible, a priori, as that a disease of the parotid glands should occasion an inflammation of the testes; that a disease in the hip-joint should cause pain in the knee and leg; that worms in the intestines should occasion an irritation and a tickling sensation in the nose, and that the uterus should, in pregnancy, invariably affect the stomach.

† The pulmonary consumption, ascribed to sympathy by authors, has generally been spoken of in a very vague way, as may be collected from what follows. "When the cough in consumptive cases has continued any length of time, it either proceeds from affection of the alimentary canal, and hypochondriac viscera, acting by sympathy upon

SECT. VII.

SOME OBSERVATIONS RESPECTING THE
APPARENT PREDISPOSITION TO PUL-
MONARY CONSUMPTION.

Having now stated the cause of phthisis pulmonalis to be an obstruction of the mesenteric glands, under this idea I shall endeavour to account for some phænomena occurring in this disease, first adducing some observations respecting the apparent predisposition. This has always, with propriety, been considered as a very important circumstance in respect to the disease. I shall not enter into the description of the minute appearances of persons liable to pulmonary consumption, but only notice here, that the principal circumstances in such persons are, a narrowness or deformity of the chest.

the lungs; or from mucus and purulent matter secreted in the air-vesicles and branches of the aspera arteria, by irritation exciting incessant coughing till it is discharged." Read on Phthisis Pulmonalis, page 193.

Persons with narrow chests are generally much weaker than those whose chests are expanded. The narrowness of the chest is, therefore, probably owing to the same cause as the weakness accompanying it. Where sufficiently nutritive food is given, two healthy processes are evidently necessary to occasion strength and vigorous muscles — a good digestion of the food in the stomach, and a proper aptitude in the lacteals to absorb the chyle, and in the glands * to pass it after it is prepared. If one or the other of these fail, debility must be one of the consequences.

I appeal to the experience of medical men, whether there are facts to prove that there is in general any material error in the digestion of such as are prone to consump-

* As by dissections the glands have been found indurated, and no observations have tended absolutely to prove any particular morbid action in the lacteal vessels, the obstruction to the food getting into the circulation, has been, and will hereafter be, considered as arising from the morbid state of the mesenteric glands.

tion. Those whom I have seen of this description have often very good appetites, rather greater indeed than others; and even when under the disease, their appetites do not fail. Such persons are not found subject to bilious complaints, nor do I know of any observations which tend to prove that the stomach or liver are materially affected in phthisis pulmonalis, supposed to arise from tubercles. Complaints of indigestion are generally very evident, and therefore, if they had been observed much in this disease so often investigated, they would not have escaped marked attention.

As then it is probable that the digestive faculties are sufficiently active, the debility may be reasonably attributed to the state of the glands, through which the chyle must pass into the circulation. Thus, early in life such a state of the glands exists, which, by preventing the chyle from obtaining an easy entry into the circulation, occasions the same effect upon the make of the chest,

as is observed of persons obliged to live upon food not nutritious, and unhealthy. For, in both cases, the muscles of the thorax, from a want of due vigour, are not capable of elevating the ribs, and retaining them at a sufficient angle with the vertebræ, but permit them to fall towards the abdomen, and cause that mark of liability to consumption, a narrow chest. Afterwards, in the progress of life, whether by occasional causes, or from a strong disposition to the disease in the mesenteric glands, whenever the obstruction in them becomes so great as not to permit the quantity of chyle to pass, which is necessary to keep the body in the relative vigour it has acquired, then it becomes gradually emaciated ; and a sympathetic action is established between the mesenteric glands and the lungs, which, by degrees, as the emaciation proceeds, gives occasion to hectic fever, and which accompanies the disease to its fatal termination.

Thus I conceive the real pre-disposition to pulmonary consumption to be such an

inherent state of the mesenteric glands as disposes them to obstruction.

A deformity of the chest is another sign of a disposition to consumption. This is generally occasioned in early life by rachitis. In this disease, the mesenteric glands are known to be morbidly affected; on which account they do not permit a proper quantity of nutriment to pass into the circulation, and consequently less ossific matter than is necessary to supply the growing bones. It can be no wonder then that afterwards a disease of the mesenteric glands should recur, and put on the form of phthisis pulmonalis, as explained. For, from our observations in many diseases, when a person has had a certain affection, he is always more liable to a recurrence of it than people who have not suffered it, as is evinced in sore throats and in different kinds of fevers. But a strong additional proof of the cause of the disease which I have assigned, may be obtained by considering this fact, that many cases of the rachitis,

when they prove fatal, have all the symptoms of pulmonary consumption attending them in the latter stage*.

SECT. VIII.

OBSERVATIONS ON THE CAUSE OF THE EMACIATION AND DEBILITY IN PUL- MONARY CONSUMPTION.

Admitting an obstruction of the mesenteric glands to be the cause of pulmonary consumption, we have an easy method of

* The following account of the progress of the disease by Mayow, extracted from Allen's Synopsis Medicinæ, strongly coincides with this statement. Internally, the liver is bigger than its due proportion; the stomach and bowels are increased in bulk; the glands of the *mesentery* are enlarged, if not strumous; the lungs are puffed up and tumefied, sometimes ulcerated, strumous, and adhering to the pleura. The jugular veins and arteries are larger than ordinary: lastly, a feebleness of the parts, with a numbness and slothfulness to motion. This distemper, of itself, seldom proves mortal, unless, the symptoms increasing, it degenerates into a *consumption*, dropsy of the lungs, or ascites.

accounting for the gradual emaciation and debility produced in that disease, and an adequate explanation of the cause of the leanness and languor, which is observed to be increasing in its first stage before the hectic fever is formed.

That the solid parts of the body are absorbed, is evinced from many very strong and unequivocal facts. Without such an action, it would be impossible to account for the decrease of the bulk of the body in health; the emaciation succeeding to a want of nutritive food, or of food taken in small quantities from disease, or the disappearing and decreasing of parts of the body. In all disorders where the stomach is in such a state as not to receive or properly digest a sufficient quantity of food to supply the usual expenditure of the body, and to make its usual deposit *; or, where the food, be-

* The facts respecting the absorption of the solid substance of the body seem to indicate that there is a perpetual change of matter; some of the food, therefore, daily taken in, may be always deposited in health, and the re-

ing prepared by the digestive processes, is not permitted to pass in its proper quantity into the circulation, on account of some obstruction in the mesenteric glands*, the absorbents, which take up the solid matter

remainder be employed in the usual expenditure of the body, and other offices, with what is constantly absorbed from the solid substance.

* Dr. Cullen admits this cause of emaciation often to exist in phthical patients, though he assigns in another place a less demonstrable one. But as, in his method of cure, he makes no mention of any remedy to get rid of such obstruction, he must have evidently thought that it depended wholly upon the disease in the lungs. "In cases of phthical persons, I shall hereafter mention another cause of their emaciation; but, it is probable that an obstruction of the mesenteric glands, which so frequently happens in such persons, concurs very powerfully in producing the emaciation that takes place." *First Lines*, par. 1606.

"The most remarkable instance of emaciation occurring in fevers is that which appears in the case of hectic fevers. Here the emaciation may be attributed to the profuse sweatings that commonly attend the disease: but there is much reason to believe that an acrimony is also present in the blood, which, even in the beginning of the disease, prevents the secretion and accumulation of oil." *Cullen's First Lines*, par. 1617.

of the body after being properly fitted for them, still remaining equally active, tend to decrease the bulk of the body. But, in the progress of a disease, where the nutriment taken into the circulation decreases, the absorbents, to supply that deficiency, probably absorb a greater quantity; which seems to be the progress in the mild sort of pulmonary consumption originating without any evident previous disease, where, in the commencement of it, the emaciation increases very gradually; but in the course of the disease, a more rapid decrease of the body seems to take place.

The laws of the animal system are, to our evidence, very wisely directed in this respect; for, when the stomach could not digest, or suffer food to be taken by the mouth, or when there should exist an obstruction to its getting into the blood, if the solid parts of the body did not supply the deficiency of gluten*, the blood, by

* Dr. Monro concludes his observations on this subject, by stating, that, "from the whole, it appears not only that

the common secretions being carried on, must suffer so great a change of quality as not to be capable of sustaining life. But in most diseases, the fluid parts of the blood are readily supplied by the intestines; for, though, in pulmonary consumption, by an affection of the mesenteric glands, the chyle is obstructed, and the most nutritive part of it prevented from passing; yet, as will be explained, the intestines supply the serous part of the blood; and in most diseases, where the stomach cannot bear any nutritive food, it is capable of suffering fluids to be taken.

But the absorption of a greater quantity of the solid substance of the body than is absolutely consistent with health, when a

the solid parts of the body may be absorbed in consequence of disease; but that in health, and during the whole course of life, there is such a constant interchange of the particles which compose the solids, by means of the vessels which secrete and absorb, as to render it doubtful whether a single atom remains of our bodies, which formed a part of them some years ago." Three Treatises on the Brain, the Eye, and the Ear, by Alexander Monro.

proper quantity of gluten is not furnished by the intestines, prevents often, for a time, any great evil from the blood not being properly supplied with nutriment through the natural and regular channel ; and on the same account the usual deposition of the solid substance is impeded. Such absorption of the solids may go on in some diseases for some time without any considerable morbid effects. But there is a certain bound set to it, which, when passed, occasions irregular and diseased motions, which degenerate, as I conceive, into hectic fever.

SECT. IX.

CONSIDERATIONS RESPECTING THE ORIGIN AND NATURE OF HECTIC FEVER.

I have never seen this disease, if it may be so called ; nor have I heard or read that it has attacked any person so suddenly, or without more previous indisposition than is usual in other fevers. Being always pre-

ceded by some other complaint, it is reasonable to conclude that it must depend upon some previous affection, which prepares the body for its action. The diseases in which it appears, though in many respects dissimilar, have one common circumstance attending them, and that is emaciation, and of course debility. The effects in these diseases are in this respect alike, and give rise to another like effect, which I conceive to be hectic fever. For, if the original disease be removed, and strength begins to be acquired, hectic fever diminishes; and, if emaciation and debility increase to a certain point, hectic fever increases also; but, without a considerable degree of emaciation, it never appears, as far as I have observed.

The theory of fevers is a subject which I shall not enter deeply into; but I think it proper to state some circumstances concerning them, to elucidate the nature of hectic fever. In fevers, it is extremely evident that obstructions of the secretions, particularly that of sweat, take place. Such ob-

structions are often occasioned by debilitating causes, which have very considerable effects upon the extreme vessels of the skin, the lungs, and the stomach. The heat of the body is carried off by perspiration mostly: when, therefore, that is obstructed or decreased, the heat accumulates to a certain point; and by its stimulating effect upon the arteries, by producing an increased action in them, it occasions them to open the perspiratory vessels. Thus, the sweat, while flowing, carries off the superfluous heat of the body, and reduces it to a lower temperature.

These are some of the general circumstances respecting fevers. Fevers are of great variety; and all, except the hectic, I believe to arise from extraneous causes, which, being applied to the body under different circumstances of vigour, or producing more or less debilitating effects, occasion that variety of fevers.

But hectic fever appears to depend solely upon debility; for the debilitated action of

the heart and arteries not being sufficient to keep the perspiratory vessels from closing, the heat of the body accumulates, and produces such a stimulus in the arteries as to force the perspiratory canals open ; but, when the stimulus of heat is diminished, the arteries cease to act with sufficient vigour, and then shortly the whole of the febrile actions are reproduced on account of the accumulation of heat. These alternate states continue while there remains sufficient energy in the arteries to open the perspiratory vessels in the manner stated. But, when that cannot be effected, as happens in the last stage of diseases accompanied by hectic fever, then diarrhœa ensues.

The perspirations in the latter part of hectic fever, though they are violent, occupy only a small part of the body. The head, neck, and breast, are mostly affected : the legs are very seldom moist. May not this be owing to the contraction of the skin, and the want of cellular and muscular substance to prevent the sides of the per-

spiratory vessels from getting into a state of collapse? The same circumstances cannot occur in an equal degree upon the head, face, and breast. The perspiratory vessels there, do not resist so strongly the arterial impulse, and are opened by the efforts of the arteries during the hectic paroxysm, so long as any considerable vigour can be excited in them by the stimulus of heat. At last, in the remissions, the pulse may be felt to be feeble, and to intermit; which are certain indications of approaching diarrhœa and delirium. For then I suppose that the perspiratory vessels, even in the superior parts of the body, have been at last permitted so to close by the want of arterial energy *, as to resist its future fee-

* That emaciation and debility of the body are strongly connected, is very evident; but, in respect to the mode in which emaciation causes debility, I do not profess at present to give an opinion. Though we observe, in cases of hectic fever, the arterial system to be much affected by such debility, yet it is in such a state, that the powers of life are long kept alive by the stimulus of the blood in continuing the circulation, and, by its increased stimulus, by the accumulation of heat, the important secretion of

ble efforts ; and therefore the fluid parts of the blood which were internally discharged by the skin, are secreted by the exhalants of the intestines, and occasion diarrhœa *.

The paroxysms of hectic fever happen twice in twenty-four hours ; and they come on at nearly the same times. The time of the night paroxysm I conjecture to be very much influenced by the circumstances attending going to bed. For, previous to the fever being “ exquisitely formed,” the debility not enabling the arterial system to

sweat is excited twice in a natural day. But when the stimulating power of the blood becomes deficient (as explained, note, page 28), then death ensues, not from an incompetency in the vital principle in the arteries to promote life longer, but from a want of a proper stimulating quality in the blood to continue the circulation : hence the diminished arterial energy which is about to close the scene of life.

* One debilitating effect of hectic fever has been stated to be the profuse sweats that are produced. But if we consider that in such cases the perspirations are obstructed for at least twenty-one hours out of twenty-four we may fairly conclude that the quantity of aqueous fluid, discharged by the skin in hectic fever, does not exceed what is secreted in health, and therefore ought not to be considered as having so great a tendency to debilitate.

continue the perspiratory vessels open as in health, a trifling and irregular fever is occasioned. But, when the body becomes more debilitated, even small additional debilitating causes may fix the paroxysms to certain times. And such causes are probably applied in the evening at bed-time. For, then the body is rendered cooler by undressing, and the temperature of the bed-room is mostly lower than that of the sitting-room; which debilitating causes, added to the already debilitated state of the arterial system, occasion the perspiratory vessels to close for some time; by which means a fit of fever is produced. Such causes being regularly applied, the night-fit comes on at a tolerably regular hour, and that in the day-time may be regulated by the evening-fit: for if Dr. Cullen's idea be right, "that there is, even in health, an increased frequency of pulse twice a-day," such a law of the animal system may occasion the paroxysms of hectic fever to be at regular intervals; and it only requires that there shall be

sufficient causes to determine one paroxysm to a certain time, to influence the period of the other. I have had an opportunity of seeing some cases, in which the causes I have mentioned had considerable influence: for, in them, at the time of undressing for bed, cough and chilliness came on, which appeared to me to be the beginnings of the night paroxysms.

SECT. X.

CONSIDERATIONS ON THE MODE IN WHICH THE SEROUS PARTS OF THE BLOOD ARE SUPPLIED IN PULMONARY CONSUMPTION, AND ON THE ENLARGEMENT AND COSTIVENESS OF THE BOWELS IN THAT DISEASE.

It has been stated that, in phthisis pulmonalis, the solid substance of the body was absorbed to support it, when the mesenteric obstruction became so great as to prevent the chyle from getting into the blood

in sufficient quantity. But this substance alone would not be capable of supplying the serum and crassamentum; and it must be evident that it supplies much more of the latter. Through hectic fever, there is a considerable expenditure by perspiration of the thinner parts of the blood: therefore, a great portion of that must necessarily be supplied by some other means than the absorption of the solid substance of the body. As the mesenteric glands are stated to be obstructed, to account for the blood being supplied with its thinner and not with its more nourishing parts, we must have recourse to certain acknowledged facts:—1. That the stomach has a curdling power. 2. That the chyle is prepared for absorption in the smaller intestines. As the stomach has the power of curdling, we may readily admit that the smaller intestines, being so intimately joined, may have the same power, though probably in a less degree. The most nutritive part of the chyle, therefore, when it cannot be absorbed in the usual way, by remaining some time

in the intestines is converted into a solid substance, and the thinner parts remain to be absorbed. In the progress of the ingesta through the intestines, more especially in the larger ones, this fluid part of the chyle is absorbed, and supplies the blood with serum. For it is asserted with much appearance of truth by Dr. Darwin, that if one part of the absorbent system remains quiescent, some other part often acquires greater activity. Thus the absorbents in the larger intestines become more active in proportion as those in the smaller are rendered less capable of performing their office.

On the same circumstances depends the costiveness of the body in pulmonary consumption: for the curdled matter of the chyle, being mixt with the fæces, renders them less stimulating; and the absorption of the lower intestines causes the very hardened fæces that are ejected in this disease.

There is another circumstance that may be noticed in this place, and that is the swelling of the abdomen. This is by no means occasioned by the mere enlargement of the mesenteric glands; for in the dissections, I have not observed them to be greater than when the glands appear to be first enlarged in the neck. But it is often caused by wind in the bowels, which is probably disengaged by some fermenting process: and in the latter stage of the disease, the muscles of the belly are so debilitated, that, though upon lying down there shall appear no increase of bulk, yet, when the patient is in an erect posture, on account of the want of resistance in the parietes of the abdomen, the lower part of the belly will appear considerably enlarged.

SECT. XI.

ON THE OCCASIONAL CAUSES OF PHTHISIS PULMONALIS.

The predisposition which I have stated to be an inherent disposition in the mesenteric glands to obstruction, may increase so much as to occasion them to be obstructed without any particular occasional cause. This predisposition is probably caused by their great irritability, which may so increase, as, by the stimulus of healthy chyle, to raise in the glands too great an irritation; which probably happens in some cases of consumptions which are preceded by no particular disease or occasional cause. This irritability being in different degrees, the disposition to pulmonary consumption must of course vary, and require different degrees of stimulus to effect the irritation necessary to excite the disease.

In the predisposed to phthisis pulmonalis,

all previous diseases, in which the stomach cannot bear its usual food, or in which a healthy digestion does not take place, often occasion this affection: for by them the chyle is rendered less bland, and produces a morbid irritation in the mesenteric glands, owing to the too great irritability in them.

2. Diseases in the smaller intestines, where an irritating secretion takes place, as in dysentery, are frequent occasional causes of consumption; and I conceive no disease to be so frequently followed by pulmonary consumption as dysentery.

3. Inflammations in the smaller intestines, by communicating irritation to the mesenteric glands, may produce consumption.

4. Worms in the intestines may have the same effect.

5. A superabundance of bile in the intestines will stimulate the glands so as to occasion consumption*.

* And here it will not be foreign to my subject to ob-

The four diseases of the lungs, stated to be occasional causes of consumption, may, as idiopathic affections, concur to produce the disease in the same manner as other previous diseases, by affecting the digestion. But it is probable that they may sometimes

serve, that a symptomatic cough, which has its rise not from catarrh, or from an immediate inflammation in the lungs, but from their sympathy with the stomach, has sometimes laid the foundation of phthisis from its having been mistaken, and of course improperly treated. It seems to be owing to a redundancy or vitiated state of the bile, or to some affection of the stomach, which it is not perhaps easy to define. It is sometimes a concomitant of other bilious symptoms; and when this happens to be the case, it cannot be easily mistaken: but we sometimes find it occurring singly, and in general attacking persons of a sedentary life. SYMONDS on Consumption.

Here is a pulmonary consumption described, which is said to arise from a sympathy with the stomach, brought on by a redundancy of bile. In this position I must, however, differ from the respectable author, as he has stated that sometimes no bilious symptoms appear. But that pulmonary consumption may be caused by a redundancy of bile is highly probable, and may from the author's history be with more propriety, I presume, referred to a disease excited by it in the mesenteric glands, than to a sympathy with the stomach; as the former is found frequently to accompany pulmonary consumption, and the other cause rests solely upon a conjectural foundation.

be excited by a strong irritation of the mesenteric glands : where, therefore, these affections appear in persons disposed to consumption, they may be regarded often as signs of an approaching fatal affection.

But the most general occasional cause of pulmonary consumption is cold. The other occasional causes have been stated to act upon the too great irritability inherent in the mesenteric glands of those disposed to consumption. But cold concurs to raise a still greater irritability in the glands, which becomes so considerable as to be morbidly affected by the common and proper stimuli of food, &c. ; and consumption mostly comes on gradually in that way.

Since I have formed an opinion that the mesenteric glands were the principal agents in consumption ; when I have visited consumptive patients, I have been particular in making inquiry, whether previous to, or about the time of the cough coming on, they have had pains in the bowels ; and I

have generally found an answer in the affirmative. And as this inquiry has tended much to confirm the opinion in my own mind, I wish others to scrutinize this observation by their personal inquiry. But by some means, that I will not pretend to account for, when the disease is once fixed in the lungs, those pains are no more troublesome ; though, through the whole disorder, uneasy sensations may occasionally be excited in the bowels by the costiveness attendant upon this disease.

All the occasional causes mentioned, by a considerable duration, may induce consumption, where no predisposition has previously existed ; which is shewn by chronic affections of the abdominal viscera producing it, owing to irritating matter from a bad digestion, &c. being constantly, for a length of time, applied to the mesenteric glands.

That the predisposition to phthisis is occasioned by too great an irritability in the

mesenteric glands, may be collected from its commonly coming on in the cold seasons; and it is a generally acknowledged fact, that cold applied to the body has the effect of accumulating irritability. This supposition of too great irritability being the cause of the predisposition, is strengthened by young people being more subject to the disease; for in the progress of life this principle is reduced.

That phthisis pulmonalis originates in the bowels, obtains great strength by considering the number of diseases of the different viscera which often precede it; for most chronic affections in the abdomen, when they end fatally, are accompanied in their latter stage by a disorder in the lungs. And it will surely be more rational to attribute such effects to one specific cause in the bowels, than to the lungs having a property of sympathising with each individual part. That in the course of a chronic disease in the abdomen, the mesenteric glands may be affected, and raise a disorder in the lungs as

stated, must appear more probable (as it has been allowed that mesenteric obstruction often occurs in phthisis, and will, I believe, generally be found to be the case) than to suppose each viscus capable of exciting tubercles in the lungs; which would be attributing to them a great range of sympathising power indeed.

The glands in the mesentery are probably indued with a stronger degree of irritability by nature than those in the mesocolon; as the first are fitted to receive chyle in its pure state, while the glands of the lower intestines must necessarily permit a less bland fluid to pass them. Hence, the former are more liable to diseases of too great irritation from different causes, while the others, through life, perform their functions with much less variation in their irritation, and in the fluids passing through them. For if we suppose the digestion by some disease to be disturbed, the glands in the higher part of the mesentery, which were accustomed to receive a bland sort of

liquid, would be first affected by the change : but during the progress of the food through the intestines, it is probable that such a change is always made, as, when it arrives in the lower bowels, to occasion very little difference in its stimulating qualities. Thus the glands of the mesocolon escape the affections of many of those in the mesentery, and are, during the disease of obstructed mesenteric glands, capable of performing their usual office, and probably rendered more active.

SECT. XII.

SOME REMARKS RESPECTING HECTIC FEVER IN DISEASES WITHOUT MESENTERIC OBSTRUCTION,

The cause of hectic fever, in cases where no suspicion of a disease in the mesenteric glands obtains, I conceive to be exactly the same as in pulmonary consumption, that is, debility. This may be occasioned by a great discharge of pus, by great and continued

pains, so as to affect the stomach, and hence cause a very sparing quantity of nourishing food to be taken by the mouth, or, as mostly happens, by both of these causes combined. But it has been stated by some, that the hectic fever in pulmonary consumption is different from that observed to be occasioned by other diseases ; and I conceive, that in the latter there may be much more variation than in the former. In phthisical patients, when hectic fever is thoroughly formed, there is, unhappily, very often a cause constantly occasioning it either to be stationary and unvaried for some time, or to increase ; but where it depends upon a discharge or pain, or both, these may often be decreased and alleviated, and through such diseases in general there are some variations of that kind. As therefore, these causes vary in their action, so the disease may by no means be so regular as in pulmonary consumption, and give rise in the attentive observer to some doubts respecting the exact similarity of the diseases. In cases where hectic fever is removed, as often hap-

pens when it arises without mesenteric obstruction, during the patient's progress in amendment, it appears to differ from that in which the disease ends in death, even though the affections may be of the same kind. Now, in the manner stated, I conceive that difference of hectic fevers noticed by authors to arise.

SECT. XIII.

ON THE CURE TO BE ADOPTED IN PULMONARY CONSUMPTION, GROUNDED UPON THE ABOVE CONSIDERATIONS.

In endeavouring to point out the true cause of pulmonary consumption, I have probably not been able to exhibit it as a much less formidable affection; though, should my observations have tended to shew its real nature, some practical benefit may possibly result from them. In considering the disease as originating from an obstruction of the mesenteric glands, the mode of

cure to be adopted must have for its object the removal of that obstruction; and as in such cases the glands have been found in a state of induration, this, or some morbid action tending to it, may be viewed as the cause of the obstruction.

As all inflammations of the glands are preceded by indurations in them, we may with some propriety conclude, that those indurations, during a considerable time *, differ only from inflammations by being in a less inflammatory state. After having come to this conclusion, we may next consider the nature of inflammations; and though this is a subject which I shall not dwell upon, yet I may infer from the increase of bulk in the inflamed parts, that more fluids are detained in their vessels than in a state of health. The next consideration will be as to the mode of cure; and the first obvious reflection on this subject

* As indurations of the glands end also in scirrhus, after they have remained for a considerable time indurated, a scirrhus affection of the glands may probably take place.

is to remove the irritating causes ; the next, to get rid of the increased quantity of fluids in the inflamed parts. If this is to be attempted by discussion, in local inflammations, such as I consider the disease of the mesenteric glands to be, the modes of cure adopted are, to unload the vessels by topical bleedings, to heighten the contractile power in them, to increase their action, and to determine the fluids from the parts affected. The two first intentions cannot be answered on account of the situation of the mesenteric glands, but the latter may reasonably be attempted. For an increased action may be produced by exciting an increased motion in the contiguous parts, which may be effected by the use of emetics and purgatives, which promote a greater motion in the intestinal canal, and from their contiguity, in all probability, communicate some of it to the mesenteric glands. And as I conceive that emetics not only excite greater motions in the intestines, where the glands are most affected, but produce a determination to the external

parts, and appear to me to cause in no wise so great a debility, I should recommend the general use of them in preference to purgatives.

That even gentle emetics may excite the anti-peristaltic motion of the intestines to some distance, may be inferred from the following instance.—A lady was taken with sickness in the morning, where I happened to be in company ; and, in similar circumstances, she was accustomed to have recourse to emetics. As there were none at hand, I recommended some warm water. By this means she vomited up the small quantity of breakfast she had taken, and afterwards some pure bile. On that account I conceived, as the stomach was empty, that she might dispense with a vomit ; but to my surprise, in the course of half an hour more, the sickness returned, and she vomited up what she had taken the preceding day at dinner. That the contents last discharged by vomiting, in this case, were beyond the duodenum, must be evident ; for otherwise the

bile could not have been evacuated pure before the last vomiting: they had, therefore, returned into the stomach again by the anti-peristaltic motion of the intestines.

As by this instance it is evident that very gentle emetics excite a contrary motion of the intestinal tubes, we clearly have it in our power to increase that motion to a considerable distance through them; and it is probable that the action excited in the lacteals by this means, and communicated to the mesenteric glands, is of the same kind; as we have very convincing proofs of the absorbent vessels being capable of a retrograde motion, in the statement and opinion of Dr. Darwin on this subject*. We may therefore conclude that emetics, in obstructions of the mesenteric glands, not only excite a greater action in them, and determine to the surface, and by that means tend to cure the obstruction, but that, by causing a retrograde motion of the lacteals, they occasion a force to be exerted through the

* Zoonomia.

glands, towards the intestines, which may probably have a considerable influence in removing the disease.

I do not hold up the proposal of employing emetics as in any wise a new remedy in consumption. In the beginning of the disease they were advised by Etmuller, and their frequent exhibition has lately been made the chief object of two respectable publications* ; the authors of which have recommended the use of emetics very strongly, upon the grounds of their own experience. But I may with great truth affirm, that the practice has been as yet little employed by the faculty in this country through their recommendation. The reason of this evidently is, because the disease in the lungs is considered as the primary affection, and is thought to be of an inflammatory nature ; and the authors alluded to have delivered too general and indetermi-

* Symonds on Consumption.—Read on Consumption.

nate theories, respecting the mode of action of emetics in consumption, to impress the mind, already biassed by other opinions, forcibly with the truth of them. But if the theory of the disease which I have stated be admitted, there will be a determinate cause to be removed, which appears to be within the influence and probable operation of emetics. In this view, therefore, the experience of others respecting their beneficial effects, though given from erroneous theories, are strong encouragements to their use.

The cure of pulmonary consumption is sometimes effected by the means of pregnancy, without the aid of art. This state of the female has been long acknowledged to retard, and sometimes to cure, consumption. And if it should be admitted that emetics retard or cure the disease, it would be reasonable to conclude, that the sickness and vomiting in the first months of pregnancy occasion the salutary effects known to ensue

from that state of the female under pulmonary consumption*.

Though I have not been in any public employ where I could make such numerous trials, as to decide positively upon the general advantages of emetics, since I have recommended them, from a change of opinion respecting pulmonary consumption, yet, from the small private practice which has fallen in my way at my present station, I can make the following statement: that though I have not seen any cases of phthisis until they have been considerably advanced, I have never exhibited emetics without a temporary good effect to patients labour-

* No observations can more effectually refute the notions that some practitioners have formed, that frequent emetics may be prejudicial in consumption, by increasing the inflammation in the lungs, or by weakening the tone of the stomach, than an attention to the effects of pregnancy. For, during that state, phthisis is known to have been sometimes cured, and mostly retarded; and though in the first months there is generally a considerable sickness and vomiting, yet, as the disease is known to be mostly amended, they can evidently neither increase the inflammation in the lungs, nor cause a serious disorder of the stomach.

ing under that disease ; that in such cases I am positive they have never increased the disease in the lungs ; that though I have never seen a cure effected by them, I have observed the disease to be much retarded ; but in no cases, in which my advice has been asked, has that fair trial been made of them that I should have recommended, had I been consulted for a greater length of time. And from the advantages I have observed to arise from emetics in consumption, I should have very flattering expectations of effecting a cure in the beginning of the second stage. But the greatest practical advantage that I conceive can possibly be derived from emetics, must be in the incipient stage of consumption ; and though they have been advised by others, they have mostly been directed in the latter stages of the disease ; but, according to the opinion which I have delivered, the cause of the disease, for the removal of which I advise emetics, is in action the very moment the disease commences, even before any cough is observed ; and if that cause can be re-

moved in the way I have stated, no suppuration in the lungs nor hectic fever will ensue. Within the year, I have directed emetics to be given in two cases, where the symptoms led to a suspicion of incipient consumption, with success. In one, pains of the chest, with difficulty of breathing, a dry cough, and fever in the night, succeeded typhus fever. In the other, the patient was of a consumptive make and costive habit; she complained of pains in the stomach and bowels, with cough, and a tightness in the chest. After evacuating the bowels in both cases, emetics were given every second or third day, and the diseases vanished.

Although it is probable that gentle emetics given at the intervals of two or three days in the incipient stage of consumption may remove the disease, if the occasional causes can at the same time be avoided, yet when the disease has arrived at the second stage, I should by all means advise a more frequent use: and an emetic taken every day, as recommended by Dr. Reid, would, in my

opinion, not be too often. It is probable, however, that nauseating doses of medicines may have as good or better effect, provided they could be given so as to imitate the sickness in pregnancy, and could be continued for a longer time than the operation of emetics. But if the disease had been long formed, and did not give way to the common vomits, or nauseating doses of medicines, it would be proper to employ the strong emetics; for it is not the operation of unloading the stomach that is the principal object, but to excite such a motion in the intestines as may remove the mesenteric obstruction.

If the obstructions in the mesenteric glands were nothing more than a species of inflammation, we might mostly be sanguine in our hopes of removing them; but in such as are predisposed to the disease, this state of the glands may have continued in a greater or less degree for many years, and may at last have formed an insurmountable scirrhus. In such cases, therefore, we

have no room to hope. But this state of the glands cannot be readily detected, and though a consideration of the possibility of it may render us less sanguine, yet it will not be a sufficient reason in any case not to attempt a cure.

Though I conceive the exciting a considerable action in the stomach by emetics to be more proper than purgatives in pulmonary consumption, yet I am not convinced but that purging may be found a very proper remedy; and if a patient should be averse to emetics, or should not wish to take them so frequently as the practitioner may advise, then purgatives may be properly substituted. For it seems probable that, by the use of them, the same effects in respect to the motions in the bowels, and to the retrograde action of absorbents, are produced as by emetics, as is instanced by cases of spontaneous and excited purgings, related by Dr. Darwin*. In this way only can we account for the beneficial effects of purgatives in dropsy. Indeed, the medi-

* Zoondmia, vol. I, pages 340, 341, &c.

cines which can excite a considerable motion, either by vomiting or purging in the intestines, probably cause a retrograde motion in their lacteals and internal lymphatics.

We have heard of patients recovering wonderfully from the last stage of consumption, without any medical aid. This effect, I conceive, may have been brought about by the purgings which happen in the latter stage of phthisis. That Sydenham must have observed good effects from purging in consumption, I cannot doubt, by the recommendation he gives of it. In speaking of the treatment of this disease, he says, “*Sin vero tussis his remediis haud cessaret (præcipue autem si febrim comitem habeat, vel si a peripneumoniâ aut pleuritide originem ducat) tum ineptum fuerit pectoralibus fidere; sed venæ sectione et catharsi debellanda est.**”

I hope I may be excused, in mentioning

* Sydenhami Op. Processus Integri, p. 630. Ed. 8vo. Lugd. Batav. 1741.

the practice of purging, as accompanying the exhibition of a well-known nostrum for the cure of pulmonary consumption. In this operation, it is evident, much confidence is placed by the vender of this medicine, who recommends the purgative pills, used for that purpose, to be frequently exhibited, although they operate very powerfully. A fact such as this, connected with a disease of much importance to mankind, ought not, I conceive, to be disregarded, because it is not collected through the regular channel of the profession. For if the person alluded to did not find advantage in exhibiting so powerful a medicine as the purgative pills, he would not run the hazard of his reputation with the public by their exhibition. Besides, as we are indebted in many parts of different sciences to chance for useful discoveries, we may not always find those to whom they have occurred to be remarkable for their industry or penetration. We should, therefore, be blameable to reject any useful piece of knowledge, because it had in some practical way occurred to a person who could have no pretension

to a discovery upon the grounds of scientific inquiry.

If I were to advise purgatives, they should be such as would act quickly and briskly upon the smaller intestines, as near them is the seat of the disease ; and for that purpose, perhaps, a large dose of calomel, joined with some other cathartic, would be a proper remedy. But, on account of the debility produced by purgatives, they cannot be so often employed ; and, on that account, they appear to me not to be so eligible as emetics.

Another mode of relieving the obstruction in the mesenteric glands is horse exercise. This, by agitating the abdominal viscera, may communicate so much motion to the mesenteric glands as to effect great good. It is a favourite remedy, in pulmonary consumption, of the sagacious Sydenham, whose practical observations are very valuable legacies to medical practitioners. But any exercise which can be performed

without much fatigue, and which tend to agitate the bowels, may be employed; and I think that occasioned by a moderately rough chaise might be used with advantage.

Swinging is a remedy which may answer two intentions. It may be of use in causing a nausea, and certainly tends much to agitate the bowels. And this and the other exercises may be employed as auxiliaries to emetics in consumption.

But the remedy which combines with it all the efficacy of exercise, and the power of procuring a proper sickness (in persons disposed to sea-sickness), is that of sailing. But for this purpose, long voyages may not be the most proper; for, after a little while, the motion of the vessel becomes unavailing to excite sickness.

It therefore appears to me, that a voyage of four or six hours, four or five times a week, if it causes sickness, would be at-

tended with more salutary effects to consumptive patients, and imitate more the sickness in pregnancy than could be excited by any other means.

Some practitioners may probably think, that consumption, arising as I have stated it, may be a scrofulous affection, and wish to employ some medicines that are supposed to produce benefit in the latter disease by a specific action; such as cicuta and mercurials. I have employed them both singly and combined, and never found them of any advantage; and I should be very averse to using mercurials again, except as purgatives; for I have found them to be mischievous in increasing the debility and hectic fever, which I should account for by conceiving that they promote greater absorption of the solid substance of the body in consumption, as they certainly promote that action when given in other diseases.

Hitherto I have only recommended such remedies as seem likely to remove the primary cause of phthisis; and, without that is done, I conceive all other means can only

tend to relieve the sympathetic affection in the lungs, and may properly be considered as palliative medicines. As these have been much discussed by authors, I shall not dwell upon the subject: but I have to state, that I should think it proper to relieve every urgent symptom in the lungs: keeping this consideration in view, to debilitate the body as little as possible. On this account, bleeding should be sparingly employed; because, when taken away, the blood will be supplied again, in a great measure, by the increased absorption of the solid substance of the body, and produce greater debility, and its connected consequences. In the use of opium I see no detriment, if the bowels are kept open, nor can it tend to any bad purpose by increasing the disease, or counteract the effects of the active means I have recommended: and it is a valuable medicine in alleviating the cough and spasms in the chest; and in that way by retarding inflammation.

If the obstructions in the mesenteric glands were removed, the disease in the lungs would then, I conceive, be as cu-

rable as other inflammations and suppurations in those organs. Or, if they should not be wholly cured, if the discharge of matter was not very considerable, the patients might live for years with a purulent expectoration. But the predisposition to consumption is so strong in some habits, that though the effects occasioned by it, and the exciting causes, may have been removed, they are very liable to be reproduced. In those, therefore, in whom this unfortunate affection should have existed, or in whom there is a strong disposition to the disease, it requires much vigilance and caution to prevent its gaining a fatal footing. But it may be a source of consolation and hope to those who are in the unhappy predicament of being liable to the disease, or to a return of it, and whose efforts are directed to prevent it, that by increasing years that baneful disposition may be conquered; and that a long life and comfortable enjoyment of it may succeed the dreads and apprehensions of their younger days.

END.

APPENDIX.

I WAS induced to cause the preceding pamphlet to be printed, at the beginning of the present year, by the circumstances there detailed, which appeared to me worthy of public attention ; having then experienced, in some instances, the good effects of emetics, which, when given in the incipient stage of the disease treated of, I conceived, might be attended with advantage. The small portion of experience, I then professed to have had, conformable to the practical means I recommended for the cure of pulmonary consumption, I hoped would have been excused, as it has been long admitted, that this disease has mostly frustrated the means, generally, adopted for its cure. The pamphlet has, however, been delayed pub-

lishing by circumstances with which it is not worth while to trouble the public*.

From the time of the printing of the pamphlet to August, I inspected the body of only one phthisical subject.—In this, the mesenteric glands were allowed to be diseased, though, by some persons present, they were not considered as enlarged: the mesocolic glands exhibited a healthy appearance.

In August last, I was directed to attend the sick in Deal military hospital; it having admitted many medical patients, from the camp, then formed, at Barham Downs. In this employ, I have had opportunities of treating many phthisical cases, and of inspecting the bodies of some who have fallen victims to the disease: the result of which,

* This was written in December 1799. I have stated the time at which the pamphlet was printed, as many opinions respecting pulmonary consumption have been promulgated from that to the present period: some of which approximate to some of the observations and theories I now offer to the public.

with some other matter, I present in the form of an appendix.

CASE I.

Upon my first visit to the hospital, I found a patient very much emaciated with spitting of pus, hectic fever *, night sweats, and all the symptoms of a well-marked phthisis.—This was a case, that appeared to me to be beyond all art ; I, therefore, ordered medicines, merely to palliate the symptoms. The patient died, in a few days, after my attendance, being affected with spasms in his chest, as is usual in the last stage of consumption, and with orthopnœa. The body was opened by my mate, Mr. Jordan, now assistant surgeon of the forty-sixth regiment, in presence of Mr. Bond,

* When I speak of hectic fever, I wish to be understood to mean the disease described under that name by Dr. Cullen, under the head of pulmonary consumption (vide Cullen's First Lines), whose strong characteristics are, febrile heat and quick pulse in the day time, unaccompanied by a foul tongue, with night exacerbations of fever, terminating in sweat.

surgeon to the Forces, myself, and several other gentlemen of the hospital. Being acquainted with my ideas regarding pulmonary consumption, Mr. Jordan first laid open the abdomen. Upon viewing the appearances there exhibited, the following singular ones immediately struck us. The stomach and liver covered almost the whole of the intestines, they being pushed down by the diaphragm, which was considerably convex towards the abdomen. The liver was perfectly healthy. Upon examining the mesenteric glands, they were judged to be diseased; the mesocolic glands appeared healthy. From this part of the inspection, I conceived I should add to my stock of proofs, regarding my opinions, and I expected to find tubercles in the lungs. Upon opening the chest, each cavity appeared full of water. The lung, on the right side, seemed sound, but extremely small, it not appearing more than a tenth part of its natural size. There was found in the water of this side a quantity, equal to half a pound, of a white fatty substance, supposed

to have been coagulable lymph exuded by inflammation. On the left side of the thorax, the pericardium was found distended with fluid, and the lung covered with water. This lung was also diminished to, at least, a third of its natural size. A quantity of pus was found in the bronchia of the left lung; but there were no appearances to indicate the absolute presence of tubercles in it, though there was a degree of inequality upon its surface. I have no positive information respecting the beginning of pulmonary affections in this case; but conceive they were attended by considerable inflammation, as the substance, supposed to be coagulable lymph, seems to indicate. It is probable, that from the termination of the inflammation, the water gradually accumulated, and, by its pressure upon the lungs, caused an action, which promoted their absorption; and by the same means, even though tubercles were formed, they might be absorbed. It is likely, that the patient must have laboured under degrees of this disease for some time, gradually increasing to the state

described. He died, as highly emaciated as any phthisical patient; and his death might probably be owing to the circumstances I have described, consequent upon the emaciation in pulmonary cases. But the principal use, I propose to make of this case, is to exhibit an instance, in which there was a surprising deficiency of lung, consistent with life; and to draw this inference, as in at least ninety-five cases in a hundred of pulmonary consumption, there are more of the lungs fit to perform the functions allotted to them, than in the present case, that the destruction of part of the lungs by tubercles, or the rendering of part of them unfit for the office of respiration, as happens in this disease, can seldom be the cause of death.

CASE II.

— Woodler, aged thirty years, was in the hospital when I first attended there. He was considerably emaciated, had hectic fever, and but little cough; he had

just been relieved from diarrhœa; he was taking an infusion of quassia, and considered himself something better. A renewed attack of his disease was accompanied by violent diarrhœa, which continued, with short intervals, to his death. The principal remedies, in his last attack, were directed to moderate the diarrhœa. He died highly emaciated. Upon opening the abdomen, the mesenteric glands did not appear diseased, in so large a proportion, as in the other bodies I had inspected; but the glands in the mesocolon, attached to the arch of the colon, were in a very morbid state. The lungs, upon inspection, appeared very full of tubercles.

CASE III.

— Motley was received into the hospital August 25, and died November 24. He had some pulmonic complaints, which did not immediately impress me with the idea that he laboured under phthisis. After a short stay in the hospital, his case be-

came strongly marked. He now complained of considerable pain in his bowels and chest, expectorated pus and mucus, had hectic fever, and a glandular swelling on his neck.

He was treated with emetics to no effect ; being prone to diarrhœa, vomits seemed to promote it. Upon inspecting the body, the mesenteric glands were found considerably diseased ; the mesocolic glands, in the arch of the colon, were healthy ; but the glands, in the small arch of the stomach, were indurated. There were many tubercles formed in the lungs. In this case the colon, through its course, was constricted,

In all the subjects I have inspected, who have died of pulmonary consumption, there was hardly any cellular substance within the laminæ of the mesentery and mesocolon ; and on this account, the glands might appear larger. But I chiefly dwell upon the circumstance of their hardness, which is certainly entitled to the name of induration,

Their feel was very opposite to the description of their healthy state*.

From the appearance of the mesocolic glands, in Case II. it must be evident, that the statement in the pamphlet, in which I have endeavoured to account for the absorption of fluids in the large intestines, and the costiveness of the body, cannot in every case be correct. This, besides, may seem to invalidate, in some respects, my opinion, that the disease of pulmonary consumption is connected, as its cause, with the affection of the mesenteric glands only. The dissections in which I have been concerned, prove, that various glands of the abdominal viscera are occasionally diseased, but the mesenteric glands invariably. I am, therefore, induced to conclude, that the emaciation in pulmonary consumption is caused, principally, by the affections of the

* Sed inter laminas mesenterii, ad divisiones vasorum reperiuntur infinitæ glandulæ, generis conglobati, molliores tamen, spongiosæ, tela cellulari succi plena factæ, membrana externa minusquam alibi dura tectæ, numerosissimis sanguineis ramulis pictæ.

Vide *Primæ Lineæ Physiologiæ Alberti Halleri.*

mesenteric glands in such cases, on account of their situation, office, and constantly diseased condition, with the exception of a very few instances.

In Case II. the disease in the mesenteric glands did not appear so general, as in the other similar cases; but the absorption of chyle must have been much impeded by this less degree of disease, and the coagulation of much of it, as I have stated, must have been the consequence; and this in time, would alone have caused the usual emaciation. But, in the case alluded to, the emaciation was certainly promoted by the diarrhœa accompanying the disease, which might be excited and continued, in some respects, by the diseased glands in the mesocolon * not being capable of their healthy action. The train of actions, as stated in

* I find my opinion, as given in the pamphlet (vide page 63) respecting the infrequency of disease in the mesocolic glands, accord with the observations of a celebrated anatomist, who says, in speaking of them, "These glands are not so liable to schirrus as those of the mesentery." Vide Anatomy of the Absorbing Vessels, by William Cruickshank.

the pamphlet, may probably take place when costiveness accompanies the disease.

Though this is all the additional information I am capable of offering respecting the actual disease of the mesenteric glands in pulmonary consumption, I presume it will be thought to add some degree of strength to the statement I have made regarding the cause of the emaciation, debility, and fatality of that disease. I shall now proceed to describe some other cases, with a view of adding weight to other opinions.

CASE IV.

—— Grant, (now * in the military hospital at Deal), had received a blow, a year ago, upon the sternum. When I saw him first (August 12), he expectorated pus in very considerable quantities, complained of pain and very uneasy sensations in the thorax, with an inability to lie on both sides; he was considerably emaciated, passed very

* December 15, 1799.

restless nights and uncomfortable days, and was troubled with hectic fever. About three weeks after becoming my patient, he informed me of a tumor upon the left side, between the sixth and seventh ribs, and midway between the vertebræ and sternum. I perceived, upon examination, that it contained a fluid, and was connected with the cavity of the chest. It was judged necessary to open the tumor, which was performed by a small opening with a lancet. There was a very considerable discharge from the orifice for many days. It is now three months since the first opening was made; and by this and other openings, more pus has been discharged, in this length of time, than has happened to one in ten of the phthisical patients I have visited. The man is, at present, in much better health, though he has suffered hectic fever, for the major part of three months, since the opening in his side. The hectic has now left him. He says, he discharges about half a pint of matter, daily, from the breast. There is a ready communication with the diseased part of the thorax, through the trachea; as upon inspiration,

when the dressings are off, the air passes through the orifices in the side. A probe has been passed a considerable way upwards, within the thorax; and from trials of this nature, Mr. Bond, a surgeon to the Forces, doing duty at Deal military hospital, conjectures that very little lung remains. From this case it may, with propriety, be inferred; First, That the discharge of matter is not the cause of death in phthisical patients, as neither Woodler nor Motley (Case II. and III.) expectorated matter in any proportion to Grant's expectoration, and discharge of pus, though they both died by a shorter disease, than the latter has suffered:—Second, That as more pus must have come in contact with the air in the case of Grant, than in those of Woodler and Motley, by which it is in a situation to be oxygenated, after which it might be absorbed by the numerous lymphatics upon the diaphragm; it would seem to follow, if oxygenated pus was the cause of hectic fever, that Grant must have suffered more from it, than the other two patients just mentioned; but the contrary has happened:—Third,

From the continuance of hectic fever, the health of this patient has not been upon the decline, but otherwise; some proof that the effects of this fever are not very pernicious.

CASE V.

— Palmer (now * in the general military hospital at Deal) has expectorated considerable quantities of pus for upwards of three months. He has, however, no hectic fever, nor febrile heat; his pulse are seldom more than eighty; he is very little emaciated; is oppressed by considerable cough and difficulty of breathing in the night; but passes the day with considerable comfort. He cannot lie for any length of time upon the right side; and he describes a rolling motion in the chest, in the direction of the diaphragm. This man's disease arose from a blow he received upon the back; and, from many circumstances, he appears to me to be labouring under empyema. His

* December 15, 1799.

case seems to be similar to Grant's (Case IV.); though, at present, there is not an accumulation of pus sufficient to occasion it to point outwards. This is another case, that must strongly militate against the idea of the absorption of oxygenated matter being the cause of hectic. If that was the case, how could this man escape? It is a proof too, that neither pus discharged from the lungs, nor troublesome cough, have a great tendency to death.

CASE VI.

Serjeant Pitt, aged twenty-two (now in the general military hospital in Deal), after using mercury for the discussion of a bubo, was attacked, on the 3d of November, with the usual symptoms of fever, accompanied by slight pains in his chest, and diarrhœa*. His febrile symptoms ceased about the 24th; but his diarrhœa continued some days longer.

* He was sent out of the surgical wards, as labouring under typhus fever.

About this time (November 24), a severe cough came on, with considerable expectoration of mucus, which was soon perceived to be accompanied by hectic fever. From this period to December the 15th, the hectic fever and expectoration, which has evidently been sometimes purulent, have continued; but the latter is much less considerable, at present, and the night sweats seem to have been, sometimes, decreased by a copious discharge of urine. The health of this patient is now (December 15th), much amended.

CASE VII.

Robert Gee, aged seventeen (now in the general military hospital at Deal) was admitted, December 6th. The account of his disease, previous to his admission, is as follows: "Dysentery. He has taken an emetic and salts; has been taking decoction of bark, with aromatic confection; to-day (December 6th) it has been discontinued,

from his being griped. His disease commenced November the 26th."

When I saw this patient, I found he had hectic fever, profuse night perspirations, with a considerable cough by night, but expectorated very little, and was affected with looseness. No pus has been discovered in his expectorations, which have been carefully inspected. It must be evident, that in this case, the most material symptoms of disease were, at first, in the bowels, as the regimental assistant surgeon has stated the disease to be dysentery. But the man, upon being interrogated, says, he had pains in his chest from the beginning of his complaint, with slight cough and scanty expectorations.

CASE VIII.

Benjamin Turner, aged twenty-five (now in the general hospital at Deal), had looseness, with severe pains in the bowels, about

three months ago; and in a week afterwards, he perceived a pain in his chest without cough. The looseness has continued, until within this fortnight (December 15th); about which time a cough commenced, and he now labours under marked symptoms of phthisis pulmonalis, such as emaciation, purulent spitting, and hectic fever.

These cases (VI. VII. VIII.), though they may not be thought to be conclusive, as to my opinion regarding the prior affection of the mesenteric glands, in most cases of pulmonary consumption, must, at least, show a very strong connexion between the bowels and the lungs.—In the two first cases, the morbid sensibility appeared synchronous in the bowels and chest; in the latter, though the man was strictly interrogated, he gave so distinct an account, as to render it certain, that the morbid sensibility first occurred in the bowels. It would be difficult, and require a considerable time, to collect a sufficiency of cases of beginning

consumption, to place out of doubt the priority of disease in the abdominal glands: a conviction of this sort must be sought for, and may, I think, be obtained, by carefully weighing the phenomena of the disease, and anatomical inspections: these are the sources, to which I wish to refer for proofs of the theory I have given.

It must be evident in such an affection as the disease called pulmonary consumption, according to my theory, that expectations of cure, in the majority of cases, could not be entertained. Having first formed my opinion, respecting this disorder, I next, under that impression, proposed the cure of the disease, with a strict reference to the theory. The most obvious means seemed to me to be the use of emetics; and, as my expectations of success were limited, I have suffered, upon the whole, no disappointment. Some cases have succeeded beyond my expectations, while in others, I have formed hopes of cures, that have not been

realized. I can, however, with certainty state, that the plan adopted, of giving emetics, has succeeded much better than the palliative means generally practised. In the incipient stage of pulmonary consumption, I cannot too strongly recommend emetics * ; in the second stage, they also do certainly succeed in many instances; and from what I have seen, I am much inclined to think, in cases of this disease, where they are not beneficial with appropriate food, exercise, and a due attention to the palliation of symptoms, that there is little hope from

* The following authority, whose opinion has been much overlooked in modern times, regarding the advantage of employing emetics in incipient phthisis, may, perhaps, be a strong persuasive to their use, if again brought into notice. After speaking of the mode of operation, it is stated "Atque hoc ritu non tantum plurimos empiricos vidi cum successu felici, sese omnem incipientem phthisin curaturos gloriari, verum etiam ipse ego ratione et experientia fretus sæpissime phthiseos incipientis progressum eodem modo brevi temporis spatio præpedivi. Vomitus ista (præsertim vero æger cum εὐφορίᾳ, et levamine eam ferat, et si sit necessaria) tertio, vel quarto quoque die repeti possit ad tres vel quatuor vices."

Vide *Phibisiologia*, auctore Ricardo Morton, M. D. p. 153.

other remedies *. In no cases have I found ill effects, to cause me to regret the exhibition of these medicines in consumption; but in most, I have seen a melioration of the disease, though too often transitory. In regard to the effects of the practice I have recommended, in the general military hospital at Deal, I can state, that one-third of such as appeared to me to be pulmonary phthisical cases † have been cured; though

* In making this statement, I have not lost sight of the employment of digitalis in consumptions. I have exhibited it, in some such cases, without either success or any effect that could be called an alleviation of symptoms; and am, indeed, a little surprised to find it by no means so manageable a remedy as I concluded it to be, from the accounts of its use in this disease. It may, however, be fair to state, that the cases in which this remedy has been employed have been such as have been under a course of emetics. As far as I may be allowed to judge, I conceive, that the good effects of digitalis in consumption will be found to be derived from its nauseating and emetic qualities. In this view, though I think it an antiphthisical remedy, I conceive, it combines with it other effects that will tend to render it, by no means, a popular medicine in consumptions.

† Since this has been written, I have the pleasure of stating, that the patients mentioned in Cases VI. VII. VIII. Appendix, are cured by the use of emetics. This note was written Jan. 14, 1800.

patients are sent there in all stages of the disease. There is now * a man in this hospital, whose external appearance strongly indicates a proneness to pulmonary consumption, who has been twice cured of the disease: there is another, now * in the hospital, with the same disease, whose cure was so much effected, as to place him under consideration for marching; who, upon being temporarily removed from the hospital, was again attacked with pulmonary affections, which appeared by a bleeding from the lungs. This man is now in a state of disease, from which I entertain little hopes of recovery. In private practice, I have shortly succeeded in some cases, in which, from the symptoms and deaths of relatives by consumption, I have had good grounds to suppose the disease to be incipient phthisis; as also in some marked cases.

I am obliged to two respectable practitioners, in this neighbourhood, for the two following cases, about whom I was consulted.

* December 15, 1799.

Not having taken notes of these cases, I avail myself of their communications, which are to the following effect :

CASE IX.

Mr. Hulke, surgeon, at Deal, states, that he was called to visit George Huggens, aged thirty years, on the 9th of December, 1798, who had been taken ill the beginning of the month. He found the patient with severe head-ache, slight delirium, dark-coloured tongue, diarrhœa, and quick pulse. The disease appeared to Mr. Hulke to be typhus fever, and it was treated accordingly. After the febrile symptoms intermitted in the day time, the patient showed signs of pulmonary affections*. At the time, I visited the patient (December

* The account of this case shows, that there was diarrhœa and subsequent pulmonary affections; which, considering that there is found, by dissections, a disease of the mesenteric glands, and diseased lungs in pulmonary consumption, and such the present case appears to be, may, with some propriety, be concluded to be connected as cause and effect, under the view now exhibited of the disease.

27), Mr. Hulke states, the symptoms to be cough, expectoration of pus, difficulty of breathing, hectic fever, with profuse sweats; a continuance of diarrhœa, weak pulse, with great debility and emaciation, which appeared to him to indicate a strongly marked phthisis pulmonalis. To relieve the local affection, a blister was ordered to be applied to the chest; and, on account of the great debility, an infusion of cinchona with opium was prescribed, with a balsamic anodyne draught, to be taken at bed-time. This plan was persisted in, until January 5, 1799, when Mr. Hulke states, that the pulse were stronger, and the appetite better, but all the former symptoms of phthisis remaining. I then recommended the use of emetics, which were exhibited on the 5th, 7th, and 10th, and afterwards twice a week, and directed the other medicines to be persisted in.—I saw the patient, after taking three emetics, on the 12th, and found him so much better, as to recommend a continuance of the plan, which he strictly pursued to February 11, when he discontinued all

medicine, being perfectly recovered. Mr. Hulke has frequently seen this man since, and has never heard of any return of his alarming complaint. This man is short, and of a slender make, and follows an occupation which exposes him much to the inclemency of the weather; he is said to be accustomed to drinking spirits.

In a postscript, Mr. Hulke states, "From the evident success attending the above practice of administering emetics frequently, I have been induced, in a number of cases of pulmonary affection, which have come under my care, to pursue the same plan of cure. In several, the relief has been very conspicuous, so much so, as to determine me to have recourse to emetics, wherever symptoms of phthisis appear, and the debility of the system is not too great."

CASE X.

Mr. Curling, surgeon at Sandwich, states, that he was called to visit Mr. John Fowle,

of that place, on the 6th of October, 1799. He found the patient with fever, cough, and a considerable expectoration of mucus; his tongue was covered with a white fur, he had a loss of appetite, and was considerably emaciated and debilitated. He had then been troubled with a cough, for the space of a fortnight. An emetic was prescribed to be taken immediately, anodyne and pectoral medicine were administered, and he was directed, three days before I saw him, to take an ounce and half of decoction of bark three times a day.

On the 17th I saw the patient with Mr. Curling, who thought him getting worse daily. At this time he was much emaciated and debilitated; he had a hollow troublesome cough, expectorated mucus streaked with blood, and had hectic fever, with night sweats; his tongue was now not at all furred, his bowels were open, and his appetite was impaired. On account of the appearance of blood in the expectoration, it was thought advisable to have immediate

recourse to vomiting ; the patient was therefore directed to take small doses of antimonium tartarisatum, to excite sickness for some hours in the day, and an anodyne medicine in the evenings : he was likewise directed to take milk in the morning for breakfast, with a scruple of nitrum in it, animal food of easy digestion, with light puddings for dinner ; and was recommended the use of horse exercise, which he had before employed. On the 24th, I again visited this patient, when he appeared in many respects mended.—I, then, directed an emetic to be taken every other morning, and medicines, to relieve the cough, composed chiefly of spermaceti, an anodyne draught at night, and to persist in the same food and exercise as before. He continued on this plan until the 7th of November, when he was considerably recovered, and Mr. Curling states, that he is now (December 15) perfectly well. The father and sister, the latter aged seventeen years, died, some time ago, of pulmonary consumption.

CASE XI.

Mr. Macheson, a respectable young surgeon at Deal, has favoured me with the following case :

After stating, that since he had an opportunity of perusing my considerations on consumption *, he had been induced to administer emetics more frequently in pulmonary affections than formerly, and in several cases with the best success ; he then gives the following instance, as the most striking that has occurred to him :

Mrs. B. aged forty, was attacked with pyrexia, on the 10th of September, 1799, which appeared, in the course of the disease, to be an attendant upon typhus fever, which she was supposed to have caught from her son, who died of that disease a fortnight before. When Mr. Macheson was sent

* A few copies of the pamphlet were presented to the practitioners in and about Deal, upon its being printed.

for, on the 14th, the patient had a feeble pulse, 110 in the minute; the tongue dry, with a black crust upon it; severe pains in the head, and a costive state of the bowels. The symptoms of fever continued unabated, to the 23d, when there was a remission, attended with diarrhœa. About this period, she complained of pain over the chest*, dyspnœa, cough, and slight expectoration of mucus, which continued increasing; and by the 2d of October, there was a purulent expectoration, with a regular hectic at night. On the 14th of October, the disease seemed daily increasing, notwithstanding the use of blisters, expectorants, and anodynes. Mr. Macheson continues his relation, by saying, that, at this period, he had little hopes of the recovery of this patient, considering the disease to be phthisis. He, however, now determined

* In this case there seems, by the account, to be something like a marked connexion between the bowels and lungs. It is stated, that diarrhœa happened, with a remission of fever, and that pulmonary symptoms came on about the same time.

on giving half a grain of tartar emetic*, every other day; which was persisted in for a week, when the disease appeared to be arrested in its progress. This encouraged him to proceed, and the remedy was continued, for a fortnight longer, with an evident amendment in every symptom. Since that time, the patient has had recourse, occasionally, to an emetic, when there were any signs of pulmonary affection returning, with the usual good effect.

The following may be taken as a concise view of the arguments in support of my theory. I take it for granted, that pulmonary consumption is connected with a disease of the mesenteric glands: this disease has been found to be an induration of them†,

* Though not stated in the narrative, by an inquiry from Mr. Macheson, I find that this dose of antimonium tartarisatum always caused vomiting in this case, which was the intention in giving it.

† In six cases of dissections (as mentioned in the Pamphlet and Appendix) of pulmonary consumption, the mesenteric glands have been found indurated; in this account, however, I have included the case marked Case I. Appendix.

which must cause them to obstruct the passage of chyle into the blood. Now, if this latter disease was unconnected with pulmonary affections, patients labouring under it would gradually grow so highly emaciated, as, at last to lose their existence, There is, therefore, something in a great degree of emaciation, which is inimical to life. The same sort and degree of emaciation also, generally, happens in fatal pulmonary consumptions. I shall, therefore, take it for granted, that the cause of emaciation in pulmonary consumption is, somehow or other, the cause of death *. This emaciation, or cause of death, in the latter disease, has been attributed ;—first, to disease in the lungs, rendering them incapable of performing their entire functions ; secondly, to an expectoration of matter ; thirdly, to hectic fever ; or, fourthly, to all these circumstances combined.

I shall now endeavour, by facts, to show these supposed causes of the fatality of pul-

* I have stated a more immediate cause of death in consumption, in the Pamphlet, in the Note p. 10.

monary consumption to be inadequate to their attributed effects. In regard to the first assigned cause, I may object, that there is no measure observed between the progress of emaciation, and the urgency or mildness of the pulmonary symptoms ; that there are many cases, in which they appear to be in a contrary proportion. We often see considerable emaciation, with mild pectoral symptoms, and the reverse. Further, in the case of Grant *, we have an instance of a deficiency of lung ; but this man, under such circumstances, from a state of emaciation and debility, is become in better health. The inference then, that I should draw, is, that his deficiency of lung is not only consistent with life, but with health. Now, let us consider the account of incipient phthisis †, by Dr. Cullen, an accurate observer of disease. By this, we are informed, though the patients become leaner and languid, that they are, sometimes, so little affected as to deny the existence of uneasy feelings. As, in such cases, we do not

* Vide Appendix, Case IV.

† This account is transcribed in the Pamphlet, page 13.

expect to find a deficiency of lungs, it will be fair to place, in this state of disease, the incapability of any parts of the lungs performing their functions, as equal to so much deficiency: as the loss of a limb may be considered as equal to the loss of the entire functions of such limb. Now, under this comparison, we shall hardly be inclined to conclude, that there is a more deficient performance of the functions of the lungs, in those cases of incipient phthisis than in the case of Grant. But, if we admit it to be equal, which is probably rating it too high, as the latter seems to be consistent with health, the former cannot be supposed to be the cause of a directly contrary effect. It may be concluded, therefore, that the leanness *, in incipient phthisis, is not caused by the morbid state of the lungs. The next supposition is, that emaciation is caused by an expectoration of matter. Now, though to every one it is known, that no matter is expectorated in the very beginning of the disease, and that emaciation then

* By leanness here, as well as in Dr. Cullen's account, is meant incipient emaciation.

commences, yet the cases of Grant and Palmer * must tend to prove, that not much emaciation ought to be attributed to that cause, even under a supposition that pus was discharged, from the very commencement. To the supposed effects of hectic fever, as causing the emaciation, I oppose a consideration of its commencement †, as mentioned in the pamphlet, its comparative effects †, as there stated, and the case of Grant, who, though labouring under hectic fever, for a considerable time, became gradually in better health. And to its supposed cause being oxygenated pus, I oppose the cases and considerations alluded to below ‡. Lastly, as the above assigned causes singly appear to be inadequate to cause the emaciation, and are jointly not adapted to the time of its commencement, it may reasonably be inferred, that combined

* Vide Appendix, Cases IV. and V.

† Vide Pamphlet, p. 15, 16, 17, 18.

‡ Case related in Pamphlet, p. 5.

Section V. Pamphlet.

Case V. Appendix.

Case VII. Appendix.

Case X. Appendix.

they do not produce the ascribed effect, particularly, as the case of Grant clearly shows, that a deficiency of lung, discharge of pus, and hectic fever, did not much oppose a melioration of disease, from a state of considerable emaciation. But in a disease, where many causes exist that may seem to effect its fatality, but are of uncertain and ambiguous effects; and where there is uniformly one discovered, by whose known effects, the functions of the body can be so disturbed as to cause death, unconnected with any other morbid phenomena; it is surely reasonable to give the chief preponderance to the action of this latter cause. Such, I conceive, ought to be the state of the decision, respecting the causes of the fatality of pulmonary consumption. The only matter of doubt then must be, at what time the mesenteric affection generally commences. For if it could, in any way be proved, that it begins with the commencement of the disease, it would be absurd to seek for any other rationale to account for the progress and fatality of that disorder. The insufficiency of the other supposed causes of

death, the phenomena of the disease *, and the cases † below alluded to, render its early commencement ‡ probable. But, though I conceive my evidence to be tolerably complete, yet I know, that new opinions on old subjects will be opposed by prepossessions, which time, observation, and experience, can only overcome.

* These phenomena, are particularly, the early commencement of emaciation ; its progress, though joined with mild pectoral symptoms ; and the death of patients generally in a highly emaciated state, whatever may be the pulmonary affections.

† The Cases alluded to are,—Case in the Pamphlet, p. 5 ; Cases VI. VII. VIII. IX. XI. Appendix.

‡ What has been here said, in regard to the emaciation, may be more strictly applied to pulmonary consumption commencing without any previous indisposition. But the general deductions I have made cannot apply in the state of disease and death, as related, page 3 in the Note, last paragraph, Pamphlet ; which cases I conceive to be rare. Nor can so much of the emaciation be attributed to mesenteric obstruction when pulmonary consumption succeeds previous diseases, whether of the lungs or of the abdominal viscera, &c. as stated in part of Section XI. Pamphlet. But, that in most cases of pulmonary consumption, the high and fatal degree of emaciation ought to be attributed to mesenteric obstruction, is what I contend for.

