Consumption curable, a practical treatise to prove consumption a manageable disease : with cases successfully treated, under a new mode in this country / by J.S. Rose.

ERRATA.

Page.

9, Line 5, for "assertions," read assertion.

11, Last line, after "[illegible]ate," read from.

15, Line 7, for "natura," read naturæ.

18, Line 4, for "end," read ends.

22, Line 8, for "loose," read lose.

22, Last line, for "is" read he.

25, Line 19, for "hydatics," read hydatids.

29, Line 21, for "phenomena," read phenomenon.

33, Line 5, for "have," read has.

34, Line 23, for "is," read are.

36, Line 2, for "medical," read medicinal.

36, Line 13 and 20, for "raising," read rising.

48, Line 13, for "is," read are.

70, Line 4, for "was," read were.

84, Line last, for "dilitation," read dilatation.

104, Line 15, for "to," read in.

CONSUMPTION

CURABLE,

A

PRACTICAL TREATISE

TO PROVE

CONSUMPTION

A MANAGEABLE DISEASE:

WITH CASES SUCCESSFULLY TREATED, UNDER A NEW MODE IN THIS COUNTRY.

BY

J. S. ROSE, M. D.

"Nature as well as art, operates to this end."

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PREFACE.

What I now offer is an unprejudiced theory, confirmed by happy success in practice. And this I think must ever be the most effectual method to arrive at truth.

I am sensible of the force of prejudice, and also the many difficulties attending an attempt to eradicate long established errors, though supported by men of fame. Yet I have ventured on the task, and in obedience to duty and truth, have pointed out many absurdities in practice, which must appear evident to every candid and unprejudiced reader.

But it must be remembered by all, that in pointing out the result of errors we do little,—if we fail to amend them. This has been my chief object; and if writing what I must consider strictly true, be not a breach of modesty, I am decidedly

of opinion, that this treatise will contribute more to the welfare of my fellow creatures, than any book I have seen or heard of on the subject of consumption.

Where, I may ask, would surgery have looked for its improvements, had not the gigantic minds of Hunter, Bell, Home, Abernethy, Physic, Dorsey, Lawrence, and Parrish, with a host of others, among the departed, rendered clear the supposed mysteries of nature's operation in the cure of disease, and by a well-timed application of art, shortened and speedily removed the cause of suffering?

The discoveries of these great men are too well known to need repetition here.

Happily there are those among us still who possess the same zeal for research. Soon after the great operations of M. Heurteloup, Leroy, and Civiale, for the destruction of calculus in the urinary bladder, we found many of our American surgeons performing the same operation. The success of Randolph, McClellan, Gibson and others, is well known.

The division of tendons for the cure of deformity, was looked upon—but a few years ago—as an operation impossible; but after Delpech had cut the tendo-achillis, and cured club foot, the division of tendons was soon considered not only safe, but indispensable for the cure of deformity. Dr. Mütter, of our City, is now almost daily performing this operation with perfect success. Dr. Togno, however, deserves, in my opinion, the credit of introducing this operation to Philadelphians.

The daily papers of 1836 or 7 contained a hoax, that was *then* considered as ridiculous as the great moon story of New York. They asserted that a Physician would spend the summer near the springs at Saratoga, who could cure squinting. In conversation with a medical man in our city, with whom this matter was discussed, he exclaimed: This cannot be, "Till Birnam wood remove to Dunsinane."

To continue the language of Shakspeare, we may add, "And now the wood doth move," for this operation has been performed on more than

four hundred persons by Dr. Crossman, with perfect success,—not requiring for each case more than from five to twenty seconds.

After all these facts, staring us full in the face, I cannot imagine it will be found difficult to believe, what has heretofore been considered doubtful, the curable nature of consumption.

INTRODUCTION.

It may appear somewhat curious to many of my readers, when they find that in my first attempt at authorship, I have selected a subject that will doubtless be received by many as fiction. The constant assertions of most, if not all of the distinguished members in the medical profession, as well as some of the most learned out of it, has been "Consumption cannot be cured." What! cure Consumption! take down the very peg upon which the medical profession have always hung their apology for failure, in the cure of disease? Yes, even so! The lawyer twists and turns in every way, when he is cast in a case at the bar, to form some excuse to his client, and finds a variety: such as, you did not tell me that or this fact before; or, you should have had the other witness here,—or, the judge was partial—or, perhaps he knew no better; and we must try to have him removed from the bench, &c. &c., thus

satisfying the client. But the physician declares, that tubercles existed in the lungs, or abscess, or bronchitis, or adhesions, or enlargement of some important bloodvessel, or great disease of the heart, or its enlargement, were sufficient to cause death. I admit they are—but I shall show and clearly prove to the unprejudiced reader, that these diseases—although sufficient to cause death, if erroneously treated, or left to themselves, or sent to other regions, North, or even *South*,—can be cured as easily as fever, inflammation, rheumatism, dropsy, or any other of the vocabulary.

Members of the medical profession,—myself among the number,—have too often been content to follow the dictates of others, without the least effort to mend their practice, or substitute a better.

The cure of disease or the restoration of a patient to health, does not always depend on this, that, or the other nostrum, the swallowing of large or small mixtures, or plastering the surface with blisters, poultices, or such like things, or increasing the violence of remedies in the sinking stages, until the last lingering ray of hope is extinct. In this state of things, the physician of judgment rests on his oars, with his anxiety excited to its highest

pitch, watching the operations of nature, and viewing his patient and disease—as two animals exhausted by combat. The one or the other must now yield. That tranquil face, that composed countenance, inspires a hope; let no rude gossip, now disturb the quiet of the bed-side, and all will be well.

> That smile which plays there great assurance gives,
> He sleeps—disease is prostrate, and he lives.

But in this state of emergency, the friends will be soliciting consultation; yield to it by all means—and if you are satisfied, from what you have seen, that the case must terminate favourably, make this statement to your medical friend, and he will assist you in holding fast on that confidence the family repose in you, which is so very requisite for your success in the treatment of all their diseases. In large cities, we possess advantages that are never enjoyed by our medical brethren in country practice. Here we cannot go amiss,—the talent, experience, high-minded, and honorable character of the medical profession, invite consultation. But should consultation be requested by partial strangers, and not be proposed by the patient, or some deeply interested friend, or

member of the family, resist it, or decline attendance, unless you are decidedly at a loss how to proceed in the case.

In consultation you may gain golden opinions, you may find many, who possess by genius, what others have obtained by hard and constant study. Cuvier remarks, that it is the privilege of genius, to see in its dreams, what the humbler race of men, can ascertain by laborious vigils, and accumulated researches alone.

And again, Professor Chapman observes: "as well might we compare the mere fluttering of the meanest and most grovelling bird, with the bold and well sustained flight of Jove's own imperial eagle, as the slow process of a vulgar intellect, by which facts are collected or observed, with the vigorous sallies of speculative genius, which seize truth as it were by intuition, and reveal it in a burst of light of celestial brightness."

Although the medical libraries of most men, contain many volumes upon the cause, nature, and treatment of Consumption, little has been done, to put either the pathology or therapeutics of the disease, on a satisfactory basis,—its treatment, therefore, though variable, is by no means successful; to remedy this state of things, and place

Consumption on the list of curable diseases, has been my aim for many years,—and by this treatise I shall give to the public at large, a list of *cured* cases, with their history and nature, known only heretofore in my private practice. I have delayed this work for the purpose of establishing beyond a possibility of doubt, the truth of what I now assert, *Consumption can be cured.*

The mortification and degradation I feel, at the utter inefficiency of our art, in this the most common of all diseases, is in itself sufficient stimulus to the work I am now engaged in,—but I have a higher object, that of mitigating human suffering, —to this end I have labored for years, "and what I conceived my duty, has been my reward."

The vast number of cases that die annually in this and other countries through Consumptive disease is a melancholy truism, although its extent, familiar as it might appear, is very little known. The common estimate gives one fourth of the deaths, which annually occur as consequent on Pulmonary Consumption. But it will be seen by reference to our statistics that this is incorrect. And that when we add to our estimate the many diseases that emanate and finally terminate in

Consumption, we shall find the number vastly increased.

Though much attention has been bestowed on this subject, by many distinguished European authors, Laennec, Andral, Louis, and many others, we find little certainty arrived at in the treatment of Consumption, until Professor Ramadge, of London, declared to the world its curable nature. When his work appeared I determined to stem the current of public opinion on this side the Atlantic, and prove what I have long asserted in private practice, that the general treatment relied on in this country is inefficient, and its result always uncertain. Dr. Young, of St. George's Hospital, says: "it is probable that without assistance, not one case in a thousand of the disease would recover; and with the utmost power of art, perhaps not more than one in a hundred will be found curable." Now out of one hundred and twenty seven cases treated by me in the last seven years, sixty three were cured, seventeen died, (above the age of fifty years) and forty seven were incurable from the extent of disease, having tubercles on the coats of the bowels, and consequent diarrhœa.

It is when this state of the bowels takes place, that I consider the patient in a critical situation,—and not when the cough, expectoration of blood, or matter, or both, have alarmed the sick man or his friends. These are only the symptoms of the disease that we profess to cure, and should never be looked upon as unfavorable; add to these night-sweats, a hectic flush, debility, and emaciation, and you only have the disease in question, Consumption.

Now whether this state be the result of a neglected, or predisposed constitution, or a badly treated pneumonia, or pleurisy, or any other actively inflamed state of the lungs, where proper depletion has been omitted the effect is the same, abscess or softened tubercles, expectoration of pus, sometimes streaked with blood, and hectic fever.

These are the symptoms belonging to that disease authors have named phthisis pulmonalis; when it occurs as a sequel of other diseases, especially those above cited, I am decidedly of opinion that the neglect of early, well timed, and proper depletion, is in every instance the cause; this frequently happens from the delay of the patient in calling his medical adviser.

I cannot believe there are many medical men

among us, in the present enlightened state of our science, unacquainted with the importance of the bold and repeated use of the lancet, in the continued form of fever which accompanies pneumonia, or pleurisy. The time to lay down the lancet, will be when the patient ceases to complain of pain, or oppression, and can lay on either side with ease.

If, however, from timidity, or any other cause, bloodletting should not have been timely and freely used, the disease goes on unmolested, and soon arrives at that point surgeons have designated the third stage of inflammation, suppuration and abscess.) The fever now assumes another form from continued; it intermits, and soon puts on the hectic character. The abscess bursts, expectoration of blood and matter follow, and the patient is said to be in consumption. The same results from the ripening, softening, and bursting of tubercles.

The constitution in which tubercles are most frequently met with is marked by a scrofulous idiosyncracy. The blood gives off its carbon sparingly, in consequence of the delicate tissue, lining the air cells, being loaded with a tenacious mucus; thereby preventing the free transmission of the gases. Oxygen and nitrogen inward, and carbonic acid outward. The blood in this case

undergoes a change, from a healthy to a diseased condition, its carbon is retained, and congestion is the result.

In this state of things, if the venous system be not relieved, by full and proper depletion, we shall soon have mother nature (the vis medicatrix natura,) acting for herself, and consequently a ruptured blood vessel.

I see in looking over the thirty-sixth number of the American Journal of Medical Sciences, for August 1836, the experiments of Dr. Robert E. Rogers, which must go far to prove the correctness of the position I have advanced above.

I have taken the liberty of copying one of his experiments.

"A small bladder, not long taken from a pig, was filled with fresh venous blood, when it was closed, and suspended by a thread from the cover of a tall receiver, which fitted air tight. The receiver, standing over mercury, was then filled with oxygen, and in two hours the mercury in the bottom of the receiver was considerably depressed. Upon inspecting the contained air, a very sensible quantity of oxygen had disappeared, but was replaced by a still larger amount of carbonic acid,

the excess of which explained the depression in the mercury.

"This experiment was varied, by making trial of other gases, as hydrogen, nitrogen, and bicarburetted hydrogen; and in every case with the developement of carbonic acid.

"In order to ascertain if, during this evolution of carbonic acid and disappearance of the other gases, any elevation of temperature ensues, an apparatus, such as may be seen at page 297 of the August number for 1836, of the American Journal of Medical Sciences, was made use of. Using my form of Sanctorio's thermometer, it was plunged to the bottom in a bag consisting of membrane, and full of blood, the bag being tightly secured at the neck, and suspended in an atmosphere of oxygen. In this instance the result was in a high degree satisfactory.

"A considerably greater rise of temperature was manifested, proceeding no doubt from the influence of the absorption of oxygen and the transmission through the membrane of carbonic acid.

"Let us now recapitulate the leading facts developed in regard to the evolution of carbonic acid from venous blood.

"1st. Exhaustion by means of the air pump has no effect in evolving carbonic acid from venous blood.

"2d. A temperature of 212° displaces no carbonic acid from venous blood.

"3d. The carbonic acid on the other hand, is absorbed by exposing it to venous blood.

"4th. Exposing venous blood to oxygen, nitrogen, hydrogen, and nitrous oxide, though each of these if we except hydrogen, is in part absorbed, yet not a particle of carbonic acid is given off.

"5th. When, however, a portion of venous blood is placed in a bag of some membrane, and the whole immersed in an atmosphere of some gas, oxygen, hydrogen, nitrogen or bicarburetted hydrogen, (others have not yet been tried,) then carbonic acid is pretty freely evolved."

These experiments solve completely the problem of respiration; and I may add, clearly account for loss of colour always met with in persons having a slight catarrh. The extensive membrane of the lungs being coated with mucus, prevents the transmission of oxygen to the blood, and hence the loss of colour. The inhalation of the vapour of warm water to which a small portion of gum ammoniac had been added, would *always* relieve

this state of things, without sickening the stomach with nauseous mixtures of squills, antimony, candies, lozenges, and such like things—the use of which most frequently end in sending for a physician.

But we will suppose this cold neglected for a long time, until nature makes an effort to relieve herself. She forces on the thickened mass of blood, the heart and arteries labour, fever commences, the fibrin becomes diseased, and consequently deposits minute masses, the nucleus of tubercles. The skin becomes permanently white, the conjunctiva pearly, and the individual is prepared for Consumption, unless some obstruction takes place in the windpipe, or the tonsils enlarge, to prevent the escape of the air, and swell the cells of the bronchea,—breaking the adhesion of mucus, and again exposing the membrane to the action of a fresh portion (oxygen, nitrogen, &c.) of the atmosphere. In this case the individual gradually returns to health.

But in the scrofulous habit, where tubercles exist, they increase, and may be seen multiplying on the sides of the neck, and under the scalp. I have removed some hundreds of them in this situation, and find them to contain the same cheese-like

matter *always* met with in the lungs of those who die of Tubercular Consumption.

A curious case of this kind occurred to me about six years ago, which will go far in my opinion, in support of my *theory of Consumption.*

This patient was the daughter of a lady who had died of Tubercular Consumption under the care of Dr. S. Jackson, the present professor of the institutes of medicine in the University of Pennsylvania. I think I may say without the fear of contradiction, that the practice he pursued in her case prolonged her life,—she was above fifty-five and died in her sixtieth year. She left daughters; one of these was soon after attacked with hæmoptysis, which greatly alarmed her, and consequently produced the most unfavourable forebodings in her mind; Dr. S. Jackson was again called and took charge of her health, her symptoms improved for a time, but she died in about eighteen months from her first attack.

Her younger sister was soon after attacked with the same symptoms. She ruptured a small vessel and spit blood freely, and determined at first to let nature take her course. But her attacks were frequent and debility alarmed her. Thus situated

she applied to me in March, 1835, I found by percussion and careful auscultation that the summit of each lung was obstructed by tubercles; several existed on the sides of the neck, and more than thirty under the scalp. I removed the most of these tubercles with the knife, and at once commenced the general treatment.

I gave her full assurance of a speedy convalescence, and the history of her case, under the head of cases, will show how far I kept my promise.

There are few anatomists unprepared to admit with me, that tubercles are most frequently, if not always found in consumptive habits, in the extreme summit of the lungs, where from the physical structure and consequent formation of the chest, portions of the lungs thus situated, are denied that free expansion in inhalation which other parts enjoy.

Now this state of things can be prevented by mechanical means, and this naturally compressed part, be brought to participate in the full and complete inflation enjoyed by other portions of the parenchyma, more favourably located for the purposes of life.

CAUSES OF CONSUMPTION.

HEREDITARY predisposition has been considered by many authors as a cause of the most formidable character, a cause that no treatment or care can avert, and of which all who have unfortunately inherited it, must feel the blighting influence.

The fallacy of this opinion I am fully prepared to prove. Cases of this nature have been abundant in my private practice. I shall detail several of them through this work, and show how far the physician may be able to remove the predisposition, and make good constitutions out of bad materials.

The constitution of man is framed by what it feeds on.

The infant born to die of Consumption, if taken at an early age from the parent, and far removed from all her peculiarities, her milk, her careful housing

her exposed mode of dressing, her hot chambers, &c. loses in an astonishing manner those constitutional imperfections, which might otherwise (being engrafted,) take root and flourish to its destruction. I have seen many cases, I admit, where children have been born perfectly healthy, and being nursed by the mother for two or three months, loose flesh, become marasmatic, dwindle and die. But the same mother, having a second child, determined upon my suggestion to employ a healthy wet nurse, when the result was the reverse.

It happens occasionally, though rarely, that the fœtus in utero may have tubercles, and the greater portion of the parenchyma rendered unfit for the purposes of respiration. This seldom occurs, however, for great nature has so arranged the fœtal circulation, that the lungs are protected in a remarkable manner from the deposit, which necessarily precedes tubercles. I have frequently met with tubercles in the placenta, but not often in the lungs of the fœtus.

Hereditary Consumption more frequently occurs from a general constitutional contamination, deranging the circulating mass of blood, and thereby rendering the deposit of tuberculous matter certain, unless a complete change is made in the mode of

living. Let the infant be reared by a nurse in constitution the opposite in every particular of its mother, and the adult forsake all her habits of former life when Consumption threatens invasion.

In vegetable life, you can so change the soil as completely to arrest the growth, and finally destroy the plant. So in Consumption, you may alter the constitution of the infant to a degree in which a consumptive diathesis cannot exist.

A supposed predisposition is not an unfrequent cause of Strumus Consumption. When the individual who may be the subject of disease of the lungs, has contracted severe pneumonic inflammation, it frequently happens that they rely on lozenges, cough mixtures, plasters, pediluvium, or some hocus-pocus for some days before sending for a physician, or when they do send for a physician, they may select one who considers active remedies dangerous in such constitutions, and the inflammation is allowed to pass through the several stages, until suppuration and abscess are the result.

I attended a family in this city some years ago, who had (under the care of their former physician) lost three infant children, one at the age of ten months, the second at seventeen months, and

the third at three years. They were all nursed by the mother for nine months, and carefully fed from that time, principally on farinaceous articles, until teething was completed. The third, living somewhat longer than the others, was allowed some animal food.

At the expiration of the third year she had a severe attack of croup, from which she recovered with the usual treatment; one week after her recovery she was taken out, and contracted (according to the account I had of her case) a slight cold, she coughed frequently, with occasional crying spells after each attack of coughing; in the course of a few days some fever was evident, and the family physician was called to prescribe for her. He gave her an expectorant, mixture of squills, paregoric, and spirits of nitre, and directed her bowels to be kept open with senna. The little sufferer improved but slightly, sometimes fretful and uneasy, and now and then amused for a short period with her toys.

This milk and water treatment was persevered in until the inflammation, fever, and cough became continual; the patient was now pronounced, like the former children, in a rapid decline.

The mother having heard that I had asserted

Consumption was curable, determined I should be sent for; this was done, and I saw the child eight hours before its demise, nature had relieved herself by effusion and the patient soon expired.

I requested permission to examine the body; this was granted, and I proceeded to the autopsy twelve hours after death.

The brain was found in a healthy state; the stomach distended with flatus; the bowels in the same condition, except the excretories on their surface, which were much congested. The blood-vessels of the liver, larger than natural. The heart in a perfectly natural state, with rather more fluid in the pericardium, than is generally met with at the age of this subject. The cavity of the chest was next examined. The pleura exhibited much inflammation, with many points of adhesion. The exterior surface of the lungs was thickly beset with small hydatics, and more than three ounces of serum was found in the cavity of the pleura. The parenchyma was not yet exposed to view. I hesitated a moment at this stage of the examination—until my friend (the family physician) asked why I did not proceed. You are aware, Doctor, said I, upon my next incision depends my professional reputation. I have told you already, that this

child had no tubercles—now if they should exist? Then, said the doctor, I shall say nothing about your opinion. No, said I, if they do proclaim me ignorant, but if they do not, believe no more in the necessity of children dying of consumption, who have the misfortune to have been born of parents *said to be* predisposed to that disease.

The parenchyma was now cut into, and that state of things only found, which is always met with after death from pneumonia. No tubercles existed.

In the course of two years the lady had another child, which is now well and very healthy, although it has passed through two or three severe attacks of pneumonic inflammation, where the lancet was not spared.

From what I have already said, it must appear evident, that I consider inflammation of the lungs erroneously treated—a very frequent cause of abscess and consequent consumption, from the simple fact, that when remedies are not properly directed or judiciously administered, (the result being uncertain,) the lungs become engorged with venous blood, their mucous membranes transmit little or no oxygen, and abscess, or tubercles, are the result.

The causes of consumption are either abscess or

tubercles, produced by a depraved state of the blood, which may be occasioned by a long spell of moist or rainy weather, in which the atmosphere becomes too light to expand the air-cells of the lungs; by a debilitated constitution, brought about in various ways, either by poor living or weak digestion, or by many constitutional diseases obstructing the free circulation of the arterial blood.

Dyspepsy, diseases of the liver, of the spleen, mesenteric glands, or of the heart, may all be cited among the causes of consumption. But as we consider all these diseases manageable, they cannot be called formidable causes.

Amenorrhœa and *dysmenorrhœa* are decidedly more so, and therefore, call for our prompt attention.

As these causes occur long before the thoracic derangement can be produced by them, they consequently should not be admitted by the judicious practitioner, but removed before consumption can be produced.

OF AUXILIARY

CAUSES OF CONSUMPTION.

Tight lacing has been hinted at by many writers of high repute, as a cause of not unfrequent occurrence. By this abominable practice, most frequently met with in large cities, *thousands* are annually sent to a premature grave. Nature is cramped, confined and shaped to suit the taste or style of some mantua maker or other, until the respiration which should be performed by the pectoral muscles, is compelled to be abdominal, unless fashion varies, and the lacing puts these muscles also in a quiescent state. In that case, free respiration will be found to exist only in the upper portion of the chest.

In the prevalence of short waists or high skirts in the dress of the ladies, when death occurs from consumption, it will be found that tubercles occupy the upper portion of the parenchyma; and when the fashion alters to long waists, the lower portion of the lungs will be their seat.

Now these facts speak volumes for the theory I have advanced in this work, on the subject of voluminous lungs—a theory upon which my practice is based, and supported by every day's experience.

This practice of lacing not unfrequently binds the longitudinal muscles of the back also, in such a manner, that one side or the other must give way, and lateral curviture of the spine be the inevitable consequence. The lung of the affected side becomes compressed, a free passage of air is prevented from penetrating its cells, and consequently tubercles must follow.

My success in the treatment of the so-called spine affections, is too well established in this city, to admit of these notions being called theoretical.

Mothers, if you value the lives of your *fair daughters* attend to these matters, for although the brain *may* escape uninjured, the *spine* and *lungs* never can. Remove all obstacles that may tend to impede that useful and beautiful phenomena of nature, respiration, and my word for it, the number of victims to the sad destroyer *consumption*, will daily diminish among that fair portion of creation for which man only lives to cherish and protect.

Wet and cold feet are very frequently produc-

tive of lung affections. There are few ladies in our city attentive to this matter, their feet and ankles are thinly clad, and consequently cold, while their bodies are well protected, and their neck and shoulders loaded with furs. The consequence is, a continual moisture of the neck and chest, and great liability to inflammation of the lungs, from a sudden check of this unnatural degree of perspiration.

I have always recommended my patients to harden this portion of the body, (if I may be allowed the expression) by bathing the bust and neck night and morning in cold salt water, and instead of wearing as much clothing on this part as can be borne, to wear as little as they can be comfortable with, keeping the feet and lower limbs well protected with thick shoes and stockings during the fall, winter and spring months.

During the coldest of winter weather, a thick double veil should be worn, and instead of running directly to the fire when you enter your dwelling, retire to your chamber to make the change from an out to an in-door dress; or if your chamber should be heated, let the change be made in the hall or some part of the building not supplied by hot air. Remain there ten or fifteen minutes, to

enable the lungs to bear the difference of temperature, without feeling that sensation of oppression which few individuals are unacquainted with, who pass a winter in a cold climate.

The present mode of heating most of our dwellings and public places by furnaces, greatly increases the risk we encounter of inflammation of the throat and lungs, by a sudden transition from cold to heat.

Indifference to these hints may not produce tubercular consumption, but it will lay the foundation of a more unmanageable disease, bronchitis.

It is from heated churches and offices that our ministers of the gospel suffer so much from bronchitis, and not from preaching,—as has been imagined by many. Churches are now generally warmed by furnaces, the air therefore is hot before the congregation enter it, the number respiring this heated and consequently impure atmosphere, soon increase its temperature, while they exhaust its oxygen. You now see many individuals, before the service is half over, throwing off their cloaks or shawls, fanning and fidgeting, reminding us of animals under the receiver of an air pump partly exhausted. Some friend now opens a window or door and admits a current of cold, which relieves

in a measure the general mass, but endangers those who may be seated near its entrance, from the previous highly excited state of the surface. But the preacher encounters still more danger, his situation is ten or twelve feet above the congregation. Heat being disposed to ascend, he is surrounded by an atmosphere many degrees higher in temperature than that in which his hearers *exist*. Here, if he escapes asphyxia, he cannot expose himself many months without bronchitis.

If this state of things was produced by public speaking, how is it, let me ask, that our auctioneers, our sea captains, or our lawyers, are not more frequently the subjects; their lungs are as often called upon to perform perhaps a more arduous and longer continued duty—but our court or auction rooms, are not often crowded, and if they are, the mass of people are continually going in and out, and consequently, admitting fresh air with every fan of the door.

Churches are, on the contrary, kept warm or hot, and the doors closed, unless some one being overcome, is led out for fresh air, *relieving those* who may be located near the opening.

This accident by no means benefits the pastor,

his situation is fixed for two hours at least, and if he be not positively exhausted, and faint, he is allowed to breathe the fresh atmosphere, only after the lining membrane of the air tubes of his lungs, have by this continued excess of heat been prepared to put on inflammation.

But the sea captain or his healthful crew, breathe no atmosphere like this. The air they respire, is warmed by the sun's genial ray; their home, walled by the horizon, and roofed by the blue vault of heaven. In their constitutions, you seldom meet with bronchitis, or consumption, and their voices, like trumpets, are heard afar.

This state of things, always met with in the sea faring man, I own is sufficient to induce all who are threatened with Consumption, to try the ocean wave. And if this is done before it becomes too late for exercise, I have little doubt that many, who could participate in the duties of the sailor, might be much benefited by a sea voyage.

I would by no means, however, recommend a sea voyage, to the individual who is expectorating pus freely, or may have hectic fever. To overcome this, a careful and well directed home treatment is indispensable, the privations on board of ship are too great to obtain the attention and care

required. And it generally happens that the voyage to sea, is the last remedy recommended, and consequently produces no beneficial result.

The reason must be obvious; the debilitated individual is perhaps unable to leave the cabin, and the air of this, is little better (if at all,) than that of their own chamber, with less of home comforts.

Or if their strength should enable them to be on deck, they are prevented either from want of inclination, or from the directions of their physician, from participating in those healthy exercises of the sailor, upon which the benefit of a sea voyage depends. He is pulling and hauling continually—frequently making full and deep inhalations, and often for moments holding his breath, to enable him to concentrate all his power for the accomplishment of some difficult task, consequently fully inflating the parenchyma, and thereby rendering himself exempt from obstructions in its circulation producing Consumption.

Nor is the mariner the subject of bronchitis, his throat and neck is continually exposed to all the vicissitudes of the atmosphere, and like his face and hands, will always be found florid and healthy, no debility of the cuticular circulation

will here exist, to invite disease, and consequently he escapes most if not all the throat affections.

To see physicians at this time of vast improvement in medical science, recommending thick stocks, boas, pieces of flannel, and the wearing long beards, as a protection from disease, excites in me a smile; when all should be done to harden and accustom those parts to exposure.

The mariner or common labourer on shore, is unacquainted with bronchitis or chronic inflammation of the throat. They wear no stocks or pads about their necks, on the contrary, you will generally find them with this part exposed, and like their faces, a lively circulation through the skin, giving that florid hue, the true criterion of health.

Consumption is never met with in the savage, whose mode of life causes him to encounter the most severe weather, half clad. He sleeps on the ground, frequently with nothing under him but his blanket, and escapes taking cold, (as it is called,) because his skin is hardened to his mode of life.

Many who travel among the Indians, without reflecting on their manner of living, attribute the

good health they enjoy to their knowledge of the medical virtues of the roots, leaves, and bark, of the forest trees. This is not the case, however, for although some of the best of our botanic medicines are found in the far west, the Indian gathers them not for his own use, but for traffic. His constitution requires little or no remedial art, in most of his diseases nature operates for herself; in catarrh some little obstruction may take place in the bronchial tubes, but the volume of his lungs is only increased. His shoulders are not tied down with straps to keep up his pantaloons, secured from raising by being fastened beneath his shoes: his lungs are allowed full play, and consequently their circulation not being obstructed in any manner by his clothing, he soon finds himself free from all his thoracic or throat affection.

Not so however in civilized life, here we find broad suspenders on the clavicle, and strong leather straps to keep the pants from raising up, fixed under the boot, with frequently large stiff plasters over the breast and back, tied down by a tight net shirt, tight vest, and not unfrequently a large stiff stock reaching the chin, and thus a full inflation of the parenchyma is most effectually prevented.

Can any one be surprised at the production of disease under these circumstances? Ask nature —the result must be obstructed respiration, obstructed circulation, inflammation, adhesions, tubercles, abscess and death.

SYMPTOMS OF CONSUMPTION.

It has long been acknowledged by the most learned in the medical profession, that the symptoms of *phthisis pulmonalis* are so variable and uncertain, the disease may be irremediably fixed, before the individual or physician has the most remote conception of its nature; and the first intimation the invalid may have of his situation, perhaps will be a ruptured vessel and consequent *hæmoptoe.* Since the introduction of the *stethoscope,* most if not all the members of the medical profession, have become more enlightened on the subject of *diseases* of the lungs; and if applied to early in their course, can in general foretell what must certainly happen.

The credit of introducing this instrument to Americans belongs to Professor Jackson, of our city, whose indefatigable zeal for improvement,

has done more for the art of discrimination in diseases of the chest, than any other physician on this side the Atlantic.

Had his practice proved as certain as his knowledge of the nature of Consumption, little would have remained for others to accomplish. His success has been much greater, however, than that of any of his predecessors, and his head deservedly crowned with laurels.

Hippocrates had no doubt made use of auscultation, as is proved by reference to his writings: "you shall know by this that the chest contains water and not pus, if in applying the ear during a certain time on the side, you perceive a noise like that of boiling vinegar." Auscultation, therefore, is not a recent discovery, but its application has been much improved by some of the French physicians. "Render to Cæsar, that which is Cæsar's."

The general external signs of Consumption, few accustomed to observation can mistake; a dejected expression, sharp features, shining eye, contracted chest, thick and projecting lips, and not unfrequently a slight anterior curvature of the spine.

As the disease advances, we find a slight cough,

hectic blush at some period in the day, but generally for the most part a very pale smoke, or lead color of the skin, with a livid, or vermilion lip, a red dry tongue, evening chills, followed by fever, terminating in night sweats, and free morning expectoration. These continue for a longer or shorter period, until finally, (without proper treatment) the individual succumbs.

Cough is by no means an unequivocal symptom of phthisis; this may be produced from congestion of the liver, crudities in the primæ viæ, foreign substances, smoke, dust, certain gasses or fumes, or from elongation of the uvula, these may all occur without the least disturbance of the healthy action of the parenchyma. The removal of such causes soon puts an end to the cough, without disturbing the stomach with nauseous mixtures of syrups or candies. I witnessed a few years ago a remarkable case of this kind occurring in the family of a respectable merchant of New Orleans. His youngest daughter was taken during the winter season, (while in Philadelphia,) with severe cynanche-tonsilaris or inflammatory sore throat; this continued for some weeks, although her physician used, (as he supposed) very proper and energetic treatment. The child improved after being

for some time confined to her chamber, and at the expiration of two months was allowed as much fresh air as she could get by being well bundled up and put into a close carriage; her health improved a little by this slight change from her heated chamber, but not sufficiently to satisfy her parents; another physician was consulted, and they determined the patient should go home to New Orleans. When she arrived there, the best medical advice the place afforded, was obtained; the child was now considered in a rapid decline; her cough was incessant, she was bled, cupped, leeched, blistered, and well dosed, for several months, but still the stubborn cough kept on. The anxious parents watched every dose of medicine, every blister, every change of expression, to see some improvement, but alas none appeared. At length they determined, that if their daughter lived until the sailing of the next packet, they would take her back to Philadelphia, and consult Dr. Physic; this was done, and the doctor soon discovered the whole cause of her suffering; great elongation of the uvula. Dr. Physic removed this cause by one stroke of the scissors, and all the alarming symptoms of Consumption vanished. How much distress and unnecessary pain would

this little sufferer have escaped, had auscultation or percussion, been used by her first physicians; her lungs had nothing to do with the cough, which circumstance would have been at once discovered by the stethoscope. Well might this patient exclaim, "throw physic to the dogs, I'll none of it," and how often is our materia medica taxed to perform, that which belongs to the better judgment of the physician.

I have heard of senna and salts being given every other day for a period of six months, to cure a pain in the lower part of the abdomen, when this was produced by irritable uterus, and the symptoms much aggravated by the course, all yielding as soon as proper remedies were used; and yet both these articles are valuable in their proper place. But to return to my subject. Hæmoptysis has been looked upon by many as a cause of Consumption, and this opinion appears to have gained ground so rapidly that few are prepared to believe their physician when he declares its existence should not alarm the individual who may be attacked with spitting of blood. The confidence must be great indeed if his assertion has the effect of allaying all their fears; now, although hæmoptoe may cause great alarm, and occasionally be

an unfavourable symptom, this is by no means always the case. It may occur in a slight catarrh, from local plethora of some minute vessel of the lining membrane of the bronchia, and be of no more importance than bleeding from the nose, in consequence of fullness of some of the small vessels of the Schneiderian membrane. In most cases, we may consider spitting blood a favourable sympton, often relieving an unpleasant weight or fulness in the breast, and frequently terminating the most alarming diseases, as pleurisies, peripneumonies, fevers, &c. &c.

The history of one of our most respectable members of society, the late Joseph Watson, former mayor of this city, may not be generally known to many of our readers; I therefore, take the liberty of introducing an account of a portion of his life, to prove that hæmoptysis should not always be looked upon as an alarming symptom.

About the year 1810, Mr. Watson was employed in the counting-house of my father-in-law, (Chandler Price, Esq.) who became much alarmed for his safety, in consequence of his having a continual cough, free expectoration mixed with blood, and frequently attacks of hæmoptoe; debility and emaciation soon took place, and in less than six

months Watson was called a walking skeleton. Dr. Physic was consulted in his case, and finding that he was determined to try riding on horseback, gave him the best directions he could follow under the circumstances: he was to make short stages, to be well protected from the weather, to eat sparingly, to keep the bowels open daily with a mild pill of rhubarb and aloes, and never to sleep in a strange bed unless the sheets and blankets had been well dried the day previous.

With these directions our friend set off for New Orleans on horseback, I believe in the latter part of the summer of 1811. The first day he reached Old Chester, fifteen miles, on the second of his journey he had some spitting of blood, but made out to get as far as Wilmington, where he remained two days in consequence of bad weather. The eighth day he arrived at Washington, where he again spit up some blood after a violent spell of coughing. He persevered on his journey, making short stages, and finally reached New Orleans after travelling twelve weeks, much improved in his appearance, strength, and spirits.

He had no return of hæmoptoe after he left Washington, and his cough gradually subsided, being entirely free from it, in about six weeks

after leaving his home in Philadelphia. Early in the summer of 1812, he returned home by sea in fine health, and much improved in flesh; he continued to increase in size gradually for some years until his weight became the only cause of complaint, having no return of his old disease since leaving Washington in the last of September 1811. He died of hydrothorax in 1841, at the age of sixty years.

The general healthy appearance of Mr. Watson must be familiar to most of our citizens. Had he remained at home and continued the sedentary employment of book-keeping, he would no doubt have died in the course of two or three years from the supervening of phthisis. Many cases of this kind have occurred, where from neglect of exercise, digestion, and full inflation, hæmoptoe has run on, and Consumption been the result. This may always be prevented, and the individual who neglects his constitution under these circumstances pays dearly for his folly.

Various nostrums, candies, lozenges, etc., deserve notice under this head of auxiliary causes of Consumption.

Most if not all the popular compounds for cough contain opium in some form or other; they conse-

quently relieve one of the symptoms of lung affections, while they increase in most cases the cause of many others, by producing constipation and consequent derangement of the liver. Few persons apply to physicians until they have swallowed all the quackery within their reach, and their bowels locked up; this is certainly the case in this country, and prevails to a much greater extent in England. There is so much truth in these assertions, that the great Abernethy, (whose talent and extensive medical acquirement I shall always hold in the highest respect,) suspected the liver as the primary seat of Consumption, and consequently prescribed blue pill with some purgative, to be continued daily for months if there was no amendment. He no doubt found most of his cases with a previous confined state of the bowels; had mercury been omitted, however, and this great surgeon of Europe illumined by the same ray that lights the mind of Ramadge to the secret operations of nature's work in lung diseases, he would have removed the mischief done by nostrums, with milder means, and perhaps explored the chest.

Professor Chapman in one of his clinical lectures at the old Philadelphia Almshouse in 1818, speaking of Consumption observed to his class, "as

well might the physician shoot a bullet through the heart of his patient in tubercular consumption, as administer mercury in any form." I think I may truly say, I have seen abundant proof of the truth of this assertion, in a practice of twenty years.

The working class of our fellow beings are for the most part free from the impositions practised upon the human family by forged certificates of wonderful cures, for they have no means to support quackery; their simple catarrhs are not often interrupted, and consequently the chylopœtic viscera is undisturbed by these narcotic mixtures; the bowels are free, and the mucous membrane soon pours out the offending cause, while the moderate contraction of the trachea always met with in catarrh oppresses the breathing, producing a voluminous state of the lungs, the circulation thereby freely maintaining a healthy action throughout the whole body.

There is no limit to the credulity of man, the most learned can be brought to believe, that, which sober reflection would condemn as false, until maturer reason claims control.

STRUCTURE OF THE LUNGS.

The different opinions which have been entertained by many anatomists in relation to the structure of the lungs, it may not be improper to mention, before entering upon the treatment of their diseases. It was imagined by Malpighi that the lining membrane of the bronchia divided to form air cells, like a sponge. But the experiments of Helvetius went to prove that the air cells were formed by a simple cellular tissue enveloping the various blood vessels of the lungs. The greater number of anatomists, Haller among the rest, have adopted the opinion of Helvetius. If we inject the blood vessels of a fresh young subject with wax, and at the same time fully inflate the air cells through the trachea, we can by careful incision, fully satisfy ourselves of the correctness of the views of Riesseissen, who proved the lungs to

be formed by air cells and blood vessels, the former terminating in a kind of cul-de-sac.

This natural structure of the lungs, while it so admirably adapts them for the office they perform in the support of animal life, renders them susceptible to many diseases, in a variable climate like ours. But as most of those diseases have been already mentioned, I shall now confine myself entirely to a description of the morbid condition met with after death from Consumption.

Upon dissection of those who die of Consumption, we generally find that morbid state of the lungs which unfits them for the duties they are destined to perform for the purposes of life. Portions of the parenchyma will be found absorbed or changed into abscess, or its substance occupied by tubercles; or large adhesions may exist, or the greater portion of the lungs may be completely solidified or hepatized; or great effusion may be dicovered in the cavity of the pleura, and the parenchyma so compressed, that respiration cannot be longer performed and death the inevitable result. Or the surface of the air cells may put on a high state of inflammation, (acute bronchitis) and consequently be rendered unfit to perform the function nature has ordained for these parts, by

pouring out an abundant, thick and adhesive mucus, and thus effectually preventing the transmission of the gasses in respiration. The blood receives no oxygen, its carbon is retained, and sent back to the *heart*, which soon becomes enfeebled, its action is consequently rendered weak and rapid, the pulse will increase in frequency while it grows weaker, the skin becomes livid or blue, and the individual is said to be suffocating. I consider patients thus situated in immediate danger, and believe there is no remedy but the lancet. I have seen *hundreds* of children thus situated restored by frequent and free depletion. In this state of things, the case will generally be called hopeless, but if the physician is experienced, and will bleed boldly, even to an extent that would be prejudicial under other circumstances, or in other diseases, he may produce some slight effusion from this lining membrane of the bronchia, washing away the tenacious mucus which block up its surface, and a free expectoration will frequently follow.

Perhaps this page may meet the eye of my old and much esteemed friend G. S——, Esq., one of our most respectable merchants; should this happen, he will no doubt remember the situation of his *little daughter Sarah*, whose case was very

similar to that above described ; free bleeding was repeated seven times, producing syncope after each operation, she soon recovered without general *dropsy* as was predicted by some of her friends.

I am of opinion that the lancet seldom if ever produces dropsy, but much more frequently prevents Consumption.

PROPHYLACTIC TREATMENT

OF

CONSUMPTION.

One of the most powerful agents in preventing Consumption, is exercise; and I may add, one of the best additions we can make to the use of internal remedies, for its cure. Of the different kinds of exercise, perhaps running, and riding, are the best. We seldom or ever see Consumption as an original disease, in the young pupils of our common schools; there is no limit to the playfulness of boyhood; the respiration is frequent and deep, a large volume of air is admitted, favouring a healthy development of the whole parenchyma, while with the increased action of the heart and arteries, rapid decarbonization of the blood is the consequence, and health is less liable to interruption. From this constant and free supply of oxygen the

animal heat is increased, the action of the heart becomes more vigorous, and all the glandular secretions carried on with greater energy.

Sydenham was generally in the habit of recommending riding as an exercise of much value as a prophylactic, and perhaps it will be found that riding, may produce all the benefit of walking or running without the fatigue ; I have already given an instance of the great advantages arising from horse back exercise under another head, and its value is too well established to require repetition here. I shall, therefore, pass on to gymnastics, as a mode of exercise, particularly in the winter season, best calculated to assist the physician in restoring his patient to health, whose sedentary habits may demand something of this nature, or whose debility may prevent him from leaving his chamber. The most proper machinery for this purpose will be a pair of ladders ten feet high, set six or eight feet apart at bottom and firmly secured at top, and so braced that there shall be no risk of falling ; a pair of horizontal bars six or eight feet long supported on two stands, in such a manner that the individual exercising, may walk between them, and by placing his hands upon the bars, raise his body, by the action of the pectoral, and

other muscles, until the feet swing clear of the floor. This exercise, will generally be found to produce a glow, and give rise to a free circulation throughout the limbs; I have often been called to visit patients, who were unable to raise the hand to the head, in consequence of great debility of the muscles, and after daily trial for two weeks, could perform many feats upon the ladder above described, raising the whole weight of the body from the floor to the great astonishment of all their friends. Strong ropes may be secured at opposite points, on the wall, to bear the weight of one or more persons at the same time; upon these ropes so fixed, individuals may perform all the evolutions of a sailor, and in a short time obtain strength and a consequent free circulation in muscles, that might otherwise soon become comparatively useless.

A remarkable case of this kind occurred in my practice in the fall of 1837. N. P——, a young man, about twenty two years of age, was taken with pneumonia, from which he recovered under the use of the usual remedies;—but the muscular power of his limbs remained so feeble, that he despaired of ever being able to leave his room: tonics and friction, with the most stimulating liniments, had no effect. Under these circumstances

I determined to try the efficacy of exercise on the voluntary muscles, and at the same time recommended full and deep inhalation, and a consequent full expansion of the parenchyma; a double ladder twelve feet high was made for his use, and at the expiration of three weeks I found him suspending his body from the top rounds by his hands, although at first unable to raise them above a level with his shoulders: he soon recovered his usual health, which he still continues to enjoy.

The ancients no doubt were fully acquainted with the advantages derived from gymnastics; and consequently recommended these exercises to be particularly practised by those who might be destined to take an active part in their wars; this they considered necessary, to produce that muscular strength required in the field of battle. War was a laborious occupation from the weight of the armour used by the ancients, and strength must be acquired by exertion, and supported by constant exercise. The gymnastic games were consequently connected with their religion, and victory in them was politically rendered an object of the highest importance.

————"Palmaque nobilis
Terrarum dominos evehit ad deos."

The gymnastic art had attained no considerable degree of perfection in the time of Homer, as we find from the description of the games at the funeral of Patroclus. Gymnastics were introduced, however, into medicine only about the time of Hippocrates, or perhaps a little before his era by Herodicus, his father. The gymnastics of the warriors were too violent for the diseased, or even for the preservation of health in those not naturally strong; and Hippocrates, in his work on regimen, speaks of exercise in general, of walking, of races on foot or horseback, leaping, wrestling, the corycus, or exercising the suspended ball, with the usual additions of unctions, frictions, and rolling in the sand practised in those days. Boxing, the pancratia, hoplomachia, running, quoits, the exercise of the ball, hoop, and javelin, required too great exertion to be admitted into the medical department; though walking, vociferation, recitation, and holding the breath, seem to have been among the medicinal exercises;—and by this holding the breath, we must conclude the ancients had some knowledge of the advantage arising from full inflation of the parenchyma. Hoffman mentions fifty-five kinds of medicinal exercises, which I shall not enumerate; Dr. Carmichæl Smyth recom-

mends swinging as one of the best modes of exercising; he devoted a treatise entirely to this subject, in which he brought forward many proofs of its superior utility. I unhesitatingly recommend all the different modes, leaving their choice to the judgment of the physician; but as the double ladder, the horizontal poles, the festooned rope, swinging weights in the hands, horseback riding, walking, running, and inflating the lungs, have done all for my patients that I could expect or they desire, I shall most certainly adhere in the generality of cases to their use.

I have known sterility entirely cured by attention to some of these modes of exercise, thereby removing the debility of the nerves, which is in many cases the sole cause.

The peculiar delicacy of constitution often met with in young married ladies, preventing their ever becoming mothers, arises most frequently from their sedentary habits. By constant attention to proper exercise and a mild local treatment, I have known many blest with the full enjoyment of all their wishes, when neglect of these matters would frequently end in bad health, the forerunner of Consumption. If we would wish to preserve good health in females we should attend to the harmo-

nious action of all the functions. To accomplish this end exercise is a powerful agent.

If we extend our observation to the inferior animals, and observe the difference between the tame and wild deer, we shall be struck with the importance of exercise. I have found in the course of my inquiries, (and this has no doubt occurred to others,) that tubercles are never met with in the lungs of the wild deer, while they frequently exist in the lungs of the same animal, domesticated.

Perhaps this cannot be better exemplified than by way of contrast,—swine, proverbially the most indolent of all animals, are the most subject to the tuberculous disease; hence the derivation of the word *scrofula*, from the latin scrofa, a swine; and Consumption and scrofula are often the same, both resulting from tubercles.

I have introduced these facts as an argument in support of the importance of exercise—if that healthful prophylactic is properly attended to, I shall be fully repaid for all the trouble I have been at. I have thus far set before the reader, disease and a preventive; not life and death, these are the dispensations of a higher power.

TREATMENT OF CONSUMPTION.

If from neglect or improper treatment of any of the acute diseases already cited, or from a scrofulous constitution, Consumption should take place, our first effort should be directed to the cure of hectic fever. When this is completely accomplished we may proceed to the removal of its causes.

It is this fever in Consumption that debilitates the patient, and not the expectoration, as has been imagined by many: we often find large ulcers on the limbs, called constitutional, discharging a great quantity of pus, and yet no hectic fever or debility is produced. The scrofulous habit is the most subject to hectic.

For the purpose of removing this form of fever, I have employed moderate anti-phlogistic means, with the most decided benefit in the majority of cases. Ramadge (it will be found by reference to

his work,) directs for this purpose the application of a few leeches to the chest, I must differ from him a little, but only in locality. I have always found three or four ounces of blood taken from the back, immediately opposite the fourth or fifth dorsal-vertebræ, either with leeches or cups, decidedly more efficacious. A few applications of this nature with the daily use of a compound pill ———— ———————— will soon lessen or remove hectic paroxysm, and prepare the patient for a course of inhalation. Weakness is seldom complained of, from this careful mode of depletion, while the relief is certain. Blood-letting in Consumption should never be carried to an extent that may cause reaction, unless it is used for this purpose solely, as in the case of indolent ulcer; if practised under other circumstances, the fever instead of being relieved will be much increased. There are those no doubt in the medical profession, who have observed a sluggish ulcer discharging matter and remaining in the same state for months, immediately put on the healing or adhesive process, after some slight hemorrhage has taken place. Many surgeons have recommended the application of a few cups or leeches for this purpose; and we frequently find the consumptive patient improve

after a slight discharge of blood from the lungs. Perhaps this apparent relief met with by all observers, may have led many to the conclusion, that a removal of bleeding hemorrhoids was always dangerous to the consumptive individual. My opinion is, however, that this conclusion is erroneous, and that it would in all cases be better for the physician to keep, if possible, depletion under his immediate controul, carefully watching every change in the system and being always governed by circumstances.

Slight hæmoptoe there is decidedly less risk, in leaving to nature ; this only occurs when idiopathic plethora requires depletion.

When by this local depletion, the hectic paroxysm is subdued, we must in the next place try to discover by attentive examination, the state of the constitution; and find whether the ulcers or vomica, are indolent, inflammatory, or irritable: upon their nature, will depend the treatment. If indolent, and the patient complains of no pain or suffering, when coughing or upon full and deep inspiration, I would direct for the purpose of producing new action,—the inhalation of a mixture of such gasses as I have invariably found useful for the production of this healthy change; a brisk purge

of sulphur, super-tart-pot, jalap and iodine, should follow the use of the gasses, and the general mechanical inhalation should commence, with a full and generous diet; by these means I should expect to prepare the cavity for reunion and approximation. But should I find the abscess, of a painful character, the expectoration ichorous, and the inflammation of the tongue and throat very considerable, I should rely on local depletion for a few days, or until these symptoms abated. This will soon happen and the patient be prepared for restorative treatment. In the irritable kind of abscess, local depletion should be less in quantity and frequency; a very slight sedative course combined with a mild diet, and a careful alterative treatment, (*not mercurial,*) by adding a small portion of the nitro muriate of gold, to the pill I have already mentioned.

The use of blisters, so frequently directed in Consumption, is always, in my opinion of doubtful utility; and in the constitution subject to this irritable kind of inflammation, producing the irritable vomica, will tend more to increase than diminish the disease. I have known the cough aggravated, the appetite destroyed, the secretions all deranged, and the patient suffer much strangury, by the ap-

plication of blisters, and yet they were continued until the vital powers were sinking under their influence.

Plasters of all kinds should be prohibited, when the individual is labouring under Consumption; if applied about the chest they tend to impede respiration, by preventing full play of the ribs and sternum, and if used on other parts of the body they can have no other influence, but to increase the irritable state.

Plasters of burgundy pitch were much used during the summer of 1832, as a preventive of cholera; many wore these plasters who escaped the disease, and they attributed this good fortune to their use. Faith in plasters was unshaken until the disease broke out in the Arch street prison, and it was found that many died with the plasters on their stomachs.

I have always prohibited the use of plasters or the chest, and for this reason, that their composition cannot possess virtues that shall counterbalance the great inconvenience the lungs suffer from a want of full inflation, which plasters worn over the ribs or breast invariably tend to prevent.

The first and most important point in the treatment of Consumption, is to get rid of fever; while

that state of the body exists called fever, we cannot expect the healing process to go on; it will always be found, that ulcers on the surface and consequently open to inspection, will change from the healing process to the opposite during fever. In this way we can account for the suspension of discharge from the lungs of the consumptive patient during the fever of hectic, and the free expectoration, when the diaphoresis (the third stage of the paroxysm) is completely established.

When we have completely removed hectic fever, we will find the remaining treatment easily managed, by the kind of depletion I have already hinted at, by free ventilation and a well regulated temperature, by proper clothing, allowing in all cases, deep and full inflation, by a kind of diet that shall nourish without stimulating, and by removing all the causes that may tend to produce irritability of disposition.

When the bowels are obstinately constipated, they should be corrected by medicines that produce the effect, while at the same time they tend to alter that state of the blood which gives rise to the deposit of tuberculous matter. This has long been a desideratum devoutly to be wished; perhaps it may be found in gymnastics and the use of my

prophylactic compound. I have always recommended the use of this compound for some weeks, after pneumonia or any of those diseases which might leave that state of the fluids, so frequently productive of obstruction and consequent tubercles, and in the majority of cases, I have had the gratification of seeing my patients return to perfect health, leaving (of disease,) no trace behind. Whatever others may think of my remedies, I shall always praise the bridge that carries me safe over.

The painful inflammatory ulcer often met with in Consumption, requires a treatment somewhat different from that demanded for the indolent ulcer; although the symptoms may appear the same, they will be found to differ widely, upon minute inspection.

The patient can most frequently place his finger over that part of the lung in which this kind of ulcer exists; the expectoration is generally viscid, scanty and dark. This species of ulcer or excavation, like the preceding, is produced by the suppurating and bursting of tubercles, forming an open abscess, but unlike the preceding is continually inflamed producing a cough almost constant, harrassing the patient day and night.

In the treatment of this form of diseased lung, we must be guided by the situation in which we find the venous system; should we find much plethora generally existing, we must direct one, two, or three small bleedings from the arm, with moderate evacuations from the bowels daily, produced by small doses of rochelle salts, with the continued use of the prophylactic mixture, for the purpose of arresting the new formation of tubercles in other portions of the parenchyma. After the venous system is relieved, or if this should not require general depletion, we may remove the inflammatory disposition of the vomica, by the application of six, eight, or ten leeches to the spine, directly over the fifth dorsal vertebra, attending to the healthy action of the bowels daily, and the continued use of the prophylactic.

When from the absence of pain and a change in the expectoration, we are led to believe the inflammatory condition is removed, we may commence the appproximation of the sides of the cavity, by careful inflation. The patient should now begin, by inhaling five minutes at each time, morning, noon, and evening, gradually increasing the time until he can use the tube half an hour at each period. This should be continued for three

or four days and then lessen the time, by reversing the process that was practised in the increase. As printed directions will be found accompanying each inhaling tube, it is deemed unnecessary to describe minutely the mode of using them, in this part of the work.

I would here remark, that the instrument I have been in the habit of using for the last seven years, is in many respects different from the kind I now recommend, though the principle is the same. I used formerly a long tube with a calibre, a line and a half, and in some cases two lines in diameter; my patients were directed to breathe in and out through these tubes morning and evening, as long as they could, without feeling oppressed; in the majority of cases the result was remarkable. In all cases, the preparatory treatment I have just described, was premised.

The first intimation of the utility of this mode of procedure occurred to me in 1824, while engaged in forming a bulbous extremity to a glass tube for the purpose of experiment; I was at the time indisposed from slight catarrh, from which I suffered some oppression. After blowing several bulbs which required full and deep inhalation, I found my lungs much relieved, the escape of air

was prevented by my mouth being closed upon the cool end of the glass tube, the air cells of my lungs were distended until portions of the tenacious mucus was loosened and expectorated, perhaps assisted by the stimulus imparted to the respiratory organs by this exercise of the lungs; the relief was very remarkable, and I determined to substitute a glass tube of small calibre in the treatment of a case of Consumption, then under my care, for a mudge inhaler in use at that time. The improvement was soon evident, and I now determined upon the general use of such an instrument.

I cannot recur to this circumstance, without a lively recolleclion of the advantages derived from the intimate and friendly intercourse I have long enjoyed with the Professor of chemistry in the University of Pennsylvania; in whose laboratory the most obtuse mind, cannot long exist without receiving some useful impression, from the multiplicity of apparatus, or the great brilliancy of experiments, seldom failing in the hands of a professor, saturated with chemical knowledge; here we find the operations of the whole universe, condensed to suit the limited vision of man; to this great teacher of chemical science, I owe the origin of all my remedies for the cure of the lion of

diseases, Consumption. The blowing of glass bulbs, the compounding, and decomposing of chemical material, the effect of certain gasses upon the respiratory organs, are all the result of experiment here performed, and always encouraged by that great benefactor Professor Hare.

That he may long enjoy the reputation he now possesses as a public lecturer and private citizen is the most ardent wish of one who cannot flatter.

Strange to tell this practice prevented my being consulted in many cases of lung disease. When proposed by such of my friends as were acquainted with my practice, the reply was in many cases—he only uses glass tubes, pills, and mixtures; time has removed many prejudices that existed years ago, and I in common with many of my old class mates, have passed the period of probation, which every one engaged in the medical profession must experience, and instead of not having patients to occupy my time, I may say now, I have too little time for my patients.

Objections are always made to consultation with junior members in the profession, who frequently possess remedies the result of well tested experiment, which should always take the place of

useless compounds, the result only, of old established nosological rule, right or wrong.

As soon as I find my patient prepared for the use of the tube, I direct a good generous diet; and if great debility should exist, I add a small portion of wine, with daily exercise in the open air unless forbid by great weakness or the state of the weather.

The chamber or sleeping room, should be large and the ceiling lofty; no curtains should be used round the bed, and the fire, if any is required, should certainly be made of wood; the bed clothes should be sufficient, but not heavy; the bed should be a hair mattrass.

In the treatment of the irritable ulcer sometimes met with in Consumption, one or two small leechings from the back will be found sufficient, or if any no great benefit can result from their repetition in this form of the disease; one or two applications of eight or ten leeches will suffice to prepare the lungs for inflation; but should oppression or coughing be produced, the tube must be omitted until this is removed by a few days use of the sedative emulsion, and the daily external application of the irritative liniment, or in mild cases the daily use of

strong salt water, beginning with it tepid, and diminishing the temperature as the part shall become accustomed to its use.

The fauces will generally be found inflamed; if so, the part thus effected should be touched daily, or oftener if required, with a wash composed of nitro muriate of gold and rose water. This will soon be found to lessen or remove the inflamed state of the fauces, and in a few days the patient will be ready for inflation, without much inconvenience. In this form of disease, I would particularly recommend the removal of all unnecessary clothing about the neck or shoulders, and by cautious steps to accustom this part to all the changes of our climate. This can be done by daily diminishing the amount of clothing, until as little is worn as the neck can be kept comfortable with, and by using for a long time, night and morning, friction with a coarse towel, saturated with strong coarse salt water.

The clothing of the body should be sufficient, but not too heavy; the chest should never be confined in any way by the garments; the lower limbs, and particularly the ankles and feet should never be allowed to feel cold.

When we succeed in establishing a healthy

action of the surface of the body, we will soon find the same communicated to the lining membrane of the throat and lungs; and yet we find many physicians using large plasters or prescribing them for their patients, with adhesive additions, to be worn on the chest, oppressing respiration, and debilitating the skin. These are worse than useless, unless they are small and composed of material that may be absorbed constituting an endermic treatment, and having some decided beneficial effect on the existing disease. I have sometimes used iodine in this way for some of the glandular diseases with great effect.

This brings me to the consideration of *bronchitis* and its treatment.

By the term bronchitis, we are to understand an inflammation of the lining membrane of the bronchial tubes; but we frequently find the individual said to have bronchitis, complaining only of the *trachea* or larynx, which should be called laryngitis when it occupies the part of the throat at the root of the tongue. Trachitis when the inflammation exists between this part and the top of the breast bone, and bronchitis when confined to that portion of the wind tube, which branches at about this point, or immediately opposite the third dorsal

vertebra, and ramifies very minutely through the whole substance of the lungs. This tube through its whole extent, is kept distended by cartilaginous rings; indeed it appears to be entirely formed by a series of these rings, joined together by ligaments. Nosology can be of little importance, particularly in diseases of this tube; it can be of little moment to the practitioner or his patient to discover the particular locality of an inflammation known by them to exist only in one organ. Disease generally commences at a small point, and spreads frequently throughout the whole extent of an organ, altering in no manner its character, although increased in degree; the treatment being the same with a corresponding increase in potency, will always be found producing the same benefit. I have repeatedly cured, what was called bronchitis, by the application of a small portion of a weak solution of the nitro muriate of gold to the fauces, and strong salt water to the neck daily; and again I have found cases requiring repeated bleeding or leeching, dieting, housing, and the artificial production of urticaria. Yet this was the same disease, though in not the same degree.

This inflammation of the windpipe or its branches is sometimes neglected until small ab-

scesses are produced on its surface, these burst forming open ulcers, and sometimes the ulceration penetrates to the cartilaginous rings; when this happens it must be obvious that the case will be chronic, and require a treatment of the most persevering kind, this cartilaginous inflammation should be looked upon as of the same nature as inflamed cartilage in the other parts of the body. We should avoid exposure to a damp or very cold atmosphere, and if compelled to leave our dwelling from the nature of our business, the cold or damp air should be prevented from having direct contact with the inflamed bronchia, by holding a handkerchief loosely over the mouth and nose. Apartments heated by furnaces should be carefully avoided by individuals affected with any form of bronchitis.

The best constitutional treatment in this chronic form of bronchitis, will be such as has been found useful, when inflammation of cartilages existing in other parts of the body demand attention, with the exception of all debilitating remedies.

The inhalation of resinous fumes, the application of moxa to the upper part of the chest and sternum, the internal use of sarsaparilla, and the alterative prophylactic pill. Attention should also

be particularly paid to the dress in this form of disease, the feet should never be cold or damp, and any undue moisture should not be excited by too much clothing about the neck or chest; an over coat should never be worn in the house, as frequently happens to professional men, making short calls; nor should the individual ever sit with his back to the fire; these rules may be considered of little importance, but experience will prove their utility.

Gestation frequently arrests Consumption, and if the treatment was always properly attended to after parturition, the physician could in the majority of cases carry out this prophylactic of nature, and restore to health, the individual whose good fortune it has been, to be so blest.

We frequently find Consumption arrested during gestation; and in our post mortem examinations we see in the lungs of females who die of Consumption, after having many children, large cicatrices extending several inches in many cases, in a direction crossing the thorax, which proves the previous existence of abscess; and from the expectoration and cough diminishing as gestation goes on, it is but reasonable to conclude, that the

pressure of the gravid uterus produced this gradual approximation and consequent reunion.

Now it has always appeared to me a matter of great importance, for ladies under such circumstances, to select an accoucheur whose time was not so entirely taken up in his profession, that he is compelled to neglect the after treatment of his patient; health more frequently depends on this than the public are generally aware of; if the abdominal compress or bandage used after delivery, be not properly managed, the consumptive individual soon feels her old symptoms returning; and perhaps in a very few days will find her strength rapidly declining, her cough renewed, her expectoration, her night sweats, her hectic flush, resuming their former unwelcome regularity. Perhaps under these circumstances, she will be directed to nurse her infant, and an extra drain is thus added, hastening her destruction, while her infant and her cough makes sleep a stranger to her eyelids, and the new being is poisoned by what it feeds on.

Can this be prevented? Certainly. Nature points out the way, her works are simple. The married female is for the most part more

exempt from Consumption. And if this should take place, her hope of cure should be greater than in single life. The common functions are for the most part more regularly performed, and if she should become a mother, (being threatened with Consumption,) the certainty of cure is increased. After parturition the bandage should be broad and made to fit the person perfectly; it should be applied by her physician, and examined daily; it should cover the abdomen completely, and be so constructed, that there shall be no slipping up; we should endeavour to bring the stomach and bowels as firmly in contact with the under surface of the liver and diaphragm, as they were before delivery; thus continuing the support the lungs may have had from the uterus. We should also dry up the milk as soon as possible, and keep the chamber cool and airy, not without fire, but this should decidedly be of wood in an open chimney; a horizontal posture should be enjoined and a generous diet allowed. The child should be nursed by a healthy female, and the use of prophylactics and inhaling at once commenced. As soon as practicable after the third week, she should ride out daily, with prudence in her dress. By this care

the mother will frequently escape debility and its consequence, and the infant become robust, which could not have happened without this mode of practice.

CASES OF CONSUMPTION.

CASE I.

J. B. S——, aged forty two years, applied to me in December, 1833, for the relief of a severe neuralgic pain of the heart, attended with much palpitation, and constant cough. He stated that he had been directed by his physician to observe perfect rest, to eat no animal food, and to take of lugal solution five drops night and morning.

His symptoms (for which he supposed he was using the best remedy,) increased, and he became alarmed for his own safety; after persevering for several months without relief I was consulted.

I found upon examination of the chest, that the summit of the left lung was the seat of an abscess, occasioned no doubt by a severe inflammation of

that part which he stated had existed a few weeks before the palpitation of the heart commenced.

I assured him at once that the heart was free from disease, although its motion was somewhat out of order, and commenced a different treatment.

I directed one of my prophylactic pills to be taken nightly, and the application of ten leeches to the spine immediately over the fifth dorsal vertebra, and a ride of half a mile in an open carriage in the morning of every fine day; on the fourth day of this treatment, my patient called at my office some little improved in spirits, with rather less frequency of pulse. The expectoration was still very great, but the cough less frequent; the pills had improved the state of his digestion, and the uneasy feeling he had complained of for many months, was in a great measure removed. I directed the left side of the thorax to be bathed night and morning with the irritative liniment, and the pills to be continued. On the twelfth day of my treatment he called again to say the soreness had all left him; upon applying my ear over the upper portion of the left lung, I found distinct pectoriloquism; I now furnished him with a small glass tube, directing him to breathe through it as

long as he could at one period, without being oppressed, to continue the pills and liniment, and to call in a few days again.

On the following day he left the city, and remained at his brother's residence, in Delaware, for two months; at the expiration of this time he returned, when the change for the better, prevented my immediately recognising my patient.

He stated that the cough had left him gradually, his expectoration was gone, and that he was now able to leave for the west—which had been his determination a year previous, had not his heart affection prevented it. (Still harping on the old palpitation.) Two years after I received a letter from J. B. S——, informing me his health was never better, and that he had married and transferred his heart *affection*.

CASE II.

A young lady, the daughter of a very respectable grocer in this city, who had for many months suffered from weak digestion, and consequent debility, for which she had taken various remedies

without permanent benefit, became consumptive; after many proofs from various symptoms, of the existence of phthisis, I was called to visit her in consultation with her uncle, her attending physician, who gave it as his opinion that she could not survive six weeks; and observed that I had been called to satisfy her brother. I replied, as I was then in the house, perhaps he was already satisfied, and that I conceived the next step of importance, was to examine the case. I found the patient much emaciated, with some cough and night sweats. And upon applying my ear to the chest, discovered the existence of a small cavity at the summit of the right lung, while I also detected a dry crepitous rattle, with bubbles manifested by auscultation, the certain proof of emphysema. This state arose from a spasmodic affection of the throat, which the patient had been subject to for more than a year. There existed much oppression and upon being informed that this symptom had come on suddenly after a distinct sound in the chest, resembling the tearing of parchment, I concluded in my own mind, that a rupture of some of the air cells had taken place, and that in time cicatrization would happen through the consequent dilitation of the parenchyma. I, therefore, sup-

posed a favorable prognostic existed, and of course differed in opinion from the attending physician. I supplied this patient with a large quantity of prophylactic pills, one of which I directed to be taken morning, noon, and night; from the existence of spasms in the throat, preventing free respiration, I concluded there was little use for an inhaling tube. And I am happy to add, that this young lady now enjoys perfect health.

CASE III.

Mrs. M. W——, aged forty two years, applied to me in 1834, in consequence of a continued hacking cough, which had been existing for four months, notwithstanding the use of all the known remedies, or cough mixtures: upon examination of the chest by percussion, I at once discovered the right lung was perfectly useless to her, and that its greater portion was occupied by an abscess. Believing surgery might afford some relief, I proposed a consultation with my friend Dr. J. Randolph, which was acceded to; the doctor made the same examination, and agreed with me at once in

opinion. The patient was very desirous that something should be done to relieve her breathing, and was willing and anxious to have an operation performed; there being great emaciation and very great debility, we concluded to support her strength with a portion of rich soup and malt liquor daily; this she took freely for three or four weeks, and recovered some strength, the bowels keeping tolerably regular for some time; this did not continue long, however, and at the expiration of about four weeks from our first visit, obstinate constipation took place, and all purgative medicine swallowed produced no operation. The use of a teribinthinate injection had a better effect. A large tumor was now distinctly felt immediately under the right false ribs, and in a few days this became very prominent, yielding fluctuation by percussion. She now repeated to me her desire for an operation, and begged me to puncture this large gathering, (as she called it.) I promised this should be done, and on the following day, requested my friend Dr. G. S. Morton to be present at the operation.

Dr. Morton examined the tumor and we jointly concluded, that an operation was not only safe, but justifiable.

After providing bandages, compresses, etc., I proceeded by making a small incision through the skin immediately over the most prominent point of the tumor, and then changing my scalpel for a small trocar, I gently pressed this instrument through the muscles and into the enlarged liver, the seat of the abscess; upon withdrawing the trocar and leaving the canula, (with which this instrument is generally sheathed,) thin unhealthy pus flowed freely through it. This continued until six quarts had been discharged without any signs of syncope being produced. I should not mention this large quantity, had not Dr. Morton been present who can vouch for the authenticity.

The respiration and general unfavorable symptoms continued to improve, the cough completely leaving her for three weeks. At the expiration of this time, the oppression and cough returned, and she sunk rapidly, living one month after the operation, from which no ultimate benefit could be promised, although demanded for relief.

Autopsy, assisted by my friend Dr. Morton, twelve hours after death; the right lung as had been anticipated, was nearly destroyed by ulceration, except a small portion which was found shrunk up under the right clavicle, while the cavity

of the pleura of the right side was filled with the same kind of matter which had been discharged by the operation a month previous. The heart was found to be perfectly natural, although this patient had suffered much from palpitation; the left lung appeared healthy with the exception of its upper lobe which was hepatized, the cavity of the pleura of this side contained about four ounces of serum. The right lobe of the liver was found greatly distended, and upon being punctured, discharged as much thin matter or pus as would make up, (with the quantity found in the chest,) the same amount discharged at the time of the operation; the liver was only a sack containing this fluid, its walls not thicker than four lines, its upper portion adhering to the diaphragm and opening into the right pleural sack, by a sinus; accounting for the great relief the patient had experienced in her breathing after the operation.

The health of this patient had been declining for many years from leucorrhea; this circumstance led me to examine particularly the state of the uterus; and from the situation in which I found this organ, I concluded our general remedies for that disease must frequently be very inefficient; I determined from this hint to change the practice

somewhat, and my success in the treatment of uterine diseases since that period will always prevent my regretting a desertion from the old plan of treatment generally pursued.

CASE IV.

Proving the injurious effect of inflammation and vesication about the chest, by blisters or plasters.

Miss E. S——, aged 17 years, in the spring of 1835, after long exposure to a cold and damp easterly wind by riding in an open carriage, was taken with a chill which proved to be the commencement of pneumonia. Medical aid was soon called and a proper treatment at once directed; she was bleed freely, and as often repeated as the nature of the case required. Evacuants were used freely and properly, and a speedy convalescence was brought about.

Some days after her physician left her, she complained of a slight pain in the right side, for the relief of which her parent administered a large

dose of calomel, which operated slightly, and was not followed by any other medicine; the following day, she had some fever and a return of her cough; the breast was rubbed with a stimulating liniment, and a blister applied. The consequent inflammation of the cuticle and general soreness produced, prevented full motion of the chest, and the patient soon complained of much oppression in breathing. This created some alarm, and her physician was again called in, who imbibing some of the views of the patient, directed a large plaster of burgundy pitch, sprinkled with Spanish flies, to be applied to the back and shoulders. This effectually prevented all healthy respiration or full inflation, and the best selected internal treatment was consequently of no avail; the lungs were supposed to be diseased, and I was called in consultation. I could not explore the chest on my first visit, in consequence of the very great inflammation and soreness of the whole surface of this part occasioned by the blisters, liniments, plasters, &c., &c. But finding the bowels still slow, with a slight degree of ptyalism, I directed one of my pills to be given morning, noon, and night, (the composition of which I made known to the attending physician,) with ten grains of nitrate of potash as often, all

the plasters to be removed, and the chest bathed frequently with a little cool brandy. The application of brandy to surfaces inflamed in this way, or by blisters alone, is perhaps one of the most soothing and comforting we can direct.

The nitre, the prophylactic pill, the removal of all external irritants, had a most charming effect. On my next visit, the lively countenance, the cheerful expression, the desire to be questioned, that she might answer for herself, told all that I could wish to hear.

Her fever had left her, the skin felt naturally moist, the tongue looking much more like health, the eye lively, and the irritable state of the throat much subdued. The peristaltic action of the bowels improved, and so much improvement in the state of the skin over the thorax, that I was now able to examine the state of the lungs by percussion, auscultation, &c.

I found immediately under the left clavicle, the respiratory murmur could not be heard; this part gave a dull sound on percussion, and the difficulty of breathing was much increased by laying upon the left side. As there was some pain produced by a deep inspiration in this part, I directed ten leeches to be applied to the back in a small com-

pass over the fifth dorsal vertebra, and the pills to be continued. On my next visit I found very little uneasiness or pain in any part of the chest, by full inflation, and less inconvenience produced by change of position. I now furnished a small glass tube for inhaling, with the general directions in manuscript, ordering at the same time a continuation of the pills morning and evening, and a moderate diet of small portions of venison, (one ounce,) and one cracker, morning, noon, and night, with one wineglass of good ale after the mid-day meal; the daily use of dumb bells, and a brisk walk up and down the chamber several times through the day. With these directions and a promise on her part to continue them faithfully, I left my patient under the care of her attending physician.

At the expiration of six weeks, she called at my house in a carriage to report her health; there was now distinct respiratory murmur heard in every part of the chest, and I agreed with her in opinion, that further treatment was unnecessary.

This young lady still continues to enjoy uninterrupted health, without the least appearance of ever having had lung affection.

CASE V.

Case of recovery after the formation of tubercles, in a constitution of a hereditary predisposition.

In March, 1835, I was consulted by Miss M. R——, aged twenty two, for a painful affection of the chest, attended with considerable cough and expectoration of blood, mixed with frothing yellow matter. She stated that she had lost her mother and sister with the same disease, and believed she herself was going rapidly; upon exploring the chest I found the summit of each lung was obstructed by tubercles, several existed on the sides of the neck, and many under the scalp; she experienced much inconvenience from these small tumours, when her bonnet pressed them; I proposed their removal which she acceded to, and commenced a general treatment: I directed her to leave the city, to use daily a pair of heavy dumbbells, to make full inspirations frequently through the day, to swing by the hands from the lower

limbs of peach or apple trees, (which I knew she would find on the farm she had chosen for her location.) I provided her with an alterative mixture and a large box of prophylactic pills, she continued at the farm, and most of the day, (in fine weather,) in the orchard swinging upon some of the horizontal limbs. The expectoration gradually diminished, her strength returned, her chest and hips expanded, she became robust, and still enjoys good health; her chest in August, 1841, when I last examined it, showed no marks of disease. I then for the first time since I had made it, observed that I had kept my promise, and that with common prudence she might enjoy a long life.

I had left one of the small tumors on the head, for the purpose of seeing whether the internal use of medicine could produce its absorption; upon searching for it after she returned to the city, I could discover no trace of this tubercle.

Note.—This case was to be the third victim in one family, see introduction, page 19.

CASE VI.

Consumption in its very advanced stage cured by the supervention of another disease.

Mrs. S. W——, aged thirty nine, applied to me in May, 1835, for advice in her case. She stated that for eighteen months previous, her health had been declining, with continued cough, much expectoration of bloody matter, and hectic fever. She had been for six months under the care of two very able physicians, whose treatment corresponded with that of others under the same circumstances: as she had received no benefit from medicine, and as dropsy had taken place, which in her opinion, was to end her suffering, she gave up all hopes of recovery; but as her cough and expectoration had diminished, while her strength had increased, and her chills, fever, and night sweats had completely left her, she consulted me for the cure of her dropsy. This I observed might be accomplished, but, that in my opinion she owed her recovery from cough to this disease. This opinion

I formed from the fact of there being no edema, which led me to conclude the dropsy was encysted, while the abdomen was as large as is generally met with in the last months of gestation. I had no doubt that the relief from her pectoral affection was owing entirely to the support the diaphragm and lungs received from the existence of this disease.

I, therefore, advised her to continue without medicine, and to let me know immediately, if any of her old symptoms of cough or expectoration should take place. In October, 1835, I was again called to visit this patient, when she requested that I would do something for her dropsy, as she had no return of cough or spitting, and thought that dropsy had done all it could for her, and that now she would like to do without it if possible. Having some suspicion of large hydatids in the uterus, I proposed an examination per vaginum, and soon discovered that the views I had of her case were well founded. The uterus was as large as we generally meet with at the ninth month of gestation; I proposed the introduction of a common sound, through the os uteri, which was acceded to, and by making a few rotatory movements, broke the sack containing the fluid, and in a few mo-

ments my patient was relieved from all her distress from dropsy. I directed her to lie with her head and shoulders low, and to keep constantly applied round the lower part of the abdomen, a broad bandage moderately tight; my object was to support the diaphragm as much as possible. She soon recovered without the use of any medicine, and now continues in perfect health.

CASE VII.

A. W——, aged thirty two, consulted me in November, 1836, for the relief of a troublesome cough, with scanty expectoration of matter streaked with blood, which had existed for several months. He had been frequently leeched on the throat, and as often blistered. He had also inhaled iodine for a long time by the advice of his physician, and had tried a short sea voyage without relief. Upon exploring the chest, I found the parenchyma healthy throughout. He complained when exposed to the atmosphere of heated rooms, of a deep seated pain and sore feeling at the upper part of the sternum, (or breast bone,) which was

much increased by inhaling a very cold air, but was greatly lessened when the weather was temperate. He had avoided all stimulating drinks, and animal food, dressed warm, and particularly protected the chest and neck. This I directed he should remove as soon as possible, and bathe the part night and morning with cold salt water, I supplied him with my solution of gold, and ordered him to touch the fauces with a soft camel's hair pencil, moistened with this solution night and morning. To commence the daily use of the Lisbon diet drink, and one of the compound prophylactic pills to be taken nightly. At the expiration of one week A. W—— called at my office much improved, his expectoration had diminished very considerably, his soreness of throat nearly gone. He continued to mend from this time, and after this treatment lasted two months he considered remedies unnecessary. This patient continues to enjoy perfect health.

CASE VIII.

Case of incipient tubercular consumption cured.

Miss E. D——, aged twenty four, came from the state of Maryland to consult me, in the month of September, 1840, she complained of great soreness of the throat with enlarged tonsils, and continued cough, except a few hours after the use of a cough mixture, which always produced sleep.

The upper lobe of the right lung yielded a dull sound upon percussion, and she complained of a deep seated soreness when pressure was made on the ribs over this part. Her cough was very constant, but without expectoration; her pulse frequent and tense, the tongue coated except near the end, which was of a deep red, her cheeks occupied by a hectic blush, lips thick and protruding. In fact all the marks of incipient tubercular consumption, commencing in a constitution loaded with scrofula. The indications in this case were plain; to soften and cause absorption of the tubercles, to remove the hectic, and change the diseased action

into healthy. Laennec it would appear by reference to his work on diseases of the chest, places little confidence in remedies said to possess the power of softening tubercles; I am by no means astonished at this. By a perusal of his writings, it will clearly be seen that this "great author," like many of his predecessors, introduces to the reader a variety of remedies, the utility of which in his mind is doubtful; without attempting to account for their failure, or proposing a better means of cure.

He classes under the head of empirical remedies, mercurial salivation, emetics, (which have been highly recommended by many distinguished practitioners in imitation of a sea voyage;) why they should select the most unpleasant part of a sea-voyage, has I must acknowledge, always appeared strange to me: and from what I have already said in relation to the advantages of a sea-voyage, it must appear evident that I place little reliance on the mere effect produced on the stomach. Laennec also places under the head of empirical means, charcoal, mushrooms, red cabbage, wolf's bane, crabs, oysters, frogs, vipers, electricity, opium, cicuta, cinchona, hydrocyanic acid, the seeds of the phellandrium, aquaticum,

&c., &c. How the opinions of Laennec have been received by those practitioners who have relied on opium, cicuta, hydrocyanic acid, mercury, &c., I know not.—But to return to my subject; I directed this patient to use all the out door exercise practicable, to throw off corsets and all restrictions to a free motion of the muscles of the body or limbs, to have a double ladder erected in the chamber, and a single large sized rope suspended from the top round; on this ladder she was to perform all the evolutions and calisthenics in her power, to climb the rope to the top by the use of the hands and arms alone, to use dumb-bells twenty minutes night and morning, and ride or walk out whenever the weather would permit; I directed as medicine the daily use of my prophylactic compounds, and every evening ten grains of the nitrate of potash.

To rub the upper portion of the right side of the chest with an ointment of iodine nightly, and use the inhaling tube every four hours, for twenty five minutes at each time. I prohibited all animal food, except wild meats, and these were to be used but once in twenty four hours. With a continuation of these directions, I visited my patient every three or four days, perceiving improvement at

every visit. Much change in the skin, and whole expression, was soon remarked by all her friends; the thickness of the lips began to diminish, the hectic left the cheek, the tongue lost its morning dryness, the stoop and disposition to approximate the shoulders was soon changed to an erect and broad expansion of the chest, and at the expiration of four months she left the city in good health. I frequently see the relatives of this patient, and learn from them the pleasing fact that she still enjoys most excellent health.

CASE IX.

Case of inflamed ulcer in the lungs cured by leeching, prophylactic pills, and inhaling.

S. M——, aged thirty three, called on me in February, 1837, with bloody expectoration, midday chills, evening fever, and nocturnal perspiration; much emaciated, considerable cough, and great loss of strength, most sensibly felt early in the day from the constant perspiration of the night. I directed fifteen leeches to be applied over

the fifth dorsal vertebra, and a pill to be taken nightly, composed of teraxicum cicutæ and nitro muriate of gold. At the end of one week he called at my office free from pain or soreness in any part of the chest, and upon exploration with the stethoscope, I could distinctly perceive the existence of a cavity near the summit of the right lung with clear pectoriloquism; the corresponding portion of the left lung yielded a dull sound by percussion, while the respiratory murmur was very dull and indistinct. The night sweats still continuing, without perceptible chill, or much fever preceding. Having frequently met with cases that were relieved of this unpleasant symptom by a remedy often used in the practice of my late and highly esteemed friend Dr. Joseph Parish, whose medical career was noted for success, I determined upon its trial in this case. I therefore directed the whole surface to be sponged every night with a strong solution of alum in hot water, to which had been added a small portion of brandy; ordering at the same time the regular use of my prophylactic pills, and a full inflation of the lungs through the inhaling tube, which I had provided for this patient, made of glass two feet in length, having a calibre one and a half lines in diameter.

The soreness originally complained of never returned sufficiently to demand a second leeching—the expectoration diminished gradually, the bathing or sponging was used for two weeks, when the night sweats had completely subsided. The prophylactic pills were used for three months, and the inhalation continued at intervals for two; at the expiration of this time the lungs became voluminous, the pectoriloquism was no longer heard at the summit of the right lung, while in the left the respiratory murmur was now distinct: October, 1841, continues to enjoy good health.

Flattered by my success, I determined to test my genius, if any I possessed, to the construction of better inhaling tubes; these I subsequently contrived of various material; of gum elastic stomach tubes, of large catheters, of lead, and of wood. They answered my purpose tolerably well, until a friend of mine returned from a visit to Europe, who supplied me with breathing tubes from the maker employed by the celebrated Dr. Ramadge. In many respects these tubes are superior to any I have ever used, and I have had a large supply constructed by a mechanic in this city for general use. There is one great advantage in having a

maker at hand, the length of tubes may be increased or diminished, while the calibre can be made to suit the peculiar state of the lungs, or age of the patient; much attention to this point is required when tubes are used.

CASE X.

In February, 1839, I was called to visit the daughter of a respectable merchant of New York, whose health had been declining for more than eighteen months; she complained of constant pain about the middle lobe of the right lung, with palpitation of the heart, and much oppression in breathing: she had been confined to the house for more than six months, by the advice of her former physician, but not to her bed. She had taken many mixtures for her cough, which was very troublesome, but without relief. She complained of some soreness upon pressure being applied to the fifth, sixth, and seventh dorsal vertebræ: this led her parents to believe the cough and emaciation was occasioned by a disease of her spine, for which I was consulted. Upon examination of the

spine I could not percieve any derangement in its column, but had no doubt that the state of the lungs communicated through the nervous system, their increased sensibility to this part. The locality of pain is deceptive, and often will mislead a superficial observer; we have often seen cases of severe hemiplegia, treated with blisters, setons, emetics, narcotics, &c., without relief, at once cured by the extraction of a decayed tooth, which had not attracted the attention of the patient or perhaps occasioned the least uneasiness. Upon exploring the chest, the cause of this soreness of the spine was soon discovered; there existed about the middle of the right lung a space of about six inches in circumference occupied by tubercles, a circumstance sufficient in my opinion, to account for the derangement of the motion of the heart, as well as the existence of all the other unfavorable symptoms. There were several small moveable tumors in the direction of the absorbents on the right side of the neck, which the patient stated, had existed for more than twelve months; the skin was always dry and the temperature above the natural standard of health.

I commenced the treatment, by causing all the articles of dress (corsets, tight frock bodies, &c.,)

to be removed, and to use no garment that could in the least impede a full inflation of the chest, or prevent the arms from being raised perpendicularly above the head; I had fifteen large leeches applied to the portion of the spine complained of, and directed one of the prophylactic pills to be taken morning, noon, and night; to rid the system more perfectly of all the scrofulous tendency, I directed at the same time twenty drops of my solution of bromine every four hours, and a bath daily of salt water at a temperature of eighty degrees Fahrenheit. This treatment was continued for one week with decided improvement, and at the expiration of that time, finding less cough and pain in the chest, I added to the remedies the use of the inhaling tube, a double ladder, dumb-bells, &c.

In about six weeks from the commencement of the treatment, the small tumor on the neck subsided, the pain left the breast and back completely, the respiratory murmur was distinctly heard throughout the chest, and the patient now took daily exercise on horseback. She continued under my care for three months longer, when she returned to her native city in perfect health, I frequently hear from this patient who continues to be active and well.

NOTE.

I might go on with my history and treatment of cases, but my time is too much occupied at present in practice, to allow sufficient leisure to put them in form for publication. I shall therefore keep the manuscript account of each case of Consumption always in my note book, which will be found upon my office table, with the name and residence of most of my patients.

I shall now pass on to the consideration of some of the most important derangements of the vital functions.

DISEASES OF THE HEART.

The healthy action of this organ is frequently disturbed by other diseases, while its deranged motion constitutes only one of their symptoms; the practitioner being misled often prescribes remedies under these circumstances that can have no influence on the real seat of disease; this is consequently allowed to go on unmolested, and the palpitation or irregular action of the heart which was originally symptomatic, becomes idiopathic, and consequently in most cases unmanageable. Diseases of the lungs, liver, stomach, bowels, spine, and nervous system, may be classed among the causes of heart affections; while the passions, such as love, grief, envy, and despair, should not be overlooked.

Idiopathic affections of the heart, are in my opinion of rare occurrence, comparatively speak-

ing; they are generally unmanageable, and the individual thus afflicted, drags out a miserable life. Post-mortem examinations frequently betray the existence of diseases of other organs with decided marks of having preceded the heart affection. Any obstruction in glands, will often produce derangement of the circulation, and consequently, great alteration in the heart's action; these glandular diseases frequently owe their origin to some derangement in the respiratory apparatus, by which the blood not being perfectly changed from venous to arterial, is unfit for the purposes of health; in this state it is returned to the heart, and sent by the route of the circulation to supply the different glands of the body. Its unfitness for this purpose soon produces glandular disease, and congestion of the venous system becomes the result. Derangement of the organs of digestion soon follows, debility with all its consequences takes place, and the heart is condemned unheard, or like the innocent victim of justice, not listened to by those who nominally preside as judges. The physician may feel the pulse and perhaps look at the tongue, but ridicules the use of the stethoscope, and consequently is ignorant of the state of things existing at the fountain of life.

We frequently find congestion in the venous system producing derangement of the digestive organs, which not being relieved by medicine alone, soon yields to its use when assisted by free depletion.

Those physicians, who are accustomed to think for themselves, and to apply to nature as the great and only unerring teacher, are aware of the frequency of such congestions, and their cause. The injected state of the capillary vessels of the stomach, and intestines, must be productive of important derangements of the action of these organs. It is essential, therefore, to restore them to healthy activity by general or local bleeding; and shonld this not suffice to bring them back to their natural functions, tonics may then be administered to correct any debility that may be left.

Corvisart mentions, among the various morbid appearances observed by him in those who died in consequence of disease of the heart, the high vascularity of the stomach. To such extent does this at times proceed, that, as he correctly states, the stomach will be nearly filled with sanguineous clots of a deep red colour, extending also throughout the small intestines. I am induced to dwell upon this phenomenon, with which indeed my

pathological inquiries have long made me familiar, principally from its singular importance in forensic medicine; although it is of no slight moment on other accounts.

"Dr. Ramadge gives an account of a very interesting trial occurring some years ago; the parties in which were the Rock Insurance Office, and the executors of a respectable banker. His death had been sudden; and on opening his body appearances were presented, which induced the suspicion that the deceased had made away with himself. More than one hospital surgeon of eminence gave it as his opinion, that the individual in question had taken poison. Their authority would, in fact, have influenced the Jury, had not a young medical practitioner, a former pupil of mine, decided the point at issue, by counter-evidence. It was, indeed, evident to the pathologist, from the detail of the circumstances, that the deceased had laboured under some obstruction to the circulation, whence arose the congested state, and discharge of blood, which had misled the other medical witnesses.

Now the phenomenon, which I have just noticed, may be presented after death from another cause, which, however, produces precisely the

same results as cardiac disease, namely, inflammation of the lungs. As an instance of this fact, I may adduce the *post mortem* examination of his late Majesty; and I recommend the considerations I shall have to make on this subject, to the especial notice of our honoured President, Sir Henry Halford. If I am wrong, he will correct me; and he cannot have a more graceful, or loyal opportunity, of making public those pathological inquiries to which doubtless his life has been unremittingly devoted.

From the report made after death, to which was appended the name of that truly eminent surgeon, Sir Astley Cooper, it would appear that this gentleman referred the phenomena, presented on dissection, to disease of the heart.

This opinion is undoubtedly correct. Disease of the heart did produce some aberrations from healthy structure therein noticed. But, through tenderness, I presume, for his Majesty's more immediate medical attendants, he omitted to mention, that the aggravated symptoms of this disease, which, as he truly observed, "had existed for many years," were secondary, not primary causes, of such morbid phenomena. Accordingly, the President, knowing that Sir Astley's name is "a

tower of strength," gave out afterwards that cardiac disease was the "*fons malorum.*" Yet, such being his opinion, it is extraordinary that he should not have remonstrated against his Majesty's frequent drives in Windsor forest, in the severest weather, previously to increased indisposition confining him to his apartment. He must, of course, have been aware of the pre-existence of his cardiac complaint; since although the President, I believe, does not employ auscultation, a careful exploration of their patient's chest, must doubtless have been made by one, or other, of the remaining medical attendants. Still I do not find, from his diagnosis, (so far as this is to be gleaned from the bulletins) that he had any suspicion of an affection of this organ, previously to death. The said bulletins were indeed most "ambiguous givings out;" and were characterized, at the time, by Mr. Brougham, (the late Chancellor,) in rather severe terms. I forget the particular expressions of which he made use, but their tenor was, that so deceptive and unmeaning were those official documents, he defied any man to lay his hand upon a single passage from which the prospect of the event, deplored by the whole nation, could have been gained.

Supposing, however, that he did entertain the belief of his Majesty's labouring under some affection of the heart, I am totally at a loss to account for his apathy in permitting those repeated airings, of which the newspapers made at the time consant mention.

It is a fact, that on the sudden setting in of cold weather, numbers of elderly persons suddenly succumb to the manifestation of disease of the heart. This has long been observed in those establishments (at least I have noticed it) in which the aged are congregated together, as at our noble institutions, Greenwich and Chelsea hospitals. The reason is very apparent. Cold at once constringes the cutaneous capillaries, and thus operating on the deep seated vessels occasions a congestion which the heart, called upon to exert fresh activity at a period when time, or disease, has enfeebled this vital organ, is unable to overcome. To use a technical illustration, an additional leverage is exerted, and the spring snaps.

Against the above account it may be objected, that dissection furnished evidence of cardiac lesion. The vascularity of the stomach, as I have already remarked, is no proof of the existence of disease of the heart; but what did exist had, doubtless

been called into activity by the unsuspected inflammation of the lungs.

In fine, as no diagnosis was recorded, it is presumable that no diagnosis was made, at least none that had careful exploration of the chest, by auscultation and percussion, as its basis. The evils, resulting from such omission, may be conjectured from the preceding remarks.

By way of corollary to the above, and as an example of how confined the knowledge of pathology is, or else of its difficult acquisition, I may mention that about two years previously to the demise of his Majesty, I had had some preparations made, at a considerable expense, faithfully imitating the stomachs of persons who had died of the consequences of cardiac disease. These preparations were shewn by the modeller to some of the most eminent in the profession, and in one case, to a gentleman who, he stated, was preparing to publish a work on the morbid appearances of the stomach in individuals destroyed by poison. They all pronounced the subjects, from whom the preparations were modelled, to have lost their lives by poison, or some acrid substance taken into the stomach.

In the report of the autopsy, on the body of his

Majesty, it is stated that the immediate cause of his death was the rupture of a blood-vessel in his stomach. To this I can give no credence. The effusion was, I make no doubt, poured forth from the muco-villous coat of the stomach. It is generally supposed that the *vasa brevia* supply a channel for sanguineous congestions by the communication they furnish with the splenic end of the stomach; but in addition to this passage, I believe the vascular pores of this organ itself must facilitate the escape of effusion. This, however, is contrary to the opinion of Corvisart, who supposes that the liver unloads itself of its accumulated blood, through the intervention of the hepatic arteries and veins, and the pori biliarii, into the hepatic duct, and that the fluid conveyed by this means into the beginning of the duodenum, may, in part, flow back into the stomach. Now, frequently as I have examined the hepatic duct, both before and since my acquaintance with Corvisart's work, I have never been able to detect the presence of any sanguineous collection there.

The course of the disorder which terminated his Majesty's life seems to me briefly this; and I ground my opinions on the few hints to be gleaned from the President's bulletins, and the details of

the examination after death. Cold, I conceive, induced inflammation of the lungs, which was latent, but could have been readily discovered by an experienced auscultator. The absence of cough, till within a few days preceding his demise, by no means invalidates the above supposition, as experience has fully shown me; and the difficulty of breathing, so often mentioned in the bulletins, tends to confirm it.

Consecutive hydrothorax first occurred in the left side of the chest (between two and three quarts of water were found after death) and the compression of the lungs, produced by this effusion, might in some degree, mask to the inexperienced, the auscultative signs of pneumonia. Had bleeding been seasonably employed, effusion could not have well occurred; and, as a proof of the inestimable value of auscultation, I must beg especial attention to the fact that venesection, critically applied, might not only have prevented the deposition of water in the chest, but had it been again resorted to at fitting periods, it would have obviated the sanguineous effusion from the stomach. This latter, indeed, arose from the general venous congestion brought on by the compression of the lungs just noticed.

In the outset of this digression, I have taken the liberty of calling Sir Henry's attention to it. Although, conjecturing from the "*aniles fabellas*," or short essays he has published on medical subjects, I am fearful that these are details which possess little attraction for him. In one of his prolusions, at the *conversazioni* if I mistake not held at the College of Physicians, he speaks of individuals' having suffered from palsy of the kidneys. This is so extraordinary, that one would suppose the curiosity of the learned President would have led him to examine these organs, in order to satisfy himself whether, or not, they had undergone any change of structure. Doubtless he knew, without examination, the morbid condition, as well as functional derangement, of these poor palsied kidneys. It would, however, have been kind in him, to have stated them for the benefit of individuals less favoured by nature.

Before dilating further on the President's multifarious endowments, it behoves me to apologize for having, although I trust in no irreverent spirit, invoked the names of royalty; yet, I am but following, although at immeasurable distance, "*non passibus æquis*," the steps of the President himself. It is his delight, and I humbly hope the

delight of his auditory likewise, to dwell upon the "last, long, lingering" scenes of royalty. Seldom does one of those evening parties occur, at which science, tea, and coffee, hold divided empire, but he favours his hearers with an account of the patience and resignation of those illustrious personages, who have died under his hands.

How far the interests of medicine may be advanced by these reunions, at which the courtly President delivers his popular harangues, it becomes not me to decide. Judging from what have already appeared in print, I should conclude that I am no very serious loser by my absence from these high solemnities. I cannot, indeed, conceive how any scientific advantages can possibly accrue from meetings, at which are assembled "throned dominations, princedoms, virtues, powers," at which, in short, a number of individuals profoundly ignorant of medicine, in company with those who by virtue of their diplomas do, I should conjecture, know something of the matter, congregate to listen to some popular essay on the gout, insanity, &c., or observations on the charms of a death-bed under the auspices of Sir H. Halford. Such meetings may tend to introduce some half-dozen sucking favorites of the Galenical Sultan's

to promising patients, and gratify personal vanity at the same time. The non-professional hearer will take oratorical common-places for the dicta of an Hippocrates, and the initiated will be wiser than to gainsay his ἔπεα πτερόεντα.

But seriously speaking, is this a state of things which can, or ought to exist? Was the college of Physicians founded for no higher purpose, than to furnish forth an evening's entertainment? Properly directed, it might become the central point around which the real talent of the kingdom might be collected. Bestowing countenance, and protection, on the young and zealous, and made the depository of every fresh accession of knowledge gained by the experienced, it might rise higher than personal views, and by enlarging the sphere of science, lessen the ills of humanity. But to effect this, or any thing approximating to it, the high places, with the images of Baal, must be overthrown. Wealth, and fortuitous success, must no longer give a patent right to the office of President. Fair, and open competition, should here, as on the continent, give the highest seat to the worthiest. The man, who has at his disposal the most valuable situations in the reach of the

profession, should have medical knowledge no less than integrity to direct his choice.

I fairly own that when I regard the men, pre-eminent in skill, and therefore, therefore alone, pre-eminent in rank, who adorn the profession abroad, I feel not a little ashamed of the figure we make at home. The estimability of private character cannot compensate for the want of distinguished professional reputation, in the nominal head of the medical schools of this country. Surely the ephemeral sheets, published by Sir Henry, could not, by his most obliged partizan, be compared, without a blush, with the masterly productions—translations of which form the richest part of our medical libraries. Did I know one offering laid on the shrine of science by the President, I would willingly give him the credit due. I attack not the man, but the system, which imposes the man upon us. When I am informed of any one discovery, in either the theory, or the practice of medicine, first communicated to the world by Sir Henry, I will proclaim him—a better man than many of his predecessors in the chair. Yet let me not be too precipitate in my judgment. His present publication

may be merely the forerunner of some great posthumous work, which may call forth our regrets when its author is no more. The boon denied us now may be vouchsafed to posterity; and future generations may hail, with reverence, that name by which at present

'Derisor vero plus laudatore movetur.'"

I am unacquainted with any member of the medical profession on this side of the Atlantic, who betrays in practice so much ignorance of symptomatology or pathological anatomy. Had William the Fourth been surrounded by men devoted to medical acquirement, and possessed of less desire to relate the death-bed resignation of some patient of rank, perhaps he might have still enjoyed his rides in Windsor Park.

The treatment of the disease which closed the life of President Harrison, was severely criticised by some member of the medical profession in New York, and perhaps justly. In Philadelphia we were informed that the President was ill with inflammation of the lungs, but we had no account of his being bled freely; every mail brought us the sad tidings of his disease progressing from bad to worse, until finally his demise was announced.

There is a fact long established in practice with regard to blood-letting, that persons advanced in life bear bleeding better than acute inflammation; and it will generally be found, that acute inflammatory attacks will often yield more readily in advanced than early life; one or two free bleedings will generally put an end to all danger from inflammation, and completely prepare the system for internal remedies, which may be indicated by derangement of any of the functions. After free blood-letting in old persons we should re-establish the healthy action of the constitution by the use of the mildest means. We should select articles of medicine that would fully accomplish what we desire to perform without debilitating the patient, or causing the least irritation. We should never rely on antimonials to remove inflammation; the tone of the stomach should be assiduously guarded. In most cases the bowels may be acted upon by enemas alone, or assisted by food that will have the same tendency. It has been remarked by others, and often witnessed by myself, that antimonials frequently reduce the patient but not the disease. Where blood-letting has been early and judiciously practised, there will be no necessity for

antimonials; and when the lancet has been withheld nauseating doses can be of no avail.

I have met with many physicians, who having lost patients with acute disease attended with some irregularity of pulse, concluded that no treatment could have resulted otherwise, in consequence of the existence of some latent affection of the heart. I have known certificates given, "*died of diseased heart*," when the subject had enjoyed a long life of uninterrupted health free from irregularity of the heart's action, until the commencement of the disease that had proved fatal. I do not wish to be understood to say, that diseases of the heart never occur; but I do say, in my opinion they are decidedly more apt to be symptomatic, than idiopathic.

I have attended a lady in this city for the last fifteen years, who from derangement of the liver, has frequent attacks of dysenteric discharges from the bowels, and while this disease lasts, which is generally from two to three weeks, her heart beats with great irregularity, her pulse consequently intermits, she has frequent syncope—and this state of things exists as long as the bowels continue deranged: but when remedies triumph over disease, and this disordered state of the bowels is

completely subdued, I find the fountain of the circulation moving on with the same healthy regularity, that had existed previous to the attack.

I have at this time a young lady under my care whose heart (according to the opinion of her former physician) was so diseased, that nothing could be done for her relief. When she became my patient, I gave her case all the attention it demanded; I examined the lungs, the heart, the stomach, the spine, &c., and gave a written opinion to her friends sealed up, with this remark, that I would not pass judgment upon the discrimination of her former physician, until some one of our city practitioners had seen the case. The selection was left to the family, and Dr. S. Jackson was their choice, who frankly stated, after auscultation, percussion, &c., that the heart was free from disease, and in his opinion, its regularity could be established, by attention to the spine, the nervous system, and the bowels. This statement corresponding with my written opinion, the seal was broken and the family perfectly satisfied. The treatment for spinal irritation commenced and the improvement progresses daily.

I consider diseases of the heart extremely rare, while inflammation of its covering, (the pericar-

dium) more frequently occurs. This disease is of the same nature as inflammation of the pleura, though often more violent; blood-letting should be boldly performed, and the general antiphlogistic plan of treatment rigidly practised. This kind of inflammation often terminates by effusion, the fluid in the cavity of the pericardium is thus increased in quantity, the heart labors, its action becomes irregular, its vibrations yield a dull sound upon applying the stethoscope, the pulse grows weak and intermits, while the individual is said to have disease of the heart: under these circumstances, if we direct a spare diet, daily exercise, and a compound of squills, digitalis, and elaterium, in small doses, the symptoms will soon change for the better, until finally the patient declares himself free from disease.

The heart itself is *sometimes* diseased in its organic structure; the labors of Lancici, Morgagni, and Senac, threw much light on this subject: and many late writers have added useful information to this branch of medical science. The present mode of discriminating by auscultation, ensures a more perfect knowledge of cardiac diseases, than the ancients practised: but the inexperienced ear will frequently hear sounds produced by healthy

vibrations that are often mistaken for disease. Corvisart made many discoveries in diseases of the heart, but they were for the most part confined to organic lesions: he probably made use of mediate auscultation; or perhaps, his cases frequently terminated fatally, and lesions were discovered by autopsy. It was asserted by Vieussens at an early period in the last century, and soon afterwards by Thebesius, a German Professor, that there were a number of small orifices in the texture of the heart which opened into the different cavities on both sides of it. The assertion of a fact so difficult to reconcile with the general principles of the circulation, was received with great hesitation: and although it was confirmed by some very respectable anatomists of the last century, it was denied by others. The subject was brought forward by Mr. Abernethy, (see London Philosophical Transactions for 1798, Part I.) who states, that he has often passed a coarse wax injection from the proper arteries and veins of the heart into all the *cavities of that organ, and particularly into the left ventricle. But it was only in subjects with diseased lungs that this was practicable.*

The existence of this communication between the coronary vessels and the great cavities of the

heart seems therefore to be proved. The easy demonstration in such subjects is ingeniously referred by Abernethy to the obstruction of the circulation in the lungs: and he regards the communication as a provision, enabling the coronary vessels to unload themselves, when the coronary vein cannot discharge freely into the right auricle.

I have met with but few cases of chronic disease of the lungs, where there was not more or less disturbance of the heart; a frequent and often irregular pulse is a common attendant on chronic pulmonary disease, even at a period in the day while fever is absent. When masses of tubercles exist in the lungs, or large abscesses, or tumors, causing obstruction in their circulation, we always find an irregular pulse: and by removing these causes we soon discover improvement in the condition of the circulation.

Palpitations of the heart frequently exist without any organic affection; its violent commotion is often a source of great annoyance to the patient, and may frequently be heard some distance from the individual laboring under this symptom. I have at this time a patient under care, whose heart, in the beginning of her indisposition could be heard pulsating ten feet from the bed side;

this violent action subsided under the use of an infusion of digitalis, and a powder composed of oxide of bismuth, rhubarb and ipecac, which was continued for three months, occasionally omitting the digitalis. Dyspepsia was in this case the sole cause, which yielding to the above medicine and a well regulated diet, the palpitation was soon removed and the patient returned to ordinary health.

Certain positions of the body, obstructing the free circulation in various parts, will often occasion derangement of the heart's action; and if not attended to may often lay the foundation of disease. Clerks in banks and counting-houses are frequently subject to these disorders from leaning over, or upon their writing desks: and children in many of our seminaries, frequently have curvature of the spine and deformity of the chest, produced in the same way. The desks upon which they rest their arms, should be nearly on a level with their shoulders, and their seats should always be supplied with high backs, upon which they should be directed to lean back, when occupied with study. No term in the day should exceed two and a half or three hours; and large seminaries should always be provided with one large room

as a place for exercise, where the pupil can be free from restraint, and jumping ropes, horizontal bars, dumb-bells, &c., should be kept for their use. In this way we might hope to avoid many diseases, and improve the rising generation. The heat of this apartment should be less than that of the school-room, the temperature of which should never exceed sixty-five degrees Fahrenheit. In mild weather the open air would be preferable for exercise. For a minute description of heart diseases, I refer the reader to the works of Laennec.

I would remark in conclusion of this chapter, that individuals laboring under chronic disease of the heart, or enlargement, are much benefited by attention to a spare diet, and in all cases by avoiding excitement of the mind. Abstemiousness in food, rigid renunciation of stimulating liquors, and above all, peace of mind are indispensable to ensure recovery in all the affections of the heart. It is in the treatment of these diseases that the physician must add to the routine of his art, the higher offices of the philosopher and Christian. Without a knowledge of the world, and the workings of the human bosom he will be often incompetent to counsel; without that faith, which alone "makes wise unto salvation" he will be unable to

soothe, strengthen, and console; and he who has not those qualifications which enable him to become the moral teacher and the friend, may in the majority of these diseases, as well "throw physic to the dogs" as prescribe for the body when it is the vassal of the mind.

ASTHMA.

This term, though indefinite, still continues to be employed by the scientific as well as the uneducated; though asthma not unfrequently exists under the name of phthisic, a term often used in some parts of the country. "Difficulter respirare," is perhaps as significant a name as we can give asthma under its varied forms. A name can be of little importance to an individual suffocating with asthma, and yet a name will frequently relieve a patient or destroy the peace of a whole family.

Among nosological writers names have produced much confusion, and as a necessary consequence have led to a similar result in practice. What one nosologist considers a cause, another describes as an effect; and medicines highly extolled by one physician, are often decried by another.

Attempts have been made by writers from the earliest history of medicine to distinguish asthma from other diseases of the chest, and this end was supposed to be attained, by terming a slight difficulty of breathing dyspnœa, and laborious respiration asthma. The moderns recognise two primary species—the spasmodic and the humoral.

The parenchyma of the lungs is seldom if ever affected by the disease, while the mucous membrane will invariably be found to be its seat, having its remote cause in the digestive organs primarily, disordering the nervous system, and through this connection, affecting the lining membrane of the bronchial tubes. In this way the system is continually predisposed to attacks, and when exciting causes occur, such as wet feet, exposure to a damp and cold wind, or a location in a low and marshy section of country, the disease will be produced. Or derangement of the nervous system, proceeding from other causes may produce asthma, independent of disordered digestion. A remarkable case of this kind occurred to me in 1837. A gentleman in Pittsburg, having received a severe blow upon the back, near the sixth dorsal vertebra, from the falling of a brick while passing under a scaffold erected in front of a new building, was

immediately seized with great difficulty of breathing, strongly resembling spasmodic asthma. His physician pursued the best treatment for his relief, which was soon obtained; he was bled freely, and repeatedly leeched on the contused part of the back; purgatives and anti-spasmodics were used with a mild diet: under this treatment the patient soon recovered.

At the expiration of six weeks from the accident, his breathing became oppressed, and now assumed the decided character of asthma, which yielded to the application of forty leeches to the spine, and large doses of gum fœtid. His third attack was as punctual, as to time, as the second had been, six weeks having again elapsed: this third attack occurred while on a visit to our city, and I was called to visit him during the paroxysm. He gave me the above history of his case, and declared his digestion had never been out of order in the least. Upon examination of the spine I was at once convinced of the fact, that the shock received by the sympathetic nerves, had been sufficient to occasion all the inconvenience from asthma which this patient suffered; and as he had been repeatedly leeched, I presumed all the benefit that could be obtained from this remedy the

patient had experienced. I, therefore, applied moxa about three inches above and below the tender spot on the back, and slight galvanic shocks, and eight drops of Fowler's solution to be taken night and morning. This attack subsided in half an hour after the application of the moxa and galvanism, when the patient observed that he had found the right thing at last. These sores were kept open with Savin ointment, and the solution continued with galvanism for twelve days. He returned home in the third week after my treatment commenced, and has had but one slight attack since that time; this occurred at the expiration of the first six weeks from his visit to our city. After a lapse of five months he suffered the sores to heal.

Asthma in my opinion is originally spasmodic; becoming humoral either from being connected with some latent inflammation, or from long continued habit. There is doubtless a third species, namely from *gout*, which will generally be found to be hereditary. This we should try to fix in some part less necessary for the functions of life.

Sauvage has employed the word *suspirium*, used by Celsus and Seneca, as a general term to designate asthma. Independently of this authority,

it has perhaps a claim to admission into the medical vocabulary from being identified with the person of Virgil; and this moreover, through the pleasant observation of Augustus, who alluding to the asthma of the epic poet, and the weak eyes of Horace, when seated between them at the table, observed that he was "inter suspiria et lachrymas," (between sighs and tears.)

The treatment I have found most beneficial, has been that which was required for the correction of disorders which may be its cause. Derangement of the liver, of the uterus, of the bowels, stomach, spine or brain, with injuries of the bony walls of the chest, predispose to, while irregularity in sleeping, eating, clothing, and weather excite the disease. These causes can all be removed by proper medical treatment, and great care on the part of the patient.

The dyspnœa requires, during an attack, some relief, which will always be obtained by taking small doses of the tincture of lobelia and ether, and inhaling a mixture of oxygen and etherial vapour.

My practice in asthma has invariably been, to remove the predisposing cause of the disease; when

this is accomplished, I have generally found its exciting causes were harmless.

I shall conclude the subject of asthma, by introducing some of Dr. Ramadge's remarks, taken from his able work on that disease.

"In its uncomplicated state Asthma, as has been observed, is of very rare occurrence. Since, too, it seldom or ever proves fatal, the pathology of this, the spasmodic form, is altogether conjectural. Many physicians, indeed, deny the existence of a purely nervous species. The correctness of this opinion will be examined hereafter. At present, we shall assume the reality of such a disease, and proceed to detail its ordinary symptoms.

The peculiarity of this form consists in the suddenness of its attack, so that no warning would appear to be given. Its ordinary fore-runners, when "note of preparation" is sounded, are mental anxiety, extraordinary exertion of any kind, sudden changes in the weather, disagreement of food, and, in short, whatever operates mediately, or immediately, upon the nerves. Thus, it is apparent, that the proximate cause of the spasmodic asthma, must, with that of most

nervous disorders, remain unknown, until we can resolve that mysterious connection betwixt the mind and body, which, it seems probable, will ever baffle alike the physiologist and the philosopher.

The symptoms, with which the attack commences, are a sense of general oppression, more particularly in the head and chest. The eyes are affected much in the same manner as in common cold; and there is a feeling of weight and fulness about the pit of the stomach. The patient is heavy and languid; disinclined to exertion, drowsy, and apt to fall into disturbed and uneasy slumber. In some cases, a day or two preceding the attack, the patient is sensible, a short time after dinner, of a feeling of weight and over-fullness in the region of the epigastrium, and the stomach is swollen and distended with wind. From the disturbance given to the digestive functions, the eructations are usually acid or insipid. Floyer observes, that he noticed in himself the spasmodic state of the lungs to be so much the more supportable in proportion to the spasm of the intestinal canal, marked by the gaseous distension, extending itself to the lower bowel.

As the respiration becomes more difficult the

pain at the chest increases, and the constriction is at last so intense as to be compared by the sufferer, to what might be supposed to arise from cords bound tightly around it. It heaves and dilates as if striving to burst these imaginary bonds, and is again compressed, as it were, by their violent reaction. The stupor and heaviness, at first felt in the head, are not unfrequently replaced, as the attack approaches its height, by severe headach. Slight fever is occasionally present with its usual concomitants of thirst and restlessness; as are also dryness, corrugation and pallor of the skin. Cough, of a strictly convulsive nature, seldom at first accompanied by expectoration, comes on, and harasses the patient by its frequency and violence. It appears to the patient as if his lungs were pushed to the top of the thorax; a number of muscles, and indeed the whole muscular apparatus is exerted in aid of the muscles of inspiration, and sometimes with such efforts that convulsions, and even epileptic symptoms, are the result.

A deadly paleness now overspreads the countenance; the extremities turn cold, and the wheezing, which accompanies each expiration, is audible at the distance of several yards. The sufferer literally gasps for breath; the blood vessels of the

eyes become swollen and turgid by the violence of the cough; and the eyes seem ready to start from their sockets. To speak, at this stage of the paroxysm, is impossible, or if effected, the effort is agony. Even to make a sign with the hand is a distressing exertion; and to add to this complication of agony, the most even-tempered will at this crisis become fretful and peevish; and a gesture misinterpreted calls forth a manifestation of passion, and with it an aggravation of every distressing symptom. It not unfrequently happens that the mind participates in the highly-wrought excitement of the body, and adds a train of imaginary terrors to the real tortures which rack the patient's frame. A thousand ills, conjured up by the morbid state of the mental faculties, not only harass the patient in themselves, but by their reaction super-add to the extremity of his suffering. Of course, it will be understood that all these symptoms are not always present; but some or other of them form the general characteristics of Nervous Asthma.

In the generality of instances, the attack commences towards evening, and after retiring early to bed from the lethargy, which I have mentioned as one of the primary phenomena, the patient is

suddenly awakened in a few hours by a feeling of strangulation, and finds that the fit has seized him with all its violence. Occasionally, however, the asthmatic will, after awakening, lie in a half-dreamy, half-conscious state, sensible in some sort of the approach of the attack, and yet indisposed to rouse up and strive to ward it off by having recourse to preventives. When fully awake, he finds an oppression of the chest, weighing him down like an incubus, and is constrained to sit up, or to quit his bed at once, if, as he imagines, he would escape suffocation. One of the most ordinary symptoms of this disease is an unusual flow of urine of a pale colour; but at the termination of the attack it becomes high coloured, and deposits a sediment. In fits of short duration, on the contrary, such a limpid state of urine is seldom observed; and the most inconvenient symptom is that of flatulency. A few hours generally bring such fits to the close, and relief is first indicated by the expectoration becoming copious. A disposition to sweat, and irregularity of pulse, are likewise concomitants of these short attacks; which are free from the proneness to sleep before noticed. Frequently, these attacks are repeated at intervals of one or two days, or more, for some period. In

such cases the pause, or intermission, between each attack, consists of an abatement of the more violent symptoms, rather than a cure. The patient will, from the delightful contrast presented by present ease to his recent suffering, feel light of heart, and imagine his restoration to health perfect; but a nice observer can easily detect incompleteness and general irregularity of respiration.

It deserves notice, that the violence of the symptoms increases, instead of diminishing, at each successive paroxysm, until the attack has run half its course; and that after this the remissions are longer, and more perfect, until the termination of the fit. When the nervous habit is once established, that is to say, when at some determinate period, or periods of the year, the fits recur, whether in winter or summer, or more frequently, the intervals elapsing between them are not times of complete health. Many indices present themselves to the physician of some disordered state, still existent in the asthmatic. Aretæus expressly says, "*in morbi cessationibus licet ipsi non decumbentes obambulent, secum tamen illius signam ciecumferunt;*" and indeed, in many instances, the countenance, gait, and manner of

the patient, indicate but too truly the disease under which he labours. Without however going the length of the ancient, but most accurate observer, just quoted, it is certain that some functional derangement, or some confirmed local disease may generally, if not invariably, be traced in the asthmatic. In cases of mal-conformation of the chest there is an obvious cause; but in the absence of every other easily discerned symptom a shortness of breath, made evident by the slightest extra exertion, will prove the asthmatic diathesis. Few, however, who suffer from this disease, are affected in precisely a similar manner. The symptoms are as various, as the causes are usually stated to be; and the variations in the duration, and recurrence of the fits, are equally as anomalous. In some, the nervous habit assumes a regular character, and its periodic return are duly anticipated by the patient. In the great majority of cases, however, much uncertainty prevails on these points.

Independent of the constitutional habit, there are a variety of secondary causes, which have more or less influence in retarding, or accelerating the attacks. For instance, if summer be the period of suffering, (and this is the more frequent

form in the purely nervous asthma,) excessive heat may bring on the commencing fit as early as the end of May; but if the weather be cool, it may keep off till the close of June, or beginning of July. In winter again, the early setting in of the frost, or as the case may be, a continuation of a close, foggy state of the atmosphere, will exert a marked influence on the early or late appearance of the disease, when it co-exists with catarrh. The most violent and frequent attacks occur soon after the summer solstice.

On the abatement of the paroxysm, when it has been severe and of long duration, a sense of soreness, arising from the straining and unwonted exertion of the respiratory muscles, is usually left for some hours subsequently. Both during the attack, and after its violence is abated, there is a painful feeling of fulness, and of undue distension, in the region of the two solid, floating viscera of the abdomen, the liver and the spleen. This state, as well as flatulence, and headach which I have mentioned as symptoms, and attendants, of asthma, are, in a certain degree, owing to venous congestion. The flatulence, which medical writers generally put down as a precursory symptom of asthma, is not, I have long remarked, apparent, until a

succession of fits has established the dyspeptic habit in the patient; which is the result of the obstruction to the circulation of the blood in the chylipoietic viscera, arising indirectly from the congested or compressed condition of the lungs. To enter more minutely into the causes leading to this mechanical hyperæmia. In all varieties of asthma lesions of circulation may be traced; and to place the subject in a more distinct light, I shall quote a passage from my Treatise on Consumption, explanatory of the happy effects resulting from free respiration, in order by this contrast to give a clearer view of its contrary.

'The mere expansion of the lungs in the first instance, tends indirectly to remove congestion of the liver, and also of the stomach, spleen, pancreas, and intestinal canal, all dependent on the more free circulation of the blood in the former. The biliary, as well as the great salivary secretion, is hereby promoted to a healthy activity. Such morbid irritability of the mucous membrane of the stomach as may be present, productive of indigestion, is removed; the chyliferous absorption belonging to the small intestines, so indispensable to life, is actively carried on, and the injurious retention of excrementitious matter in the large intes-

tines, is obviated by increased mucous moisture, and accelerated peristaltic motion.'

I now proceed to the contrast; and do not know that I can explain the mechanical hyperæmia existing in asthma better than by the following passage from the same work:—

'The blood of the right ventricle of the heart not finding a ready passage through the lungs, afflicted as above-mentioned, causes a preternatural quantity of the same fluid in the adjoining auricle, and especially in the two great veins opening into it. The consequences of this state are head-ache, owing to the interruption of the free return of blood from the head; pulmonary engorgement, through the difficulty the bronchial veins experience in transmitting their blood, by either its direct or circuitous course, into the vena azygos; and serious derangement, or actual disease, of the most important viscera of the abdomen. The superior cava, preternaturally full of blood, will, by retarding that fluid in the jugular veins, produce pain in the head; and, by a similar interruption to the circulation of the vena azygos, besides interfering with the free return of the blood into the bronchial veins, it will, in some degree, impair the activity of the kidneys; the due return of the

effete blood of which organs depends on the freedom with which it is conveyed from the vena azygos into the vena cava superior.'—P. 80. New Edition.

Pursuing this train of observation it will not, I think, be unphilosophical to suggest that the great debility accompanying asthma may originate, in some degree, from the want of a due supply of blood to the left side of the heart, and its arterial system.

Having thus presented the ordinary symptoms of the disease, it remains to ascertain the state of the respiration afforded by means of auscultation. No disease presents more anomalies in its auscultative diagnosis than asthma. This partly arises from the longer, or shorter period, during which the patient has been asthmatic, and is partly owing to other causes of a pathological nature. It has been stated that the inspiration yields little or no sound; but in most cases of nervous asthma examined by me, I have detected the presence of a more than ordinary mucous secretion in the trachea, more or less audible. Spasm of the posterior membrane of the trachea, as well as of the membrane of its cartilaginous rings, is, I am inclined to think, a general accompaniment of this

species of the disease; and this is pointed out not less by the impediment presented to the action of swallowing than by the peculiar manner in which the breath is, as it were, sucked in. The posture, too, in which the patient ordinarily sits, with his head inclined forward, favours this belief: and would seem to show that the spasmodic contraction of the connecting membrane of the rings of the trachea, in some degree, induced this position. That the lungs do not receive their due proportion of air, is conclusively proved by the want of natural clearness in the inspiration.

Much variation exists in the auscultative signs, from the structural difference in the lungs occasioned by the habitual recurrence, or otherwise, of the disease. Thus, as Laennec has observed, the respiration is, in many instances, almost perfectly puerile; although I do not conceive his explanation of this phenomenon to be satisfactory. I feel convinced, from repeated observations, that portions of pulmonary tissue are at times subject to spasm, and that to antagonize the contraction, the other portions assume an extraordinary power of expansibility. Repeatedly have I heard that part which at first yielded a clear sound become less

distinct, and the parts previously in a state of spasm, give out in their turn a puerile respiration. It has appeared to me that the portion influenced by spasm must by its contraction have the air contained within it forced out; and whilst the other parts were receiving the air inspired, I have, unless my ear, well-accustomed to such minutiæ, deceives me, heard the counter stream from the spasm, or spasms of the pulmonary tissue, escape. This phenomenon must not be confounded with that of interlobular emphysema of the lungs, noticed by Laennec, as being of rare occurrence, and the peculiar sound observable in which he denominates the friction of ascent and descent. The latter occurs but rarely in asthmatic patients; whilst the former is met with early in the disease. The sound in this phenomenon, which I believe is now noticed for the first time, is less audible than the dry crepitous bubbling rattle which is the characteristic of interlobular emphysema.

The character of the sound in asthmatic cases varies from a variety of circumstances. Thus the "*rale sonore*," the sonorous rattle, so far from presenting one uniform character, is divided into several sounds perfectly distinct from each other.

At times, it resembles the sighing of the wind through the trees; at others, that of air violently forced through a tube, as is the case with the bellows of a forge; and in others again, it acquires a sharper sound, something betwixt a hiss and a whistle. The sound is occasionally broken into a kind of gurgling noise, like that made by a small brook; and, in some instances, like that produced by rubbing the finger over paper of a coarse texture, and uneven surface. This difference of sound depends, in great measure, on the state of the mucous membrane of the trachea; and is also modified by the spasm or spasms of the bronchi, as well as their membranous terminations, and on the quickness with which the inspiration is made. Where the paroxysm has been very severe, and the patient exhibits much debility, as well as when the attack occurs late in life, a subcrepitous watery râle is sometimes heard, the diagnostic sign of œdema of the lungs. To hear the respiratory process in this, as well as in most other diseases, and more particularly to discern the sound made by the expulsion of air consequent on spasm, an eligible method is to place the ear over the apex of the lungs, or over the fine edges of this organ approaching the sternum.

Another peculiarity, attendant on this disease, will be perceived by auscultation; which is the irregularity and unevenness of the heart's action, occasioned by the effort it makes to overcome the opposing spasm of the respiratory apparatus. Percussion, in patients who suffer from permanent emphysema, produced by a long continuance of the disease, yields a sound clearer than natural; but in recent cases, I have not observed this to happen. Much has been written concerning the immobility of the chest in asthma; but this is only observable after a long series of attacks, and when the disorder has become habitual. From the over-exertion of the ribs, caused by excessive and repeated anhelation, their cartilaginous extremities undergo ossification; and I have known this to happen before the age of puberty, the patient having been affected from childhood. When the disease dates from an early age, this precocious change of structure from cartilage to bone prevents that enlargement of the chest, usually seen in asthmatics; but the chest partakes of the generally rounded form characteristic of the disease, and which arises in part from the antagonism offered by the muscles of inspiration to the contraction of the lungs. However, this tendency to ossify is

not so marked in the nervous, as in other species of asthma.

This truly singular and terrible disease, "*morbus maximé terribilis*," as Willis terms it, is not unfrequently hereditary; and this, with its fluctuating nature in some, and regular recurrence at stated periods in others, forms another marked feature in asthma. When we meet with cases in which the fits return invariably every month, as they often do at the catamenial period, or at the expiration of a certain number of months, or, as we have it on the authority of Heberden, after every seven years, the regularity of the occurrence coupled with similar phenomena in other disorders, would induce a belief that there were certain laws of nature, independent of the "seasons' difference" common "to mute and to material things," to which the health of man is periodically subservient.

One extraordinary instance of this singular uniformity came under my knowledge in the person of a lady, a patient of mine, who, for eleven or twelve months, had alternate monthly attacks of epilepsy, and of asthma, and this with the greatest regularity: a strong proof, I may observe, of the purely nervous character of the disease.

Bonnet relates, in his "Sepulchretum Anatomicum," that he had met with a case of asthma alternating with dysuria; and we find in the "Ephémérides des Curieux de la Nature," an account of an asthma which attacked the patient the moment he had composed himself to sleep.

Among my own patients, I have lately had a singular example of the mind's forming the essential circumstance of the disease. A female of the upper class of domestics, who was attacked with asthma, on her removing to the country, after having lived three years in London in the same situation, without any manifestation of her complaint, was seized, on her return, with a fresh paroxysm, just as she had obtained a new situation. Every thing had been arranged to her satisfaction, and she was on the point of setting off, (it being abroad,) when the poor creature's hopes were destroyed by this untimely attack. Ever since, the same result attends her, when placed in the same circumstances; and no sooner does she obtain a situation, and prepare to repair to it, than on the very day, and almost the very moment she is about to enter her new abode, her complaint incapacitates her from embracing the opportunity.

Among other cases recorded by Heberden, in addition to the one before alluded to, he states that he has known some patients to remain free from asthma (after having suffered under it several years) for the space of thirty years; and he mentions that one person used to suffer from violent paroxysms for a single day, which would then cease, and after an indefinite period recur for the same brief space, endangering life from their excessive severity.

I have quoted these instances from Heberden, as I probably shall do from others, rather with a view of showing that I have not neglected the writings of those whom, as a member of the College of Physicians, I am bound to reverence, than for any high opinion of their science. A note-book like Heberden's proves his attention to appearances, but throws no light on causes. However, like the cabinet of the virtuoso, the curiosities the possessor cannot explain, others may. I allude to the species of writing, not to Heberden. His fame was well-earned—for he wrote in Latin.

The primary, or proximate cause of the purely spasmodic asthma is unknown; but from many reasons, that may be grounded on the facts I am

about to state, the inference will be that this species of the disorder positively depends on some alteration of the condition of the nervous influence. The suddenness of the attack, the irritable temperament of the patient, the sympathy betwixt the mind and body peculiarly observable in this form, its periodic recurrence, its hereditary character, and, above all, the non-existence in the few instances in which it has been possible to make pathological observations, of any perceptible organic lesion, however minute, all tend to the same point.

Nothing can be more various than the origin of this disease, as far as it can be traced. Almost every variety, however, is complicated with cold. Whether it depend chiefly on an affection of the trachea, or the numerous ramifications of the bronchi, or a peculiar state of the nerves, each or every of these influential and additional causes, is, for the most part, dependent on, or rather is complicated with cold. Hoffman observes, "*Quemadmodum frigis, omnibus nervosis partibus infensum est: ita maxime pectori deprehenditur inimicissimum. Quamplures mihi cogniti sunt casus ubi ex eo solo liberalius admisso tusses, asthmata spasmodica, et cardialgiæ atrocissimæ*

propullarunt." Again, he says, "*Si quid ex causis occasionalibus est quod asthma convulsium inducere potest, certé est externum frigus, hostis ille nervoso generi inimicissimus.*"

Without, however, recurring to authorities, a very little experience will prove that the more ordinary apparent cause is cold. To say positively what is, or is not the cause, I cannot pretend to do; and until we are acquainted with the proximate origin of epilepsy and hydrophobia, I firmly believe this "*crux medicorum*" will not be removed. Some injury done to the nerves of the chest, by cold or other means, would seem to be its most general exciting cause; but in this there is nothing positive. One of the best defined, and most exquisitely determined cases, that ever came under my knowledge, was in the person of a noble lady, wife of an officer of high rank, to whose immediate ancestor we are indebted for a large accession to our Indian territories. Convulsive asthma first seized her after an attack of whooping cough, and I never witnessed the disease of a more purely convulsive, or a more distressing nature. In this lady there occurred a disturbed state of the mucous membrane of the trachea, with a decided catarrhal tendency, but the same symp-

toms may be noticed in other individuals without the manifestation of any asthmatic disorder.

Although the pneumo-gastric nerve sends out many filaments or branches to the lungs, in no other species of asthma does it appear so peculiarly excited as in the nervous. From various cases which have passed under my observation, this may, I think, be satisfactorily accounted for from some peculiar disposition of the nerves.

A gentleman, a patient of mine, from making the common galvanic experiment with a piece of zinc and of copper in his mouth, was seized with tic douloureux, and became an intense sufferer from it. He would pass the edge of his nail along his upper lip several times, as a sort of test, or criterion, of his state; when, if the liability to fits for the time being had ceased, no effect would ensue: but, if otherwise, no sooner was a certain minute point touched than he was thrown into the most acute agony. Coupling this with facts of a similar nature, such as lock-jaw from a trivial wound, we shall have the purely nervous nature of the disease rendered highly probable; and it may, perhaps, be accounted for from an unusual distribution of the nervous filaments, as in the case of tic douloureux above-mentioned. I would refer

the obvious nervous influence to a sentient extremity of the nerve's being seated somewhat nearer than usual to the cuticular surface. The laws of sympathetic association of muscular contraction, will thus solve many phenomena of the disease. Although I certainly am inclined to think that some functional disorder, or morbid sympathy, of the nerves of the chest is the more immediate cause of true asthma ; yet reasoning from analogy, it is far from improbable that its origin may sometimes be considerably removed from the seat of the disorder. Some years ago I was called to see a female who was suffering severely from tic douloureux. It was not until my second visit that I discovered she had lost a leg, which had been replaced by one of cork. Inquiring into the history of her case, I found that in order to wear the artificial one with the better regard to appearance, she compressed the stump of the amputated limb so forcibly, in inserting it into the false leg, as to constrict the nerves in a very prejudicial manner. At least, conceiving this to be the case, I ordered her immediately to discontinue the use of it; and found, from the relief subsequently experienced by her, that my conjecture was right.

Here was an evident proof of the intimate con-

nexion existing between the nervous extremities, or rather, as this required no additional proof, of the effect injury in one place might communicate to a more distant locality.

I may here mention that having understood from the domestic physician of a gallant nobleman, representative of his monarch in a sister kingdom, and who had lost a limb in the service of his country, that he had become subject to attacks of the same distressing complaint, I related the above case to Dr. M., and had the satisfaction of introducing him to my patient. Whether the hint was acted upon, I cannot say; but from a communication I received, with the thanks of his noble employer, I should trust that it had proved serviceable.

A writer, who appears to have used much industry in collecting materials for his work on Asthma, Dr. Bree, is of opinion that the spasm of the chest is an effort of nature to relieve the sufferer. Had he trusted to experience rather than the dogmas of others, and inclined to fact rather than theory, he would have seen reason to retract this doctrine. Some time ago I enquired of him if he had ever employed auscultation; but he told me a defective state of hearing precluded him from

its use. Otherwise the ear would have convinced him, that he had embraced an erroneous view of the subject. But, independently of this, we find that in the humoural asthma, in which the effusion of serum is considerable, the spasms are trifling; whilst in the nervous, at the commencement of which there is almost always a total absence of serous effusion, and its presence but slightly indicated at the end, that the spasmodic convulsion is of the most violent nature.

Following the observations of Dr. Whytt, who truly remarks, that the contractions of the abdominal muscles, and diaphragm, in pregnancy, tenesmus, and stranguary, are marked with a wise intention, he quotes from the same writer, with great satisfaction, the following indisputable error, where he asserts that 'the increased motion of the organs of respiration in the fit of an asthma are the efforts of nature to free the body of something hurtful.'

By a parallel reasoning, it might be asserted that the lethal convulsion of the pharynx, consequent on a bite of the hand, for example, by a rabid animal, or the itching of the nose indicative of the presence of worms, were the efforts of nature to relieve the patient.

Because instances of mercy and wisdom are visible in many apparent disturbances of the human frame, it is an abuse of reason to conclude, that no alteration in the animal economy can take place unless to effect a relative good. Palsy might, on such inferences, be deemed a blessing; and the spasmodic rigidity accompanying tetanus the means of relief. A little reflection will show, that the inordinate muscular action in asthma is radically injurious. It lays the foundation for an emphysematous state of lungs, which, although a blessing to an individual of a consumptive diathesis, is in other cases any thing but enviable. Thus frequent attacks of convulsive asthma generally end by rendering the disease chronic, and will even lead progressively, in some cases, from pulmonary or vesicular, to interlobular emphysema, and so induce the numerous train of ills which are complicated with asthma in its last and worst stage.

It is perhaps necessary again to observe that nervous, or convulsive asthma, strictly so called, depends on some cause, or causes, hitherto unknown; and that whenever the cause is definite, the disorder is a variety, and not a pure asthma. Thus in some individuals subject to attacks of gout, which have been suddenly arrested, or have

ceased for an indeterminate period, a difficulty of breathing has taken place, accompanied by spasm, which may, or may not arise from the non-appearance of the usual fit; but in either case, it is the pure form of the disease, since we know not in what manner the suppression of the gout can influence the chest. Stimulation, or sympathy, is another exciting cause, as it likewise is in hysteria, and chorea; and apprehension of an attack, the mere nervous dread of its recurrence, will not infrequently bring it on. The purely nervous nature of the disease is still further elucidated, by the paroxysms of asthma being often excited by powerful, and penetrating odours, such as those of ipecacuanha, the tuberose root, and other scents which are known to affect some individuals in a very violent manner.

A medical gentleman of my acquaintance was subject to sudden attacks of asthma, but how produced he was long unable to ascertain. At length it occurred to him that he was invariably seized after sleeping in a particular bed, which had been presented to him by the captain of a ship in the Baltic trade. The feathers, from some process in drying, most probably emitted a peculiar smell, and to this he was led to ascribe the

origin of his atacks; since on no other occasions did he ever suffer from them.

Here is an exciting cause, to all appearance; but the *modus operandi* of the odour on the nerves is so unknown to us, that we cannot venture to term it a proximate one.

Ferrus, in his ingenious article on Asthma, inserted in the "Dictionnaire de Médecine," has given a case of what he terms idiopathic, or essential asthma, which at the same time that it is instructive, is not a little characteristic of *la grande nation*. The patriotic feelings of the soldier, maddened at the sight of "foreign troops at the gates of the capital," furnish a little touch of the sentimental in the true Gallic vein. The case is as follows:—

'A young officer, full of talent and honour, grievously wounded in the last campaigns, but at the time in good health, returned in 1814, with his family to Paris, still occupied by the allied troops. He experienced so great a shock on perceiving foreign soldiery at the gates of the capital, that he was immediately seized with a sense of uneasiness, and his respiration became difficult. This state became worse, and he had that very night a violent fit of asthma. The following

nights he was equally distressed; and the intensity of the symptoms did not decrease until fifteen days after the first attack. M. Corvisart was consulted; and he perceived no certain index of organic lesion. The condition of the invalid was but little benefited by the most enlightened advice, or the most affectionate nursing. He repaired to the south of France for the winter, and entirely regained his health.

'In 1815, the paroxysms of asthma recurred on his experiencing griefs, but with longer intervals, during which his health was good. He was seized, in 1820, with severe intermittent fever of an ordinate character. In the course of a journey which he took during his convalescence, he was again attacked by an asthmatic fit, after taking a warm bath, and subsequently stopping some hours in a place of public entertainment. The expectoration, which did not come on till the morning of the following day, consisted of sanguineous secretion, and in great quantity. No change in the state of the circulation was observable. The invalid continued his journey, had a recurrence of the attack for four or five following nights, and recovered without even observing a strict regimen. During the last ten months, his health has been

good, he has devoted himself to numerous active exercises, and experiences no difficulty of breathing, except when mounting a stair-case too quickly.'

I cannot conclude this part of my subject better, than by quoting the words of Delens.

'*Enfin, il faut le dire, dans quelques cas toutes les recherches des anatomistes ont été infructueuses, et l' on n' a pu rapporter la maladie qu' à une perversion de l' influenee nerveuse, dernier retranchement où il faut bien nous réfugiee en pareil cas pour ne pas être obligé d' admettre, comme nos prédécesseurs, des maladies* essentielles, *des maladies* sans matiére, *bien qu' à vrai dire, notre explication ne soit pas beauceup plus satisfaisunte que l' espèce d' obscurité dont ils cherchaient à couvrir leur ignorance.*'"

I would remark that the general treatment directed by most physicians for asthma is confined to the period of attack; this often gives much relief, but as remedies are not continued during the time of intermission, the disease returns at stated intervals with all its horrors. A disease so purely intermittent in its nature, can only be eradicated by a careful continuation of remedies during the

intermission, which shall tend to alter the state of the system to a degree, that must certainly prevent its recurrence.

The chylipoietic viscera should be particularly attended to during the intermission, by the removal of crudities of the prima via, by regulating the diet, and the use of such medicines as may tend to keep up a healthy peristaltic action of the bowels, and the alterative pill of nitro muriate of gold. During the attack the treatment should be entirely directed to the nervous system; galvanism —a never-failing remedy in the treatment of pure neuralgia—should alone be relied on during the fit of asthma.

This has always been my practice, and the success attending it prevents my seeking a better.

RECAPITULATION.

In the treatment of consumption, many remedies that are worse than useless, are still recommended by some physicians, such as the removal of tonsils, the use of blisters—sometimes perpetual,—emetics, cathartics, expectorants, demulcents, narcotics, alterative mercurials, astringents, tonics, balsams, inhaling iodine, sea voyages, southern climate, &c., &c. But as I have used all these, and witnessed their full trial in the hands of others, I conceive myself fully prepared to pass judgment, and declare them utterly inefficient.

Exercise of the body and lungs, by inhalation, by gymnastics, or by the common pursuit of business, (where this is sufficient,) regulation in diet and digestion, attention to the healthy action of the skin, and all the secretions, by the daily use of remedies I shall style prophylactics, will soon accomplish what the patient may look for in vain from the use of medicines already tried and justly condemned.

These prophylactic compounds will be constantly kept, by some of our most respectable druggists, accompanied with full directions.

In conclusion I would remark that in the foregoing very brief sketch of the pathology and treatment of a disease hitherto considered as admitting of little more than palliative remedies, I aim at no literary fame. The harassing engagements of a laborious profession leave but little leisure or inclination to cultivate the graces of composition. My object will be fully accomplished if by the labour, anxiety, and intense application of many of the best years of my life I have succeeded in disarming of its terrors one of the most formidable diseases to which flesh is heir; and of infusing into the hearts of despondent and weeping [illegible]tions the cordial—*hope*. Justice must cede to me the merit of having contributed largely to effect this important and most desirable consummation; and I fully acquit myself of the charge of arrogance or presumption, when I assert my ability to control and cure a large majority of the cases of clearly developed *pulmonary Consumption*.

FINIS.

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