

## **A few suggestions on consumption.**

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ON  
CONSUMPTION

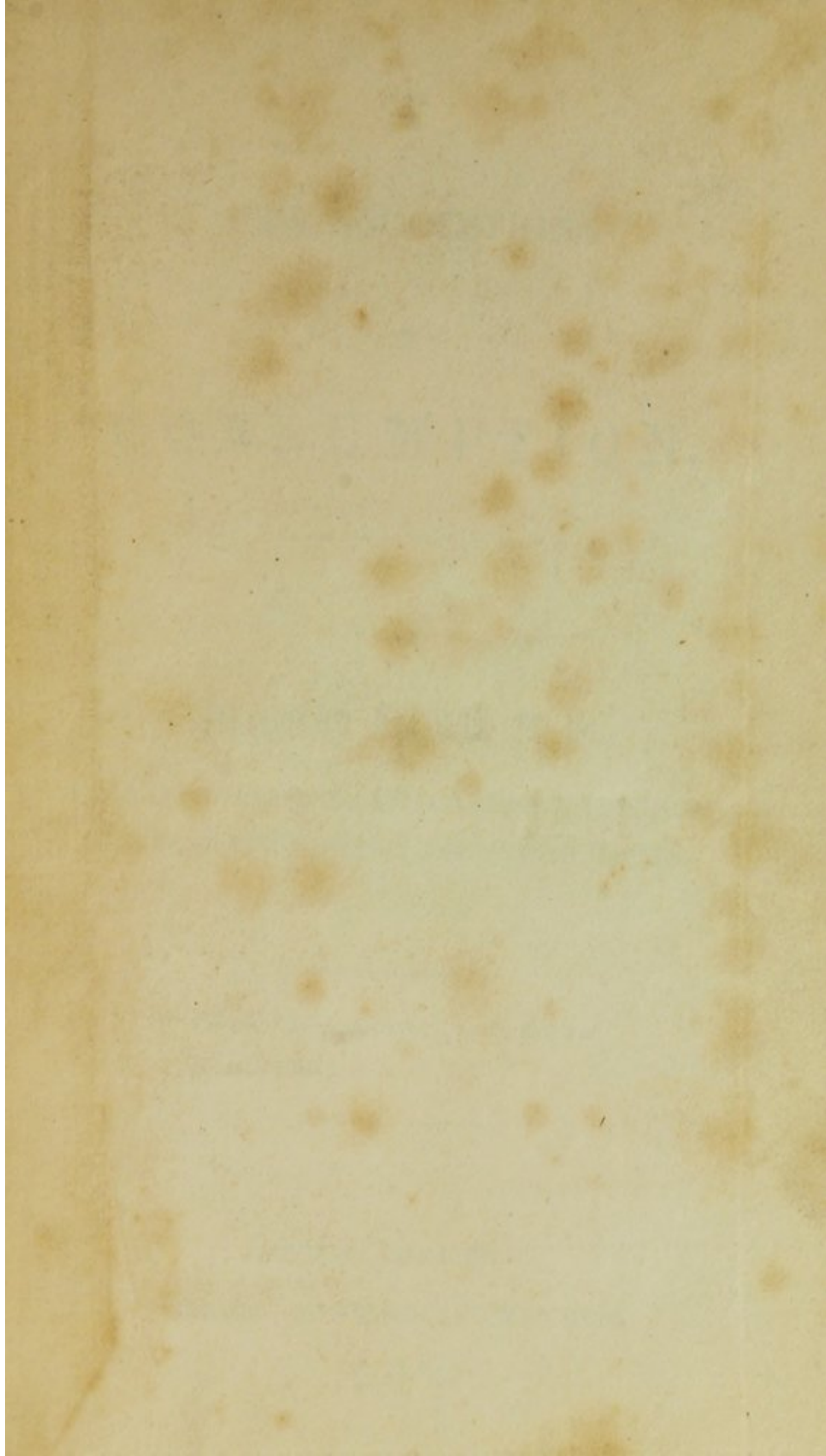
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A  
FEW SUGGESTIONS  
ON  
CONSUMPTION.

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BY  
ROBERT HULL, M. D.,  
EXTRA-LICENTIATE OF THE ROYAL COLLEGE OF PHYSICIANS;  
PHYSICIAN TO THE NORFOLK AND NORWICH HOSPITAL.

~~~~~  
*Οὗτος δ' ἀνὴρ ἄριστος, ὅστις ἐλπίσιν  
πέποιθεν αἰεὶ.*  
~~~~~

LONDON: CHURCHILL.  
NORWICH: STEVENSON AND MATCHETT.

1849

THE HISTORY

OF THE

ROYAL

ACADEMY OF THE SCIENCES  
AND ARTS

OF THE CITY OF LONDON

AND

THE SOCIETY OF ARTS

TO

FRANCIS HAWKINS, M. D.,

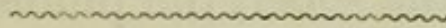
FORMERLY FELLOW OF ST. JOHN'S COLLEGE, OXFORD;

FELLOW AND REGISTRAR OF

THE ROYAL COLLEGE OF PHYSICIANS;

PHYSICIAN TO THEIR ROYAL HIGHNESSES

THE DUKE OF CAMBRIDGE AND THE DUCHESS OF  
GLOUCESTER.



MY DEAR SIR,

I presume to dedicate to you these *few* pages: a *little* illustration of great respect. I am not ungrateful for much personal kindness; nor ignorant of the courtesy and promptitude, which mark your official intercourse with the Physicians of the College, Urban and Provincial.

But is not the body medical, beyond the collegiate domain, sensible of your good deeds? It acknowledges your classical "Gulstonian Lectures on Rheumatism." It is eminently indebted for an Harveian Oration, specially adapted to these degenerate days, when monstrous management of the patient world is displayed by practitioners, who are, notwithstanding, appointed to public charities, met in private consultations.

Is the medical art destined to undergo a fatal fall? Is the sober, the philosophic, the logical, to yield before the transcendental nonsense of *Homœopathy*?

Is sensual *Mesmerism* to spread over the country, until the cold-blooded, infidel, Bas-Bleu, and adolescent, ingenuous gentlewomen are equally boasted of, as *en rapport*, by the *Arch*-physicians of the sect?

Is *Hydropathy*, like a second flood, to overwhelm the land? May we not fear

*grave ne rediret*

*Seculum Pyrrhæ nova monstra questæ :*

when numerous herds are seen wending to  
distant hospitals, erected among mountains ;  
exclusively erected for “ The Water-cure ” ?

*Omne cum Proteus pecus egit altos*

*Visere montes.*

When fearful girls and high-born *dames*  
are stripped, daily and oft, into Eve-like  
nudity ; rained upon, pumped upon, soaked,  
deluged ?

*Et superjecto pavidæ natarunt*

*Æquore damæ.*

If disgrace be our destiny, you, Sir, at  
all events, will have the satisfaction to reflect  
upon a manly protest against foolery or  
fraud—foolery, if these puerile doings be in-  
deed adjudged as worthy—fraud, if their per-  
formers concur in the contempt, with which

they are viewed by the most eminent and the wisest members of the Royal College of Physicians.

I remain,

DEAR SIR,

Your obliged and faithful Servant,

ROBERT HULL.

*Norwich :*

*St. Michael at Plea :*

*October 30, 1849.*

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THE HISTORY OF THE  
CITY OF BOSTON  
FROM 1630 TO 1800

CHAPTER I.  
THE FIRST SETTLEMENT.  
1630-1634.

THE first settlement of the city of Boston was made in 1630, when a number of Englishmen, led by John Winthrop, arrived in the harbor of Massachusetts Bay. They found a small number of Indians already settled there, and they were soon joined by others from England.

The first settlement was made on the site of the present city, and it was soon called Boston. The first church was built in 1630, and the first school was opened in 1631. The first printing press was set up in 1639, and the first newspaper was published in 1689.

The city of Boston was the first to have a city government, and it was the first to have a city council. The first city council was elected in 1630, and it was the first to have a mayor. The first mayor was John Winthrop, who was elected in 1630.

The city of Boston was the first to have a city court, and it was the first to have a city jail. The first city court was established in 1630, and the first city jail was built in 1631. The first city jail was built on the site of the present city jail.

The city of Boston was the first to have a city library, and it was the first to have a city hospital. The first city library was established in 1630, and the first city hospital was built in 1631. The first city hospital was built on the site of the present city hospital.

The city of Boston was the first to have a city police, and it was the first to have a city fire department. The first city police was established in 1630, and the first city fire department was built in 1631. The first city fire department was built on the site of the present city fire department.

The city of Boston was the first to have a city park, and it was the first to have a city zoo. The first city park was established in 1630, and the first city zoo was built in 1631. The first city zoo was built on the site of the present city zoo.

## ON CONSUMPTION.

*Causarum ignorantia in re novâ mirationem facit. Eadem ignorantia si in rebus usitatis est, non miramur.*

“Tubercles in the lungs are the anatomical character of consumption.”

These cause the pulmonic decay, commencing in short, dry cough; whilst copious expectorations close the scene.

Yet no organ enjoys immunity from tubercle, although it mainly invades the chest. Even the contents of the cranium admit tubercular deposit. But, next to the lungs, it affects the abdominal apparatus.

What is the character of this tubercular diathesis, which manifests itself in head, or chest, or abdomen, or pelvis, or in all together? Is it one of power or of weakness? “Weak constitution and lymphatic temperament are two of the principal conditions regarded as predisposing to phthisis.”—Thus saith LOUIS.

Then, the local actions, in the lungs for instance—do these demonstrate power? The insidious tubercular infiltration, without pain, heat, phlegmonic activity, prevent ideas of power. Even when nature, irritated by the tubercles, sets up an expulsive process, how languid this! How *sub-inflammatory* the action, which slowly forms matter, preparatory to ejection!

If tubercular deposition were truly inflammatory, would not a pneumonia increase tuberculation? Yet Louis says that it does not appear to aggravate, in the unadvanced state. Very rarely tuberculosis may date from a pneumonia; but the connection seems accidental. Since pneumonia, in the unphthisical, does not engender tubercles. Since, in the phthisically disposed it may arise and subside *years* before consumption breaks out.

Even in *acute* phthisis, so called, when a few weeks suffice to demolish the sufferer, inflammation may form no part of the lethal processes.

Pulmonary consumption is a systematic malady. A lung may suffer alone, or in common with the viscera of the abdomen. The oppressed lungs, diminished in their capacity for air, are unequal to influence the blood. But blood is not made sufficiently. All is prostration. The stomach anorexic; the liver torpid; the lacteals obstructed. Such is the history of very many cases.

Although, therefore, tubercles in the lungs are the anatomical character of consumption, this is only because the tubercular dyscrasy has concentrated its manifestations on the respiratory organs. There are other consumptions, through the abdomen.

What are the causes of decline?

Concerning this terrible scourge, the world must unlearn a great many prejudices.

For instance, phthisis is not the product of a cold climate. In the Indies, in Madeira, it is as common as in Europe. The Cingalese are more phthisical than Europeans.

It is not, at all events, the product of *the mere cold* of climates, since the mortality from decline is greatest in the West Indies, least in Canada and Nova Scotia : as great in Malta as in Sweden.

*In Russiæ quibusdam partibus per totum anni decursum tussis sonitus haud auditur*, said Leigh.

In confirmation of this, the benefit of emigration southward seems partial and temporary. The best reason given for emigration is, that open air may be secured through a greater portion of the year. And abstractedly this is a potent reason : unless the relaxing character of the air counterbalance. For myself, I must declare, that I do not recollect a single case of phthisis, wherein the good was not exceeded by evil. Not one, where-

in the bodily symptoms would not have been better treated, had the patient been content; not *himself* coveting change—change to anywhere.—This is a condition, in which emigration may do good, because remaining would do harm; the unsettled mind fretting the weak frame. To such rest is disquietude; home productive of ennui; comforts are not appreciated; they fly from their very selves.

But such impatient sufferers are few. The greater number prefer the scenery of their earliest associations, their happiest hours. To these a departure from England is a great evil, augmented by the discomforts of travel; which are inevitable on land, but pre-eminently severe at sea.

To some of these the foreign journey or voyage is, I am quite sure, prematurely lethal. But I have seen cases, for which *not* to have emigrated from friends and domestic comfort seems to have given nature a successful chance.

Emigration to foreign lands is a very different process from travelling in England on horseback, or in a carriage, as so vehemently recommended by Sydenham. It is impossible to despise *his* testimony in favor, particularly, of the first:—*Palmarium hujusce morbi præsidium est, ut æger quotidie equo vehatur.*

But what did Sydenham mean by horse-exercise ? Hear him !

“ One of our bishops, having studied too hard, fell into a hypochondriacal disease. He had passed through long steel courses ; tried almost all mineral waters, purges, antiscorbuticks, testaceous powders. Worn out, partly by disease, *partly by physic*, he was seized with a colliquative looseness, which is wont to be the fore-runner of death, in consumptions. He consulted me.

“ I advised him to ride a horseback, first a small journey, agreeably to his weak condition. To persist daily, till he was well, going further and further, till he went so many miles, as prudent travellers, that go a large journey upon business, without any regard to meat, drink, or *the weather*. That he should take every thing as it happens, like a traveller. At length he rode twenty or thirty miles daily : and, encouraged by wonderful success, he followed this course many months, in which he rode many thousand miles. At length he gained a strong habit of body.

“ Nor is this exercise more beneficial to hypochondriac people, than to those in *consumption*, whereof some of my relations have been cured by riding long journeys.

“ Not only in small indispositions, with cough and leanness, but in consumptions almost de-

plorable—when looseness accompanies the night sweat, which is wont to forerun death.

“How deadly soever *consumption* is, two-thirds, which are spoiled by chronic diseases, dying of it: yet I sincerely assert, that mercury in lues, and bark in agues are not more effectual than the exercise mentioned in curing a consumption, if the sick be careful that his sheets be well aired, and that his journeys are long enough.

“Those, that are past the flower of their age, must use this exercise much longer than those that have not yet arrived at it. This I have learned by long experience, which scarcely ever failed me; and though riding on horseback is chiefly beneficial, yet riding journeys in a coach is sometimes very beneficial.”

Of this author so preponderant, so imperial is the name, that it is selected, as of the greatest English physician, to decorate a splendid association—The Sydenham Society.

This testimony of the greatest of observers to the benefits resulting from exercise in the open air has been most inexplicably neglected by succeeding practitioners and by the laity. Is it that the prescription to ride, like a commercial traveller, was too singular and too harsh, to be credited and obeyed? or that it requires unusual fortitude? or is it that few medical advisers dare

to enforce the Sydenhamic exhortation? and that no patients will obey an ancient order, unless it is backed by present contemporary physicians?

Nobody denies that Sydenham was a master of his art: nobody denies that his consumption was the same disorder as our hodiernal foe. His descriptions are graphic beyond cavil. Then why do his admirers not follow him in his practice?

Sydenham is said to have intended a complete Treatise on Consumption; but he was prevented by death. However, in his *Processus Integri*, he has written a chapter "On Cough and Phthisis," and another "On Tabes." These contain the condensed opinions of this marvellous observer, on the nature, cause, and treatment of Pulmonary Consumption. As to treatment, it seems certain that he was very successful; certainly much more successful than any physician of these times. Yet his success could not have been due to any particular powers of physic, as such: of any mere articles of the *Materia Medica*. This any body, who will take the trouble to peruse his catalogue of drugs and simples, must instantly perceive.—Nay, the purgation, expectorants, venesection, opiate sedatives, which he employed, must have rendered Sydenham, in cases, where he trusted to these, not more triumphant than his successors. For all these plans have eminently failed in Eng-

land, on the Continent, every where. Who, since Sydenham, who, save brazen Charlatans, will boast that by the ordinary methods he cures consumption largely? Nay, even Sydenham denies the paramount utility of the routine practice; saying,—“Some of my relations have been cured by riding long journies; for I knew I could not cure them better by medicines, or any other method.”

If the routine practice of demulcents, expectorants, opiates, has signally and shamefully failed in all other hands, why should Sydenham through *these* have succeeded? No! his victories resulted through prescribed equitation; riding, when the phthisis was incipient, and the tubercles quiet—“in small indispositions, with frequent cough and leanness.” Riding, when “looseness accompanies the night sweat, which is wont to be the forerunner of death.” Can any language be more energetic? Was any man more veracious than Sydenham? Can any great physician have been more *specially* forgotten? Specially as to phthisis. He cured decline by daily horseback, with unrestricted diet, *no* privation of food or of drink—*cum in hoc uno omnis rei cardo vertatur!!!*

*Such* was the peculiarity of Sydenham’s practice; such the remarkable process, by which he became a successful physician in declines.

Dr. Charles Leigh, a famous cotemporary, does not mention Sydenham's *palmarium* remedy of horse-exercise; yet he, too, manifested an originality of treatment, but of a negative kind. He rejected *opiates*, as a prodigious evil.

To me they have, during many years, appeared hurtful. Action is the order of the human microcosm, as well as of the universe. But the effect of opium is remora, stoppage, death.

*Ex opiatis*, said Leigh, *tanquàm à peste, fugiendum est*. As life depends on action, beginning at the heart, going on in the red vessels, propagated to capillaries; still maintained in veins, lymphatics, through glands, through membranes; opium retards, represses, terminates. Can this be a proper drug in frames, whose character is deficiency of vigor? Consider the influence of opium on the stomach. Appetite and digestion are injured; at length destroyed. Next, the bowels, from duodenum to rectum, are all embarrassed in their peristaltic movement. The liver secretes little or no bile; and the fæcal excreta are pallid.

All the vessels efferent from the heart, all the returning veins and lymphatics partake the lethean torpor, sluggishly conveying their various liquids. Is this a state proper for a consumptive, requiring nourishment for his wasted frame; blood for

his cold extremities; absorption of tubercular deposits; expulsion of softened tubercle?

In the great cycle of action, which maintains health and preserves life; from the stomach, which is the first sanguific, to the heart, which is the main distributor, opium opposes all and every organ. Even if the stomach of a phthisical be not involved, and the appetite and digestion be vigorous, this condition soon vanishes under the opiate influence. If the prevention or removal of tubercles be possible, through potent digestion, assimilation, sanguifaction, corporeal *power*, is it reasonable to use articles, which torpefy all the agents in these essential processes, and results?

But what induces the secretion of tubercular matter? What vessels are faulty, depositing such morbid masses? Of these masses what is the chemistry?

“Tubercle may be regarded as protein, from which *five* atoms of carbon, one of hydrogen, and one of oxygen, have been removed,” says one philosopher. “Protein, that has lost *three* atoms of carbon and one of oxygen,” says a second analytic. “Protein, from which *two* atoms of carbon and one of oxygen have been removed,” declares a third. And “scrofulous matter may be formed from protein, by the removal of two atoms of carbon and oxygen, the addition of two of hydrogen.”

Thus, whatever chymistry throws of light on the nature of tubercle, it sheds none on the cause of its formation.

Tubercle is composed of materials, which belong to the animal frame, but they are miscombined or misplaced. Do the finer analyses of modern chymistry subserve the practitioner treating phthisis? Can he chant to victory from an acquaintance with the protein-compounds,

*Pepsin seu ptyalin, chondrin, glutinve pyinve?*

Wherever the seats of tuberculous matter, must we not look for the pathology to distant origins?

Mr. Macilwain has published a book "On the General Nature and Treatment of Tumours." It is full of practical management, founded on Abernethy's admirable theory, that they are the result of local actions, provoked by distant and systemic causes. An inquirer about tubercles should study this treatise on tubera. There is not a fact, nor a reason, which is irrelevant to the subject of this opuscle.

*Thus:* "Inquiry scarce ever fails to obtain evidence of unhealthy habits, former diseases, treatment or tendencies."

Is it not true in the case of pulmonic deposits?

*Thus:* "Tumors are so deposited from the blood, as to represent a new arrangement of matter."

Is this not true of the pulmonary deposition ?

*Thus:* "There is nothing impossible in the removal of tumor, by the powers, which deposited."

Is it not allowed that tubercles have been softened, cavities made by their expulsion, cicatrices formed ?

*Thus:* "Tumors are conditions of disorder, and in many cases we can arrive at ideas of the disorder, because removal of such is accompanied by absorption of the tumor."

Is not this true of the tuberculous lung ? I believe that it is, in many cases, where there was every *rational* sign of tubercles, although the ear detected them not, in their quiescence. There was disorder distant from the seat of morbid deposition ; and of this the signs departed, through attention to the faulty structures, stomach, or liver, or other parts of the economy.

It is impossible, at present, on merely chymical principles, to account for misplaced animal materials. And the modern chymist, like former enthusiasts, is prone to estimate too highly the specific applications of his interesting science.

"Of tubercles the chief organic constituents are fibrin, casein, fat, albumen. The inorganic are chloride of sodium ; phosphate of soda ; phosphate, carbonate of lime ; oxide of iron, etc. That they contain phymantine and pyine is by no

means certain, Preuss and Gütterbock being at variance concerning the relation of pyine, albumen, casein." Thus saith *Hasse*. If then we wait for a practical pathology, founded on a precise and undisputed chymistry; on the delightful harmony of Messieurs Gütterbock and Preuss, now, alas! at variance concerning certain relations, we may perhaps delay, until ourselves and our patients, *phymantine*, *pyine* and all, undergo the final decomposition.

The science of medicine usually has come after facts. The influence of materials is accidentally discovered first; explained subsequently. Such has been, with few exceptions, the history of physic. Is it not, likewise, the prophesy? Is it not wiser to observe facts, upon a wide scale, than to essay to practice upon ingenious theories, which have rarely done good service? Even limited facts adduced by sober witnesses should compel attention. Thus Sydenham, the greatest of observers, asserts, that horse-exercise is the *palmarium* remedy; and that he cured many of his own relatives in their last stages by exercise on horseback. These were *facts*.

*Uranus*, a young gentleman, aged fifteen, consulted me in the autumn of 1845. He displayed all the external signs of the phthisical frame. And he gave proofs of an ample cavity in

the apex of the left lung, and of a smaller excavation in the summit of the right. The pulse ranged to 120. The liver was very torpid, and the alvine excreta drab-colored.

The father of this patient, a gentleman of masculine sense, was quite ready to send his son, on medical authority, to the South of France; or to Spain; to Italy or Malta; to Madeira or any where. I told him of the uselessness of such inconvenient expeditions: and he chose that his son should not be banished. I directed attention to the *liver*, prescribing dandelion internally; and baths impregnated with nitro-muriatic acid. That the diet should be generous, of milk and solid animal food, of malt liquor.

That no pectoral drugs, nor *opiates*, should be given. That, if the cough disturbed by night, free potation of porter, which is somniferous, should be preferred, medical sedations excluded. That the patient should expose his lungs, his body being warmly clad, to the air. He resided in the northern part of Norfolk; and he rode daily on horseback to the sea-shore, distant seven miles.

At Christmas, his pulse being quick as ever, the sputa were puriform, very offensive and copious; the gurgling in the cavities was remarkable as ever, and emaciation was extreme. Profuse perspiration at night. It seemed that death could

not be very distant; but he persevered in his course. In the month of May he presented himself to me, fleshy as he had ever been, in buoyant spirits, in juvenile strength. On stethoscopic examination, all cavernous symptoms were gone. He is now, after a lapse of four years, from the first consultations, in perfect health, with a pulse of seventy-four beats in the minute. In this case, doubtless, masses of tubercle were softened and expelled. But what would have been the result, had the digestive organs been weakened through the ordinary course of demulcent, sedative, *opiate* physic? Appeals only to the cough, an effect, a symptom? Nature was allowed fair play, and *she* triumphed

At one time the muco-purulent sputa amounted to a pint per diem, perchance more. But, during this elimination, Nature, unpalsied by opiates, aided by generous nutrition, *favoured* with air, sustained the frame free from complete exhaustion; and, when the elimination was perfect, healed all breaches with triumphant energy. When, at one period, this patient could not keep his saddle, through debility, he was driven abroad in an open carriage. But his bold perseverance with horseback, when he could possibly retain his seat, was worthy all admiration.

This gentleman, doubtless, found an ally in

youth, in which efforts of Nature to repair mischief are much more lively and efficacious. But it is reasonable to infer that Sydenham's patients and relatives, of whom "many" were cured, when the sudores and diarrhœa had come on, were of adult, middle, advanced age. It is not likely that the many patients, and some relatives, of Dr. Sydenham, were merely boys.

In this case the diet was unrestricted, save by the taste of the patient; which certainly did not dictate "privation." "No privation of food or drink," said Sydenham, *cum in hoc uno*—on this one hinge the whole treatment turns. "Take every thing, as it happens, like a traveller," is a rather liberal hortation, when it is considered how commercial travellers have always lived, especially in the times of the Charleses. How different is this joyous dietary from the mean, meagre, exclusive, timid prescriptions, given by many medical advisers of our day, to the weak, wasting consumptive! We allow Sydenham to be the prince of English physicians; the closest observer; the most successful of curers; the most unimpeachable of writers; yet we heed him not when he discusses the subject of phthisis, so fatal to our countrymen—when he promises salvation, if our invalids will but ride, eat, and drink, like—bagmen!

Ἄ νεότας μοι φίλον.

*Tendencies* to decline are often created by faulty nourishment, impure air; general mismanagement of an infant. What is the proper nutriment? Human milk. This nature intends; this nature almost always provides, from the very frame which provided the child; and, if the mother fail, there are always to be found rich milk and healthy breasts elsewhere. Nurses, free from physical ailment or mental depression. With this adapted pabulum, how all the organs of the infant play! The stomach digests! The liver secretes golden bile! The bowels are evacuated regularly, without flatus, without griping. And of this milk the infant cannot suck too much. Nature indicates the measure; for the stomach rejects, through *easy* vomiting, all superfluous food. Some fancy that this vomiting implies improper milk or weak digestion. On the contrary, it shews the salubrity of the food, and the voracity of the child. Of such an infant tranquil are the hours by day, sleepful the night.

But some mothers cannot furnish milk. The fountain is dry; or the mamillæ not perfect.

And then comes the pitiful difficulty : the dislike to employ a wetnurse. Mrs. A. cannot bear that her child should be suckled by a stranger. Lady B. cannot procure a married nurse, and is too conscientious to employ an unchaste woman. Mrs. C. says, that her friend's child Laura has been brought up on "tops and bottoms," and you see what a fine child *she* is ! Probably, vain excuses ; the real reason being a false economy. How many deaths of the sweetest infants have I traced to this wretched hesitation ! Then, if the spoon-fed infants survive to childhood, it is a frail or rickety childhood. Lymphatic temperaments ; big heads, *looking* watery ; big abdomens, *looking* obstructed ; spindle shanks. Old faces ; old frames comparatively. Girls, precise as their maiden aunts ; boys, solemn as chancery judges. Then come the Christmas medical bills ; and at last the pulmonary mischief, tubercles, suppurations, bits of lungs only to breathe with—death.

If there be one indispensable provision to build up a child for longevity, it is human milk, devoured from a human breast !

If people will inquire into the biography, they will learn that, in most cases, the invalid child, scrofulous, rickety, phthisical, hydrocephalous, has been brought up by the spoon.

*Prasinus* has as fine a family, about a dozen,

as the world sees ; of whom, all, save one, quaffed the maternal milk. That excepted child is just dead of acute phthisis.

The children of *Vietor*, five in number, have all displayed precocity of intellect. Two, who had been nourished with farinacea, died as hydrocephalous infants. The three, who survive, had the same threatenings ; and would doubtless have shared the same fate, but for timely recourse to wetnurses.

But the very milk of the nurse may be noxious, and the child require change for animal diet in another form. Thus, in the third surviving child of *Vietor*, although a wetnurse was obtained, after a time fresh convulsions came on, threatening very frequently instant death. To return to spoon-diet, the original evil, would have been folly ; to persevere with milk, supposed to be faulty for many reasons, would have been equally foolish ; against another nurse objections were doggedly made. Wherefore beef tea was given ; and the child was rescued from rapid and severe convulsions, and survives healthy to this day.

“ Children fed on arrow root, salep, or any amylaceous food, which does not contain ingredients fitted for bones and muscles, become fat, but do not acquire strength, nor are their organs properly developed.” Thus says Liebig.

“Milk, furnished by nature as the only food for the young, contains *all* the elements for nutrition.” Thus saith Pereira.

“*All* the elements.” This cannot be impressed too deeply upon parents, who employ the wet-nurse *partially*. They entertain an idea that some of the diet should be farinaceous, although the nurse can boast an overflowing breast, and must waste her healthy milk, if the infant is partially spoon-fed. Or absurd reasons are adduced; that the child may not be quite dependent on a domestic, who might be dismissed, or become invalid. Or, if the mother suckles, and she a lady, that the party of pleasure may still be enjoyed, the infant no obstacle.

“Out of the caseine of milk are formed the albumen and fibrine of the blood, and the proteinaceous and gelatinous tissues. The butter serves for fat, and contributes, with the sugar, to support heat by yielding carbon and hydrogen to be burnt in the lungs. The earthy salts are necessary for the osseous system; the iron for blood-corpuscles, and hair; the alkaline chloride furnishes the hydrochloric acid of the gastric juice.” Who, concurring with Dr. *Pereira*, will attempt to build up infants with other materials than milk?

*Est quippe cibus simplex, multum alens; coctu*

*facilis, constitutioni infantum amicus. Quamdiu hoc alimento commodè aluntur, minùs huic morbo redduntur obnoxii.*

Thus wrote Glisson about two centuries ago; and although he alluded to rickets in the above passage, his argument tells with still stronger force upon decline. If the framework of bones cannot be built without milk, what are the prospects for the soft organs? Common observation is corroborated by the doctrines of modern and exquisite chymistry.

The diseases of children may be much more left to nature for their cure, if the children are still at the breast; and this breast healthy. Their disorders would be fewer, if any, and they would be less acute. The probability is that, if a nurse be entirely healthy, the infant will be so likewise; and that if a child falls off from this standard, some deviation has first occurred in the milk. For myself, I scarcely ever find it needful to treat the infant *directly*. If an infant, suckled unmixedly, display febrile uneasiness or hepatic torpor, the stools being not yellow; or cutaneous eruptions; or other ailments; an investigation into the health of the nurse will usually give a clue to that of the suckling. The nurse must be kept healthy, through pure air, proper food, sufficient sleep, gentle exercise, unconfined bowels, and,

above all, a placid mind. *If* the above conspire to produce a healthy milk; if even acute disease attacks the infant, say pneumonia, is it not likely that nature will resolve it? I have seen infants destroyed by the depletions of the leech, soon or slowly.

Many persons, in their restriction of the diet of children, include maternal milk. I know medical men, who allow their own babes permission to suck only at prescribed hours. They fancy that they know better than Nature: and they dole out supplies with the niggardly calculation of a Scotch purser. They forget that children have not merely "to renovate their tissues, but to grow. Their circulation and respiration are more active; and they require food, to support respiration, at shorter intervals.

"The elements of respiration (non-nitrogenous foods) are more necessary. In the young the weight augments daily, and the nourishment must exceed the waste. The child must be supplied with sufficient non-nitrogenous food, which yielding carbon and hydrogen to be burnt in the lungs, protects the tissues from the injurious action of oxygen."

Now the sucking infant secures these in its natural food.

"Children evince an instinctive fondness for

sugar, which is supplied in the mother's milk. It is an element of respiration, and therefore more necessary for them, on account of the greater activity of *their* respiration." But children must be weaned, and then let us remember, that "in very cold countries, substances richer in carbon and hydrogen, yielding more heat by combustion, are preferred. The most northern race were unacquainted with sweets, and their infants sputtered out sugar with disgust; but grinned with ecstasy at a bit of whale's blubber."

These are quotations from Pereira, and I believe, with this accomplished physician, that of the weaned child the *natural* appetite is an index of the wants of the system: and that parents commit gross error, who disregard it. I, like him, have seen children refused vegetable food, though they ardently desired it; and denied animal food, though the digestive functions were active, the appetite for meat most keen. It is evident, from the accounts by travellers in the hyperborean countries, that the oily alimentary principle is the favorite of the natives, who may be said to devour the oleaginous aliments without any principle at all. "One of the Yakuti consumed in twenty-four hours the hind quarter of a large ox, twenty pounds of fat, and melted butter for his drink." At another time, "rice, boiled

with three pounds of butter, weighing twenty-eight pounds, without stirring from the spot."

Such histories I quote, not for an example to be admired, and, if possible, followed by English eaters; but to shew that these Northerners differ from us, not less in the nature of their food, than in the temperature of their air. They are singularly exempt from phthisis; and since *cold* does not make them consumptive, is it not most probable that their food preserves from tubercular decline? Doubtless our latitudes demand not such masses of flesh and fat. We could not swallow them, nor digest, if swallowed. But the British islanders should be allowed to eat animalized food, so far as they may covet and can concoct. Infants should be reared on milk; children on meat *much* more than at present; and youths and adults be taught, that if they devour the *nitrogenous* foods, these nourish; if the *non-nitrogenous*, they warm their frames.

A calorific diet is especially requisite for females of every age of life; since the dress of girls and women is so scanty about their necks, arms, and legs, that the era of Vortigern and the naked Picts seems to have returned.

*Non contecta levi velatum pectus amictu,*

*Non tereti strophio luctantes vincta papillas.*

Perilous opinions concerning the diet of young

persons extensively prevail. *Growing* boys and girls are stinted. They are told to follow King Charles's golden rule, and rise from table with an appetite. Now this is in opposition to Nature, who surely did not bestow upon the *growing* animal a voracious appetite without reason. When growth is complete, it is right to adapt supplies to other expenditure. But the expenditure of the incomplete frame is upon growth. To stop short of Nature's indication is to stop short of building up. All that youth requires of surveillance, as to food, is to supply proper materials for growth; and to leave the quantity to Nature. Her criterion is appetite. The brevity or the length of the human life is determined during the growing period. Afterwards no essential change can be made in the fabric by ingenious arts.

Under the paternal roof a child is generally secure from starvation. The natural wish to satisfy a child, whose stomach cries "cupboard," insures him from a loving mother, good cheer; unless the lady is opinionated or *docta nimis*. Instead of credulously reading certain silly books, let her believe in Nature, and follow common sense; giving the suckling all it can swallow of unmixed milk; the weaned child all it can devour of nutritious food.

*Nec historias sciat omneis ; sed quædam ex libris et non intelligat.*

But the child is extruded from the parental domicile, and the boarding school receives.

It is a convenient theory for some masters that children may eat too much ; and that their vigilance is necessary, lest the scholars should burst.

This theory has been much acted upon at the ladies' schools ; and I attribute a great portion of the consumptions, which destroy young women, to this cause.

Even in seminaries, where there is no deficiency of food, there is often too little of animal aliment. It is said, that the families of butchers are remarkably free from phthisis ; and may not this immunity be traced to the animal diet of a butcher's household ?

Denial of a meal is one scholastic mode of punishment. It would be wiser to inflict overrepletion, whose misery might give a lesson against gluttony in future life.

As the natives of the North devour, with instinctive voracity, fat and oily food, this may confirm the opinions of those, who are now eulogizing cod-liver oil. I now foretell that this new remedy will speedily sink into unmerited oblivion, through overpraise. Whether it be fuel for animal heat, or nutriment for a wasting frame, it cannot

alone prevent or cure a phthisis. It can only be an auxiliary. If it be wanted for nutriment, give me, as a clever friend suggests, the liver itself fried; a dainty dish. If it be fuel for the lungs, this is procurable by much pleasanter processes.

In the management of children, next to food, the most important consideration is *air*. And I am certain that the school-rooms are often very injurious, through want of space and ventilation. The little oxygen, occupant of the empty room, is speedily consumed by the numbers of juvenile lungs, which, until the hour of breaking up, are breathing azote. Can this possibly be done with impunity, four, six, eight hours per diem? All these observations are not the less important, because trite. This pamphlet is to warn against decline: and it must therefore deprecate its causes.

The infant, from its entrance into the world, is mismanaged. Midwives and nurses fancy that a being, which has been incarcerated nine months, can exist without air after birth, and that to give air is to give "a cold." Some babes, are they not suffocated directly, the nurses swaddling up the offspring, to concentrate attentions upon the mother?

If not, during many months the child of wealthy parents is cosseted in close chambers,

whilst it ought to inhale the pure open atmosphere.

Such a child is not built up to vigor; and if, in after life, the tubercular crisis is displayed, can we wonder that "Gellerstedt and other pathologists take refuge in the doctrine of depression of vital influence, to explain the formation of tubercle?" Can we, when tubercular cough arises, believe that practise correct, which implies low living and debilitating physic?

In childhood and youth *air* should be constantly administered, in daily walks, drives, rides. Let those, who inhabit vallies, send their children to the hill-tops. Those, who live inland, send their families, every now and then, to the seashore. With clothes sufficiently loose to permit expansion of the lungs, gymnastic exercises should be employed.

To me the erection of hospitals for the treatment of phthisis, if these mean wards and dormitories for a congregation of sufferers, seems hostile to therapeutic treatment. The foul air of a ward is the worst possible atmosphere for a damaged lung, because it wants all the oxygen it can procure. There is good reason to believe that much practical error has arisen from the idea, so prominent in the minds of Beddoes and others—the idea of Liebig, that consumption is the result

of excess of oxygen in the blood, consuming it and the textures. Many symptoms show that there is great deficiency in respiration, by which oxygen is supplied ; and some rapidly fatal cases, exhibiting speedy emaciation, are bordering on asphyxia. This is a remark of Dr. C. J. B. Williams : so simple, so intelligible, that it is wonderful that Beddoes never made a similar. Especially because in his day the formation of oxygen for the fabric was accredited, without dissent, to the lungs alone.

The practical error to which I allude, as founded on the oxygen theory, is the neglect, contempt, even dislike of pure air abroad ; ventilated, breezy apartments at home. Hence confinement of patients to their close domiciles and more closed apartments, during the winter months. Hence a horror at open windows, for "tender lungs," in churches, chapels, lecture-rooms, at parties ! It is painful to see the extent to which this dread of the best friend of the phthisical is carried ; even by medical men, who ought to know better. How they foster the vain fears of their pulmonary patients ! How they, at all events, yield to their ignorant trepidation ! "We are afraid of draughts." Then get out of the draughts ; but, pray, do not shut the draughts out of the room.

But, as to hospitals for decline, there is reason

to believe that tubercular effluvia corrupt other lungs, which inhale them. If a sound lung can be contaminated, morbid structures may be made worse. Some deny the mischief; while others as positively affirm. It seems wisest to concur with those physicians, who believe that a tendency to decline may be rendered fatal by sleeping in the bed of an expectorant consumptive. I have known the husband become phthisical, after the wife; one sister succeed another in the terrible career to the grave—and as in any case it cannot be proved that tendencies do not exist, so no wise person would run a risk, if it could be eschewed. The patient, with suppurant tubercles, should sleep alone. If some sceptical persons deride the idea of mischief inhaled from other lungs; the evils must be due, for the facts are undeniable, to a cachexy engendered by the closeness and foulness of the air of the apartment. And if this can create a phthisis in the sound, what chance of life exists for the consumptive himself? and what urgent necessity always for *air*! Air abroad! All possible air at home.

*Hic morbus est valdè contagiosus, ita ut tutum non sit fratribus aut sororibus phthisi laborantis cubiculum ingredi. Siquidem miasmata, quæ a pulmonibus exhalant, et cubiculi totius aerem inficiunt, ab aliis, præcipuè dispositionem habentibus,*

*in pulmonem attracta, similem dispositionem generant.* *Riverius.*

That lungs receive effluvia, which permeate the system, is shewn by the odor, imparted to the renal excretion, from their inhaling those of turpentine.

The lungs are in permanent contact with air; and the great object of search is the best air.

Now pure air may be obtained north, east, south, west. And the places, to which consumptives are sent, cannot boast any peculiar purity, chymically analyzed; but that a milder temperature tempts the sufferer to get more air *sub dio*.

If the surface of the frame can be secured from obstructed perspiration, it does not seem that cold air inspired injures healthy or deteriorates morbid lungs. Lungs, as such; since, where the larynx is morbid, cold is a great foe. It may bring on acute and fatal symptoms.

*Vaticella*, a married lady, mother of three children, was seized with dyspnœa, hoarseness, sub-stridulous respiration occasionally, aphonia at times, pain and other proofs of chronic laryngitis. But was she also tubercular as to lungs? Her descent from a phthisical father, her tabid look, and many other symptoms rendered this probable, although auscultation revealed no morbid sounds. But she was treated on an assumption of phthisis.

After a time she consulted a physician, who told her to expose herself boldly to the atmosphere, and despise the idea of decline. A walk on a cold, wet day, brought on a coarctation of the larynx, which went on increasing up to speedy death. The larynx was found thickened, ulcerous, disorganized, but the lungs were quite free from tubercle. Thus was verified the physician's diagnosis: and an indication afforded of the danger of irritant cold in laryngeal disorder. This life, so valuable, might have been saved, perhaps, by tracheotomy—an operation, which surgeons appear to avoid: although a lancet and probe suffice: their constant companions—

*σύνηθες ἀεὶ ταῦτα βιασάξουσιν ἐμοί.*

*Quod autem putamus difficillimum esse artificium? Ego puto medicum. Medicus, qui scit quid Homunciones intrà præcordia sua habent.*

I exhort the younger physician to look at the practice and cures of the illustrious Sydenham. To ponder over his remedy for the “small indisposition, frequent cough, leanness”—for, in fact, incipient phthisis, unsoftened tubercle; at all events unexpectored. What was *his* treatment? Horse-exercise and free living. “I intreated him to persist daily, going further and further, so many miles as prudent travellers, that go a long journey upon business, without any regard to meat or drink or *weather*; but that he should take every thing as it happens, *like a traveller*.” Who is ignorant that the commercial traveller hath always been the most welcome guest to mine host, because the most hospitable to himself?

But is not the dry and hacking cough of delicate subjects, as a matter of course and instantly, subjected to the narcotic treatment? To sedatives, which torpefy the stomach, and other ab-

dominal viscera, and so derange the general health, that an artificial disorder is engendered? Long have been tried, useless have been found, all such appeals to this dry and dreaded cough. Assuming that tubercles are the origin of a cough, hath it ever been demonstrated that ultimate good arises from the narcotic plan?

But, what is to be done? Here is cough : and patients clamor for direct and instant removal of this great annoyance. Tell them that tubercles are the cause or they are not. If not, surely they may rest content with innocent measures, trusting to these and to time. Or, they *are*. Then, what is the object? to keep them quiet, at the expense of the constitution? Tell them that, while cough is subdued, softening goes on, the cough giving no warning. That it is unwise to interfere with Nature, whose constant effort is to eliminate, if she move at all. That she must be aided with invigorant treatment, not encumbered with such as really thwarts her peculiar proceedings. It is easy to eulogize bechic medicines : and to quote cases, wherein they have appeared successful ; but, on the whole, time has manifested how little their value in phthisis or even menaces of phthisis.

Of *cough*-medicines, the expectorants, next to opiates, are most employed. But if they deter-

mine toward the tuberculous seats, do they not mischievously irritate? Squill is an universal favorite with prescribers of expectorant drugs. But, if tubercles are quiescent, why exagitate with the scilla? if softening, why interfere? Why, especially, with a nauseant article, which will render any stomach weak, squeamish, dyspeptic? Our object should be not augmented excretion into bronchia, but removal of a distant, morbid cause. If antimony, ipecacuhana, camphor, castoreum, myrrh, which are oft administered, do benefit, is it not probable that they affect healthily the primæ viæ, with their secreting apparatus? He will assent, who "considers the length of way by the blood-vessels, before they reach the lungs, and what a *small* part comes to their destination," as expectorants. Does modern science admit *any*?

*Narda*, a young lady, aged about fifteen years, was brought to me in March, 1847. She was distressed with "a severe, dry cough, and great difficulty of breathing." The debility was marked; there was amenorrhæa, shrinking, a pulse of 120 beats in the minute. The ear detected no sounds of softening tubercles, but no man could avoid a strong suspicion of their existence. The chest was not so resonant as I should have wished; the respiratory murmur was not so silky as it would be in pulmonic integrity. The sounds of the

heart rather too audible over the pulmonic regions. I believe that tubercles existed ; but I exhorted her mother to disregard the cough, and to concentrate all attentions upon the digestive organs. To supply a generous diet of meat and malt-liquor ; administering tonics only to aid the digestion of this diet ; and to move the patient to the sea-coast, so soon as the arrangements could be made. After a few weeks, in the beginning of May, she migrated to Cromer. Here she religiously avoided *opiates* and all cough-medicines, drinking the nutrient tonic, Decoctum Cetrariæ ; and using baths of warm sea-water. After three months, having received “ great benefit,” she returned to her inland home. I was not again consulted ; but I hear from her friends that with no other treatment than the described, she is, this May, 1849, “ in perfect health.” In this case the commencement of phthisis was logically to be predicated. In the case of *Uranus*, detailed before, was seen the approaching termination in death. I believe that *air*, sea-air, generous diet, avoidance of *opiates*, prevented fatal tuberculation, perchance caused absorption of morbid deposits, in the lungs of the female patient. That they remedied the grave mischief of cavernous lungs in the instance of *Uranus*. That in both Nature was *the* physician ; that in myriads of similar cases death re-

sults, because close rooms and *opiate* poisons prevent the therapeia of Nature ; whose powers are unknown or overlooked or opposed, fatally opposed, in many disorders.

Let us suppose a different course adopted.

*Narda*, going through the routine, is blistered on the chest ; ordered to appease cough by *opiates* ; to keep within doors, as the air, her enemy, is abroad, seeking whom he may devour. She takes digitalis, for so rapid a pulse. Squill is added, because it generally accompanies foxglove and *opium*. Purgatives are given to counteract the constipating influence of opium. Animal food is denounced, lest the lungs become more infarcted. Stimuli are out of the question.

After a few weeks will not the auscultator detect bronchial rattles ? Yes !

*Altella*, a handsome, lively, bright eyed, young lady, in her teens, stood one day a long time on damp grass, and caught a cold and cough. The family surgeon is summoned and begins his work ; syrup of poppy for her cough ; digitalis for the pulse. She has slight pectoral pains, and is repeatedly blistered, first leeches. She gets weak from low, starving diet. Her diet is not increased, but she is treated with quinine. She perspires copiously and the mineral acid is made stronger. She has diarrhœa ; and chalk and opium are minis-

tered. These processes included from the first the close bed-room and the bed. When I saw her, I found the lungs within a *few* months, disorganized; and then, within a few weeks I heard of her, that she was in her tomb. This is a death according to art!

But the honest practitioner would treat his own child as he does others', as the following note will shew:—

*Attica* “has been, and still is, very unwell, first from a very severe cold and cough; followed by considerable fever. I administered *tr. opii*, *tr. digitalis*, magnes. sulph., acid. sulph. dil., infus. rosæ.

“The febrile symptoms gave way, but the pulse was so lowered, that I changed for *tr. opii* ammon.

“This has had a good effect upon the cough, but yet it does not yield, and her debility continuing much, I feel very anxious for your advice. Plasters of mustard have been applied to the chest.”

Now the writer is a man of strong head and great experience; and his practice is similar to that of thousands; but when I examined the young lady, I found, beside other phthisical symptoms, *cavities in each lung*.

*Colonus*, aged about 25, applied to me with dry

cough, quick pulse, attenuation, debility, so that he was compelled to relinquish his business. He was flat-chested, with livid fingers, aduncous nails, a genuine phthisical look. But no rattles nor morbid sounds were audible. I told him there was no present auscultatory *evidence* of pulmonary unsoundness. To live well; to breathe pure air; to imitate his father, who with precisely similar subjective and objective symptoms, at this same time of life, was cured by generous diet, with free potations of *porter*. This the parent *stoutly* affirmed, and this his fabric and history certainly corroborated. But the young man was persuaded to consult a surgeon, who prescribed for his cough the routine of bechic *opiates*. Tubercular softening came on rapidly, and he died in about two months! Would this gentleman have triumphed over phthisis, as did his father, whose crisis he certainly inherited, had he, like his father, quaffed generous malt liquor, and eschewed *opiates*? Who can say no? At all events, might he not, as his fate displayed, as well have imitated his still living sire?

Histories, such as I have excerpted from hundreds, of similar fatal termination, ought to teach us that it is disgraceful to the art of physic to conduct the credulous consumptives in a barbarian method to their graves. If they must die—

and what possible chance of life can patients, or rather victims, managed like the delicate, interesting *Altella*, boast?—let them die without close rooms, foul air; without the pangs of hunger; without the pains of blistering plasters; the annoyance of leeches; without the loads of disgusting physic. “If they must die”—but is it so clear that the cold and cough, which end in phthisis and the early grave, are so abstractedly fatal? As I live, I believe that numberless cases are lethal, through medical meddling. I feel that I have some right to make this bold affidavit, from the experience of forty years—during which, as student or practitioner, I have witnessed the symptoms, management, and end of Phthisis Pulmonalis.

Let boys from the schools of physic enter upon that career of credulity in drugs, which the old observer must relinquish. Let him, who fondly reads about every fresh discovery, so called, believe that it *is* a discovery. But let those, who are not disposed to be jilted for ever, turn a deaf ear to clamor about new specifics—seek chiefly to *prevent*; but if the tubercular crisis hath arrived, aim next at cure, *not* by physic, but attention to the non-naturals. Thus, and thus only, will they triumph: or be beaten without self-reproach.

*Inhalations*, fruitless as they have been *all*

proved, still find advocates. Inhalation of *narcotics* amongst them. Many fancy that *tobacco* can prevent, some that it can cure decline. But it can effect neither benefit: whilst I judge, from the histories of some young, inveterate, smokers, that it may lay a foundation for this terrible cachexy. Grave physicians once lauded tobacco, and *Magnenus*, speaking of cough, pulmonic ulcers, purulent excretions, phthisis, says—*his omnibus conferet tabacum*. But it is a poisonous, depressing herb; and the abuse of it bestows on its devotees a cachectic physiognomy; and any benefit, which the lungs might receive locally, must be counterbalanced by general nervousness and diminution of stomachic power. He, who smokes habitually, loses in proportion appetite for food; and is loss of appetite desirable for a tubercular subject? I know that to this language many will oppose the examples of hale, old men, who have smoked tobacco all their lives, and all the days of their lives. But shall exceptions destroy the rule? Because some few frames are poison-proof, are others therefore never to be poisoned?

Many other inhalable, sedative articles have been praised; as useful in tubercular phthisis. But not one has retained a character, which no-

velty, the enthusiasm of the proposer, and the credulity of men, first bestowed. Not one.

If morbid deposition in the lung be not *the* disorder; but only an effect of a distant cause, every artificial inhalation will be pretermitted.

But, as the art of physic chiefly consists of an ancillation upon Nature, when the elimination of tubercles is set up, can we not accelerate the process? Just as the surgeon applies emollients or stimulants to forward an abscess or detach a slough, can we not apply, through an inhaler, apt remedies to the ulcerous, softened, detachable portion of morbid lung?

No. The restlessness of pulmonic structure demonstrates that the idea is unphilosophic, and the removal of tubercular débris, *if* practicable by such applications, would not affect the remoter cause. The morbid deposit would still be made.

We must aim at constitutional vigor, healthy circulation, active secretions in the abdominal cavity; and the powers of Nature *may* throw off the pulmonic extranea and repair the breaches.

Can this circuitous treatment be aided by the popular remedy, cod-liver oil?

A certain physician considers that fixed oils have a solvent power on the fat of tubercle, if carried into the circulation. That cod-liver oil increases appetite and promotes nutrition; in-

creasing strength, and giving increment to the textures. That the rudimental molecules of all structures appear to consist of fat, which the oil supplies and renews. That it can penetrate imperfectly organized deposits, soften their molecules, bring them under the influence of living parts, through the circulation; improve their vitality and nutrition, or if they be incapable of improvement, dissolve and absorb away. Or words to this effect, for which see *Braithwaite's* valuable *Retrospect*.

Mr. Braithwaite is not answerable for all which he publishes. And for his own sake, I am glad that he is not responsible for this apparent romance.

But many patients will not or cannot swallow this precious oil much or long; it nauseates them intolerably: and it is a consolation that, whether it be nutrient, or calorific, or stimulant to secretion, we do possess pleasanter food, and equally potent therapeutics.

To nauseate is to weaken; and we must view with suspicion any means, which diminish *power*. Power, which can only be maintained by the genuine nourishment of generous diet; and more or less of cordial stimulus to aid the digestion of palatable food. The same enthusiasm, that is now displayed in favor of the cod-liver oil, hath

been in turn displayed for almost every new remedy. If it, indeed, possessed those divine qualities, which Mr. Braithwaite reports, the grand specific hath been discovered, to prevent phthisis, to cure it; to give health, to lengthen life. But let the most credulous remember that, after all, its glories depend upon an *if*. “*If* it be carried into the circulation.” And if, when there, it works away with the judicious zeal, declared above.

If *one* symptom constituted phthisis, victory might be proclaimed. If quickness of pulse, for instance, were the essence of decline, digitalis would be that mighty therapeutic, which its first advocates trumpeted. It might seem that a heart beating 120 in a minute, must wear out the system, and that to retard must be to save. But the fond hopes of Withering, Beddoes, Drake, Mossman, have been proved to be fallacious. As a palliative it is, however, extensively used; and may not the sedative influence of the foxglove upon the heart extend to other structures, where sedation is by no means desirable? Stomach, liver, bowels, lacteals? Quickness of pulse is an effect, not a cause. But, in the phthisical, it indicates a state, which, unchecked, unaltered, leads to a fatal result. While this velocity is diminished by digitalis, the danger is only masked.

I have seen it yield without this appeal; I have never known it permanently removed by fox-glove. A continual velocity, month after month, of 120 beats, is not the less formidable, because no signs of tubercular suppuration accompany. Death arrives without them.

But what are the causes of this cardiac velocity? Is not one cause the necessity, under which the frame lies, to procure oxygen through the lungs? As the oxygenant space is invaded by tubercular deposits, Nature compensates for the deficient area by exposing the blood quicker in the aircells. Nay! may we not judge of the quantum of tuberculosis from the increased quickness of pulsation? Partial tuberculation, suppurant mischief, cavities, are occasionally extant, without acceleration. But extensive deposits in both lungs, even quiescent, dry, unexhausting, may always, I believe, be proved to have been concomitant with permanent quickness, up to death: death, without softening and expectoration.

If quickness of pulse be partly, at least, an indication of the *vis medicatrix*, the retardant drugs are given unwisely, and of course with detriment. At all events, they are depressors of general vigor, and so far, enter into that category of mischievous agents, which it is the aim of this humble pamphlet to deprecate and supersede.

I protest against the use of digitalis in every form, and stage of decline.

There is a complication in the menacing, incipient stage of phthisis, in young women, which very often occurs; *amenorrhæa*. And this is occasionally a lucky symptom for them. Their own minds are ever impressed with a conviction, that this irregularity is the sole cause of all their ailments, debility, dry cough, shrinking. And, if their family surgeon takes the same view, they have a good chance of recovery. *If* this uterine torpor did not co-exist, then phthisis would be diagnosed; and the usual routine of blistering plasters, leeches for pains, merely muscular; of foxglove for quickness of pulse, would be instituted, and the usual result would occur.

But, fortunately, the surgeon himself does now and then look on this functional effect as the efficient cause. And, as *this* disorder is notoriously cured by tonic medicine, good diet, pure air, and horse-exercise; so these are hopefully prescribed; and cough, rapidity of pulsation, thinness, all vanish. The young lady is cured of commencing phthisis, when she was occupied with a different idea. She has had a narrow escape.

It is this sort of case which has mainly procured for steel a reputation in phthisical maladies.

It owes its fame secondly to its stomachic influence, when the appetite and digestion are weak. And in these instances the *Mistura Ferri Composita* retains the creditable character, which its inventor, Dr. Griffith, claimed for it. But a random prescription of steel or of quinine seems not only unnecessary, but injurious, as giving superfluous work for the digestive organs—as filling the stomach with physic, instead of food. *All* needless medicine should be religiously avoided; and the only way to effect this, in many cases, is to religiously avoid the mercenary practitioner, who cares for nothing so much as his Christmas bill. It requires but little discrimination to find *him* out.

That phthisis is a *cachexia*, induced by errors in the “non-naturals,” and maintained by the same, is rendered probable by the violence it displays in persons of the lowest ranks. In the matter of “*air*,” for instance, in town and in country, these especially are defrauded of oxygen. In the towns, they occupy the lowest parts; filthy; undrained; unventilated; stinking. In the country; on the very sea-shore, where space for building is obtainable, their cottages are small as possible; the rooms mere cabins; the effluvia as of bilge-water. Their meat and drink undeniably scanty, non-nutrient, ungenerous.

As to "sleep and watching"—the third non-natural—they have not, as a mass, sufficient sleep; but more than enough of vigils, to provide their daily bread. The invigorating influences of sleep are not duly appreciated. "Plenty of sleep," said Dr. Elliotson, for the incipient phthisical. During sleep, the corporal functions, unruffled by the mind, play with freedom, regularity, success. Health is secured, growth fostered; yet, in all ranks of life, growing, delicate persons are chid for indulgence. "Early to rise," may be a good injunction for the bloated, the sensual, the full-grown. But the juvenile and feeble should be left to Nature and their own instinctive wishes. They best know when they have secured sufficient sleep. If they wish to rest upon the pillow, debility, not laziness is the cause. But of all the ranks of society the lowest assuredly is *most* deprived of sleep: from the force of circumstances as well as from mistaken theory.

A great deal of apprehension is expressed about sleeping on mattresses and rejecting the relaxing feather-bed. If superjacent bed-clothes are too numerous, and febrile heat and perspirations be induced, these will relax. But the repose, be it remembered, procured through the yielding feathers is more complete, than from the rigid mattress, when pressed by the salient portions of the frame.

Sleep is demanded; the more the better for the growing: but it should be secured in ventilated rooms. Sleep prolonged in closets, where consumed oxygen cannot be replaced, through doorways, windows or chimnies, is the sleep of disorder; of coma, asphyxia, death.

In these foul holes are originated the dyscrasia of the poor and the pulmonic decline.

“Motion and rest” form the fourth non-natural. And here the modern system of repressing the movements of the ribs by rigid stays: and those of the body generally on inclined planes, is in direct opposition to sound physiology. As to stays, which are meant to support, they must create the very weakness, which requires support. They imply a complete ignorance of the laws of vitality which demand motion for the nourishment, strength and utility of all structures. Stays for growing girls must contract the chest: and they certainly injure the form. The finest-shaped young women are those, who have been reared without stays. Why should female children wear stays, and boys not? If healthy support be wanted, each sex would equally require. But if it be thought that stays give an elegance of figure, it is as erroneous as the practice is mortal. Yes, mortal in many tubercular, contracted chests! Nature is the best judge of elegance of

figure, and never meant that the mobile ribs should be cramped and the waist resemble a wasp's.

As to the iron stays, made for yielding bones of spine and ribs, they cannot be mentioned without derision; so unphysiological are their patrons.

Then the inclined plane is a monstrous invention. The girl is to rest statuelike for hours daily on this rigid rack, to prevent round shoulders and salient hips. This is sheer absurdity; but her confinement and want of air must induce the osseous, muscular, pulmonary debility, which are the very objects of apprehension. Completely to understand *why* the repressors of motion are most hurtful, implies more acquaintance with physiology than the laics possess. But the faculty repudiates them; they are chiefly commended by instrument makers; and for myself I should only say to the parents of the victims—bind and shackle upon your own responsibility.

Retention and excretion form the fifth unnatural. Here the stupidity, or the inability, of poor mothers in investigating the excretions of their children, leads to subsequent and constitutional disorganization. Here the nursery of the middle and higher classes is, of late times, much improved; and it is not so unusual as formerly for

the sensible parent to insist upon observation of the excreta. But she must use her own vision, not trust to the nursery-hireling. If due, daily excretion of bilious matters were secured, one should less often encounter phthisis.

“The passions of the mind” form the sixth non-natural. The deposition of tubercle is wonderfully influenced by these. Hilarity, joy, hope prevent, perhaps remove tubercular deposits. Gloom, fears, despondency lead to rapid and fatal mischief. The histories of young women, “crossed in hopeless love,” furnish numberless cases of tubercular decline. Cases, where the moral cause is most evidently the sole. Health previously, with every physical means of preserving it; but acute phthisis, when all hope has fled.

Depression induces phthisis. Will sanguine joy remove its menaces, proving its cachectic character and the appropriate treatment?

*Phylæa* shrank rapidly; with a dry cough, an accelerated pulse. She felt vast weakness, so as to be bed-ridden: lost all appetite; perspired copiously; was judged to be in incipient phthisis. How could we say that she was not tubercular in the lungs, although no softening of tubercles had arrived? Especially because no gastric mischief was evinced by tongue, excretions or subjective symptoms. Was she in love? Yes, baffled

love: with a gentleman, whom her family adjudged to be too plebeian for a match.

But, when the physician announced the grave character of the malady, and the family had ceased to oppose, all menaces of phthisis disappeared. Would not *Phylæa*, if her wishes had been hopelessly crushed, have gone on in the remainder course of decline? Yes! By all the rules of medical logic; by all experience of similar phenomena, yes!

If the opposition to intense, but virtuous attachments, be justified by worldly arithmetic, then let consumption go on to decimate the thwarted fair. "Women must not marry beneath their rank!" Then let them be sacrificed to a phantasma! Then let them pine and die, because the vain or mercenary ideas of their frigid parents find no responses in their own unsophisticated breasts.

Consumption is a cachexy; and it is induced by depressing causes, from within or from without; from mental misery, visceral torpor, malnutrition; from foul, azotic air.

Like other cachexies, also, it becomes hereditary. And hence, so far as they can be managed, the propriety of hymenæal alliances to be sought among strangers, *not* relatives. How this can sometimes be effected with tenderness, or

honor, or justice, it is not for a physician to discuss. But, who has not witnessed the ravages of phthisis, in large families of extensive relationship? If it can be done, infuse new, exotic blood into the fabrics of a tubercular tribe.

The poor are helpless, as to air and food; but why should the untethered rich imitate the necessities of the poor? Why should parents, to whom heaven gives the means for flight from undrained houses and lands, reside in the foul atmosphere of crowded cities? in streets, in alleys? Why should a generous nourishment be prohibited to those, whose purses can command it? All agree that scrofula and consumption, a form of scrofula, predominate among the poor. Then they are results of those circumstances, wherein the poor differ from the rich. What are these? Chiefly impure air, scanty food, neglected excretions. Yet the rich incarcerate their consumptives in azotic chambers; keep them low, as if decline were active inflammation; lose sight of the abdominal apparatus and its most potent secretions, as if the lungs, which depend upon the belly within and the atmosphere without, were isolated perfectly from both.

For the prevention and cure of pulmonary consumption no specific exists. There is no medical material, which can anticipate tubercles, nor

*directly* remove their results, whether these be ex-ulcerations, cavities or caverns. The powers of Nature can alone suffice; and if these be unequal to the business,

τὸ θανεῖν

κακῶν μέγιστον φάρμακον νομίζεται.

Αἷμα ἄνω μὲν, ὀκοῖον ἂν ᾤ, κακόν.

*Hæmoptysis* is rare in the untuberculous; however forcible the heart and full the vessels. Even the hypertrophied organ fails to burst the pulmonary arteries. Even the plethora of the glut-ton is scarcely ever relieved through the lungs; but through the nostril or the bowels. Or the cerebral vessels yield, apoplexy the result. Yet, so vascular are the lungs, so near the heart and its first force, that we should have expected that the lungs, before all other structures, would yield to superabundant blood.

The exspuition of blood hath always been reckoned a most formidable symptom, when the subject was suspected to be tubercular. The vessels, in these patients, are they not attenuate, fragile, weak? In the majority of cases, there is little cardiac action, nor much distending blood; and the vessels yield, without precursor hæmorrhagic nismus. In these more numerous instances the sanguineous loss is *comparatively* slight. There is no pyrexia.

But an hæmorrhagic *erethism* accompanies great losses. When the practitioner arrives, the pulse is found to be quick, bounding, *seemingly* full and strong. Cullen intimates that this is an effort of Nature to vanquish a pulmonary congestion. But the commotion does not always subside proportionally to the flow; and I have often suspected that the mental apprehension of the patient aggravates or maintains it. He sees his own blood and he sees pallid spectators, whose fright is often enormous, founded on ideas of speedy dissolution. But this is a rare consequence, and no instance hath ever been witnessed by me.

The extreme horror of the patient ends at times in hallucination.

*Sequissa*, having expectorated a small quantity of blood, was incessantly *seeing* it recur, although recur it never did. Often was I hastily summoned to behold with my own incredulous eyes proofs of hæmorrhage on her white handkerchief, which was perfectly unstained.

Many similar instances of delusive terror have occurred to me.

Then, who can say, in cases of febrile *erethism*, what is due to loss of blood alone? At all events the young surgeon should ever bear in mind the influence of the soul over the body; should display no gloom of countenance, nor hurried move-

ments. For, as the pulse, after the smart hæmorrhage and the revulsory venesection, resembles the beat of huge losses in parturition, an added irritability might lead him to injurious practice. This once obscure state of the parturient is now generally understood; and the accoucheur, instead of repeating venesection, which would excite the pulse farther, soothes, sedates and sustains.

I assume that the surgeon hath let blood in an acute hæmoptysis; and I only request the young practiser not to be deceived in the character of the pulse, perhaps full only in appearance, strong only in his fancy, lest he do harm in the pulmonary disorder, as was undoubtedly done in the uterine. I only hint at caution, since, after all, venesection, the most powerful revulsive, has, in all times, been practised, when the hæmoptysis has been severe with pyrexia disturbance. But he must never forget that the patient, of whom I speak, is disposed to phthisis: and that venesection must ever be a perilous proceeding, where the vitality is low, the nervous energy prostrate, the spontaneous hæmorrhage compatible with *present* life. He must use it only as a revulsive, since hæmoptysis, if the blood flowed direct into the mouth, might be left to itself—but, alas! it is tearing up pulmonary structure.

The difficulty may be to decide, whether hemoptysis result from simple plethora, the frame healthy—or be connected with that fragility of vessel, which tuberculous deposit implies, perhaps creates. If there be cases, wherein doubt is unavoidable, extreme cases admit none. The broad-chested, bloated, sensual fellow, replete with ale and sausages, is readily distinguished from the delicate, thin, blue-veined, youth; aduncous as to nails, flat as to chest, hereditarily tabid. The abominous plethoric one may bleed without parsimony; the weakened *pterygoid*, as Hippocrates called him, requires great judgment in the lanceteer.

*Local bloodletting* by leeches is very frequently practised; and, especially, if the surgeon imagines that he has taken blood enough from the general system. But leeches are a round-about method of unloading distended vessels, and, locally, leeching is rendered abortive, through the mass of pectoral wall, interposed between the points of suction and the faulty lung. The benefit leeches can possibly produce must often be outdone by the agitation created in the sufferer. Medical men, in the stoutness of their own healthy nerves, do not think of this. But a sight of the dark, swelling, voracious, leeches, is distressing to sensitive women and fearful children. After all, if

overdepletion is to be denounced in tuberculous patients, as hurrying on the very phthisis, which it is used to prevent, the same arguments tell against leeching as in the case of venesection. For leeches, in sufficient numbers, can rob the frame, like the human operator; and if *little* abstraction be thought sufficient, why not use the lancet?

It may be pleaded that, if leeching be used in the apyrexia, passive, tuberculous hemoptysis, with lesser losses, nobody ought to object. But, in these minor excretions, is there any necessity for detraction of blood at all? May we not in these confide in other measures?

In the pyrexia hemoptysis, so perilous, so terrific, repose is most important. Here is rupture of vessels: and the sooner they are closed, the better. But have I not seen the young surgeon, all business, prescribing every remedy at once? Bleeding *and* purging? *Purgation* necessitates movements hostile to the occlusion of the vessels. To be springing out of bed in a catharsis must set off the heart and arteries, and why wonder at more flows?

If the bowels be *loaded*, so as to create or maintain a febrile erethism, it may be right to empty them by some potent eccoprotic, which would not keep the sufferer in constant moves:

or a clyster may suffice. But if purgation can be deferred, it is much safer. By care in not giving more food or drink than is absolutely needful for life, one can afford to wait and not remove the intestinal contents for a few hours or days. But each case has its peculiarities: and no writing can relieve the younger surgeon from thinking and personal responsibility.

It is necessary, in the active hemoptysis, to mitigate the action of the heart. And *digitalis* possesses this desirable power. And it is a manageable power.

But the *Prussic acid* no judicious man ever can prescribe, without a fear lest the precise dose might be surpassed. Yet it is astonishing how this weapon of assassins is handled fearlessly by some practitioners.

Some years ago great contempt was felt for the vegetable astringents, great dread of the mineral. Of lead for instance horror was expressed by truly wise physicians; but now it is known that the acetate of lead combined with opium is quite safe and very successful. The acetate of lead may be administered in grain doses, or even more, and it may be dissolved in an acetic mixture, with an addition of laudanum: or it may be given in pills with acetate of morphia. For *acetate of morphia* is one of the best of sedatives; and in

hemoptysis, according to the degree of cough, opiates must be given, lest the succussions of cough should burst afresh the vessels, or open fresh vessels, not already burst. If it be feared, lest blood, already extravasated, may be detained in the lung, for want of an ejecting cough, may it not contract into coagula, occupy less space of aircells, and remain dormant, until direct danger be over? May it not be absorbed? Of the morphia, from an eighth to a fourth of a grain may be prescribed more frequently than it could be safely given in larger doses.

*Narcotica in hoc affectu multum præstant*, said Riverius. Perhaps hemoptysis has been over-rated as a mortal symptom. Dr. James Alderson, a septuagenarian and observing man, physician to the Norfolk and Norwich Hospital, said that he had never seen a case, which, sooner or later, did not end fatally. Most probably, the patients, whom he quoted, had been treated *after* the hemoptysis, according to the established plan of much physic and low diet. But if that sober physician's sentiments were indeed correct, is it not high time that the hemoptytic patient should avoid medicinal treatment, which availeth nothing; and trusting to Nature and instinctive dictates, entertain a hope?

*Ericæus*, when 25 years old, expectorated blood.

He was the only surviving member of a consumptive family, three sisters and a brother having died, hæmorrhagic and phthisical, whilst himself displayed all the exterior appearances of his relatives. Will his fate be similar? Such was the prognosis. But the patient refused medical surveillance; and living generously underwent no return of hæmoptysis. He is now, at the age of forty, in capital condition, vigorous, uncomplaining. To me this is a history of prevented phthisis, in a gentleman of easy fortune, living *well*; not hostile to good wine; fond of *horse-exercise*, of rural life, of *air*. If he had been placed under medical spell, and kept low, would he not, long since, have succumbed under the fate of his family? He would have been ordered off from the bracing air of Norfolk to be stewed in Lisbon or Malta or Naples. A brief consultation would have sufficed.

*Nulla unquam de morte hominis cunctatio longa est.*

The history of *Ericæus*, does it not shew that, although exercise and fullness might promise rupture of vessels again, a tone of resistance was given to the vascular tunics, which prevented it? But often have I seen the same quietude, low living, and depressing drugs, which were meant to weaken the heart, weaken fatally the pulmonic vessels.

As an *astringent*, oil of turpentine has been prescribed. I have not myself any experience, in hæmoptysis, of this discomforting drug. But a gentleman, whose case I will adduce, declares that in his own instance it repressed formidable hæmorrhage, recurring for a considerable period.

*Manlius*, about 15 years ago, spat blood copiously and repeatedly. It filled his mouth in an instant, and, as he is a medical practitioner, induced a belief of extreme danger. He succeeded, so he believes, after many weeks, in stopping the hæmorrhage with half-dram doses of oil of turpentine, prescribed by Dr. Elliotson. It has never returned, *because*—I use this conjunction advisedly—because he continued to lead an active life, being much in the saddle, visiting a large circle of patients on *horseback*; and never omitting to live generously. He, like the subject of the last case, is in excellent health, elastic, strong, hilarious. Rare is decline among young country-gentlemen, for the same reason; and it is such equestrian histories, which should make us confident in the narration of Sydenham, with his *palmarium* remedy, horseback.

*Quare, si sapiet, viam vorabit.*

But if there be insuperable objections to the saddle, air, changed and various, may be obtained through other vehicles.

Let us again listen to Sydenham. "Though riding on horseback is chiefly beneficial to people that have a consumption, yet riding journies in a coach is sometimes very beneficial."

*Tecton* is a healthy gentleman, aged sixty; enjoys life, without, scarcely ever, medical assistance. But, about forty years ago, he was attacked with hemoptysis: and, under the direction of an eminent surgeon, was confined to his house; and kept on the sloppy diet of tea and buttered bread for a whole month. This surgeon was Mr. Martineau, whose practice was so different from that of Gil Blas's master, that the gravity of the hemoptysis may be inferred from the duration of the medical rigour. After this *Tecton* mounted his gig and, at the rate of thirty miles a day, travelled from Norwich westward to Cornwall, returning by the midland counties. His tour occupied two months; and as his hemoptoë never recurred, although an hereditary taint was fairly deducible from a phthisical mother, he always attributed his good health to this timely locomotion. Sydenham would have concurred in the idea.

Now this *vehicular* treatment is applicable to young ladies, although the prescription of horseback may be declined. Few, in this country, the gentlewomen who occupy a saddle, but for the

phthisical this exercise and its conjuncts would be as desirable, as for men.

I know that many persons dislike the spectacle of a mounted woman; but the object is too important to justify sarcasm. If horseback gives a lady a masculine appearance, remember that she aims at masculine health: and if a tubercular lady could secure suitable equestrian companions, she could not do better than follow the Sydenhamic exhortation to the other sex. Sydenham says "it is inconvenient for women, that are accustomed to a slothful and delicate way of living." But this argument seems rather weak from a physician, who states that the Jesuits' Bark in agues is not more effectual, than the exercise mentioned, in *curing* consumption, if the journeys are long enough.

The chamber of the hemoptytic is often kept too hot. His surface should be warmly clad; since, if this were chilly, blood would be determined inward and the pulmonic vessels distended. But the inspired air should be cold, lest the lungs and their blood be expanded by caloric, and the vessels yield again.

Air, reduced to the freezing point, was recommended for pneumonia by American physicians. Hemoptysis also indicates refrigeration.

Not only is the room kept hot, but conse-

quently it is foul ; and rendered more so by numerous, useless attendants, depriving the patient of his due oxygen, using it for their own unaffected lungs.

*Counter-irritants* I believe are often inconsiderately applied. They excite *general* disquietude; and must increase any febrile erethism, which accompanies the flow of blood. Some frames are most miserably tormented by blistering plasters, antimonial ointment, croton oil *et similibus*.

But this little book does not pretend to give a detailed account of the various drugs and processes, which have been tried for the repression of hemoptysis. I merely essay to throw out some gentle hints on subjects, which have not always been sufficiently considered. I warn the young surgeon that, in hemoptysis, he hath to recollect the cachexia, from which it springs: that he is not to compromise the future in his hurry to make good the present: and that he is not to share in the great terror felt and expressed by the laity, when they see pulmonic blood.

It is possible that we may err even in the primary management of hæmoptyses, being too restrictive as to exercise and open air. For *Manlius* displayed this peculiarity in the treatment of himself; that he rode on horseback more often and more violently, during his protracted and

copious bleedings. In fact, he despaired of his life; and he rode with desperation. Whether *this* horse-exercise or Dr. Elliotson's turpentine saved him—who shall decide? *He* thinks the turpentine; I am disposed to believe in the horse.

When hemoptysis hath subsided, and simple cough, or cough, with slight colorless sputum only, remains; how long shall the physician persist in lowering treatment? No general rule can direct. But, believing the patient secure from returning hæmorrhage, should he not disregard the cough, *as such*, and institute a course, medical and dietetic, which, by appealing to the abdominal functions, would invigorate? Cough is an effect. He, who would remove it, should attack its cause. Cough indicates that something exists, irritating the lungs, like a foreign body; requiring expulsion. To allay with opiates is to render the lung insensible to this foreign body, but not to abolish the evils of its presence. It is masking the disorder.

Here, *ex opiatis, tanquàm à peste, fugiendum est.*

Great ignorance prevails among the laity as to the opiate preparations. Persons, who would eschew laudanum and opium, take acetate or muriate of morphia habitually; not knowing that morphia is a vegetable alkali, extracted from opium, of which it constitutes the narcotic prin-

ciple. Thus whatever may be said against opium, in tuberculosis, applies to the narcotic principle.

Does our art possess any direct sedative power over the tubercular cough, save with substances, which do as much harm as good? One result, almost universal, of narcotics, is the stoppage of the hepatic secretion; the alvine excreta becoming as white as when a gallstone shuts up the common duct. Can this be done with impunity? Is the bile of so little importance, that we are at liberty to quiet a cough at the expense of the freedom of the liver?

My own deep conviction is, that numberless lives are annually sacrificed, through the use of opiate cough medicines. I cannot see why tubercular deposits should not be thrown off or absorbed, more frequently than they are—for I believe that they are absorbile, and all know that they are occasionally detached—unless it be, that the natural powers are paralyzed by the narcotizing treatment. Unless it be, that the cachexy, which produced them, is augmented, or an artificial cachexy created, by this pernicious method. The profession knows the evils of opium, when swallowed for pleasure and from selfish habit. Does it cease to be a poison, when it is mistaken for a therapeutic article?

But so little does the public suspect this dan-

ger, that it is usual to send to the shop of the druggist a vague order for a cough-mixture. A child, perhaps, has a slight cough, but it has a tendency to tubercles; has them, perhaps, already. The cough is quieted, and many weeks and more mixtures are forthcoming, until a manifest cachexy compels the attendance of the family practitioner. When this gentleman arrives, he detects disorganized lungs; dyspnæa, mucous rattles, even cavities. Yet the cough had been kept under and no visible expectorata had terrified the mother. The child, however, goes on in phthisis to the tomb; whereas, if the unhappy parent had at first summoned a man of science, he would have rectified aberrant function and prevented, perhaps removed, tubercular deposit.

Are we angry with the unpathological druggist, because he sent laudanum in his cough-mixture? What does he know of a cough-mixture without laudanum? Why should he *not* give it? Surely the responsibility, the guilt and the consequences are *all* due to the silly persons, who imagine for one moment that the druggist is the fit therapeutic agent. What idea has the counter-physician beyond a counter-irritant on the outside of the frame and morphia within? He gives both; and, after a time, it is discovered that death is the victor and the druggist discomfited.

Then come the fond mother's regret, rage, vengeance: a clamor to punish druggists, who dare to practise physic! Unhappy woman! Every body practises physic. And if you do not know who alone can be the scientific practitioners, be quiet and resigned under the dispensations of providence. Heaven does undoubtedly avenge ignorance which might have been avoided, as well as direct and hardened guilt. To weep, alas! is your only consolation—

διακενῆς ἄρα

ἐν σπαργάνοις σε μαστὸς ἐξέθρεψ' ὅδε,  
μάτην δ' ἐμόχθουν καὶ κατεξάνθη πόνοις!

Τὸ γὰρ ἀποστῆναι χαλεπὸν  
φύσεως, ἣν ἔχει τις αἰεί.

Most physicians consider phthisis to be a scrofula, and Dr. Elliotson assumes identity. "Scrofula is more likely to occur in the lungs between eighteen and thirty." But when is phthisis incipient? Tuberculosis may be latent; detected neither by general signs nor by the stethoscope.

I speak of unsoftened tubercles. Does dullness, on percussion, assure us, invariably, of their presence? Do sounds of the heart, too diffused, *prove* that such diffusion is owing to tubercular density? This would be a hazardous diagnosis, other causes of diffusiveness considered, unless it was confirmed by rational signs. Where these are present, it is right to *assume* tuberculous deposits.

Then, the aim should be to invigorate with *fresh* air, daily exercise, plenty of rest at night. Thus prescribed Dr. Elliotson—"Plenty of animal food—malt liquor; wine, if it can be borne."

Porter is often the best beverage, if it can be obtained unadulterated: the true, simple, honest liquid. Bed-time is eminently suited for a draught, if sleep be coveted; and tincture of hop, from half a dram to two drams, may be commixed. And if acidity of the beverage be suspected, liquor potassæ may be conjoined, from ten to thirty drops: ingredients, which will not render the porter distasteful.

If consumption be scrofulous, tubercles indicate a generous prescription, as there is reason to believe in their occasional absorption, by undrugged, unparalyzed Nature.

If softening, suppuration, sputa have come on, still more should we remember the scrophulous character. If we concur with Dr. Madden, that tubercles imply a specific malignity, as does cancer and some other *tumid* degenerations, still there is a cachexy, with vitiated blood from imperfect nutrition; and still exists the same necessity for invigorant treatment and diet.

As to the absorbility of tubercular deposits, of course, if the *rational* signs of their presence are succeeded by the physical; by rattles, cavities, death; we know that tubercle was not absorbed, but irritant and fatal. But if a patient, with similar primary signs of tuberculosis, goes not forward in the usual career; but retrogrades to

health and pectoral integrity, it is logical to believe that absorption hath existed.

But, if the absorbility of tubercle be admitted, can *Iodine* effect or promote absorption? The sorbific power of Iodine is enormous. See the dispersion of bronchoceles, prominent as the chin, wide as the neck. But would a sober physician essay to disperse the tubercles of a fragile consumptive by a poison, which cannot be directed exclusively to the seat of disorder? I have known symptoms, produced by Iodine, to resemble those of phthisis so much as to puzzle every body.

*Allata*, a young lady, aged 27, was reduced to extreme weakness and emaciation. I saw her, in consultation with Mr. Pedgrift, of Loddon, who concurred, that the case was most probably one of severe tubercular disorder. Although no softening was detected through rattles, there was cough: although the sound on percussion of chest was tympanic, and the vesicular inflation silky, yet the presence of tubercles somewhere was not completely disproved. The heart pulsated 150. Although the abdomen presented no tumid signs of mesenteric affection, the marasmus was awful. I gave a gloomy prognosis, and was about to leave, when I was informed that the lady had been taking Iodine for bronchocele, more than a year. I obtained an instant solution of the pro-

blem; and requested her to discard the Iodine, to live generously, and to expect that restoration, which commencing from this day was complete in a few months.

Iodine and its compounds require constant watching. The Iodine of Potassium, given for rheumatism in doses of two or three grains, has deprived the patient of sleep night after night, although the rheumatism hath been subdued.

Besides, Iodine has been tried and, like other specifics, found wanting.

Louis has done great service, divesting the public of a false trust in many peculiar medicines: for this faith cannot be innocent. Either injurious drugs are administered; or physic is given to the distaste of necessary food, or the physician neglects the native powers, which alone can save.

*Iodine* has been recommended in form of vapor to be inhaled, and the practice hath been tried extensively but in vain.

*Chlorine Gas* was also proposed, and the same process; and *fallacious* hopes were excited; for it does not abolish a single symptom; and the foetor of a cavity returns, so soon as the inhalation is over. Moreover, is it even innocent? Pelletier was the victim of an inhalation of a large portion of chlorine gas. A consumption, which was the consequence, said Dr. Paris, in his

“Medical Chymistry,” in a short time proved fatal. Dr. Alison said, that “work in an establishment where muriatic acid was manufactured, frequently laid the foundation of pulmonary disease;” and yet these very chlorine fumes have been commended for a state of lungs, which is actually produced by them. Louis tried *chlorine* on more than fifty phthisical subjects, but obtained in no instance, a successful result.

Whether we wish to prevent tuberculation or to absorb the deposits, no sedative, inhaled, can prevent deposition; no stimulant smoke effect absorption. The local mischief indicates a dyscrasia of the frame; and could the lungs, for a time, be freed, the morbid action and results would return. It is impossible to avoid repetition of this statement, but its importance must render tautology venial. Many, like Sydenham’s patients escape, if this dyscrasia be attacked with *air*, food, potation—none, if they are assailed with phisic and oppressive fumes.

Of late some physicians have commended a *moist air*. The room to be perpetually misty, through the steam of warm water; and the crevices to be stopped. And this monstrous proposition is for damaged lungs; for a structure demanding vital, oxygenated air for itself and every part! I strongly protest against this hermetic

closure of an apartment, in tubercular cases and at every stage. Whatever sedation may arise from moist air ; loss of pure air, the crevices stopped, must outweigh all benefit by evil.

There is, in the tubercular patient, a desire of pure air, that cannot be mistaken ; and he *would* secure it, unless prevented by absurd advice to avoid it as an enemy. The Norwich Hospital is an airy, wholesome institution. But patients, with damaged, tubercular lungs, earnestly request dismissal, that they may breathe in the country. Concerning all medical practitioners, who obtain patients and emolument, on the ground of proposals, hostile to Nature and to common sense, I must say, *magis famâ quam vi, stare res suas.*

It is clear that decline is deemed the greatest scourge, which the army of diseases contains. Why is it so ? It is clear that physicians have unlimited sway, inexhaustible means to try their utmost prowess, and that in all ages they have been strenuously employing their energies. “ Why is it so ? ” It is because their weapons have been physic ; while the disorder requires little, sometimes, most often, none.

A more simple attention to the *non-naturals* ; a more determined exclusion of medical treatment ; a complete rejection of all appeals to the pul-

monic apparatus itself, would, I feel decided, have been more conducive to victory over pulmonary decline.

Phthisis has been too interesting, common, and mortal a malady in all ages, that a curative specific, once discovered, would possibly have dropped into neglect and oblivion. Shall we go on to hope against hope? Are we still so young and credulous as to believe that a specific is within range of probability?

But if regular physicians raise false hopes of a *specific*, we cannot wonder that the patient flies to empirical swindlers for their various nostras.

*Creosote, Iodine, Prussic acid* recently; endless articles before, have failed, in spite of the eulogies of educated men.

So liniments of *Turpentine, Brandy and Salt*, recently; endless articles before, have been sworn to by quacks. If diplomatized men say they can cure with *mechanic inflations, Naptha, Asellous oil*, why marvel, if faith so strong should find a counterpart in desperate patients catching at a straw?

A famed physician has declared that he can check tubercular developement with an *alcoholic lotion*, to be renewed incessantly for weeks, months, years. What patients could tolerate this life of humectation? Whence the pitiable at-

tendants, who would spend their weary hours in thus soaking their fellow Christians? Compulsion, assuredly, must be used, and some Danaides, from prisons and penitentiaries, must be summoned to work away, in commutation of punishment.

*Audiat Lyde scelus atque notas*

*Virginum pœnas et INANE LYMPHÆ*

*DOLIUM.*

But is it this magic lotion, after all, that has done whatever service has been effected? Since it “has been conjoined with a mild *animal diet*, regulated bowels, early hours, flannel over the surface, sponging with salt and water, and *free exposure to the open air*, when the wind has not been northerly nor easterly; and have been added, if possible, constant *journeying*, or *sailing*, and change of *air*.” Surely some of these potent conjuncts ought to eclipse the glories of the lotion, and I especially point to the animal diet and the open air.

But is it not marvellous and unintelligible, the philosophy which recommends steam and closed key-holes? Should this be one moment entertained? Or should we listen to the physician, who prescribes “the sea, the sea, the open sea?” Sailing and air? Which prescription of so contradictory a character are we to follow? Surely

that which is confirmed by the authority of the great Sydenham and other logical reasoners.

The mischief done by writing earnestly about steam; and about spirituous lotions over the ribs, to keep down tuberculosis at the summits of the lungs, is not felt by the patients of sober, incredulous practitioners. But there is always a large mass of raw students, who are led away by didactic names; and of half-taught amateurs, who believe every thing they read in medical books; and these may be very detrimental as enjoining or lauding prescriptions, from which the *faculty* turn with indifference.

*Counter-irritation* forms a part of the routine and it is practised for pains in the side. But where the seat? Not the substance of the lungs, which permit great devastation without pain. These pains, in some cases, indicate partial pleurisy, and this *may be* a remedial action, intending cohesion of the pleuræ, thus to prevent that fatal mischief, an escape of tubercular fluid and air into the cavity of the chest. Air, outside the lung, presses on and condenses this organ—tubercular pus continues passing—and absorption of the whole lung may take place before death.

Now such cases are usually treated with digitalis, counter-irritants, low diet, no stimuli; yet I have—who has not? seen all fail to prevent

tubercular abscess and pneumothorax; and may *they* not have prevented pleural agglutination, the object of Nature? An object indicated by the pain, so much abhorred?

At all events, countless are the cases, in which depressing treatment has failed to achieve what was wanted.

I have known many young persons brought into tubercular cachexy by the low diet of poverty; I remember none extricated from it by depressing physic. Such cases, managed on an opposite plan, *if* equally fatal, would not be equally fraught with discomfort, misery and pain. But in spite of all experience of the failures, practitioners persist in the routine—

οὐδὲ σαὶ τύχαι, τέκνον,  
σεσωφρωνήκασ', ἀλλ' ἔτ' ἐν ταυτῷ μένεις.

Wonderful the efforts of Nature to prevent this perforant mischief, by thickening the walls of the cavities; to render these compatible with years of life, if we would but second her with air and food, not paralyze with drugs and *opium*. The learned Dr. Thomas Willis tells us in his work *De Medicamentorum Operationibus*, that sometimes *foveam, aut forsan binas efformari, easque circumcirca PARIETES CALLOSOS obtinere, ita ut materies in massam sanguineam minime transferatur, sed expectoretur. Taliter affecti, quasi fon-*

*tanellam haberent, sputum etsi multum, crassum, flavum, quasi purulentum rejiciunt, tamen satis sani degunt, bene respirant, comedunt, et dormiunt, εὐσαρκεῖς perstant, et non raro persenescunt.*

The case of *Saginus*, to be soon mentioned, resembled these enduring cases; but, alas! he paralyzed his nervous system by *morphia*, became homebound, instead of *aërial*, sedentary instead of riding and driving, and, finally, was suffocated by the *multum sputum foveæ*, when he was too narcotized to expectorate, as it reached the epiglottis.

In a case of *empyema* and *pneumo-thorax*, which was witnessed at the Norwich Hospital, life was preserved six months, with one lung useless, daily being absorbed; the other infarcted with tubercles and congestion of vessels.

But a case of perforation of the pleura narrated by Dr. Barlow, proves that life is sustainable even three years after the bursting. His case so recovered, that the subject walked abroad, seemingly comfortable. But would the young woman have so rallied, if, instead of walking forth, she had been cooped in a close room, misty with steam, hermetically stopped? How long would her remaining tubercular lung have supported her in such a stew? For every form of tubercular disease and results I would enforce that the air

of heaven is the true gas to be inhaled : not the azote of foul chambers, not the chymic fumes of poisonous drugs. Nature says *air*; common sense says *air*. If an infinity of facts can be worthy data for logical induction, it is this, that they are most secure from phthisis, who breathe most the vital air; they only recover, who can procure it; they perish, who are chambered and stewed.

*Aura veni!*

*Pains in the chest* may be *muscular*, results of the succussion of cough. Yet these pectoral pains are frequently attacked with exhausting counter-irritants, while the last persons to bear needless annoyances, are the sensitive, enfeebled subjects of a tubercular constitution.

As to the lungs themselves, I do not deny that the vascular process required to expel tubercular matter—a process, which a modern philosopher has declared to be external to the tubercles—may become excessive, running on, in some few cases, to phlegmasia; but it seems most important, that a practitioner should be sure of this, before he proceeds to heroic treatment, lest he depress a salutary action, set up to eliminate.

Are we not, in simple cases of acute pneumonia, very cautious, if a suppurant process, more or less extensive, has displayed itself, to preserve power and lower no farther, that *Nature* may

eject the vomical contents, or pus more diffused? And is not equal caution demanded, when the feeble native powers of a phthisical sufferer raise up an action of vessels *intended* to be curative?

If we take a not unfriendly view of the vascular action, we simplify the treatment. We avoid the great difficulty of reconciling "the opposite indications afforded by tubercular suppuration and tubercular inflammation co-existing." *Alison*.

If the deposition of tubercle be a low action, and the softening thereof by more active vessels be salutiferous, the treatment should, in both circumstances, *not* be lowering. In the first, it would increase the deposit; and in the last it would prevent absorption, or suppuration leading to ejection.

The *pains* of pleurisy are not, according to Dr. Stokes, to be detected by physical signs in the early periods of consumption. And yet, what should obscure them, if the ordinary pains in the side *were* pleuritic? If to such a masterly observer the nature of these pains be obscure, the young surgeon should hesitate before he appeals to the lancet, to teasing leeches, to cupping or the blistering plaster.

That injury is commonly done by treating ordinary pains, as if in every case they were pleuritic, is the assertion of Dr. Stokes.

But then the undenied pleuritic stitches of advanced disorder, may *these* not be often treated improperly, *if*, as I believe, they intend coagulation, and the integrity of the pleural sac?

Should we not always ask, what the meaning of a symptom? May it not imply medication? How long was mistaken the vascularity of the conjunctive, which despatched a fascicle to fill up a corneal ulcer? The universal plan was to destroy these salutiferous vessels.

In *pleurisy* of nonphthisical patients I have witnessed violence of treatment resulting from the use of the stethoscope. Degrees of pleurisy, which alarm not experienced men, trusting in *rational* as well as physical signs, have so terrified young practitioners, listening only to sounds of friction and to ægophony, that they have lost their calmness and hurried on to exorbitant depletion; as if the pleurisy of past times, when sounds were not studied, were different from modern. Too much dread of pleural cohesion has seized many practitioners; although it is quite compatible with every respiratory function.

*Repaphius*, a learned knight, was examined, after death, for a disorder unconnected with the respiratory apparatus, which was never known to be morbid; yet the lungs, themselves sound, were

united universally to the pleura of the ribs. I witnessed this necrotomy.

But no man, who has been accustomed to anatomy, will deny that pleural adhesion, and this universal, hath been observed in dead bodies, whose lungs have been in substance sound; and where death could in no way be judged as depending on this concretion of surfaces.

The following case, of a very *usual* character, will illustrate many opinions, expressed in this libellule. It will show perhaps the evil influence of propagated effluvia from the phthisical to the sound; the evil of sedentary, chambered life; the inutility of the routine of physic and diet; the vain discomfort of emigration; the vis medicatrix of Nature to prevent pleural perforation.

*Sallensis*, aged 52, an eminent painter, lost his wife from consumption, about four years prior to his own decease. He became himself the subject of chest-affection for two or *three* years before this last event; and it is a fair suspicion, that the fate of an affectionate husband may have been due to the *miasmata in pulmonem attracta*. His physician noticed great dulness on percussion at the upper part of the left side. This was succeeded by a cavity, which became large. Subsequently similar symptoms were detected on the right side.

Expectoration was copious; emaciation, loss of appetite, debility proportionally great.

*Sallensis* continued his labours as an artist; but occasionally absented himself.

In 1843, on the approach of winter, he proceeded to Malta, thence to Naples and Rome, but finding neither health nor comfort improved, he returned with great fatigue through France, and reached home almost *in extremis*. On the 18th of January, 1844, he expired at his residence in London.

Necrotomy showed that on the right side there were pleuritic adhesions about the upper lobe, *strong* at the apex. A large portion of this lobe was completely excavated; the cavity having *firm, dense, smooth* parietes. The remaining portion of lung was crepitant, but deep red, thickly sprinkled with tubercles.

On the left side adhesions were much more extensive; *close, firm* over the upper part of the chest. This part was occupied by *a cavity* of such dimensions and *firm* parietes as to resemble that of the pleura, in chronic pleuritis, when the seropurulent fluid has been withdrawn. The walls were formed by a *firm* tissue, having spots of lymph.

Notwithstanding the adhesions, the lung was removed, when the greater part of the walls of

the cavity was seen to consist of little more than *thickened* pleura. The remaining portion of this lung resembled the corresponding portion of the right, as to tubercular deposits. Intervening portions of lung were spongy, crepitant, not so deeply engorged as the right.

The above is an abridgement of the case, as drawn up most graphically by a very scientific man, and *friend* of the patient: and the history is that of thousands, who enjoy, as this patient did, the best advice of the day. Would this case have had a different ending, if the patient had *not* had a phthisical wife—*not* been fastened down in the painting-room, away from air, country, exercise?—had he lived like Sydenham's traveller—in England and on horseback, instead of emigrating to the relaxing, torrid, regions of Malta and Naples?

It is clear from the anatomy, that Nature made the strongest efforts, during three years, to oppose the malady. That she condensed the walls of the cavities; that she agglutinated them to the costal pleura; that she thickened the pleura itself, to prevent perforation and escape of fluid into the thoracic sac. Is it not likely that such marked efforts might have succeeded, had the victim's mode of life been the reverse of that, which, I suppose, circumstances compelled?

May we not hope more vivaciously that in a disorder, where Nature is so ready to assist us, we may gain the day by assisting Nature? Pleuritic adhesions are a proof of her great anxiety to help, and my views of this vis medicatrix are confirmed by Louis' anatomy. He tells us that "adhesions and disorganization bore a direct proportion. No adhesions, generally speaking, excavations none—adhesions limited, cavities small—adhesions close and spread, cavities of large dimensions. Cavities, when large, were always seated at the apex, close to the surface, and here only were found *thick, firm* membranes, which strengthened the walls of the cavity, sometimes formed them in part. A lesion, proper to phthisis, is the cartilaginous cap, investing the summit of the lung, when extensively excavated,"—the *paries callosus* of Willis!

So wonderful are the provisions of Nature to prevent tubercular effusion into the pleural cavity, that it is fair to conclude that, whilst at times pleurisy succeeds in conglutinating the opposite surfaces, the serous, effusive pleurisy is only a vain effort to effect this good. That it does not imply a stronger, but a degenerate, action—that the effusive pleurisy is, probably, sometimes due to injurious, depressing treatment; more especially because plastic lymph in ordinary, untuber-

culous pleurisy is *the* secretion of genuine phlegmasia. If this be true, let us soberly beware lest, by prosterning treatment, we convert a plastic, salutary pleurisy into an effusive and fatal.

This manifest struggle on the part of Nature to assist the sufferer should give us great encouragement; the more, when we consider that, even if much mischief be done, life is compatible with diminished pulmonary machinery, if further devastation can be stopped.

*James Newstead*, aged 26, a laborer, was, this very summer, working away for a living, with only a right lung, the left having been absorbed or shrunk, after pleuritic effusion, for *five* years. He came under my care, as physician to the Norwich Hospital. The heart was found beating on the *right* side of the sternum: and he had been, during three previous years, an in-door or out-door applicant at the Hospital, under the care of another physician, who had recently died. I learnt that, 1844, April 6, he was, while ploughing, seized with acute pain in the left side of the chest, which prevented his leaving bed three days: his home for ten weeks. A physician had prescribed "cough-drops." At harvest-time he worked, breathing difficultly, but without cough.

At Michaelmas the pain returned; and he applied to the same physician, who received him

into the Hospital in February, 1845: where he staid fifteen weeks. He then had, so reports the house surgeon, thoracic effusion, for which tapping, although suggested, was foregone.

He was then made an out-patient, and so continued until he came under my care. 1847, April 21, I requested my surgical colleague to tap the bulging side, whence three pints and half of a puriform fluid were drawn off. As before the tapping, so neither after could any respiration be heard, not even behind, near the root of the lung: but his dyspnea was marvellously relieved by the operation.

*May 3*, nearly three pints of fluid were withdrawn by paracentesis.

*May 10*, four pints and half of fluid, more puriform than ever, were removed.

About a week after, the left side was measured and found largest by an inch: and the fourth tapping was practised, on

*May 19*, when five pints of fluid escaped.

*June 2*, one pint only was forthcoming.

About this period he was made an out-door patient; but attended irregularly.

*December 28*, he walked from the country to be tapped, and, as no evil symptom had ever resulted, he left the Hospital the next day.

1848, *middle of April*, he was again tapped;

and, on his own responsibility and self-will, walked home immediately.

How far the heart has resumed its sinistral position, I cannot tell; for he has not presented himself to me since the last date; but a gentleman, who lives in his parish, recently informed me that he was healthy, powerful, and in work.

Now, if one lung will support the life of a rustic laborer, we may hope that great disorganization of structure, if it goes not on, may permit existence to a phthisical pulmonic.

The recovery of this hardy patient must I think be much owing to his want of sensitive apprehension.

Alas! the subjects of *our* malady, phthisis, are usually the most delicate, mobile, and, even, intellectual persons. And all that manipulation and surgery, which Newstead bore with insouciance, would perchance of themselves suffice to produce a fatal influence on less torpid brains and nerves.

The simple examinations by the ear and stethoscope are often productive of such misery to the nervous patients, that they submit with reluctance, or, sometimes, flatly refuse to undergo them.

Young surgeons should, when manipulating their pulmonic invalids, never forget the influence of mind.

*Varyllus* was the patient of a most intelligent surgeon; and the case was pleuritic. The verification of the disorder through the stethoscope terrified him beyond expression; and each medical visit to him was one of torture. He rallied; but the conviction that he had had pleurisy, and a superstitious feeling that he was to die of phthisis, brought him into a despondency, which proved directly fatal. For he refused nutriment sufficient for *his* frame, and died of inanition, lest he should die of decline.

Will the influence of mind upon body ever become an universal idea among the practisers of physic? The temptations to forget it are very strong. For the hilarious, hopeful physician is sometimes distrusted—"He made light of my case." The gloomy, maw-worm physiognomy is construed into profound wisdom. But on the whole the cheering practitioner is the safest—

μὴ νοσοῦντί μοι νόσον  
προσθῆς· ἄλῃς γὰρ συμφοραῖς βαρύνομαι.

οὐχ ἅπασα  
πέφευγεν ἐλπίς τῶνδ' ἐμοὶ σωτηρίας.

The exquisite discoveries of animal chymistry do not boast a proportional utility. Tubercles are the result of an unhealthy frame, and we must chiefly aim at prophylaxis. Whatever the chymistry of tubercle, we must fall back on the digestive powers, on invigorant diet, on the *non-naturals* generally, if we wish to prevent: or dare hope to cure. Air, meat and drink, sleep and watching, motion and rest, retention and excretion, and the passions of the mind; these are the six non-naturals. But common sense shows their importance, to preserve a healthy or renovate a disordered frame. Where there exists a suspicion of the consumptive diathesis, animal food, generous stimulation with wine and malt-liquor are demanded, and regular inspection of the alvine excreta must be made.

The bile demands especial observation. The liver is often disordered in phthisis. Louis found

it fattily transformed in one third of his cases ; in forty out of a hundred and twenty. If we know not any direct method of dispersing this fat, we are bound to use that treatment, which bids fair to induce the flow of bile.

The statements of Louis were founded on dissection ; but I have so frequently observed in consumptives a deficient colour in the *fæx alvina*, that I am confident we should especially watch the function of the liver.

This viscus must be kept in action, or all other actions will be diminished. Without reference to the chymistry of the bile, we know that it enacts a serious part in the economy. Whatever else the liver may be, it is a huge emunctory ; and if its machinery be clogged, the matters it should have excreted must be expelled by other agents or deposited in the loculi of cellular membrane.

Of the medicines, which emulge this organ, I wish to say that if mercury *can* be pretermitted, it is safer in the tubercular to employ taraxacum ; or the nitro-muriatic acid, internally ; or, better still, endermically in baths ; or aloëtic aperients ; or other agents.

I believe that tubercular deposition is often vicarious, the liver failing to separate from the blood the expected *débris*.

How frequently we see patients with cough,

without physical signs of implicated lungs; whose cough yields to blue pill or other antibilious remedies! Who can deny that this may be the cough of tuberculosis, less extensive, not disclosed through the stethoscope, yet arrested by returning action of the liver? not going on to phthisical decay? I believe that this is *little* tuberculation vanquished, as the *great* results—suppurations, cavities—assuredly sometimes are. Deposit is so quickly made at times, as in acute phthisis, that, if it be absorbile, we may fairly adjudge it to be occasionally quickly removed.

Sea-air, at least residence on the coast, seems to stimulate a flagging liver, without other means, in some cases. I have known the dry cough, which threatened tuberculation, perhaps indicated it, promptly removed. The flow of bile and the subsidency of cough seeming to bear a strict relation.

The vicarious action of the kidneys, when the liver is torpid, shows the emundant character of this organ. I have noticed elsewhere the evil influence of tobacco on tubercular subjects: and my belief that it may engender phthisis. I suspect that this is produced through the fault of the liver, which is known to be torpedied by the use of the pipe or cigar. In some cases of smokers the urine is very loaded and, on cooling,

deposits a variety of the pink sediments; while a cessation from the pipe restores the alvine excreta to their biliary tinge and the urine to its healthy transparency. May we not therefore logically suspect that in some of those cachectic smokers, who have died of phthisis, the original evil was seated in the liver, whose depurgant offices the tobacco diminished? That, because the liver did not carry off the usual débris, morbid and fatal deposits were made vicariously in the lungs? That, in the management of pulmonary symptoms, suspected to have a tubercular origin, we should always do well to attend to the liver: and feel pretty confident that the lungs should be left to themselves, as to diagnosis, treatment, cure?

*Propter glandulas in hepate obstructas bili transcolanti imponitur remora, quæ sanguini itaque regurgitat; ex eâ lenta febris gliscit, et ratio urinæ lixivialis petenda est.*—Leigh.

I have deprecated mercury, *if* it can be pretermitted in the consumptive tendencies; and I have known a result of a long use of mercury, which, I believe, is noticed, also, by Dr. Budd; I mean a repugnance against it manifested by the liver itself.

*Gryllus* had, or fancied he had, *many years*, “liver complaint,” and was always more or less

under the influence of mercury, especially calomel. Ever attending to the hepatic secretion, on the least deviation from *his* idea of perfect color of the alvine discharges, he had recourse to mercurials, until, at length, when he consulted me, they resembled the *Album Græcum*. I told him to leave off the mercurial treatment, and take no stimulant for the bile, which immediately thereon returned and this completely.

In simple torpor of the liver the formulæ, which contain Aloës, generally suffice to maintain action of the bowels and hepatic secretion. And the *Pilulæ Aloës Compositæ*, *Pil. Aloës cum Myrrhâ*, *P. Cambogiæ Compositæ*, or *Rhei Comp.* or *Sagapeni*, are excellent as antibilious. For children the *Decoctum Aloës Compositum* I have found to be an efficient and not unpalatable medicine: whilst of the Dandelion and its preparations one can hardly speak too highly.

But vegetable appeals to the liver, may, like mercurial, and other mineral drugs, be made too frequently and too long; and the susceptibility of the organ to the particular stimulus be abolished. Hence the patient should be very anxious to discern, whether he *really* requires everlasting physic; whether the hepatic and intestinal sluggishness may not be due to habit—the habit of waiting for artificial fillips.

A mode of exonerating the bowels, loaded through deficiency of stimulant bile, now most extensively used, is the enema; which, by some persons, especially ladies, is *the* daily apparatus for relief. This unpleasant process, as a habit, is said to be learnt from French women, and is one of the many importations, which have been procured for us, through the long peace, after Waterloo. It is very well to use enemata, occasionally, under emergencies, through medical counsel—and every house should be provided with the portable pump for lavements—but the *habit* of administration is very injurious. It produces the very constipation, which it is intended to obviate, because it produces permanent dilatation of the rectum bowel, whose distended and flaccid tunics cannot contract upon and extrude the ordinary and natural volume of contents. Great dilatation and great contraction of this bowel equally disturb its function—

*Sunt certi fines,*

*Quos ultrà citràque nequit consistere* RECTUM.

The consumptives would be safer, if left to Nature, than they can be from the multifarious, even contradictory materials, with which they are often infarcted.

*Pectoral* physic, if it does no good, must deteriorate. It prevents an appetite for needful

nourishment. It deceives the empty and craving stomach, which then rests satisfied with useless drugs, to the exclusion of supporting, invigorant, reparatory food.

As no specific drug has yet been discovered to cure decline, I exhort the younger practitioners to give up the vain search. To look comprehensively at the frame in its healthy and morbid state, nor dream that a specific is even possible. Health is the result of an infinity of conspiring actions, and how can *one* material effect it? It is impossible not to hold cheap the intellect of a medical man, who really hopes that he can discover, or hath discovered, a specific for phthisis.

I exhort the public to trust more to common sense than to treatment founded on physic: and I venture to exhort the faculty to recover their lost ground, as a sober and sensible body: nor edit nor sanction farther puerility.

Even the *tapping* of *tubercular cavities* has been advocated by educated practitioners. Would these practitioners quote the classical authority of Cicero, endeavouring to show that the vomica of Jason was *tubercular pus*?

*Nec prodesse voluit Pheræo Jasoni is, qui gladio vomicam ejus aperuit, quam sanare medici non poterant.*

Now tapping a cavity in a living lung seems to

me so outrageous, that I regret that our Royal Colleges of Physicians and of Surgeons have not the power to summon, to examine and to punish—if they desire to punish—all persons who would prescribe or perform so barbarous a deed. “Popular opinion will put down such physic and surgery.” No. The people, in their longing for life, will submit, in their deceived ignorance, to any form of death.

Tubercles are not so extensively fatal as the world has imagined: and Dr. H. Bennett published an interesting exegesis on this subject. He believes that certain puckerings in the lungs, discovered upon dissection, conjoined sometimes with cicatrices, sometimes with calcareous concretions, indicate the previous existence of tubercles, healed by Nature. And from his observations and those of other physicians it is calculated, that this cure has occurred in from *one third to one half of all, who die after forty.*

If this be true, it confirms my suspicion, that the fatality of phthisis *may* be somewhat due to our over-sedulity and interference with Nature: since the numbers of these patients are indeed too great never to have been heard of or paraded by the faculty. If these cases had been treated medically, lamentations of incurability could never be heard. These are persons, who, happily, were

never noted down in case-books ; who were tubercular, without knowing it ; and recovered, because they were not oppressed with medical materials. I can form no other conclusion.

*Expectoration*, sometimes, does not occur. In children and younger persons it is supposed that the mucus or pus is raised to the fauces and then swallowed ; passing from the trachea to the gullet. But an absence of excretion is sometimes observed in adult patients ; and yet tubercular suppuration exists.

*Vertigella*, a young lady, about nineteen, had been decidedly consumptive, the physical signs very marked, the past half year ; during which I had been consulted, with Mr. Burrell Parkerson.

The pulse was permanently 120 ; never less. The lungs were excavated at the apex, for voice, respiration, cough, were all "cavernous." Yet, although the râles were most readily distinguished, no sputum ever appeared ; and although the cough was very annoying at bed-time, she was positive that no excretum ever reached her mouth, and that there was none, of course, to be swallowed. Was there not, then, absorption from the cavities ? No pain existed any where. She took all the nourishment she could digest ; all the malt-liquor she wished ; and *thus* her strength increased, and she *felt* for months much better.

She took *no opiate* whatsoever; but some stomachic treatment being indicated she took with benefit a mixture containing half an ounce of *Liquor Sarzæ*, in half a pint of the *Decoctum Cetrariæ*, for some time.

This case showed the advantage of not depressing nervous power, by sedative, *narcotic* drugs, and so long as she remained under my charge the above symptoms persisted.

But her friends, to whom I had revealed the worst, abstracted her from her provincial attendants; and placed her under the advice of a physician in London, who had lauded *naphtha*.

She soon, that is in September, 1848, fell into her long, last *nap*—

τὸν πολυδάκρυον

ἔπλευσ' ἐς "Αἶδαν, πόνων τελευτὰν.

In some cases of cavity, *opiates*, if largely given, are instantly fatal.

*Saginus*, when young, underwent an hæmoptisis, which did not recur. He entered the army, and, leaving the service, devoted himself to agriculture, married, begat a family and forgot all fears of pectoral disorder. About the age of five and forty he was seized with acute rheumatism, for which were prescribed powerful doses of colchium. This drug depressed his nervous system awfully; the pulse became *very* rapid and feeble,

accompanied with cold sweat and other effects of this narcotico—acrid poison. Immediate danger, so soon as I reached his country-residence, was removed by stimuli, but the patient never regained his pristine, general strength. Moreover, from this period pulmonic disorder came on ; dyspnea, cough, dulness in the right mamillary region. Then rattles, muco-purulent sputa, a cavity. Then nauseating fœtor, requiring perpetually chlorine fumes in the apartment. Two summers and two winters passed, and the cavity, become a cavern, took twenty-four hours to fill, and was then emptied through cough ; cough, which ceased again, until the next cycle was complete. He had, by this time habituated *himself* to morphia ; but was easily roused by admonitory symptoms, when the hour for expectoration arrived.

On a certain day a practitioner, who was unacquainted with his history, prescribed an *opiate* in addition to his usual dose. This threw him into so profound a sleep, that when the expectorant hour arrived, he could not be roused, neither by the internal irritation nor by his servant. He gurgled terribly, but was too narcotized to cough and propel the sputa beyond the glottis ; and he died of direct suffocation.

May I theorize thus ? This gentleman was menaced with decline, in early life. He was fair

skinned, blue veined, aduncous as to nails; and underwent an hæmoptysis. But the animation of military life, succeeded by the salutary habits of an agricultural, arrested tuberculosis; until the terrible *colchiac* debility gave fatal influence to an insidious foe; to tubercles, which might have been latent or then deposited. No evidence was given, through auscultation, of other pulmonic damage; but so rarely is tubercle confined to one lung, that a cavity *almost certainly* implies disease in the opposite side, even although, says Dr. Stokes, no physical signs exist. An examination, after death, could not be obtained to verify or disprove in this instance.

This gentleman died in good condition, even fat; and on the luckless day had accompanied his family on foot to a public meeting in a crowded room.

It is most hazardous for persons, who labor under curtailed respiration, to enter crowded rooms; whether tuberculosis, chronic pneumonia, or congestion, be the character of the disease. A fatal syncope may come on, even in the apartment; and this occurred not long ago to an honorable member of the surgical profession.

The good condition of *Saginus*, his abundant fat may seem surprising to those who think decline and leanness synonymous terms; but phthi-

sis of lung may be concurrent with obesity of other structures : and this is the state of many consumers of cod-liver oil. I do not know if the frame of this gentleman might not have triumphed over the phthisis ; but *morphia* was too fascinating a quieter of cough.

Nature always essays to empty the cavities ; alas ! that she should ever be torpedied by narcotics ! and there is this peculiarity about her proceeding, that, “after complete evacuation of a softened tubercle, its contents are *never renewed* ; while the sides of an abscess, after it is opened, continue to secrete pus.” This statement by Dr. Good ought to corroborate professional hope, as it certainly does my sentiments.

Dr. Good had seen one or two instances, where *appeared* the last stage, with a pint and half of pus and mucus expectorated daily, night sweats, anasarca—end favourably. “Dr. Parr witnessed six cases of decided phthisis, which recovered spontaneously.” Laennec is convinced “that phthisis is curable after softening and excavation.” But it is often curable before softening, if many cases of seeming incipient decline, even with sputa of blood, were tubercular. I certainly have witnessed many : and the surgeon, who performs amputation for white swelling, or lithotomy for stone in the bladder, will confirm my views. He

will say that frequently the symptoms are those of menaced phthisis, with rapid pulse, night-sweats, diarrhœa, et ceteris. That, but for the local disorder of joint or bladder, he should pronounce the case phthisical; that he summons a consultation to settle whether he may operate on so suspicious a subject. He operates and the phthisical symptoms vanish as by a charm.

*Harpagalus* complained of dyspnœa, dry cough, debility. His chest was flat; pulse 120; frame emaciated; *tout ensemble* of look consumptive. Was he, then, phthisical? He was fourteen years of age; and he had calculus in his bladder. Shall he be cut? With these ticklish symptoms, his physician, Dr. Ash, doubted; but he referred the case and the responsibility to a surgeon, when this practitioner, judging that the pectoral symptoms were secondary, removed a mulberry calculus from the bladder. All the phthisical menaces vanished directly; the lad became fleshy and strong; and in a few months went to South America, to seek his fortune.

In this case I think that there was tubercular deposition going on, under the calculous disquietude; not from any direct sympathy of the urinary organs with the lungs, in their morbid action; but, because the boy's sufferings had brought him into a cachexia, under which tuber-

culuation commenced. I believe that absorption took place, when the irritation was removed ; this case illustrating the position, that phthisis must be prevented, must be cured, by appeals to remoter influences, not to the pulmonary structures.

This lad belonged, I believe, to the Society of "Friends." And this reminds me of the prevalence of phthisis in this sect. And is it not traceable to a sufficient cause? The system of repression, which begins with the cradle and only ends with the tomb, must injure their corporal fabrics.

The bodily movements, the rompings of children, their physical expressions of nervous vivacity, are kept in check ; and the organic functions are checked in consequence. Nature says—Move. Quakerism aims at stillness. Nature says—Come let us dance and sing ! Quakerism prohibits both these salutary exercises—singing, which expands the chest and fortifies the respiratory organs—dancing, which is instinctively set up by the young—so animating to nerves and muscles ; so helpful to the organic movements of digestion, sanguifaction, growth. Quietism is the aim of "Friends."

The very first order given by Nature to the human animal is to cry aloud, that the lungs may be filled with oxygen and life.

*The first time that we smell the air,*

*We wawl and cry :*

*When we are born, we cry.*

Quakerism deprecates all vociferation.

I have mentioned the alliance of the liver and the lungs, and the amount of sympathy, which Louis estimated betwixt them, in phthisis. This alliance is particularly shown in the "Friends," in whom I have, in my medical experience, remarked unusual hepatic torpor, as well as pulmonary decay. To the physiologist this torpor is no mystery, because he knows that energetic action of the liver is not to be expected without much physical exercise and some moral excitation. We have seen that the physical movements of life are systematically restricted in the education of young "Friends." The circulation of the visceral blood through their livers is not aided by the rough sports and noisy exercises practised by children of other creeds, whose abdominal muscles and diaphragms are kept in constant play, emulging the portal system.

Physiologists differ as to which parent contributes most to the hereditary health, good or bad, of the progeny : and endless might be the argumentation. But in practice *nihil vulgarius occurrit quàm hunc morbum intueri patris genium consequentem. Per totum vitæ decursum matre sat*

*athleticè degente, quidam circa eandem ætatem cum patribus hoc morbo correpti sunt.* Thus wrote Leigh: and this who cannot confirm? And if indeed this be the result of a law of physiology, the case of the "Friends" is more unfortunate than that of others. In other communities the women may be passive, sedentary, home-bound, but the men are abroad, working, sporting, gymnastic. From these may be expected a *rusticorum mascula proles*. But the male quakers are nearly as quiet as the women: and thus diminish the chances of Herculean offspring.

The "Friends" eschew the stirring professions—"the dangers of the seas"—the art of war. Moral stimulation is deficient; moral emotions are repressed—for instance anger; yet anger is a healthy, natural stimulus to the secretion of bile. And this passivity goes on from one generation to another, until this Christian sect is become, to a great extent, one of inferior physique. Whatever position they occupy in social life, from their virtues, their beneficence, charitable wealth, sobriety, religion—the *physical* results frequently are frames, which no energous blood makes healthy: lymphatic glands, which are scrofulous; tubercular lungs, that are consumptive; livers, that are torpescent.

The phthisical and strumous constitution is

more often displayed in the females, because these are called still less into the activities of life. And all this illustrates the views of my concise pamphlet. It shews that in the pursuit of frames to be untainted with tubercles no innocent exercises should be foregone, which are dictated by Nature and by common sense.

Τί δαί; ἡ τῶν σωμάτων ἕξις ἔχ' ὑπὸ ἡσυχίας μὲν καὶ ἀργίας διόλλυται, ὑπὸ γυμνασίων δὲ καὶ κινήσεων ὡς ἐωιπολὺ σώζεται;

Μὴ, φίλα ψυχὰ, βίον ἀθάνατον  
 Σπεῦδε· τὰν δ' ἔμπρακτον ἄντλει μαχανάν.

In this cursory essay I have aimed at nothing more than to *suggest* a few ideas, especially to younger men, which observation, experience, and enforced incredulity have suggested to myself. I wish them to think independently, nor longer practise in a routine, which is useless or hurtful or fatal. I wish them to distrust expectorant and, above all, *narcotic* drugs, and to rely more on Nature and her unhampered powers. It is thwarted Nature, which is the real cause of much of decline. It is civilization, which has abolished healthy habits and compelled into others, which engender disorder and hurry on death. Man is not the only sufferer: but the lower animals are involved in his social calamities.

Monkies, that is, the monkies of menageries and private domiciles, are very phthisical. What marvel, since the natural life of these agile creatures would be passed in open air, in boundless exercise, that they should suffer, like men, when

cooped and inhaling the air of smoky towns, the stagnant azote of chambers?

It hath been customary to attribute the phthises of these pitiable exotics to mere cold; but would they perish, if they could be allowed to spring and run and climb in their natural manner, so keeping warm their frames—or if, like their *fellow-creature*, man, they could clothe their delicate skins with flannel, “dreadnoughts” and “wrap-rascals?” or if they could digest, if not animal food, at least thermantic and cheering potation?

“I dissuade patients from asses’ milk. I particularly dissuade from its use at Paris and in other large towns, because no doubt asses fare as cows; and the latter are said to die phthisical in large towns. I cannot help suspecting their milk and abstaining from it in such places.” If *Louis* found that these coarser animals cannot healthily oppose the miasmata of towns, what chance for the delicate organization of the human being?

It is on the subject of *air*, that we want to know more and see clearer. Remembering the relation of the lungs to *air*, their constant contact, the ceaseless expulsion of used air, the indraught of new, we must recognize the paramount importance of proper air. It is not that we require *hot* air, for the warm countries are among the

most phthisiferous. Nor moist air, for the dry frosty regions of the North are least so. But we want *pure* air, air free from suspended miasmata, vegetable or animal. And this can only be secured perfectly under the canopy of Heaven. In proportion as we are housed and chambered, are we breathing an atmosphere of miasmata: our own bodies contributing to them.

Should not the young physician pause in the routine, which prescribes in England warm, closed rooms, often in the summer, always in the winter?

Catching "cold" is the bugbear. Hence the incarceration at home: or the stealthy creeping out with the muffling "respirator." But can men catch cold through their lungs? I trow not. Is it not the cutaneous surface, and this only, which is the hurtful recipient of cold impressions? If cold in the lungs did the mischief, what would become of the extreme Northerners? They could never be pulmonically sound; yet they are eminently unconsumptive: and is not their immunity partly due to their dress? Look at their furs.

Their regions are more *equably* cold; and thus the natives are always on duty, never surprized by an attack of frigid temperature, whereas *we* find the thermometer varying many degrees in few hours. We cannot or will not adapt our dress and *we* catch cold, but not through the

lungs. Thus, if we were as careful against the *cold* of our vicissitudes, as they are against a permanently low temperature, should we not avoid that phthisical dyscrasy, which some suppose to be due to the rapidity of aërial change?

I have touched, in this brief essay, on emigration: and, on this subject, am I not justified, from the history of the past; from Celsus who directed patients to Alexandria, to the physician who sends them now-a-days to Malta, in saying that all expatriation is vain? Our own islands contain every various advantage of air, from Devon, where the roses blow in winter, to parts of Scotland, which, for bracing air, rival the Pole.

Unhappily, for the invalid, we prescribe a locality with unbending rule: whereas, the feelings of the sufferer may dictate another region and atmosphere. And we should attend to these feelings, without any quarrel because our science cannot fathom them. How often do we hear patients say of the same place, maritime or inland—*A.*, that he is always well there and breathes with delightful freedom—*B.*, that she cannot one minute respire with comfort, and that “the air is too strong?” Yet science cannot tell why this dissonance.

Would it not, therefore, be wise to gratify the *instinctive* wishes of a phthisical patient, rather

than prescribe a residence dogmatically? Peremptorily to prescribe *air*, but leave to the sufferer what air?

Many, who are *forwarded* to the western spots in Britain, to Torquay especially, say that they are formidably relaxed by that luxurious region—then, let them try a bracing atmosphere. Many revel in that celestial country. Then let *these* abide there; on the principle that they can expiate *abroad* all the hours of the day and all the days of the year.

But exercise is wanted in the tubercular cases as well as air; in the carriage—on the horse, or on foot; and as the two latter forms cannot well be *much* used in warm airs, the pedestrian and the horseman may try a cooler arena. I believe that the chief, perhaps only, advantage to be secured by *many* spots is the facility, afforded to the sufferer, of wandering about in the open air: in *some* spots that the *change* of air, simply as such, does the good, although we cannot account for it. But I am deeply impressed with a conviction, that, *ceteris paribus*, a *cold*, dry air is the most congenial with a delicate or tubercular or exulcerated lung.

But it is very difficult to secure the benefit of cold to the lungs, free from the perils of checked perspiration or of general chill. Girls and women

cannot take that amount and rapidity of exercise, which men and boys do. They are not so able to keep themselves warm abroad and in cold days ; but, would not the best chance be afforded to the tubercular lungs by pure, dry, cold air, whilst the frame is kept warm, hot if you please, by its own intrinsic movements of circulation ?

I take it that *this* state of things accounts for the immunity boasted by those nations, whose countries are bounded by the arctic sea. Freezing cold inhaled ; but surfaces kept warm, genial, hot, by exercise *or* sufficient clothes ; skins, furs.

People look for *cases* in confirmation of any proposed plan or remedy in any disorder. Here are cases, upon a large, upon a national scale, of consumption prevented—and prevention is superior to cure—by a residence in the coldest regions, with warm clothing, with animal, oleose and even alcoholic diet.

It is a moist region, or moist *and* cold that is prolific of phthises ; for cold, as such, does not, undeniably does not, engender pulmonic disease. Are cold bracing countries so unconsumptive, because only also dry ? or because also equable ? The equability of temperature hath been much commended ; and in a changing climate, the sufferer is directed to chamber himself, keeping the thermometer from 60° to 65° ; but he loses

thereby purity of atmosphere and healthy exercise.

He dreads vicissitudes; then let him provide against them: going abroad with protecting clothes: but still going abroad: abroad in his own vicinity or, at the farthest, at some spot in England to which he can speedily repair, or, if he desire it, whence he can easily return.

If we quote to some persons the experienced inutility of exile to foreign, southern shores—then comes the stale rejoinder—that the victims went too late. Have they not always been going too late? If persons manifest no symptoms, are they to be expatriated on conjecture? If they show them, are they not in the same state as the natives of many places, to which they emigrate? If they must change, why go *thither*? Why to the south of France, for instance, where Foderé, quoted by Good, says that phthisis commits “the most horrible ravages”? Why to Madeira, where genuine consumption itself, according to Dr. Gourlay, is not uncommon to the natives? Why to inter-tropical regions, where high heat, a source of debility, may become a source of phthisis? If, as Good prescribed, the consumptive of a hot climate should be sent to a cooler—might not the phthisical of a temperate region be despatched to a cold?

To a cold region, if he can command the means of heat—clothing, fires, thermantic food and drink? May he not with these venture to respire the very air of the North Pole? Did not the health of the ships' crews in all our arctic expeditions prove that cold, as such, is not hostile to the lungs?

An officer, who served six years in Canada, where the cold was *intense*, told me that, during that period the 79th Highlanders did not lose a man from phthisis—but that, on their return to Glasgow, 700 strong, many died in decline: in not many months. My informant is not a medical but a combatant officer: and cannot speak with numerical precision “from book,” but his statement must be near enough to facts to verify my views. He said that many men, who went out with the regiment, and were supposed to be phthisical, recovered their health in Canada.

Besides, according to a German writer, “consumption is unknown to the North American Savages.”

Cold has been too long considered active in the production of tubercles; too long has it been supposed that tubercles are *peculiar* to northern climates; and that a warm climate is a panacea, when the disease is not advanced. Louis, reflecting that, if cold be a cause, phthisis must

commence more frequently in winter, ascertained the month in which the earliest symptoms manifested themselves—that in 129 patients 60 contracted it in the warmest, 61 in the coldest months. The logical conclusion would be that cold is without appreciable influence as a cause.

The consumptives may be divided into three classes of society—the poor, who cannot move from their residence and must take their chance—the middle classes, who cannot be removed from home, without great domestic and pecuniary inconvenience—the opulent, who can travel any where.

Are the expense, discomfort, wretchedness of travel and lodgings compensated in the middling class by proportionate health and recovery? I firmly believe never.

Do the wealthy succeed, through migration or emigration, in getting rid of phthisis, menaced or actually arrived? I believe that direct physical benefit is seldom effected for these; but I am not prepared to prohibit, *if* the journey to the English place, or the voyage to the foreign, be either coveted or a matter of indifference.

Do we not see in wealthy and noble families a comparative want of attachment to their home? May not this arise from the multiplicity even of domiciles? The magnate, who has his family

mansion in a shire, his London house in a square, his marine villa on a fashionable shore, is not always susceptible of the vulgar attachment to a home; neither he nor his relatives. These feel perhaps as easy at Rome as in London—at Villa Franca as at Ventnor; and since no disquiet nor yearnings attend upon their movements, let them, if they choose it, move! But there are often great reasons for avoiding dislocation from home.

*Trebia* is the mother of nine interesting children, and is said by her surgeon to be tender-lunged and is directed by him to hybernate in the west. But her husband, a professional gentleman, cannot accompany, and her numerous children cannot all be taken: and her mind could never be happy, with her family far off and her supervision impossible. “Must I obey the orders of my surgeon?” No, madam! You live in a healthy spot, famed for longevity; you can daily walk abroad in dry weather, cold-proof with shawls and furs; you can enter your carriage daily in wet and tempestuous; you can select apartments in your own domicile, with various, opposite aspects; you can keep these warm as you wish; you can live well, with every grateful and nutrient article of food and drink. Stay at home, tranquil, with your husband and your children, resting assured that by this sort of life you

have a much better chance of fortifying your frame and your lungs, than in cramping lodgings, among mercenary strangers, nearly a solitary.

Is there any particular wind, during which the tender-lunged should house himself, nor venture to respire abroad? May he encounter the east wind? Whatever the miseries by the east wind, they do not seem to be pulmonic. It may chill the surface; it may depress the spirits; but is there any deleterious miasma introduced thereby into the lungs? It is said that the east wind is especially abhorred, because it is the coldest every where, but the cold of the east wind in Great Britain doth not equal the ordinary cold of the arctic regions, much less its cold, when the winds *ab ortu flantes diuturniores sunt*. Yet these regions are non-phthisical. I can conceive no reason, why even the east wind should terrify a phthisical, but let him encounter it fearlessly, if adequately replenished within, wrapped up without!

I still claim for my remarks the simple character of *suggestions*.

I *suggest* that there are materials for independent thought on the part of the people. If the faculty persist ruthlessly, without deference to the peculiarities of persons and families, to prescribe exile, the people have a right to rebel,

when it is known that in both Indies, at Rio de Janeiro, in Madeira, phthisis is *precisely* as frequent as in Europe—that these statements offer as little in favour of the tropics generally, as of particular changes of climate—that tubercular disease ought not to involve, as a matter of course, banishment.—*Vide* Hasse.

I ask for the phthisical, in every stage of his malady, pure air, as much as possible. I know no limitation but inability to keep warm the surface, in some frigid places. I leave the sufferer and his physician to judge of this impediment, but if difficulties are not fancied, in most cases they do not exist. I prescribe no particular places, but I do prescribe air, sea-air especially. Sea-air is more equable as to temperature; and are there not marine effluvia, dependent on the saline character of the ocean, which specially affect the lungs?

I think that the faculty should leave more to the invalid the choice of migration and emigration. “Shall I go westward?” “Shall I go to Italy?” Yes, if you *wish* it. Physically and directly you will not improve your state, but morally you will benefit your physique, if you anxiously wish to move and would fret yourself at home.

Some practitioners, knowing that men hold cheap

our profession, that they deem us mercenary, servile, commandable, feel unwilling, through delicacy, to oppose or undervalue emigration—lest, one moment, they should be deemed selfish, actuated by personal motives—they are loath particularly to commend their own vicinity.

“The fine things, which medical men put into their pamphlets about places, where they reside, are to be received with large allowance”—says *Thomas*.

Ἐτραπεν καὶ κείνον ἀγάνορι μι—  
σθῶ χρυσὸς ἐν χερσὶν φανείς—

said *Pindar*.

I am not prepared to dissipate the suspicions of the Doctor nor the sarcasm of the Poet; believing that the medical profession does include many buyable and base members. But it is, to a great extent, their own fault, if patients will employ unprincipled men—because, however numerous these may be, there are to be found honest practitioners, quite as scientific as the knaves.

In their pursuit of specifics men have sought a specific air for consumption and its cure. With what success all history tells us; and seemingly in vain. Places, like physic, have had their day and been forgotten. The Roman physicians, in the days of Celsus, sent consumptives to Alexan-

dria, a place never mentioned for them now. So of all foreign spots in more modern times, their fame is dimmed or forgotten. So of English asyla for decline. Penzance is rarely mentioned—Hastings depreciated, because “the air rushes in currents in some parts, is stagnant in others.” Torquay is, at present, popular: but it will share the common disrepute sooner or later.

There is no specific spot for phthisis: and if patients are much oppressed with miseries in travelling, is any place worthy the sacrifice of money and comfort?

Is the success of migration from home, and residence at any, even English, popular town sufficient to *demand* a medical prescription in their favor? Let patients go, if they please, and that is all which should be said: all by those physicians, who concur with me that in consumptive cases a bracing air is better than a relaxing, a dry than a moist, a marine than an inland—and that such can be secured somewhere in *almost* every county in Great Britain and Ireland, although it may not be the foolish *fashion* to inhale it—*there*.

But, if I am altogether in error, then is the principle of a Hospital for Consumption scientific. Then, as the munificence of the charitable provides such for the poor, let the policy of the physicians secure similar for the rich! Let us

see institutions for the paying classes erected on the Brompton model—where pulmonic effluvia, like the property of the primitive Christians, may be shared in common—whence no terrified consumptive shall flee, exclaiming—

ἐγὼ δὲ, μὴ μίασμά μ' ἐν δομοῖς κίχῃ,

λείπω μελάθρων τῶνδε φιλτάτην στέγην.

I have repeatedly alluded to the necessity of adequate clothing; and *all* writers and physicians insist on *flannel* next the skin. The skin, whatever its pores perform, must be kept warm for the performance. But the bath, especially the warm shower-bath, and ablutions are essential to its health and diapnoë. How can we expect a breathing perspiration, if the pores be clogged? and clogged they must be, without systematic washing. If common delicacy does not prompt to daily washing—if the Saturday night's pediluvia content many lazy persons and families—an affair almost incredible, but really true—let people learn that to diminish the chances and fatality of decline, cleanliness is essential.

The modern dress of children, with exposed legs, must often lay a foundation for tuberculosis; through repressed warmth, circulation, exhalation, in the lower extremities.

But it is the *Fashion!* And what hope that the physician can successfully cope with this

tyrannical power, when, in all ages even the moralist hath failed?

*Corrumpere et corrumpi SECULUM vocatur.*

I have endeavoured to enforce an animal diet for the growing and the phthisical. And at page 27 I have noticed a friend's hint that the fried liver of the cod might serve the double purpose of physic and of food. But frying must disengage too much of the very oil for which the liver is fried—and Dr. Ure “recommends the livers to be immersed entirely in boiling water, to which sufficient salt has been added, to raise the boiling point about 220° F. This coagulates the albumen of the liver and prevents escape of oil. When the liver is cut, the oil exudes, and mashed potato may be used as a vehicle.” *Pareira.*

The difference in taste of some for this oil is marked. Some *cannot* retain it on their stomachs; some are indifferent to it; others like it; and a very young lady, now under my care, is so fond of it as to anticipate the medical hour. Nor are its effects on some phthisicals less various. Some it purges; of others it stops the diarrhœa. Has it not the power to stimulate the digestive organs as well as increase the products of digestion? For it makes fat disproportionally to its own quantity: some ounces of oil consumed, some pounds added to the weight of the frame. Thus the asel-

lous oil should be *tried*—for if it cannot be tolerated—if it nauseates or pukes, it can readily be dropped. If it agrees with the stomach and bowels, it may be used, but not even then as a sole and mighty therapeutic. It must not induce a contempt of *air*, nor of exercise, nor of generous diet, solid and fluid. At present it is endangered by overpraise.

The infant may be built up with milk, which contains *all* the elements of nutrition—but neither building nor repairs can be done by this oil alone; which yet could be done, if the eulogy adduced at page 43 were correct: videlicet, that it “supplies and renews the rudimental molecules of *all* structures.” This character it cannot share with milk, unless it claims the same constituents: and a glance at the chymistry will give a denial.

“*Milk of the woman—Constituents—Caseine, Butter, Sugar of Milk, Salts, Water.*

*Composition of Cod Liver Oil—Fatty matter, Resin, Gelatine, Colouring matter, Chlorides of Calcium and Sodium, Sulphate of Potash, Iodide of Copper, Bromide of Potassium.—Pereira.*

Thus it may be partially nutrient, or tonic, or alterative, or thermantic; but where is the ædification of *all* structures? As a nutrient, it must be consociated with other foods—as a tonic it requires food to supply the textures for tone—as

an alterative, it presumes nutrition—and as a thermantic, it must be assisted by the stimuli of other calorific articles, solid, vinous, cereal.

I speak of phthisis, which it cannot *alone* cure; not of other and more superficial maladies, which it does cure alone.

I have recommended *exercise*, active and passive. And I have especially pointed to Sydenham and his ideas. Great physicians, Hoffman, Baglivi, Stewart, followed in the wake of Sydenham—other authorities deviated from and decried his course. But, perhaps, it is because a too *specific* character for cure *seemed* given it by Sydenham, that it has been so subsequently neglected. Strong however as was his language of eulogy, it did not intimate exceptionless cure. He compared horse-exercise for curative power to the bark in ague; with the hydrargyrus in the Gallic disorder—but every ague does not yield to bark—every luetic case not to mercury. Whosoever his decriers, I will say that such a man's practice must be deserving of more attention and obedience than his posterity have manifested.

*Pedestrian* exercise hath been too little enforced for the prevention of phthisis, for the attempt at cure. More muscles are brought into play by this than even by horse-riding. More veins for refluent blood pressed and agitated;

more secernents stimulated—more genial diaphoresis secured. The horse, it is true, carries his rider through higher strata of *air*; and greater, because distant, varieties of atmosphere. But the systematic walkers have always been the strongest, healthiest, longævest of men—and a process, which certainly contributes to health—has it not been too much forgotten in our prescriptions against disease?

The passive exercises must be inferior in promise to the active—although the carriage, the swing, the ship, the boat, have all been lauded and sworn to be occasionally efficient. But *air* any how, rather than incarceration and azote! should be sought. Air for the adult, who is already phthisical—air for the child, who is menaced! Let him be inveigled into exercise *and* air by his kite, or ball, or battledore—every gymnastic play. Let him make all the *noise* he likes, consonant with his fellows', for Nature rejoiceth in pulmonary movement, not in taciturnity. Thus will the child acquire strength, although not fat; for fat and strength are not synonymous terms; he may be made unctuous as blubber with adipose deposit, while muscles and bones are undeveloped and frail.

It should mitigate the vexation of those, who are annoyed by the vociferations of infants and

children and the adolescent to reflect, that all these hubbubs are processes instigated by provident Nature to augment the thoracic capacity, to oxygenate the blood, to develop healthfully the frame.

I have essayed to prove that whilst there is no specific drug to cure phthisis, so there is not one of the RES NON NATURALES, which alone can be ever considered a *Res Specifica*. All duly managed together may pretend to prevention or effect a cure. Not good *air* alone, nor *diet*, nor *exercise*; nor *sleep*, nor due *excretions*: *alone*. Air must be backed by exercise; air and exercise by liberal food, and generous drink. Exercise and diet must harmonize with sleep, which alone can renovate sensorial power and assist digestion, assimilation, repair. The excreta must demand vigilant inspection, the more because, if generous food be administered, the index of quantity and quality is given by the excretions—by the bile, by the urine, by the cutaneous moisture. Deficient bile; renal, cutaneous excretions too copious imply that the dietetic management is erroneous; not applicable to the peculiar individual. For, although the main principle of *generous* support be conceded, be enforced, still the idiosyncrasy must be studied. If beef steaks and the ale of Preston Pans be prescribed, the quantum must

be adjusted by the capacities of the individual, not to the standard of Hottentot stomachs.

Then, all these *Res corporales* are valueless, if the mind be gloomy and despondent—as a halcyon soul could not avail, without the physical substrata, just quoted.

But I attach the utmost importance to my *suggestion* about physic, and appeals to the lungs themselves. I have adduced no new medical article; I have cautioned as to credulity in the old—I have affected no elaborate Treatise on Decline, which hath been completely discussed by the greatest masters: but I have dared, arguing from our accumulated experience of the inutility of interference, to advocate the *laissez faire*, so far as *bechic* drugs are concerned; above all, so far as *narcotic* materials are prescribed.

Let people themselves see the simple logic of the question. If mankind are not one whit the better for being physicked and *narcotized* year after year, century after century, is it not high time to suspect that the very physic hath caused this wretched stationary state of things? Almost every other malady hath confessed the power of medicine; is it not time to believe that phthisis is not to be healed by medical *art*; that art has paralyzed Nature; that the purveyor of animal food, the brewer, the wine merchant, are most probably

the best physicians: that the *non-naturals* are after all the natural means of prevention, of cure? That if Nature were incompetent, which the meddlers assert or imply, which is by no means whatever proved, art is not less feeble? that art is even pernicious, shortening days, which might have been prolonged; exasperating existence, which Nature would have soothed? nay, often curtailing life, which might have reached the allotted span?

Most implicitly do I believe that, while some few cases of decline may have been cured, under the routine treatment, not *by* it, the huge mass of phthisicals is prematurely despatched. That if, from the first consumptive down to the last victim, art had abstained with respectful diffidence, the human race would have been less decimated by millions.

Of *opiates* I cannot repeat too often that they are lethal.

And if practitioners generally will reflect, they must confess, at the least, with the learned physician, whom I have already quoted, *Leigh*:

*Ex opiatis nil nisi inducias incertas mihi adhuc observare contigit.*

The *demulcent* medicines, well known, are alone *safe* in phthisis, if some mitigants of cough *must* be used. Decoctions of Liverwort, of Sarza; the

Compound Decoction of Barley; Infusion of Linseed; Mixtures of Acacia, of Almonds; the Compound Powder of Tragacanth; Liquorice, in Decoction or Extract; Syrup of Marshmallow; Syrup of Sarza are innocent emollients. *How* they sooth the coughing structures has been discussed in controversy; the facts exist. These cannot irritate tubercular lungs; nor repress salutary excretions; and against these the only admissible objection is, that they may too much occupy the stomach, excluding more nutrient appeals. But a teasing succussion of cough will sometimes, *perhaps* irresistibly, prompt to the use of such: and they surely are widely different from the active, noxious, agitating expectorants—the paralyzing varieties of opium—the usual routine. Nay, they come somewhat within the category of nourishing materials.

But, views like mine are sure to be opposed by the venal and garrulous practitioner, a person, whose finesse nobody can understand, except his medical brethren. A chatterbox, with superficial sense, with no lore, but with much cunning and cupidity in his breast, and a long tongue *unscrupulously* used, can induce his patients to swallow any amount of physic, profitable to the vendor, pernicious to themselves.

Give this trading professional a consumptive

sufferer and he will easily extract from him as much money as if he were a nervous hypochondriac.

Canting attentions, which procure credit for a tender heart; ministration to every trivial symptom, as if it were lethal; close confinement to the house, at whose door his vehicle daily stops; quietus to cough with bewitching opiates; such are the precursors to the certain death—and not less certain bill, which comes before the executors in due time.

The tongue is an unruly evil, but it is likewise an evil which rules. The patients of such a magpie are held fast and fettered with his tongue, as the wild horse by the Indian lasso. He may treat them unscientifically, he may “let them die,” he may destroy; but he assures their relatives, although consultations are never suggested, seldom permitted, that every thing was done for them which could be done—and he continues his career of volubility and gain.

Χαλεπὸν τῷ λαλῶ ἐστὶ σιωπᾶν· καὶ οὐκ ἂν σιωπήσειεν,  
οὐδ’ εἰ τῶν χελιδόνων δόξειεν ἂν εἶναι λαλίστερος.

THE END.

## ERRATA.

Page 35, line 22, for amenorrhæa, read amenorrhœa.

... 43, l. 21, read thermantics.

... 46, l. 2, after "decline," be pleased to insert these words, viz., Hæmoptysis excepted.

... .. l. 5, read amenorrhœa.

... 69, l. 9, read dyspnœa; and elsewhere.

... 74, l. 6, read Iodide of Potassium.

... 102, l. 13, read Naphtha.

At page 26 I have quoted from the sixth satire of Juvenal, but the lines are misprinted, as if prosaic. In this satire the uncompromising poet has attacked the blue-stockings of Rome: ungallantly depicting with the same caustic crayon the silly, the profligate, and the half-learned woman.

That Juvenal did not attack real learning must be clear to those, who will read *him*—or the admirable Gifford, or the impetuous Dryden.

*But of all plagues the greatest is untold;  
The book-learned wife in Greek and Latin bold.  
The critick-dame, who at her table sits:  
Homer and Virgil quotes, and weighs their wits.  
Ev'n wit's a burthen, when it talks too long:  
But she, who has no continence of tongue,  
Should walk in breeches, and shou'd wear a beard;  
And mix among the philosophic herd.*

But there is a character, of which Juvenal never conceived, the female lecturer—especially a lecturer on Phrenology—whose supple fingers should manipulate the heads of living men—whose chiromancy should distinguish the intellectual soul, and the amount of animal propensities. *Illa tamen gravior*, indeed!

But surely satirical contempt is more due to male blues; to sciolists, who retail second-hand at soirées, and mechanic institutes and Athenæa—and in lecture-rooms of all sorts and sizes, the ideas and discoveries of others. Who “read up” for their lectures, which are rendered amusing to uninformed, credulous, good-tempered souls, through daubs of diagrams, pictures and experimental toys.

For myself, I cannot but consider the little, self-appointed lecturers of our day—whether stationary or itinerant; even although they do not ask for money—as so many show-folk, who voluntarily seek that *dehonestamentum*, which all times, as well as those of the Cæsars, have denounced. They cannot plead the excusation of Laberius—

*Necessitas, cujus cursus transversi impetum  
Voluerunt multi effugere, pauci potuerunt,  
Quo me detrusit?*

They do not sympathize in his self-reproach, as they retire smirking from their auditors and *doxologies*.

*Nimirum hoc die  
Uno plus vixi mihi quam vivendum fuit.  
Nunc me quo dejicis?*

The lecture is the least potent method of obtaining knowledge—which is best secured in the study, the library, with the book, the lexicon, the tutor. The lecture-room is in harmony only with the excitation, gew-gaws and forced growths

of the times—the modern lecture-room, where young ladies learn botany; where conchology and geology are made easy by condescending professors.

But is not all this frivolous stuff? Are not the toys of natural history a poor education for the solemn duties of subsequent and maternal life? Above all, for that unseen but certain existence, which awaits them beyond the grave? An undue attachment to natural history, even if sedulously studied, not sipped at puerile lectures, diverts the immortal soul from nobler studies and invigorating contemplation.

It is impossible not to see that the musea, public and private, of natural history, are mostly mere toys. That, although a *few*, a precious few, great minds have devoted themselves to natural history, the hordes of disciples are usually fribbles; and this, although they may acquire professorial chairs, place, wealth, titles. In the social intercourse of life, in the yearning after colloquy, ideas, hopes, as to our future and awful destiny, can any body find in the mere natural historian a companion worthy an hour?

Among the *Errata* of this Essay I may include an omission of the subject of *Phthisis*, as produced by *intemperance*. It may serve as a warning to young, adolescent persons to assure them that there is such a decline. I have repeatedly seen lives lost from tubercular disorganization, brought on by excess in drinking, more especially in drinking spirits.

Up to the period, when bibulous habits are commenced, the victims shall have displayed no tubercular character, nor have been suspected of hereditary taint. But they soon display symptoms of phthisis and go through the fatal career with singular rapidity.

In these instances I believe the first morbid change to

have occurred in the liver : and the disorganization of lungs to have been produced through tubercular deposits ; the liver unable to execute its emunctory duties.

I deem it the more necessary to make this protest against *excessive* potation, because I have advocated all through my Essay generous food, generous drink. But I have never *prescribed* spirituous liquor, the product of chymic distillation ; but the veritable juice of the vine.

Of the Bacchæ of Euripides the *meaning* hath been much disputed. That piece I believe to have been composed against certain tea-totallers of *his* day, who were doing as much mischief as mistaken persons can do : as wrong-headed people are now effecting. Let the Reader assume this interpretation and he solves a problem, which has set so many critics by the ears.

‘Ο Σεμέλης γόνος

βότρυος ὑγρὸν πόμ’ εὔρε κείσηνέγκατο

θνητοῖς, ὃ παύει τοὺς ταλαιπώρους βροτοὺς

λύπης, ὅταν πλησθῶσιν ἀμπέλου ῥοῆς.

ALSO,

BY THE SAME AUTHOR,

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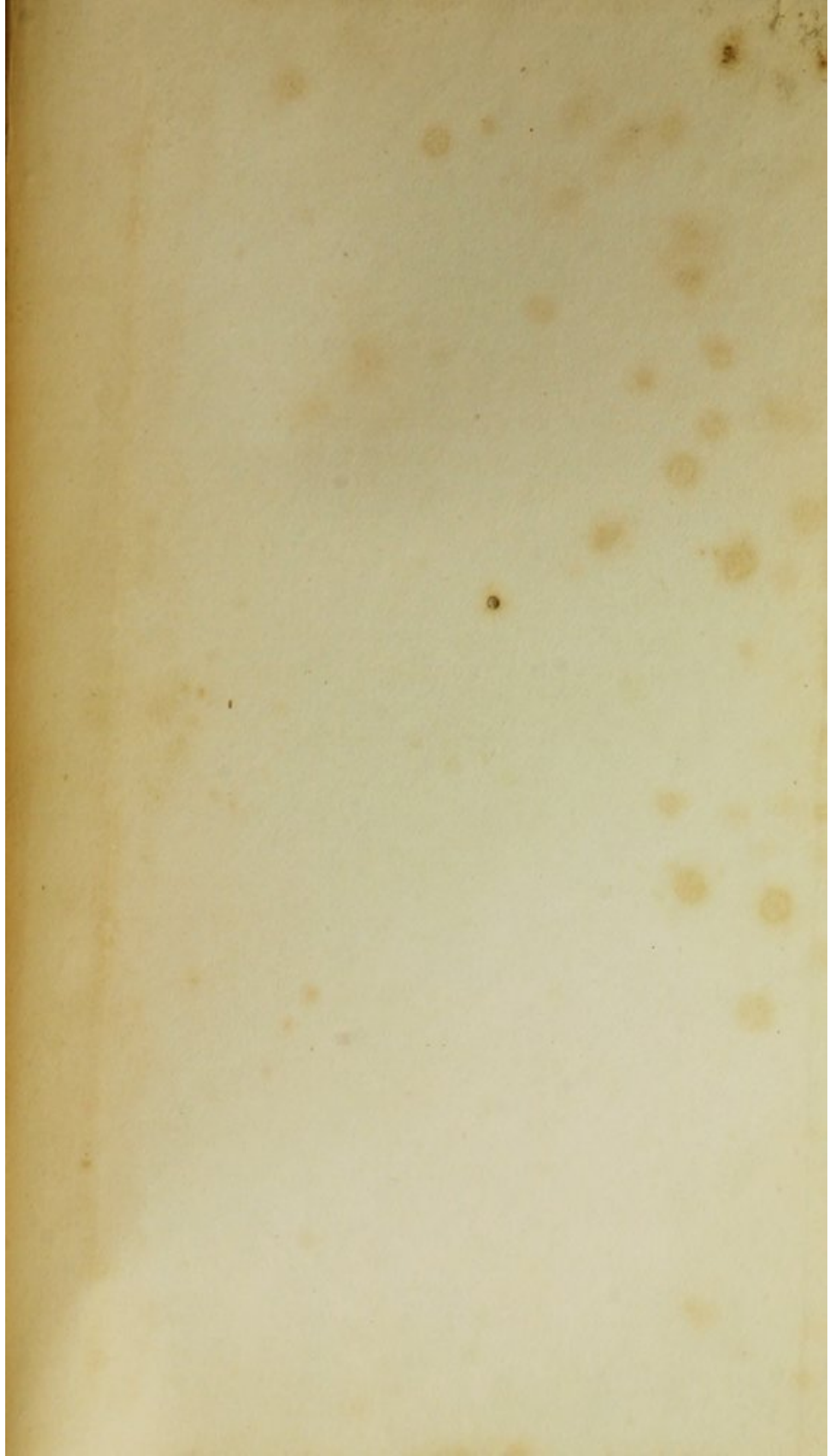
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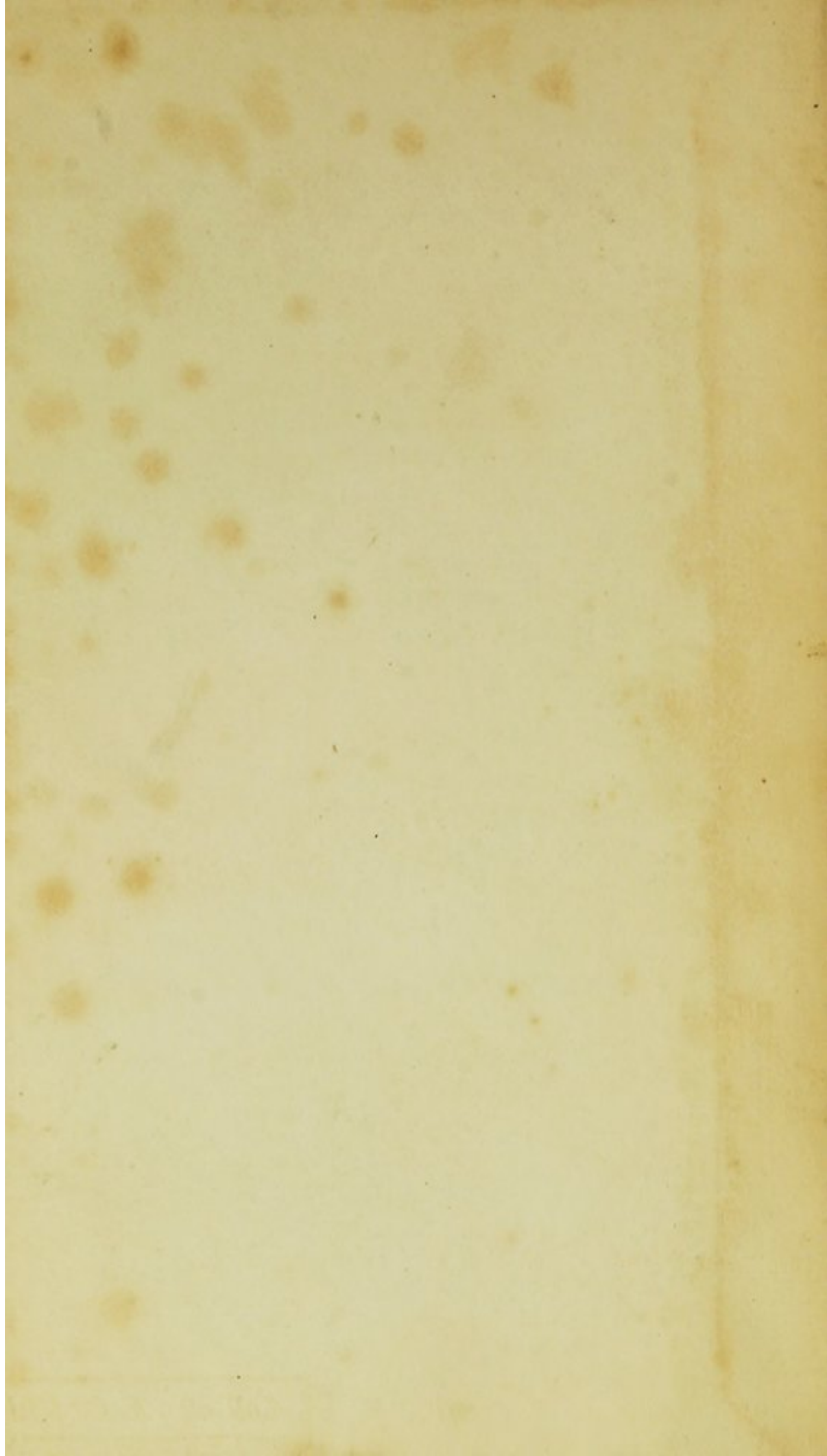
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