

AN
HISTORICAL ESSAY
ON
MEDICATED INHALATION,
AND LETTERS ON

CONSUMPTION, ASTHMA, BRONCHITIS, SORE THROAT, LOSS OF
VOICE, NASAL CATARRH, WEAK LUNGS, ETC.

BY N. B. WOLFE, M. D.

Editor of THE STETHOSCOPE, THE ACORN, etc. etc.



The Lungs Feed on air, and digests it for the Spirit.

SECOND EDITION.

CINCINNATI, O.
H. WATKIN, PRINTER, No. 140 THIRD STREET.
1862.

Opinions of the Press.

From the Free Nation, Cincinnati, December 7th, 1861. Edited by the Rev. C. B. BOYNTON.

CONSUMPTION.—We invite attention to Dr. WOLFE's advertisement in to-day's paper. A careful reading of it will awaken confidence in his system for treating Consumption—for, to us, it seems both rational and scientific. Dr. Wolfe, we are informed, is a gentleman of high scientific attainments, and has devoted himself for many years to that department of medical science which treats of diseases of *The Throat and Lungs*. In this city he has effected many wonderful cures of Consumption, which were thought to be, by other physicians, too far advanced for possible recovery. He has authorized us to say that clergymen and their families will be treated at half the price indicated in the published terms.

From the Central Baptist Journal and Messenger, Cincinnati, December 6th, 1861.

CINCINNATI INSTITUTE.—We neglected, heretofore, to call attention to the card of Dr. N. B. WOLFE, Physician to the Cincinnati Institute, on Fourth Street, which will be found in to-day's paper. It speaks for itself. We are assured that Dr. Wolfe is a scientific man, and has given years of study to diseases of the *Throat and Lungs*. We hear of remarkable cures of Consumption which he has effected in this city. * * *

From the Presbyter, December 5th, 1861. Edited by Rev. J. C. MONTFORT & WAMPLER.

Dr. N. B. WOLFE.—The general want of success in treating *Pulmonary Consumption* should secure to Dr. Wolfe's card in to day's paper a candid reading. His method of treating this disease is to introduce medicine into the lungs by breathing it; a system which strikes us as being more rational, as well as scientific, than the one which prescribes medicine for the lungs to be *swallow-*

ed into the stomach with the food we eat. Dr. Wolfe has effected cures in this city of the most advanced stages of Consumption, and his practice, we are told, is generally successful.

From the Cincinnati Press, Dec. 10th, 1861.

In our local column will be found the professional card of Dr. N. B. Wolfe, Physician to the Cincinnati Institute of this city, for the treatment of all diseases of the lungs, throat, and air passages, by means of inhaling or breathing medical air into the lungs, instead of swallowing crude medicine into the stomach. As we believe Consumption to be essentially a disease of the *lungs*, and not of the *stomach*, this system of Dr. Wolfe's for introducing medicine directly to the seat of the disease, the *lungs*, commends itself to our judgment as being both practical and philosophical; and we have the evidence that it is so, *from the many remarkable cures he has effected in this city of cases of Consumption, when all other tried means proved inefficient in affording any permanent relief.*

Dr. Wolfe has been before the public as an enlightened and successful *Specialist* for many years in this department of medical science, and is a graduated physician of one of the most respectable medical colleges in this country. As a medical writer and progressive thinker, he takes rank properly with TRALL, DIXON, HALL, and other distinguished medical reformers, both in this country and Europe.

From the Cincinnati Enquirer.

Dr. N. B. WOLFE.—This gentleman's services are sought far and near. * * * * In treating Consumption he very rarely gives medicine to be swallowed into the stomach, but has them prepared in such a way that they may be *breathed into the lungs*. His cures are really astonishing.

AN
HISTORICAL ESSAY
ON
MEDICATED INHALATION,
AND LETTERS ON

Consumption, Asthma, Bronchitis, Sore Throat, Loss of Voice,
Nasal Catarrh, Weak Lungs, etc. etc.

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Entered according to act of Congress in the year 1862.

By N. B. WOLFE, M. D.

In the Clerk's Office of the District Court of the United States for the Southern
District of Ohio.

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AN OUTLINE HISTORY
OF
MEDICATED INHALATION,
For Treating Diseases of the Lungs and Throat.

WE believe in the faith which is engendered, as well as in the power which is gained, by knowledge ; and we have long entertained the opinion that the public justly appreciate every effort made to impart to them information in matters of vital importance to their health, their mental and physical perfection. When thus informed, they do not fail to recognize the advantage of trusting themselves for direction and management to those only who are duly qualified to undertake so great a responsibility. No better safe-guard against the approach of the empiric can be instituted than by freely communicating information to the public upon all subjects thus unfairly represented. The charlatan succeeds because he is bold in his assumptions, dogmatic in his assertions ; and the public, being uninformed of the subject of his pretensions, are unable to discover the fallacy and extent of his imposture. The eminence which the employment of Medicated Inhalation has recently attained in the estimation of the public, has afforded many facilities for this class of impostors, who practice their deceptions upon the sick and uninformed. If I can guard the public against the imposition of such, I will not only have done them a service, but also will have rescued the fair fame of Medicated Inhalation from unmerited reproach.

Inhaling medicated air, for treating disease of the respiratory organs, is not claimed to be a discovery of modern date, as the reader will soon learn ; but to modern times belongs the honor of systematizing the practice, and arranging its pharmacy. The idea of reducing medicines to vapors has a record in medical science extending back as far as the age in which Hippocrates lived. It is alleged that this great teacher recommended the burning of various herbs and the heating of various minerals, the

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fumes of which he directed to be *inhaled* by those laboring under disease of the lungs. He states nothing, however, of so practical a nature, or definite in itself, as would be of any advantage in constructing a system upon his teaching. The nearest approach to specific instructions perhaps is to be found in his recommendation to "use hellebore to drink, either alone or mixed with a decoction of lentels, and inject the lungs with *fumigations*." He also favors "fumigations of hyssop of cilicia, sulphur and asphalt, to be *inhaled* through the nose to bring away phlegm in catarrh."

The many theories which have obtained from time to time, and even the Rational School which now sheds so much lustre on the science of medicine, there can be no question, owe a large portion of their excellence to the doctrines and example of the old Grecian instructor. They were in his own day what the inductive philosophy of Bacon, as applied to medicine, now is; and his pupils soon launched forth, by the impetus received from his positive mind, into a sea of theoretical speculation, which resulted in the establishment of various schools of medicine, from which are transmitted the imperishable names of Aristotle and Plato.

In the writings of these illuminated minds is found much matter for thought and investigation appertaining to our subject. Among the Problems of Aristotle, the question of the communicability of consumption is introduced in the following manner: "Is it because," he says, "consumption makes the breath corrupt and offensive, that those who approach the diseased persons, and breathe the air, acquire the same malady, as if their system had become vitiated by their own respiration?" In this problem attention is directed to the communicability of consumption by *inhaling* vitiated air; and our observations but too strongly confirm this hypothesis, for we have seen those, who with tenderness wait upon the expiring brother or sister, inhaling their impure exhalations, that when the messenger came to guide the departing one through the shadowy valley, he bade the bereaved prepare for his next coming, and painted a blush upon their face that he might know them when he came.

Among the followers of these distinguished leaders, and nearly four centuries after the age of Hippocrates, one of the most illustrious scholars in the school of *empirics* was DIASCORIDES, celebrated as a botanist and pharmaceutist. He lived in the first century of the Christian era, and acquired great distinction for his learning

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and skill in curing disease. In his *Materia Medica*, "for coughs of long standing, fumigations of colts-foot leaves, of native sulphur, of sweet calamus with turpentine resin, of dry squills, of water-cresses, of oil of cedar, of centaury root, and of fennel seeds, to be carried into the mouth through a hollow reed inserted in a hole perforated in the bottom of a small vessel, smeared over with arsenic and triturated sandarach, moistened with water," are highly recommended.

From the age of DIASCORIDES, down to the present time, every writer of distinction who has written on the treatment of consumption, alludes more or less to medicated inhalation. Thus CÆLIUS AURELIANUS, a pupil of the famous ASCLEPIADES, writes very correctly of consumption under the name of *Phthisis* or *Phthoe*; and makes the following observation respecting its treatment: "Some, in the case of patients suffering from difficulty in the upper parts of the diaphragm, have exhibited, besides other remedies, *fumigation*s arising from the burning of hyssop, thyme, or origanum, or sulphur; some sandarach, aloes, or styrax, having been placed on the fire, have ordered the patient to open the mouth, and by an effort at swallowing, to devour the vapor;" and if the disease begins to increase, so that *Aphonia*, or loss of voice, comes on, then the patient must feed on slops, using at the same time gargles of warm sweet oil, of water sweetened with honey, or a decoction of grapes, of pine nuts, of fat figs, or of liquorice leaves, as well as from wheat or from barley water, in order that he should *breathe the vapors rising from the evaporation or exhalation*.

ARITIOUS, a disciple of THOMISON, the founder of the Pneumatic school of medicine, though he describes disease to errors in the "spirit," writes floridly on the subject of consumption, and kindred diseases; and though he makes no specific mention of the employment of vapors in their treatment, he strongly recommends sea voyages for the cure of consumption, averring "that the *saline particles inhaled in the sea air, appear to dry up the ulcers in the lungs*."

AVICENNA, a distinguished Encyclopediast, a member of the Eclectic School and follower of *Galen*, recommends for the cure of Asthma, a preparation of myrrh, spikenard, cassia, and saffron, and patwort, and storax, to be rubbed up and prepared with cow-fat, and bolusses made of them of the size of a nut, one drachm

of them to be used in *fumigation*, three times a day for ten days. He also gives various prescriptions for *cura ulcerum pectoris et cura Phthisis*, and remarks that "fumigations are administered in this disease, and certain dissiccative and cleansing substances with which a *fumigation* is made, by means of a tube or siphon."

Both CELSUS and PLINY occupy a prominent place in the literature of medicine, though it is questionable whether either of these savans devoted much more time to the science of medicine than was necessary to give them a knowledge of disease, merely as an adjunct to their general education. *Celsus* speaks, however, of Phthisis, (consumption) as beginning in the head, and descending to the lungs; and describes the stage of ulceration as being attended with fever, cough and expectoration of purulent and bloody matter, and says: when ulceration takes place in the anterior part of the fauces, physicians apply cataplasms and moist fermentations externally, and *hot vapors into the mouth*. *Pliny*, while enumerating a number of specifics for the cure of consumption, speaks particularly of the pectoral qualities of gum amoniac, and praises all the woods which give an abundance of *resinous odor* while burning; the vapors arising from which, he says, "are more beneficial to the consumptive, than a voyage to Egypt, or a course of milk in the mountains." He mentions, among other materials used in the composition of the fumigating bolusses, "dried cow-dung, bullocks' horns burnt and powdered, the fumes to be drawn through a reed."

Among all the writers in medical science, whose names have been transmitted from ancient to modern times, there has been none around which so many intellectual splendors cluster, as that of the immortal GALEN; who, by the force of his genius, acquired an influence over the minds of men, which has outlived the mutations of time, and all the revolutions of opinion which have dawned and died in the empire of mind for centuries. Let us pause before his impressive shade, and digress but one moment from our subject. The range of his philosophic and professional studies was most extensive; he traveled through various countries in search of medical lore, but it was principally at Alexandria, in his day still the most famous school of medicine, that he acquired his reputation as a scholar. While residing in Alexandria, he was invited to Rome by the Emperor Aurelius, and sub-

sequently took up his residence in that city. The mental characteristics of *Galen* were, a disregard for the opinions of others, when investigating a principle, and an entire confidence in his own resources. Conditions always yielded to the force of his character; and whatever circumstances surrounded, he rose superior to them. He acquired and exercised a sway over public opinion in all matters relating to medicine, which had never been attained by any other individual before him, and has never since been equalled. His writings are the most voluminous of any author, extending to two hundred distinct treatises on different subjects. His authority was undisputed, and it would seem to have been a sufficient answer to any argument of theory or statement of fact, that it was contrary to the opinion or assertion of *GALEN*!

In an early French translation of his works, is found a remarkable passage, reasoning on the *inutility* of administering medicines through the stomach for the cure of pulmonary disease, and we transfer it from Mr. Mellville's article on "Medicated Inhalation," to which we stand indebted for much useful and instructive matter. Galen says, "Consider how many parts or members the medicament has to pass through before it reaches the lungs. First, it enters the mouth, passes down the œsophagus and into the stomach, then to the intestines, and from thence penetrates as far as the veins which are contained in the mesentery, which veins carry it to the concave portion of the liver, and from thence to the convex; thence it is carried to the vena cava, and from it to the heart. We cannot deny that medicines thus administered will mingle in each of the parts above mentioned with some humor, and undergo some transformation or alteration, dependent on the nature of the viscera through which they pass; thus what remains of the virtue of the medicament is weaker, so that it cannot effect any relief to the wounded part; because too the remedies suitable to them cannot touch the place where the disease exists." We find him, nevertheless, recommending the smoking of arsenic, opipiment, with pepper and other vegetable substances, as well as burnt sponge, in treating ulcers of the trachea.

With the exception of *RHAZES*, a follower and commentator of *Galen*, who recommended as a *fumigation*, a mixture of arsenic, aristolochia, myrrh, styrax and galbanum, to be inhaled for consumption, we have no traces of any improvement being made in

this method of treatment by the ancients, nor until the beginning of the present century; though all along the annals of medical literature, Inhalation crops out in the writings of Nicoli Pison, Boerhaave, Schenck, Poterius Spigelius, Harvey, Sydenham and others. Dr. Beddoes began to treat disease of the lungs, by the employment of various gasses to be *inhaled from a bladder*, in the beginning of the present century, since which time, Inhalation, as a system, has been "struggling into birth."

The great error which has retarded its parturition, has been the vain search by physicians, after a specific remedy, and their contentions about the relative merits of their discoveries. This selfish and unphilosophical spirit has always operated to the prejudice of science, and has resulted consecutively in the abrogation of the use of tar water, chlorine gas, iodine vapors, and the host of other remedies claimed to be specifics, and put forth at various times as bantams for professional fame, but always resulting in disappointment. Recently another professional offspring has been put forth by Dr. Churchill, who, in the exuberance of parental pride, exclaims, "Eureka!"—which, like its elder brothers, claims to be a specific, only *a little more so*, as it is claimed to cure the worst cases of consumption with more ease, than the simpler manifestations of the disease; but to put him right on the record, we will quote Dr. Churchill's own words as they appear in Galigani's Messenger: "Contrary to the opinion generally received, the *third stage* of Consumption is, all other circumstances being equal, more amenable to treatment than the *second*." All this is to be done by dosing through the stomach with the hypophosphates of soda and lime. Rejoice, O invalid! it is not too late; here is a medicine prepared by Dr. Churchill, expressly for late cases; the more advanced the better for the display of his remedies! Benefactor! Upon the same pedestal where stands the doctor who could cure nothing but "Fits," let him rest his claim for posthumous honors, who treats the *third stage* of consumption with more complacency than he does the first.

But trifling aside. Dr. Churchill's treatment is predicated upon the supposition which has led the profession astray for centuries, that consumption, *tubercles* and *mesenterica*, are constitutional in their character, and not local; that they are superinduced by the undue waste or insufficient supply of phosphorus in the human system. To meet the ends obviously indicated, he has dis-

covered that hypophosphites of lime and soda, really contain phosphorus, and can be made to assimilate with the blood, and supply this element to the system." However theorists may speculate upon his premises, *facts* demonstrate the opposite of his assumption, that consumption is a *constitutional disease*. We beg leave to state, even to so illustrious a committee as Drs. Serres, Andral and Claude Bernard, the gentlemen to whom Dr. Churchill's paper has been referred, that a tubercle on the lung, or an ulcer in the lung, is as much a local affection, as a boil upon the arm, or an ulcer on the leg; and that any system of treatment which ignores this fact, must of necessity end in failure and disappointment. A boil or an ulcer on the lung, and a boil or an ulcer on the leg, making their conditions equal, will be cured by the same medicaments. Further on we will give our views of the constitutional treatment of consumptives, and for the present will again turn to Medicated Inhalation, from which subject I have thoughtlessly digressed to pay my respects to Mr. Churchill.

Dr. Beddoes having suggested a method for administering gas, the profession seemed to be stimulated by further experimentation, by a paper written by M. Ballard, the proprietor of extensive chlorine works in Paris, calling their attention to the fact, that among his employees, numbering several hundred, consumption and its kindred diseases were entirely unknown; and that persons apparently laboring under pulmonary disease, on entering the establishment, rapidly convalesced. Not understanding how this information could be made to subserve the interests of medical science, the faculty, whose attention had been momentarily arrested, turned from the plane of facts, and relapsed again into theoretical speculations respecting the coloring matter that gives such brilliant hues to the butterfly, at the same time giving M. Ballard permission to make the best use he could of the information he had communicated. He accordingly set to work to invent an inhaler, and after many efforts succeeded in constructing "a pot," into which he put chloric acid, and after applying heat to it, directed pulmonary patients to inhale the fumes as they arose therefrom. This Hippocratic method produced no satisfactory results, invalids in the main receiving no benefit from the treatment. M. Ballard was jeeringly told to stick to his proper calling, and leave matters of that kind to the charge of scientific savans. Justice, however, must declare that the suggestions thrown out by this gentlemen, attracted atten-

tion to the subject, which proved ultimately to be of great service in establishing inhalation, for truth once uttered is never lost. It was the starting point of a train of thought, which comes down to us richly freighted with the best experiences of the past. The fact that his workmen had an immunity from consumption, he ascribed to their constantly inhaling chlorine gas, with which the air of his factory was constantly charged; and hence he advocated the introduction of some method, other than the "bladder," for inhaling chlorine gas as a curative agent in disease of the lungs. This suggestion started the train moving in the right direction, and upon the car of reform but few took passage as its destination was uncertain. Among these few, however, we find the great Dr. MUDGE, of London, whose benevolent and comprehensive mind, dealt gently with the dawning idea of inhalation, and warmed it into being. He had watched with anxiety the star of M. Ballard pale with uneffectual fire before the stronger glare of science, and as it expired seemingly in eternal night, his own fame rose upon the gloom, a planet of the first magnitude in the firmament of Reform.

Attributing M. Ballard's failure in his experiments with Inhalation to a want of proper knowledge of the hygienic treatment necessary to be employed to equalize the conditions of patients, Dr. Mudge soon convinced the faculty, that what seemed to be a failure palpably, was no failure in fact, but was unsuccessful only because of the imperfect views entertained by M. Ballard respecting the laws and conditions of health. By the strength and force of his logic, the beauty and elegance of his diction, and the scope and comprehension of his intellect, he grasped the salient points of Inhalation, and harmonized them into system. He concentrated the energies of his mind in devising an instrument for inhaling purposes, and succeeded in producing an Inhaler quite superior to the "bladder" used by Dr. Beddoes, or the "pot" of M. Ballard. This Inhaler is still in use, and is thought by many to be *au fait* for all practical purposes; it is called "Mudge's Inhaler," and being constructed of metal, is heavy as well as liable to the action of the various acids which enter into medicated vapors, on which account it has been superseded by the substitution of glass, and the more comely Inhaler such as are now used by Hunter, Dillenbach, and myself. (*See engraving on title page.*)

The successful results from the scientific employment of the Inhaler in treating disease of the lungs and throat, inspired the mind of Dr. Mudge with the most glowing prophecies of its future achievements. He fondly predicted that Inhalation, as a system, would soon become a favorite child of science, which in its growth and development would open up new fields for research, and tend to happier results for humanity. But the day that was to usher in the success of Inhalation as a system, had only dawned upon the vision of the prophet-physician, when his great humanitarian soul, exulting in the splendors of the morn, leapt into the world of causation with a shout of triumph that still echoes through the great brain of humanity its revelations of hope to the invalid.

In the death of DR. MUDGE, Inhalation lost a valued friend and an able defender; but men are but the creatures of a day, while truth is eternal. Untoward circumstances might retard the development, but could not destroy the vital element within this principle.

About the year 1831, PROF. FAUQUIER, a teacher of clinical medicine in the University of Paris, commenced a series of experiments in the Charity Hospital of the French Metropolis, with Medicated Inhalation; his attention having been more directly drawn to the subject by reading the writings of the lamented Mudge. These experiments were conducted on a very extensive scale, and were witnessed by my late colleague, Prof. S. C. Sewell, who was at that time visiting the wards in the Hospital. The limited number of medicinal agents, and the imperfect knowledge of the properties of such medicines when reduced to a condition of vapor, together with other unfavorable causes, which I will hereafter notice, operated against a favorable result. In fact, the experiments, so far as success was aimed at for demonstrable purposes, resulted in blank disappointment. The Medical Faculty now stepped forth and with characteristic generosity ridiculed most bitterly the idea of treating so formidable a malady as consumption by Medicated Inhalation; and among other things, they averred, that medicines lost their active principles while reducing them to a condition of vapor. To both these propositions I will in due time pay my most respectful regards; but for the present must be indulged with a "back lick" at the profession.

When we reflect how little was known, even at so late a day, respecting the true pathology of consumption, and what erroneous

opinions and pernicious practices obtained among the Faculty in relation thereto, we cease our astonishment at the failure of these experiments, and almost become incredulous that ever any hope of success was entertained. Consumption was viewed in their diagnostics as an inflammatory disease, and as such, patients were confined to ill ventilated wards and extreme poverty of diet, running down the patient to an extreme condition oft incompatible with life. This view of consumption gave it a fatal character, so universal indeed, that many even now shake their heads with incredulity, when you speak of the curability of the disease, notwithstanding progressive science has forced such to change their position, and acknowledge, that consumption, like every other form of scrofula, requires generous diet, fresh air, and plenty of out-door exercise. It was ascertained that when Prof. Fauquier was engaged with his experiments at the Charity Hospital, the air was so very impure, that the mortality, after severe surgical operations, *was three times as great as in the London Hospital ; and that the patients were being literally poisoned with mephitic exhalations at the time these experiments were being conducted.* The sanitary condition of this institution presents a striking contrast with the chlorine works of M. Ballard, already spoken of. But it is not our object to interpose a special pleader between Inhalation and its failure, for thus far, as a science reduced to a system, it must so be considered. Perhaps its friends were over sanguine, and felt too keenly the disappointment at its results. But if it has not flashed meteor-like athwart the sky of science to dazzle a moment with its splendor, and then go out in gloom forever, still it has, like the struggling genius of humanity, wended its way step by step, steadily up the steep of time, with a fleck of sunshine and field of storm upon its pathway. Hitherto Inhalation seems to have been more an experimental idea than a great useful truth, to be made subserve the interests of man. Henceforth it takes a higher rank and gives better hope for the fulfilment of its early promise.

Development is that process by which ideas are transmuted into tangible being. Modern arts and popular sciences are but the fulfilment of ideals born from the womb of past experiences, in which view, Inhalation may be considered heretofore as struggling into birth-hood.

An occasional article in the London Lancet, and other Medical Journals, both in Europe and America, on the subject of inhal-

ing remedies for treating consumption, gave assurance to the friends of progressive science, that the idea still lived and grew, and would soon developed itself in a more practical phase than it had hitherto done. Hopefully they waited for the "good time coming," until the night of sorrowing had passed for the lamented Mudge, when his mantle fell gracefully upon the shoulders of that able pioneer and gallant Medical Reformer, Dr. ELLIOTSON, who, in 1845, was elevated to the headship of the Brompton Hospital of London, for the cure of consumption, establishing a memorable epoch in the history of progressive medicine.

The treatment of consumption up to this period, as already intimated, had been involved in the greatest darkness and uncertainty. Among all classes of society, and with but few exceptions among the profession, it had been regarded as *incurable*. No power of medicine, it was thought, could drive out or destroy this enemy of human life, when once it had gained possession of the lungs. Thenceforward it was left to revel unrestrained among the delicate air cells; to ravage as it would the fine membranous surface of this exquisite organ of breath; to choke with tubercles, or corrode with ulcers, this inlet and gatherer of life. In vain the young, the gifted and the beautiful, turned their appealing eyes to the physician, as to "a priest of the holy flame of life," to catch a gleam of hope. Daily he saw them sinking, unhindered by his remedies, and unaided by his art. Surrounded by the pale skeleton forms of this dreadful disease, and amidst the incessant sound of hacking, gurgling, strangling cough, as a moral hero, Dr. Elliotson fearlessly entered upon his responsible duties. Passing from ward to ward, breathing an atmosphere laden with the poisoned breath issuing from decayed lungs, a thorough and vigorous reform in every department of the Institution requiring it, was at once instituted. One by one the old landmarks of practice were destroyed, and new ones substituted. Air, Exercise and Food were the trinity before which his genius bowed and offered up its homage. Under his patronage, Medicated Inhalation became the orthodox treatment in pulmonary disease, and has ever since maintained its position as being the most rational, scientific and successful practice ever introduced into the Brompton Hospital. For the *first* time after introducing this practice, a statistical report of the Hospital shows a very large proportion of the cases of consumption in the *first and second stage, cured*, and a significant per centage of even

the *third* stage fairly arrested. These reports contain the first reliable information ever given to the public, of the successful results of any systemized mode of practice for treating consumption, and to them I would respectfully refer my medical readers for much valuable information respecting the working results, and the superior merits of Medicated Inhalation.

To Dr. Elliotson belongs the honor of having first demonstrated the curability of consumption, by means of Medicated Inhalation, as will be found in the reports above alluded to. Prior to this time, much was said about the *curability of consumption*, and notwithstanding the greatest physician that had appeared in Europe since the time of the Arabians, Sydenham affirms that he had cured Plithisis; still it was not an admitted dogma in the Profession, and the declaration was considered apocryphal. Consumption does no longer appal the physician with an incurable character. Brave men have struggled with their might to conquer this scourge of humanity; and, unawed by the dicta of the schools, and the jeers of their less laborious or less intelligent brethren, have broken through the trammels of routine, and dared to follow the new path of science, which leads them to success. Sir Charles Scudimere, a physician of great eminence and deserved reputation, published a work about ten years ago, in which he earnestly calls upon the medical profession to adopt Inhalation as a method for administering remedies in diseases of the chest. Many liberal minds responded to the call, and enrolled themselves as friends to Inhalation. Among these were Dr. Marshall Hall, Dr. Cotten, (successor to Dr. Elliotson), Dr. Maddocks, Dr. Piorry, and Dr. Corriveau, in Europe; while in America, Dr. Rush gave it an unequivocal endorsement; and Dr. Coxe, in his work on pulmonary consumption, considers Medicated Inhalation as a treatment well established. Three years after the introduction of Medicated Inhalation in the Brompton Hospital by Dr. Elliotson, in 1848, I commenced the practice in Upper Canada, attended with very gratifying results. My attention had been directed to the subject by reading the reports of Dr. Elliotson; since which time I have given it much of my attention. Four years later, Dr. Sewall of Montreal, adopted the practice, and has kept a record of its results under his management. Several of his cases were pronounced *incurable*, having advanced to the *third* stage of the disease, by that accomplished stethoscopist, the late Dr. Sweet of N. Y.; but

they survive the Doctor Judge, and bear testimony to the efficiency of medicated air as a therapeutic agent. Early in the Spring of 1853, the Hunter brothers, *Robert* and *James*, gentlemen of fine professional abilities, commenced as specialists for diseases of the lungs and throat, in the city of New York, and gave to Medicated Inhalation a prominence with the reading public, before unattained in its history. I should fail in my duty, were I to omit the mention of another name in this connection, of a gentleman whose mind is the receptacle of rich and varied stores of information, and in whom Inhalation found a faithful friend and defender: I allude to *Dr. Henry Melville*, of New York.

I have now sketched briefly and very imperfectly, a general outline of the history of inhaling medicated air, as a therapeutic agent. This has been done to disabuse the minds of the uninformed respecting its parentage and claims to public favor, which is frequently alledged to be Ignorance and Quackery. I have shown by a long chronology of venerable ancestors, extending back to the illuminated brain of Hippocrates, that Medicated Inhalation is a beautiful and legitimate child, born in the holy wedlock of progressive science and mental illumination, and whose mission on earth is to inspire hope in humanity, and confidence in God.

NOTE TO THE SECOND EDITION.

The collection of Letters presented in the following pages originally appeared in the public press of New York, Philadelphia, Boston, St. Louis, and Cincinnati, and were written at irregular intervals of time, when the author was engaged in a large and laborious practice. Under the circumstances the author could not give them that critical attention and elaborate finish which he might otherwise have done.

As a Second Edition of these Letters has been called for, they are again submitted to the public, with all their imperfections, and with the hope that they will receive that courteous attention and favorable consideration that has hitherto been extended to them.

We respectfully call attention to Dr. Wolfe's card on the fourth page of the cover, by which it will be seen that he has opened an Institute in this city, for the treatment of all diseases of the throat, lungs and air-passages by his improved method of inhaling vitalizing balms, etc.

GEO. C. KING, PUBLISHER.

Cincinnati, O. 1862.

CONSUMPTION

AND

MEDICATED INHALATION.

[NOTE TO THE READER.—Frequent application for back numbers of my letters on *consumption*, *asthma*, *bronchitis*, *sore throat*, *loss of voice*, &c. and my method of treating them by Medicated Inhalation, have been made, and being unable to comply with such requests, I thought it best to publish them in a collected form, that the whole subject discussed could be presented at once to the reader. The hypercritical will perceive that they have been written without much regard to their taste, and fearless of their censure; but to the demands of the invalid, I have given my most earnest attention.—N. B. W.]

LETTER I.

ON THE ANATOMY AND PHYSIOLOGY OF THE LUNGS.

The true physician, “appointed a priest of the holy flame of life,” has a higher calling and a more responsible duty to perform than merely to repose in the shade of his *alma mater*, cite illustrious names, quote them as authority, write long prescriptions for patients in barbarous Latin, and hand both over to the tender mercies of the apothecary’s clerk. This may answer the purposes of conservatism, and be *very* professional in its character, but the claims of humanity are neglected, and the public mind, in regard to the laws of health, is left in Cimmerian darkness. This should not be so; especially as the people are capable of receiving, nay, are asking for, “more light.” Let the physician, then, take *one step forward at least*, and become a teacher of the laws of health and the principles of cure, and soon the public will be able to discriminate the scientific data of the educated physician from the bold pretensions of the uneducated charlatan. Do this, and the public will not only be protected from the many impositions now practiced upon the uninformed, but the mental status of the profession will be raised, and much of the reproach now cast upon the medical faculty will be removed.

Before entering upon a description of the diseases to which the

lungs are liable, I will briefly call the attention of the reader to their anatomy and physiology.

The lungs consist of two porous bodies, conical in shape, of a dark purple hue, composed of an infinite number of air cells, and situated within the walls of the chest, which they completely fill. Physiologists have computed each lung to contain nearly two millions of air cells, so that if their walls were exposed upon a common plane, they would cover a space of twenty thousand square feet. This extensive surface is fanned gently by every inspiration of air we breathe, and as the constitution of the air may vary, so will its influence be felt upon the system. Charge it with a noxious gas, and we become oppressed; inspire it with a salutary balm, and our spirits are elated; soothe it with a narcotic odor, and we yield at once to its drowsy influence; inhale the fragrance of flowers, their love, and pleasure runs riot through our veins.

The cells into which the air passes at each inspiration, and from which it is expelled at each expiration we make, may be compared in form to a cluster of grapes—the bronchia or air tubes representing the stems on which the grapes hang. The bronchia form at the lower part of the windpipe is divided into two grand divisions, one entering the right, the other the left lung. These again sub-divide, the right into *three*, and the left into *two* tubes, corresponding with the number of lobes in each lung, which they severally supply. These again divide and ramify into an almost infinite number of smaller branches to every part of the lungs, terminating each in a small grape-like cluster of cells. The interstices of these cells form cavities for the transmission of blood from and to the heart; and the coats of these vessels are so extremely delicate that the air we breathe passes through them, and mingles with the blood of the whole body every four minutes.

The heart throbs, and every vessel is filled with blood; we breathe, and every air cell is filled with air; and thus by a beautiful law of reciprocation—"give and take," the fires of animal life are sustained. Since, in the same manner, we breathe common air, we can inhale or breathe a medicated vapor; what can be more natural, more simple and efficacious, than the treatment of consumption by this method, by which remedies are conveyed directly into the lungs, and their properties are brought to bear at once on the seat of the disease, without resorting to the uncertain, and, alas! too frequently, mischievous action of medicine taken

into the stomach, from which it is blindly sent on a mission of mischief through the intricate channels of humanity's noble temple.

LETTER II.

CATARRH, OR COLD IN THE HEAD.

There is, perhaps, no part of the practice of medicine, about which the mass of even educated physician know so little, or entertain such vague and erroneous impressions as they do in regard to the action and efficacy of medicated inhalation. This, however, is not strange, when we reflect how little has been written upon the subject, and that, too, of so vague, indefinite and unsatisfactory a character.

The basis upon which this mode of practice mainly rests, may be explained in a few words. The air we breathe is more immediately concerned in the production of disease than any other influence to which we are exposed. It is subject to change in its temperature, its density, in its electrical condition, and in the amount of impurities it contains, all of which directly affect our feelings and our health. Every change is thus impressed locally on the internal surface of the lungs, through which, by absorption, it acts upon the blood, and through the blood on every organ, muscle, nerve and tissue of the body. In this way we contract continued fever, the plague, *yellow fever*, cholera, ague, influenza and many other maladies, ascribed to some radical change of the air itself, or to the poisonous gasses, vapors or particles floating therein. Through the same medium, the virus of small-pox, scarlet fever, and other common eruptive diseases is spread from house to house and from town to town, until nations become afflicted. Spasmodic asthma has unquestionably an atmospheric origin, and whooping cough we know to be transmitted from one child to another by the breath.

Now, in these diseases the exciting cause is inhaled into the lungs, and from thence absorbed into the blood, which is thus vitiated and carried from organ to organ, depressing their vitality, until a chain of morbid disturbance is established, involving the entire system. Here we have the true source of the so-called "idiopathic diseases." There are other affections than those enumerated, which spring directly from the action of the air upon the

mucus membrane lining the air passages, such as catarrh, quinsy, laryngitis, bronchitis and pneumonia, of which I will speak *seriatim* in my future letters. For the present, I will consider as briefly as possible the subject of "CATARRH," or "COLD IN THE HEAD," as a very common disease in all countries where the climate is subject to many and sudden vicissitudes of temperature. From its great prevalency in this latitude, it is esteemed of little importance, and hence liable to neglect. A more fatal and melancholy mistake seldom occurs, as it frequently masks the commencement of that other malady, "*consumption*," whose very name awakens echoes of grief in a million hearts, and whose victims are more numerous than those of all the men-slaying conquerors of earth. The pathology of Catarrh is an inflammatory action of the mucus membrane lining the nose, which membrane extending downward, also lines the throat, larynx, windpipe and bronchial tubes. This is to be noted particularly, because it is a law of inflammation, that its tendency is to extend along the membrane affected, and hence it is easily explained how a chronic catarrh may end in consumption.

When *acute catarrh* begins to invade the system, a sense of heat and stuffing in the nose is experienced, with much difficulty to draw air through the nostrils. At such times, exposure to sunlight, or breathing cold air will excite violent sneezing. If the irritation extends as far as the frontal sinus, it will be known by a violent pain in the forehead. It may also extend through the lachrymal canal, which convey the tears from the eyes to the nose; if so, the tears will flow down the face, and being acrid, will excoriate the skin. A thin ichor begins to distil from the nose, which gradually becomes a bland yellow mucus, and in a few days the complaint has subsided, or lost its acute character; and if left to cure itself, it frequently terminates in chronic catarrh. Sometimes a simple cold in the head will proceed along the eustachian tubes and cause deafness. This is especially the case with those of scrofulous constitutions.

Chronic catarrh is met with in several forms, and may consist in "hawking," or cleaning the throat frequently through the day, of a yellow or straw-colored mucus, which accumulates behind the soft palate, and on examining the throat, may be seen hanging down in festoons from the posterior nares. Again, small ulcers form in the nose, and also scabs, which the patient cannot refrain from picking. In other cases, false membranes exude, which the

patient removes from time to time ; or the secretion may be purulent, and dripping into the throat, diseases that part, creating a disposition to "snuff" or "hawk" to remove the offending matter. Sometimes ulcers penetrate the bone, causing its death, when a thin, yellow foetid discharge ensues, and the sense of smell is impaired or quite destroyed. Chronic catarrh, however, derives its importance from its tendency to descend to the throat, thence along the air passages, and reaching the air cells, lay the foundation of consumption, of which it is the usual precursor.

Common sense will teach us, that remedies administered through the stomach, cannot reach the seat of this disease, and hence, until the introduction of local applications, it baffled the skill and science of the profession to cure. Its formidability, however, has been overcome by the combined use of medicated air, and the showering syringes, and without these appliances as local remedies, constitutional means alone must fail.

LETTER III.

AFFECTIONS OF THE THROAT.

In my former letters, I introduced to the reader the subject of catarrh and its various modifications. I now propose to call his attention to some of the diseases to which the throat is liable, and the treatment most proper to be observed.

The throat, or fauces, is that cavity which is seen on looking into the month when the tongue is depressed, below and behind the curtain of the palate, and is lined with a mucous membrane, continuous with the nose, oesophagus, palate, tonsils and windpipe. In health, this membrane is of a pale rose color, and is lubricated with a bland transparent secretion, which oozes from the delicate mouths of the follicles cropped over all its surface. This membrane is subject to a variety of diseases, superinduced by sudden changes of temperature—much loud speaking—the use of tobacco and stimulating drinks. Its integrity is frequently found very much impaired in clergymen, lawyers, singers, lecturers, actors, auctioneers and tobacco chewers, giving rise to a train of most serious maladies, pre-eminent among which we have laryngitis, or clergyman's sore throat, which is distinguished by a partial or total loss of voice. We have also a tickling in the throat, with a

disposition to "hawk" frequently through the day, and an inclination to swallow the secretion. On looking into the throat, little red elevations from the size of a pin's head to a pea, may be seen, but of irregular shape; or the blood vessels may be engorged, and look like a scarlet net work spread over the back of the throat. In scrofulous persons we find circumscribed forms or patches, assuming a deep scarlet purple or violet hue, frequently accompanied with considerable tumefaction, the result of a serous infiltration beneath the subjacent cellular tissue, and not dependent upon actual hypertrophy itself.

These various affections of the throat, if early attended to, can in most instances, by a judicious treatment, be arrested, and the mucous membrane be restored to its original integrity; but if from neglect or improper management the disease remains unchecked, then it becomes more and more complicated, transmitting its deadly influences step by step, from the throat to the larynx, from the larynx to the trachea, thence to the bronchial tubes, and last of all, the lungs themselves become involved, and we are left alone to the silent meditations of its fearful consequences.

The usual recourse to bleeding, purging, counter-irritation, etc. in treating this disease, exert a pernicious effect upon the constitution, by impairing its strength, and thereby giving inveteracy to the character of the malady. The better treatment is to soothe the parts with expectorant and anodyne inhalations, and at the same time excite the diseased surface to healthy action. This can be done more effectually by topical applications, and inhaling medicated vapors, than any other means practiced by the profession.

LETTER IV.

LUNG, PALATE, AND ENLARGED TONSILS.—QUINSY.

I will now proceed to consider the abnormal conditions of the Tonsils and Uvula, after which we will be enabled to take another and more important step in the progress of our investigations of diseases of the throat and lungs.

When diseased action has existed in the throat for any length of time, such as follicular development, or degeneration of the mucous membrane, incident to frequent colds, the immoderate use of tobacco, loud speaking or strong stimulating potations, we are

pretty sure to find *relaxation or elongation of the uvula* consequent thereto. This condition, however, is not dependent upon these causes alone, as we frequently find it existing in persons innocent of such improprieties, but of anaemic or scorbutic constitutions. If neglected, the uvula becomes elongated to such an extent as to hang down upon the root of the tongue, where, by a mechanical irritation, it produces a constant disposition or *desire to cough or clear the throat*. *The person so afflicted will frequently close his lips and make an effort to swallow something that sticks in his throat every few minutes.*

It is quite useless to make applications to an inflamed throat, so long as the uvula, or palate, is permitted to hang dangling about the pharynx; and it is surprising how much not only the comfort, but the health is interfered with by this simple affection. Persons lose flesh as rapidly almost as in phthisis, while the cough is not unfrequently supposed to be the dreadful signal of the terrific consumption. The removal of the uvula, however, together with an anodyne inhalation, soon dissipates these impressions; and generous diet, with plenty of out door exercise, again restores the patient to his wonted plumpness.

Immediately behind, and at the base of the arch of the curtain of the uvula, the *tonsil glands* are situated, standing like sentinels keeping watch to the entrance of the fauces. These glands are subject to violent inflammation, by which they become so much enlarged, as almost to fill the passage to the throat. This condition, when not of a chronic character, is called "*quinsy*," and in looking into the throat, a red ball of flesh may be seen jutting out from either side, with a rough, uneven surface, seemingly puckered or fissured. This disease soon terminates, either in suppuration or resolution, after which it quickly subsides, and in a few days the patient gets well. It is always heralded with the usual symptoms of inflammation, such as cold rigors followed by heat, increased action of the heart, and a dull headache. But when from frequent inflammations of the tonsils, they become chronically enlarged or hypertrophied, so as to obstruct respiration or deglutition, or permanently altering the voice, and producing deafness by pressing upon the eustachian tubes—then there is but one efficient remedy, and that is, their prompt and speedy removal by means of the *tonsillitome*, an instrument which divides, and secures the gland at the same instant of time, scarcely requiring a second in the opera-

tion. The operation is very simple, and is attended with very little pain, and no inconvenience; and, except in the hands of an actual bungler, gives the patient an absolute immunity from danger.

Tonsillitis is a powerful ally to that greater malady, consumption — by obstructing the entrance to the windpipe, and increasing the liability to attacks of chronic disease of the mucous membrane of the fauces, extending to the larynx, and thence to the lungs.

LETTER V.

LARYNGITIS—CLERGYMAN'S SORE THROAT.

In approaching the subject of the Laryngitis I have a disease of a much more formidable character than any hitherto presented. It was from an acute attack of this malady, superinduced by exposure to a drenching rain, that the illustrious Washington died, and few indeed, there are, who have been subjects of its attack, that have not also been its victims.

The larynx may be called the head of the trachea or windpipe, and is situated immediately behind, and descending from the base of the tongue. It is in shape not unlike an inverted cone, the apex being larger than the base, and is composed of four cartilages, held firmly together by ligaments and muscles. It varies in length from one and a half to two inches, beginning at the base of the tongue, and extending down below the prominence on the neck, (*pomum Adami*) known as Adam's apple, and has two openings, the upper one of which is called the *glottis*, situated at the base of the tongue. This opening is covered by a little sensitive valve, called "*epiglottis*," which, like a faithful sentinel, on the approach of food or drink, shuts down upon the entrance to the lungs, and allows the nutriment to pass into the stomach; for if the smallest portion of solid or fluid obtains access to the windpipe, it excites violent cough and great distress, until the offending matter is ejected.

About three quarters of an inch below the glottis we have the second aperture, resembling a slit, called the "*rhino glottidis*," the sides of which are formed by ligaments known as *chordæ vocales*, or vocal chords, enclosed in a fold of mucous membrane. The air we inspire and expire through this aperture in the act of

talking, renders these chords vibrative, producing that infinity of tone by which language is made intelligible to express the indwelling thought of the soul.

When the larynx is attacked with inflammation it is called "Laryngitis," and if the attack is acute in its character the danger is imminent, frequently terminating in death in a few hours. The symptoms characterizing this form of the disease are easily distinguished, the patient complaining of sore throat, with an indescribable restlessness and anxiety of countenance. The breathing becomes laborious—almost stertorous—and there is much difficulty in swallowing. The voice is at first husky, gradually becoming more indistinct, until it settles into a low whisper. The horrors of strangulation then commence, the breathing becomes more difficult, the face becomes livid, the eyes stare and start, an indescribable sense of oppression or suffocation is felt, and the patient grasps his throat convulsively, as if he would tear the obstruction from it, for he feels that his vital powers are not destroyed by disease, but that he is strangling—dying for want of air, as a man dies who is gradually strangled with a rope, and his windpipe closing slowly, slowly, slowly—the damps of death now bathe the forehead—the eye grows gradually dim—from every chamber of the brain springs an electric thought of by-gone years, and that this trial is the last of earth.

Cases like this make us deplore the *impuissance* of our art, but when we can save a victim of this "fell destroyer" from impending death, then indeed have we achieved a victory more worthy of monumental renown than all the victories of blood-stained soldiers, who burn cities, and desolate the land by rapine and murder. Cicero says that "nothing brings men nearer the gods than by giving health to their fellow-men."

The physician, to treat this disease, must have no coward spirit. He must be prompt in his decision, and act with energy. If the usual antiphlogistic treatment fails, then no time should be lost in making the local application, as advised by Drs. Belloc and Troasseau, with the probang, and using anodyne and emolient inhalations. This can be done by depressing the tongue so as to elevate the epiglottis, and open the entrance into the larynx. Repeat the operation every few hours, and if unattended with relief, and the patient is still sinking, then employ the knife and open the windpipe below the seat of disease. The relief is instantaneous, and the effects

almost magical ; the patient is surprised, and looks around him as if he had actually arisen from the dead.

CHRONIC LARYNGITIS is a modified type of the disease we have just attempted to describe, and though not so startling in its manifestations, is more common, and often leads to quite as fatal results. Persons of scrofulous habits are very liable to its attacks, though none can claim exemption from it. It is frequently found among clergymen, lecturers, singers, actors and others who make any forensic effort. The disease is sometimes called "*clergymen's sore throat.*" As a general thing, however, chronic Laryngitis comes on as a sequence to consumption, superinduced by the matter expectorated from the decaying lungs. This matter, on being thrown from the lungs, adheres to, and produces more or less ulceration about the vocal chords, beginning on the lower sides and gradually extending upwards. A neglected cold in the head or sore throat are also fruitful causes in producing it, for the very obvious reason, that the unhealthy secretions from the head, are constantly dripping into the throat from the posterior nares, producing an irritation which extends rapidly into the larynx, trachea, bronchi, and finally into the lungs, *all of them being connected by the same membrane.*

The treatment depends much upon the cause and form of the disease. Where it is secondary to affections of the head or throat, to much public speaking, or to the use of tobacco, it is perfectly manageable in a month or two, as all these faulty conditions may be corrected, but medicines taken into the stomach will do no good. When the disease is primary, however, then there is but one sensible course for the patient to pursue, and that consists in the direct application of remedies to the internal surface of the larynx itself ; and even this, to premise entire success, must be continued in several months. To make this application the inhalation of vapors is indispensable, as by them we can soothe, astringe, heal or stimulate, the particular parts diseased.

LETTER VI.

ACUTE BRONCHITIS.

I have already called attention to the parts involved in that fearful disease, Laryngitis. Next in order, as we pass toward the

lungs, we have the trachea or throat division of the windpipe, by which, bifurcating at its lower part, the grand division of the bronchial tubes are formed. One enters the right lung, and the other the left, and each sub-divides again into innumerable smaller tubes, until they resemble the branches of a tree in their ramifications, which are as intricate and minute, as the fabled mazes of Mythos.

The bronchial tubes, commencing at the lower part of the trachea, are entirely within the lungs; and hence, an inflammation of the membrane lining these tubes is, *per se*, a disease of the lungs, and not of the throat, as is generally supposed. This membrane—a delicate, transparent covering of the muscular fibre of the air tubes, is liable to disease from a variety of causes, among which are sudden changes of weather, impure air, the dust of workshops, inhaling noxious gasses, etc. When it becomes involved in inflammation its action is deranged, the character of its secretions are altered, and a train of morbid symptoms of a more or less grave character, both local and constitutional, are set up. If the inflammation is acute, we have a hard, dry, hoarse cough, commencing like a common catarrh, attended with a sensation of heat, dryness of the throat and nasal passages, with alternations of chills and fever. As it progresses, respiration becomes difficult, the lips and cheeks become purple, changing to a livid paleness, the countenance grows anxious, the eyes stare wildly, a cold sweat breaks out upon the face and hands, delirium comes on, and the patient relapses into the stupor of death, which result frequently ensues in forty-eight hours after the attack first comes on.

Generally, however, acute bronchitis is a mild disease, and subsides entirely at the end of a week or ten days, or having only the cough and expectoration after the fever has disappeared, constituting what is termed chronic bronchitis, or what was known to the faculty formerly as "*tussis*," "*cattarhus senilis*," "*bastard peripneumony*," and the "*peripneumonia notha*" of Sydenham. Its decadence is marked by the expectoration of a thin, saltish, irritating water, scanty at first, but gradually growing copious, whitish, more thick, and finally yellow. When the sense of chilliness subsides, the pulse loses its frequency, the oppression in the chest passes off, and the patient rapidly convalesces, or the disease settles into chronic bronchitis.

In treating this disease, I have seen the most happy and beneficial effects of Inhalation, after a judicious anti-phlogistic treat-

ment had been employed. Emollient inhalations of marsh mallow, conium and ipecacuana, will, if properly used, afford in an almost incredible short space of time the greatest relief. By inhaling these simple remedies, the difficulty of breathing and the oppression of the chest has been rapidly removed, the heat and parched condition of the skin became moist, the cough quiet, and the expectoration easy. Who that has witnessed the soothing effects of warm fomentations applied to the external surface of the body can doubt the value and superior efficacy of warm, soothing vapors, properly medicated, when inhaled and transmitted along the inflamed membrane of the bronchia?

LETTER VII.

CHRONIC BRONCHITIS.

When the lining membrane of the bronchial tubes is inflamed, it is called "*bronchitis*," of which there are *two* kinds, distinguished as "*acute*" and "*chronic bronchitis*." In my last letter, I directed your attention to the symptoms by which acute bronchitis is distinguished, and will present now some of the characteristics of chronic bronchitis.

By the inexperienced and unskilled, the disease is often mistaken for consumption; for the mucous membrane, sooner or later, becomes altered in structure, and pours forth a matter which has all the qualities of pus, when the usual hectic fever supervenes, and the disease tends as certainly to a *fatal* termination as consumption. Of the chronic form of *bronchitis*, there are several varieties, one of which we meet as a *winter cough*, making its appearance regularly as the winter season approaches, and partially subsiding on the return of spring. This form of bronchitis is incurable by any other means than medicated inhalation; and if neglected, will as certainly break down the structure of the lungs in consumption.

Another form of bronchitis is distinguished by an excessive humoral discharge from the lungs, resembling gum water, ranging from one to several pints during the twenty-four hours. Usually there are two fits of coughing in the day—one in the morning, and the other in the evening. There is considerable difficulty in breathing while the coughing paroxysm lasts, but as soon as the

visced secretion has been ejected, it subsides. This disease enfeebles the patient very much ; but he may, however, live for years, and be able to attend to light duties ; but gradually the countenance assumes a pale, blueish tint—the body wastes—the blood becomes thin, and death ensues apparently from the constant drain upon the lungs.

There is still another form of this disease, called *dry bronchitis*, produced by a thickening of the mucous membrane of the air tubes, by which they are very much diminished in size. There is a scanty secretion of a dense, glutinous kind of matter, variously tinted, sometimes greenish, again blue or white, and not unfrequently, after a rasping cough, striated with blood, or russety. This affection is so common in this climate, that a careful examination of the chest would doubtless reveal its existence in many who are nursing the fatal delusion of entire exemption.

The symptoms by which dry bronchitis is known, are not marked by much severity, until it has advanced to its later stages, when a little exertion will produce much shortness of breath, arising from the obstructed bronchial capacity. When a large portion of the lung is involved a sense of oppression is felt after meals on making slight exertion, which is frequently referred to as the result of a full stomach, or some other than the true cause. After a time, however, there is felt a tightness in the chest, with a rasping cough, several times through the day, which enables the patient to expectorate a tough, gelly-like substance to clear the throat. If you ask such whether they have a cough, they will answer “no,” and yet almost in the same breath, they will *hack* and raise the very substance I have described. If the stomach is deranged, it is fashionable to ascribe this cough to the stomach, or the result of nervous derangement, or liver disease—when these are but the signals of the inroads being made upon the system by this very condition of the lungs. But there is something so gratifying in being assured that there is *no danger of consumption*, that the physician giving this interpretation to the anxious enquiry, yields to the persuasive look, and cries “peace, peace, when there is no peace !” Thus human life is tampered with, until the fearful details of death are written indelibly in the hectic flush, the wasting frame and the enfeebled step—until the silver chords are loosed, and the golden bowl is broken at the fountain. This is no

fancy picture, for we see daily around us men and women sinking gradually under such influences into premature graves.

But we find still another form of bronchitis, of a very grave character, mostly in old people, analagous to a type already enumerated as "humeral." From its attacks being most frequent upon those who have passed the meridian of life, it is called "*catarrhus senilis*" and *old man's cough*. The symptoms are marked by a profuse expectoration, and a feeble and languid pulse; there is also a strong inclination to sleep, frequent complaining of extreme weakness, and a peculiar sense of languor pervading the entire system. Women who nurse their children too long are subjects of this disease. It is distinguished from consumption by the face assuming a pallid and livid appearance, and the lips a purple hue; while in consumption the lips are of a bright red color, and the cheeks more constantly flushed. The respiration is also very different and well marked.

We could still enumerate other forms of bronchitis, but being rare in their occurrence, do not demand the important consideration given to the foregoing. Among these there is a form characterized by a kind of false membrane forming on the inside of the tubes; another form is the very opposite, and consists in dilatation of the bronchia, which may occur in one lobe, or a whole lung may be enlarged uniformly, or swollen out at the extremity in a globular form, or there may be alternate contractions and dilations along the same tube.

In the treatment of this class of diseases by the profession, there has been nothing but a fruitless round of experiments from the beginning to the present; and until the introduction of Medicated Inhalation, treatment only served to hurry on the fatal issue. I will examine the treatment by Medicated Inhalation in my next.

LETTER VIII.

TREATMENT OF BRONCHITIS.

The reader who has closely followed me in the progress of these letters, need not be told how inadequate all treatment must be, which does not penetrate the lungs where the disease itself exists; and how utterly inefficient—nay, mischievous, all applications to

the throat must be, while the fountain of evil lies beneath untouched.

The application of nitrate of silver to the fauces as a remedy in treating bronchitis, has doubtless had its origin in the erroneous idea that bronchitis was a disease of the throat. This opinion is as untruthful as the practice is unphilosophical and injurious. As its name implies, bronchitis is simply a disease of the bronchial tubes, which, everybody should know, are not in the throat, but in the lungs. Hence, when they become diseased, the lungs must also be more or less affected.

The pathological condition of the bronchial tubes, when inflamed, is frequently found to consist in an alteration of the structure, by a thickening of the mucous membrane lining them, until a part or the whole of the smaller air-tubes become completely closed or blocked up. This prevents the transmission of air to the parenchymical structure of the lungs, and as a sequence disease sets in. The veriest tyro in physiology understands that if sufficient fresh air is not received into the lungs to arterialize or oxydize the blood, that the circulation will contain an excess of carbon, than which nothing can be more fruitful of disease and death. Upon this principle Dr. Cullon founds his carbon theory of the formation of the tubercles in the lungs. This condition of the blood frequently exists without giving any warning other than the usual bronchitic symptoms, of the fearful change which is taking place in the system, until the details of consumption are made painfully manifest.

I have said that the treatment of bronchitis hitherto has been profitless of good, and often fraught with mischief. The difficulty has been in getting remedies to act upon the parts affected by a direct and local application. Now, how can you get into the lungs with remedies? Certainly not by swallowing medicine into the stomach, for these never, only in a qualified sense, reach the lungs, and are more frequently productive of evil than good. Let us look to nature in this dilemma, as we must in other cases, for a solution of the difficulty, and the method is at once indicated. It is to *inhale*, or draw in the medicine with the air we breathe, into the lungs.

Inhalation simply means the act of inspiring or drawing a breath, but when applied to a mode of administering medicines it means to *breathe them*. Thus I say, "*I inhale a medicine*," instead of "*I*

take a medicine," the only difference being that one is inhaled into the lungs, and the other is swallowed into the stomach. With this explanation it is made plain that remedies must vary when administered by inhalation as much as if they were swallowed. I will illustrate this proposition still further. It is well known that in spasmodic asthma, inhaling the smoke of "jimson weed" (*datura stramonium*) will relax the spasm and relieve the patient; but this remedy will not check the discharge in humoral asthma, nor make any impression whatever upon systems having idiosyncrasy of habit or constitutional peculiarities. Now, what has been said of asthma is equally true of bronchitis and consumption, and I only make this explanation because, that many who write to me respecting treatment, have got the erroneous idea that inhalation, instead of being a mode of practice, is some *specific* nostrum for the cure of consumption. To make it such is to degrade it to the level of quackery, or stamp it with the pernicious character of the routinist.

The late Vice President of the United States, Wm. R. King, undoubtedly had his death expedited by the ignorance and imprudence of his medical advisers, who advised him to use the "sugar-house cure," by inhaling the vapor of sugar. At the time this advice was given, the Vice President had extensive cavities in his lungs, which were secreting a copious and enfeebling expectoration. By inhaling the sugar vapors, this secretion was increased, and after spending a winter in a sugar-house on the Isle of Cuba, he returned to Alabama, barely in time to meet his friends before he died. Now, sugar vapors are highly useful in treating some forms of consumption, but it is equally injurious in others. Had the medical advisers of William R. King known how to distinguish the various forms of consumption, and prescribe accordingly, it is only fair to say that the pineries of Carolina or the balsam groves of Canada would have been selected as recruiting grounds for the Vice President, if it was at all necessary to go so far, to breath balsam or gum exhalations.

In treating bronchitis, the first object is to cleanse the air tubes of the lungs, by the use of expectorant inhalants, after which, the irritation must be allayed upon which the secretion depended, by soothing and healing the inflamed surface. When I come to speak of the treatment of consumption, I will write more in detail upon this subject.

Having now considered briefly some of the more prominent

diseases of the throat and air-passages, and pointed out that Medicated Inhalation is the only efficient mode of treating them, I will next proceed in like manner, to consider the more serious maladies of the lungs, direct.

LETTER IX.

CURABILITY OF CONSUMPTION BY MEDICATED INHALATION.

While a large majority of the medical profession entertain the opinion that consumption cannot be cured,* we cannot affect much astonishment that the mass of mankind should echo such a pernicious oracle. To combat this opinion, before I enter immediately upon a description of the symptoms of consumption, I will adduce from indubitable authority, as well as my own knowledge and experience, evidence to show that consumption is perfectly curable, if properly treated.

Sydenham, perhaps the greatest physician that has appeared in Europe since the time of the Arabians, affirms that he had repeatedly cured *phthisis* (consumption,) not only in its incipient stage, but after night sweats and diarrhea had taken place. The great Doctor *Laennec*, the discoverer of the stethoscope, and physician to the largest hospital in Paris, examined thousands of bodies after death, and he gave to the world as the result of his researches, that he had met many cases, in some of which, large portions of lung *had been destroyed by consumption, but the parts, nevertheless, had entirely healed.* Sir *James Clark*, physician to the Queen of England, in his great work on Climate and Consumption, admits fully the curability of the disease.

Professor Graves of Dublin—than whom, while living, none stood higher as a stethoscopist,—pointed out one form of consumption in which the tubercle could be entirely dispersed by a gentle salivation, which statement is corroborated by Professors Stokes, Bellingham, and others in the *Lancet*. Dr. Piorry, physician to one of the largest hospitals in Paris, is renowned in France for his success in curing consumption by friction and inhalation. Dr. Maddocks is at present celebrated for his success in curing consumption, and has done much to advance the science of inhalation, which is his principal mode of treatment. Both he and Sir Charles Scudimore have written out very acceptable books, in

which many cases of consumption are cited, that have been perfectly cured by medicated inhalation, which treatment they unequivocally recommend to the profession, as being the very best. The reports of the Brompton Hospital, under Dr. Elliotson, show more favorable results from this practice than was ever attained before ; while Professors Sweet and Periora pronounce medicated inhalation the most scientific as well as the *most successful* practice ever employed in treating consumption. Similar opinions to the foregoing could be quoted from many others, eminent in the profession, all attesting the curability of consumption ; but I must omit them, to make room for a few expressions in favor of Medicated Inhalation.

Our own great physician, Dr. Rush, says, in reference to "inhalation," that "too much can not be said in favor of this simple system of conveying remedies to the lungs. *I have frequently seen patients snatched from the jaws of death by it ;* and whether all the beneficent results that may be justly considered possible to result from the inhaler will be realized, must be determined by future observation ; but it is hoped that the *general want of success* which attends the present mode of treating consumption, will induce medical men to give inhalation a fair trial as a remedial measure." Dr. Coxe, of New York, in his work on Pulmonary Disease, says : "I now consider the curative power of medical inhalation well established ; and those who labor under consumption, have certainly a right to demand of their medical advisers a fair trial of its powers, before they are urged to leave their homes for changes of climate, or the uncertain consequences of a sea voyage." Dr. Carrigan, of Dublin, says : "There can be no doubt that medical inhalation exerts a most powerful influence over diseased actions, and that as it is only in this form that we can administer remedies to act locally upon diseased tissue of the lungs, it merits our most respectful attention."

Dr. Melville, the intellectual colleague of *Dr. Hunter*, of New York, grasps with his comprehensive mind the whole subject of Inhalation, and reduces it to this simple proposition : "If we would cure consumption, we must treat the disease—not the symptoms ; and if we would treat the disease, we must *inhale* ; for there is no other means of reaching its seat—the lungs. *No treatment by the stomach can be more than palliative*, while by the

lungs it is always *radical*—it gets at the very root of the disease.”

Having cited briefly a few authorities recognizing the curability of consumption, and the claims of medicated inhalation in the scientific attainment of that result, I would now suggest to those who are still professional Sadducees, that if they cannot present the record of a practice equally successful, to *get out of the way of Inhalation*, and let it work. We know that by the old practice, thousands, hundreds of thousands, die annually, and will continue to die, until the treatment is changed. But as the new practice becomes better understood, and medicated inhalation has enlarged and improved its pharmacy, then this appalling fact will cease to be.

Already some master minds, unsawed by the dicta of schools, or the sneers of their less laborious or less intellectual brethren, have broken through the trammels of routine, and grappled with gigantic strength this fearful disease, and dared to follow the new path of inhalation, which, though still only in the adolescence of its usefulness, has achieved results in the cure of consumption hitherto deemed unattainable. Give it, then, a fair trial; and in the hands of the scientific practitioner it will be found a source of blessing to the invalid, though when employed and degraded by the charlatan, whether he be a priest or layman in the profession, the result must always be equivocal. One consideration, however, cannot be too strongly impressed upon the minds of persons afflicted with consumption, who propose to use medicated inhalation, and that is, that the certainty of cure is greater, the earlier the case comes under treatment; and that success grows proportionately less the longer treatment is deferred, and the disease approaches its fatal termination.

LETTER X.

SYMPTOMS OF CONSUMPTION.

It gives a startling importance to the subject upon which I write, when we reflect that of the crowd of men, women and children we daily see thronging our streets, *one-fifth* will fall victims to the fell destroyer, *consumption*, unless rescued by appropriate treatment. In my former letter, I have presented incontes-

tible proof that consumption may be cured by medicated inhalation, and now let us in candor ask, what promise have we to lessen this frightful mortality by the old system of treatment? Take up any practice of medicine—*Watson*, *Wood* or *Eberle*; *Hahneman* or *Thompson*—or any standard works in our medical schools, and they all alike candidly avow, that no treatment of consumption to them known, has been more than palliative. Watch the practice of two physicians of equal eminence, and see how opposite their mode of proceeding; but each lands his patients equally in death.

So sure are they of the fatal result, that they invariably deceive their patients at the beginning, by saying it is “only a mere cold,” or “slight bronchitis;” and if the patient spits blood, “it comes from the throat,” and thus *the precious opportunity when the disease is most easily controlled, is allowed to slip by, never to be redeemed.* The very treatment, while it soothes the most distressing symptoms, masks the disease, and in many instances hurries on the catastrophe. When the disease has so far advanced that the patient almost dispairs himself, he is then advised to go south or take a sea voyage, in most cases deprived of the oriental benediction of “dying among his kindred.” Why patients intrust themselves to physicians who openly proclaim in their books, and in their conversation, that they can do nothing for consumption, is an incomprehensible infatuation. If the physician has no faith in his ability to cure consumption, it is the height of folly for the patient to trust him, and every dose he swallows should be as a sacrament taken, accompanied by a profound meditation upon death.

In my last letter I cited a number of names, eminent in the profession, favorable to medicated inhalation as a therapeutic agent in treating consumption, which presents a striking contrast to the opening paragraph of this letter. I will now consider a few of the more prominent symptoms which herald consumption, and by making them perfectly understood, will apprise the patient of danger in time to avert it.

The earliest symptom that commonly attracts attention is a slight, dry cough, occurring in the morning, and perhaps repeated two or three times a day. This gradually increases in a few weeks or months in frequency, and a ropy, saliva-looking mucus is spit up, most abundant in the morning, and usually supposed to come

only from the throat ; but it is secreted from the air tubes, which are irritated by the neighborhood of the tubercles. Gradually yellowish specks appear in the expectoration, which ultimately becomes entirely yellow or green. The expectoration is not always a criterion of the amount of disease in the lungs, though it generally is. But I have seen persons die, from the blocking up of the lungs by tubercle, and neither cough nor spit the whole time.

It is of the utmost consequence, that coughs should be attended to early, for although every cough is not the premonition of consumption, most are ! and it is a golden rule, that the earlier it is attended to, the greater the probability of cure. Spitting blood, or bleeding from the lungs, is sometimes an early symptom, but always a serious one in consumption. This symptom, says Henry Melville, possesses a fearful interest, from the melancholy truth that it rarely happens, *except as a consequence of serious disease within the chest*. The loss of blood is an indication of the presence of tubercle within the lungs ; and from these tubercles will arise, sooner or later, all those changes and symptoms which constitute consumption. On this point there is much error. It is by no means unfrequent for physicians to cheer their patients by the assurance that "*the blood has only come from the throat.*" Let me warn you against being deceived. The throat rarely bleeds ! *In nine hundred and ninety-nine cases out of a thousand, when you cough up blood, however small the quantity, that blood comes from the lungs, and speaks a terrible warning.* Bleeding, however, does not always accompany consumption, but when you have it, if you value health, if you prize life, if you have any object that renders existence desirable, *begin at once* to earnestly resist the progress of this fearful malady, the seeds of which are sown in the most vital part of your body.

Shortness of breath is an early symptom, and is felt most on exertion ; on ascending heights, going up hill or up stairs. It is a mark of such importance, that when it exists, an immediate examination of the lungs should be had *by a competent and truthful person*. If, along with shortness of breath, there is a wasting of the body and quickness of the pulse, *it amounts to a certainty that there is disease going on in the lungs*. When the pulse ranges above a hundred beats in a minute, the case is very grave. Some few cases are seen in which the pulse is preter-naturally slow,

and yet end fatally. The natural pulse is 70 to 75 in the minute ; the respiration 15 to 18. Above this, announces disease. Wasting is always to be looked on with suspicion, when there is no evident cause for it. Shooting pains through the collar-bones and shoulders, or dull, burning pain in the chest, are fearfully significant. If the disease has advanced, hectic fever comes on toward evening, and goes off toward morning in a perspiration called "night sweat," which is often enormous in amount, occasioning great distress to the patient, and accelerating the catastrophe from the rapid wasting of the tissues, and the exhausting debility it produces. Hectic is gradual in its approach ; at first a little creeping chill felt for a few moments in the afternoon, followed by a slight pink of the cheek and slight sweat at night ; but as the disease advances, these symptoms are all aggravated and intensified. I have known it to be mistaken for ague, when the chill was decided.

In persons over twenty-five it sometimes occurs that the first deposit of tubercle is accompanied not with a cough, but with dyspeptic symptoms, such as uneasiness in the stomach after eating, or heart-burn and indigestion. The end approaches, when the physician mistakes the disease, and purges his patient for biliousness.

In females, the *suppression* of the *periodic excretions* often occurs in an early period of consumption, and the younger the patient, the more rapid the fatal termination. When *suppression* occurs either in the young, the middle-aged, or the *change of life*, attended with a cough, sore throat, palpitation of the heart, on walking briskly up stairs, with a flattening of the chest under the collar bones, and a tendency to stoop, then indeed disease in the lungs becomes too manifest to tolerate a doubt for one moment the existence of tubercle. And if, in addition to this, we observe the white of the eye become pearl-gray, with a slight spasmodic twitching of the upper lip and nose when speaking, it is only to add confirmation to conviction, that the seeds of death are there.

If under such circumstances, drastic emmenagogues are resorted to, to restore the impaired function, we only too surely hasten death by producing a rapid failure of the vital power.

LETTER XI.

SYMPTOMS OF CONSUMPTION—SPITTING BLOOD.

In my last letter I called attention to some of the most prominent symptoms which herald the approach or indicate the presence of consumption. As I then stated, I did this to apprise persons of danger in time, that they might address the proper remedies to avert its fatal consequences. Among the early symptoms of consumption I noticed, I mentioned a hacking cough, with a ropy-like saliva in the morning, and more or less frequently through the day. In the early stage of consumption, we also have "short breath" in walking up hill or ascending stairs—palpitation of the heart when using a little extra exertion—shooting pains through the breast and sides—night sweats and *spitting blood*. To this last symptom I wish to call your attention more particularly; especially so, as it is one of great importance.

Many persons spit blood years before any symptoms of consumption are noticed, and when by general observation they would be pronounced healthy. To agree with this opinion, such persons when they approach the auscultator, thump themselves on the breast, and say, "There is nothing the matter here, doctor," and expect a good-natured acquiescence. In others, the first attack of hemorrhage dates the commencement of the disease, and the cough, the short breathing, and the expectoration, are all referred and ascribed to the bleeding. Some again do not raise blood until late, and in a few instances, consumption runs its entire course without even a tinge of blood in the expectoration. But as a general thing, whenever blood is spit, whether it is only a few streaks in the expectoration, or mouthful, remember that it rarely happens except as a *serious disease within the chest*, though the patient may be unconscious of it. Spitting blood is almost a sure indication of tubercles within the lung, and from these tubercles will arise sooner or later all those changes and symptoms which constitute consumption.

Henry Melville, says: "It cannot be too widely known that spitting blood is a thing of fearful interest, as pointing out the silent, treacherous progress of a deadly disease within the lungs. The loss of blood is an indication of the presence of *tubercles*, from which arise consumption. Physicians frequently cheer their patients by the assurance that the blood has *only come from the*

throat. Let me warn you not to be deceived. In nine hundred and ninety-nine cases out of a thousand, when you cough up blood, however small the quantity, *that blood comes from the lungs*, and speaks a terrible warning; and if you value health—if you prize life—if you have any object that renders existence desirable, begin at once to resist the progress of this fearful malady.”

Professor Walsh, in his work on Diseases of the Lungs, says: “In those cases of bronchitis where blood is present in the expectoration, *tubercles may always be expected in the lungs.*”

The celebrated Dr. Sweet, in his work on Diseases of the Chest, says: “Though bleeding from the lungs does not always occur in consumption, yet, whenever it does occur, it almost certainly indicates the disease.”

Professor Latham, in his lectures on Clinical Medicine, in St. Bartholomew, thus speaks of Hemorrhage of the Lungs: “Spitting blood always gives fearful intimation of the presence of tubercles, which are only the eggs of consumption.”

In twelve hundred cases of bleeding from the lungs, Dr. Louis did not meet a single instance where it was not preceded or followed by consumption. And thus it is that “spitting blood” is considered so sure a precursor of consumption, that life insurance companies refuse to grant policies upon any man’s life, who has been so affected.

Hemorrhage from the lungs seldom proves fatal in its immediate consequences. Years sometimes elapse before its fatal effects are produced. Indeed, we frequently hear persons who have had bleeding at the lungs, remark *that they feel decidedly better, and seemingly do improve*, but this is only a temporary relief, and it is a fatal mistake to regard it as a removal of the difficulty; for the same causes that produced the bleeding still remain, and if not arrested or removed, will end in death.

LETTER XII.

CHRONIC CONSUMPTION.

In my last letter I pointed out that spitting of blood is, with few exceptions, the precursor or companion of consumption, and that the smallest quantity mixed with the expectoration, is as significant as though there were pints coughed up; and therefore, on

the appearance of this symptom, immediate recourse should be had to measures calculated to eradicate its deadly companion, Phthisis.

Consumption is divided into CHRONIC, LATENT, INFANTILE, SUB-ACUTE and ACUTE, which I propose to describe *seriatim*. Chronic consumption runs its course in a period varying from a few months to several years; the average time being about twenty months. At first, a slight, hacking cough comes on, which is most frequent in the morning when rising. It is dry at first, but after a variable interval, a little thick, saliva-looking mucus is spit up, which, as it becomes more abundant, often deposits a greyish sediment resembling barley water, which is only seen in consumption. The cause of this cough, which at first is only a hack, is the irritation occasioned by the existence of tubercles in the lungs, too often not suspected until too late. Sometimes the first symptom observed is the spitting of blood, often in very small quantities. In other cases a sore throat, or catarrh, comes on from a slight exposure to cold, which, on subsiding, leaves the dry hack just spoken of.

Sometimes consumption is ushered in by a succession of chills and fever, that comes on with the regularity of ague, for which it is often mistaken. Others, again, first betray the fatal taint by a sense of heat in the hands and feet, and a slight flush on the cheek most marked in the evening. A wasting of the body is often an early and always a serious symptom. Perspiration is increased at night, until at length the bed is fairly saturated in the latter stages. The wasting and debility keep pace with the amount of night sweat. As a general rule, the appetite remains good, but in the second stage the food is frequently vomited after coughing. In women, the monthly sickness is generally suppressed; and the mistake is often made of attributing the lung disease to this, *instead of referring to the consumption as the true cause of suppression*. Pain is often present, but not always. *As the disease progresses* the spits become streaked with yellow—changing into yellowish or grayish green, consisting of pure matter, mixed with specks of tubercle. When thrown into water they assume a round, flattened shape, covered with a ragged, woolly surface, and sink in the water. When cavities are developed in the lungs, they lose their rounded shape and are expectorated in large, shapeless masses.

In this form of consumption, the patient does not always run a

uniform course, but in some the patient appears to improve every now and then; he may be apparently well even for weeks or months, and then be again prostrated totally, and this for several successive intervals. But this improvement is deceptive; how, I will proceed to explain. A crop of tubercles are deposited upon the lungs; they soften and are expectorated, during which the patient is prostrated; after which he rallies until a new crop is sown or softened, which goes through the same routine, and this is repeated until the patient is exhausted. At every successive softening of a batch of tubercles, a portion of lung is broken down and expectorated, and the patient spits pus—has hectic fever, night sweats, loss of flesh and strength, and often of appetite, and coughs very much at night. Then the symptoms improve, the cough disappears, and he regains flesh and strength. Now his friends think he is well, and he flatters himself that he is quite restored, but in a short time all the bad symptoms return. It is the occurrence of these intervals of temporary health that has given an ill deserved reputation to Cod Liver Oil, and a thousand villainous nostrums for the cure of consumption, and upon which, also, the reputation of testimonial publishers depend; health being established for the time by nature herself, which they refer to the last drug taken, or to the last quack employed.

The most eminent physicians content themselves with telling their consumptive patients to *live well, take out door exercise, be prudent, and take very little medicine*. This is all very good advice. It is better than helping on the fatal result of the disease by preparations of morphine to soothe the cough at the expense of the digestion; making a sore on the outside of the chest, to help the ulcer inside to finish the patient; purging, to aid the disease to exhaust the sufferer, and the other fashionable modes of slaughter. This plan of leaving the case to nature, is the better of two evils, as the patient has a chance of a longer lease of life, although death is almost the invariable result.

It was my intention to here speak of treatment; but apropos of what I have just written: In attempting to cure consumption it can only be done by absorption of the tubercles, and their removal, without breaking down the structure of the lungs. This is the mode by which dropsies, enlarged scrofulous glands, tumors, etc. are removed; and this is what we assert is effected by Medicated Inhalation, when resorted to in time. The tuberculous mat-

ter thus absorbed into the blood, is thrown off from the system by the skin, kidneys, bowels and other emunctories.

LETTER XIII.

LATENT CONSUMPTION.

In my last letter, I described chronic consumption, and shall now take up the *latent* form.

Latent consumption is characterized by an absence of cough, expectoration, pain and spitting of blood, although the lungs be loaded with tubercles. These symptoms in not a few cases, are absent even till death results; but in the majority, after a long period of ailing health, spitting of blood, cough or pain set in suddenly, and the disease runs a rapid course. The tubercles existing in the lungs, often work out their ill influences by secondary changes in the blood, and other diseases are set up, which destroy the patient, and from the absence of the prominent symptoms of lung disease, the physician and patient are both led astray, and attention is directed towards removing the diseases, which are the effects, instead of attacking the cause. Or, if the physician knows the cause, he conceals it for the patient's sake, because he knows no remedy. In such cases, the patient goes about with less alacrity than when in health; business is an exertion; he complains of various dyspeptic symptoms, heartburn, pain in the stomach, water-brash, uneasiness during digestion, pains in liver or right shoulder, costiveness alternating with diarrhea, disturbed rest, and emaciation more or less. The urine will even present the chemical and microscopic changes observed in functional or organic affections of the stomach and liver. Fistula in ano occurs almost exclusively in such cases, and appears to keep the tuberculous disease in check, as does also chronic inflammation of the peritoneum, (investing membrane of the intestines,) which often masks latent consumption, and is most frequently in females, while fistula is more common to men. Besides these, various other symptoms are complained of, indicating a diseased state of the body, and often puzzle the medical attendant.

The observant physician will generally see marks in the countenance of the patient, that will make him suspect the existence of tubercles—such as the delicate appearance, the pearly hue of

the white of the eye, varying in tint from yellowish white in the fair, to deep, blueish gray in the dark complexioned, and a very slight spasmodic twitch of the corners of the mouth and nose in speaking, which increases to a shiver over the cheek as the deposit in the lungs augments.

On examining the chest, depression will be found above or below the collar bones; or both. When the deposit is great, these bones stick out, so to speak. On tapping in the immediate neighborhood of the collar bones, sounds are produced, establishing that tubercles exist in various stages of development—nay, even cavities, although there has been no cough. These cases are generally pronounced bilious or dyspeptic, or anything but what they really are, and the treatment of course cannot be appropriate. I would particularly impress the fact that active purging and the use of mercurial preparations, are peculiarly apt to rouse the tubercles into activity, and to develop rapid consumption. At present, the orthodox practice for bilious and dyspeptic complaints is calomel or blue pill, which are rank poisons in the forms of disease under consideration. The obvious practical inference is, that in all cases at all resembling what I have described, it is absolutely necessary to have the chest examined by a competent and truthful physician, before undergoing treatment, and if tubercles are present, Inhalation presents the only known means for their removal.

LETTER XIV.

INFANTILE CONSUMPTION.

In my last letter I described that insidious form of disease, latent consumption, and pointed out how constantly it is confounded with liver and other chronic complaints, to the great danger of the sufferer. I now enter on the subject of *Infantile Consumption*. It is commonly thought that this disorder is very rare, under fifteen years of age; but the researches of Boudet Papvoine, and Trousseau, prove that more than one-half of the children of the poor, and of those in the infant hospitals of Paris die of consumptive disease, and this is approximately true of all large cities, so that from three years to fifteen, consumption is more prevalent and fatal than at any other age.

The causes of consumption among children are usually the circumstances in which they are placed, and not to inheritance, as is vulgarly supposed. Among the *poor*, impure air from living in narrow lanes, with yards reeking with filth and garbage ; *dark noisome rooms*, whose windows are rarely opened ; *personal and domestic uncleanness* further contaminating the air ; *bad food*, whereby healthy development is checked, and scanty clothing, exposing them to colds and inflammations, are the *four great causes* ever in operation to develop consumption.

Strange as it may appear, the same causes are active among the rich. Cooped up for at least twenty hours out of the twenty-four in hot, ill-ventilated nurseries, instead of spending half their time in exercising in the open air, they are fretted by a tedious operation of dressing, and then sent out for stately walks along the sidewalks, with Sally. Being so finely dressed, they must not play : it is—Master Charles, don't rub your gloves along the wall—Master Henry, don't walk in the dirt—and this is to do them for air and exercise. The food, although not deficient, is nevertheless equally pernicious from the quality. Instead of being kept to plain, nutritious food, they are too often indulged in all the varieties of the table, and their digestion impaired by candies, sweetmeats, and cakes. The clothing, although expensive, is too often deficient, the bare arms and legs, which imperious fashion exacts, are direct cause of almost all the croupes, colds and inflammations children are attacked with. Consumption does not usually manifest itself in children by active symptoms ; wasting is the most constantly present. When we find conjoined with this, eruptions behind the ears, swelling of the glands of the neck, soreness or running of the nose, eruptions about the face with puffy, chapped lips, pustules about the edges of the eyelids, or sore eyes with the greatest dread of the light, causing the child to bury its face even in the pillow, we may suspect the existence of tubercles in the lungs, as these all point to a diseased state of the general system, with deep seated complication.

Although the causes enumerated above will develop consumption in any child long enough exposed to them, yet there is a wide difference in the susceptibility of different children to contract it. Very intellectual children, with ardent affections and loving dispositions, are remarkably prone to it, and the expression constantly used with regard to them is, that " they are too wise or too good to

live." A pale, pasty complexion, or a large head with a narrow chest, indicate the same predisposition.

The symptoms in the consumption of children are very mild ; there is no spitting of blood ; the paroxysms of coughing are not urgent or distressing ; and the matter coughed up from the lungs is invariably swallowed, and excites no alarm. Night sweats exist only about the neck and brow. The hectic fever is slight, and generally attributed to worms, or derangement of the stomach. Diarrhea is a usual attendant, and the child, when asleep, is observed to breathe faster than natural. With all this, *gradual wasting of the body and strength* is constantly present. Change of air or diet may arrest the wasting for a few weeks, but the improvement is only temporary. *Diarrhea or fever* soon close the scene.

Children under five years cannot be made to use the inhaler, and therefore the air of the nursery must be medicated, thus compelling the child to breathe only a medicated air which acts most powerfully on the diseased surface of the lungs. Above the age of five, children usually regard the use of the inhaler as high fun, and take to it readily. The changes in the system of the child are so rapid, and the vitality so great, that amendment is far more speedy than in grown people.

LETTER XV.

SUB-ACUTE PHTHISIS.

My last letter contained a description of infantile consumption, and next in order comes sub-acute phthisis. This form of the complaint runs its course in from six to fifteen weeks from the first observance of the symptoms, which usually resemble those of chronic consumption already detailed, but are much more rapid in succession.—It is unnecessary to recapitulate them here. A very large portion of the lungs is rapidly infiltrated with tubercle and rendered useless ; there are softenings and cavities, but these are small in extent, owing to the short duration of the complaint. It would appear that death takes place more from the system not having time to accommodate itself to the speedy diminishing capacity of the lungs, than from the exhaustion of the prolonged discharge of matter, thus differing from chronic phthisis. Sub-acute consumption is known by the name of "galloping," from its early

termination, and is often confounded with acute bronchitis, but an experienced stethoscopist, would never make the mistake. Even this form is amenable to treatment; I have several cases reported in my book, where the disease has been permanently arrested, and the parties are now in good health. It comprises but a small portion of the cases of consumption. Acute phthisis is of very rare occurrence—I have seen only four cases of it, running its course to a fatal termination in three or four weeks. The lungs become completely blocked up in that short time, chiefly with tubercles.

The symptoms resemble those of low typhoid fever, with wandering or delirium at night. The cough is either dry, or accompanied by expectoration of a clear, sometimes yellowish mucus.—This, with the continually increasing frequency and difficulty of breathing, should draw attention to the condition of the lungs, which the stethoscope will soon reveal. This form does not appear to be at all controlled by treatment. In my next letter, I shall explain how tubercles produce cavities and ulcerations in the lungs.

LETTER XVI.

PATHOLOGY OF TUBERCULOUS CONSUMPTION.

In my preceding letters I have pointed out the various forms of consumption, and the symptoms peculiar to each, and also the symptoms of nasal catarrh, sore throat, chronic laryngitis, and bronchitis, demonstrating the important facts that the tendency of these complaints is to lay the foundation of consumption. The mode in which it would appear this is produced, is by the gradual extension of the inflammation along the air tubes, until, reaching the minute branches and the air cells, these are blocked up with mucus, thus preventing the air from reaching the blood circulating through the air cells, so that the change from venous to arterial blood does not take place. The consequence of this impediment is, that the tuberculous matter is deposited in the air cells, and the smaller branches of the air tubes. At first, the tubercles are very small, resembling millet seeds; hence called "miliary." They are grey and translucent, and scattered more or less profusely over the upper part of one or both lungs. It is a tradition in the

profession, that the left lung is much oftener the seat of disease, first or solely, than the right. But this is the result of imperfect observation, promulgated by a high authority, and implicitly received by the flock. My experience, which has not been small in this disease, has fully satisfied me, that there is little if any difference in the liability of either lung to the deposit of tubercle. Again, it is a disputed question as to whether the tubercles are deposited in the air cells, or in the surrounding tissue. Examination with the microscope has convinced me that in miliary tubercle the deposit takes place into the air cells and finer air tubes, and that tuberculous matter is never found in the substance of the lungs, except in the form of infiltrated tubercle, the result of what is now called "chronic pneumonia," or chronic inflammation of the lungs—rather a misnomer. The miliary tubercle, after a time, undergoes a change in size and appearance, becoming larger, and of a yellow, cheesy appearance. The pressure of these little masses causes absorption of the walls of the air cells, and a coalescing of the tubercles into maps of various sizes. In this state they may remain quiet for weeks or months, sometimes, though rarely, even for years, but liable at any moment to be roused into active disease by apparently inadequate, and often unknown, causes; so that a person carrying about with him a crop of tubercles in his lungs, is at any moment in danger of commencing the downward course that ends in the grave.

At first, these yellow tubercles are of the consistence of cheese; they then soften—become infiltrated with matter, and finding their way into the larger air tubes, are expectorated, and a small cavity is thus left, secreting matter. In the chronic form of consumption, patients often rally for a time after this occurs—the cavities are healed, or become livid with a kind of mucus membrane—the fever and night sweats disappear, and the cough is either absent for a time or subsides into a *hack*, and the body acquires fat. But this is only temporary; another series of cavities are formed, and the same routine is gone over and over, till the patient sinks exhausted. When several small cavities are contiguous, they gradually enlarge, and, opening into each other, form a large cavity. I have seen them large enough to hold a pint.

When tubercles are in the grey or yellow stage, inhalation is of the utmost service, by promoting their absorption without destroying the substance of the lungs; and hence the wisdom of apply-

ing early for treatment, when there is the slightest suspicion of such a state of things, while there is the most probability that the disease may be overcome. When cavities are formed, the disease is then said to be in the third stage ; and here astringent inhalations act upon the surface, secreting matter, and by constricting the vessels, arrest it, and promote the adhesion of the sides of small, or the formation of a membrane, secreting mucus instead of matter. Such are the ways in which Inhalation arrests the progress of this formidable malady.

LETTER XVII.

COMPLICATIONS WITH CONSUMPTION.

It is impossible to conceal from ourselves the appalling frequency and fatality of diseases of the chest in the United States, and I consider that I am fulfilling a public duty in contributing my mite towards making their symptoms and treatment familiar to the mass of the people, so that, early apprised of danger, they may address themselves in time for relief.

My last letter contained an explanation of the mode in which tubercles are deposited in the air cells and finer air tubes, namely : That any impediment to the free circulation of blood in the air cells, by preventing the due conversion of venous blood to arterial, is the immediate cause. Such changes in the structure of a vital organ can not occur without the system at large sympathizing, and various others become deranged, often to such a degree as to draw off the physician's attention from the real point of danger. Under the head of Latent Consumption, it has been stated that the complaint may proceed to the utmost disorganization of the lungs without cough or expectoration being present. In such cases the prominent symptoms are derangements of some of the abdominal organs. Dyspepsia is the most common, and in ignorance of the true state of things, the efforts of the physician are too often directed to removing the effect instead of the cause of deranged health.

Many cases are treated for liver disease, when large cavities in the lungs actually exist and hectic and night sweats are excessive. It is only three weeks ago since we were called to a patient, who stated that he had been treated, up to the time of our visit, for

liver disease. The appearance of the patient, his emaciation, his cough, excessive expectoration and sweating, indicated too surely phthisis as the enemy. On removing his clothing we were horrified to see the unhealed sores of tartar emetic ointment, and scarifications of cupping still recent over the region of the liver, showing that a frightful and inexcusable mistake had been made as to the nature of his disease. As it was important to him to know his true state, we were obliged to tell him the melancholy truth, that he was in the last stage of consumption, and that his life could not be prolonged beyond a few weeks. Diarrhea often masks consumption; this is found among adults, but it is still more common among children. The investing membrane of the lungs, called pleura, is often the seat of chronic inflammation, and water or matter is infused into the cavity, constituting hydrothorax or empyema. The lung is sometimes perforated, so as to admit air into the pleura, when a chronic inflammation is set up with the same result as the preceeding; this is called pneumothorax. The larynx is often the seat of ulceration, and completely masks the disease in the lungs to a superficial observer. Such are some of the complications of phthisis, and are the result of the blood imperfectly aerated in the diseased lungs, circulating throughout the body, and by its impurity provoking disease in the different organs; this is often described by the term sympathy. It will not seem superfluous caution to warn the reader of the importance of paying watchful attention, and not to rest content with a superficial or hastily formed opinion. Few medical men possess any but the most superficial knowledge of the use of the stethoscope, and still fewer are competent to give an opinion worth a rush in the earliest stages of consumption. For an opinion to be of any value, it can be so only after a careful and thorough examination. As usually conducted, it is but an idle form, and would-be farce but for the important stake at hazard.

I have witnessed the exploration made through a creaking starched shirt, or muslin collar, several folds of clothing, even through solid, old-fashioned corsets. Then to see the pomposity and parade of learning that this is done with, is enough to provoke a laugh or a tear. There is one consolation, that these gentlemen could not discriminate any more if they did examine *en cuerpo*. The knowledge of the stethoscope requires a study apart, a special devotion to it, and much experience in a hospital. So

informed, the practised stethoscopist distinguishes all the sounds of the lungs, healthy or diseased, as readily as a tuner appreciates the condition of the notes of a piano. A man who practises as physician, surgeon and accoucheur, and honestly and laboriously tries to master all the branches of his profession, can never acquire a tithe of the proficiency in the use of the stethoscope that he will attain who devotes himself specially to its use.

LETTER XVIII.

TIME TO TREAT CONSUMPTION.

In discussing the question of treatment, upon the period of the complaint at which a case of consumption presents itself for treatment, will very much depend the probability of a cure. I have pointed out, that the earlier a case is taken in hand, the greater the certainty of a cure; and that the chances of this favorable result diminish in an almost arithmetical proportion, the more the disorganization of the lungs is allowed to progress before applying for treatment. Unfortunately, the largest proportion of these cases, which have hitherto come under my care, have been in the last stage of confirmed consumption—cases in which part of one or both lungs was not only broken down into ulcerous cavities, but the strength of the constitution exhausted by the progress of the disease, and by the different kinds of treatment to which they had been subjected. I need hardly say, that such cases are no proper test of the efficacy of any system of treatment. Humanity, with the desire to relieve, is the only influence that can induce the physician to receive such as patients at all—since many seek for treatment in an utterly hopeless state, and can but be made comfortable by the highest skill within the power of man.

I have been obliged to refuse several applicants who were so far gone, that even the poor comfort of temporary relief seemed unavailable. Yet, notwithstanding all these disadvantages and discouragements, a larger proportion of recoveries have taken place among this class, through the instrumentality of Inhalation, than has ever hitherto been possible to attain from any and every other means of treatment. I have cases now under treatment, where there are cavities in one or both lungs, which, humanly speaking, I feel confident of restoring to health.

This, then, should be firmly impressed on the mind, that the earlier the presence of pulmonary disease can be detected, and the sooner the patient comes under treatment, the better chance for deriving benefit, and stronger probability of ultimate cure; but to insure this, the treatment must be persevered in as long as the least vestige of disease remains, for it would act as an irritating nucleus for the reproduction of the complaint.

It will be recollected that the commencement of consumption, is the deposit of grey tubercles in the lungs, and that this is commonly synchronous with the little hack and short-windedness on exertion, that are usually the first symptoms remarked by the patients or their friends. In the second stage, these tubercles undergo a change of structure, and become yellow and cheesy. Now the hack becomes a decided cough, and a sticky, clear or greyish mucus is expectorated chiefly in the morning. The third stage consists in the yellow tubercles becoming infiltrated with matter, softening down, breaking into the bronchial tubes, being expectorated, and leaving cavities, secreting matter. In this stage, we have hectic fever, exhausting sweats and diarrhea, with the other concomitants that rapidly wear out the patient.

The specific manner in which Inhalation acts upon these several phases of disease, will form the subject of my next letter.

LETTER XIX.

TREATMENT OF CONSUMPTION—FIRST STAGE.

It has been a desideratum with the medical profession, since the days of Hippocrates, to discover some effectual mode of applying remedies directly to the diseased surfaces of the lungs, for it has always been received as an accepted fact, that where attainable, local applications should always be employed along with the constitutional remedies, which latter are often rendered unnecessary when the former can be used. Accordingly we find in the writings of Hippocrates, and the chain of medical writers from his time down to the present, traces of efforts to apply this method to the diseases of the lungs, but all of the crudest kind, resolving themselves into inhaling fumigations arising from burning gums, resins, and herbs, the fumes of heated cinnabar realgar, and other substances volatilizable by heat. These were received into the throat

by holding the nose and mouth over the ascending vapors, and drawing them into the lungs in inspiration. Any one curious in such matters will find a description of this method in Boerhaav's Commentaries, article "Consumption." This was the condition of the therapeutics of inhalation for 2500 years. I think that Dr. Mudge, of London, is justly entitled to the merit of having taken the first practical step towards the modern mode of inhalation; although he was not aware of the full extent of the reformation in treatment of the lungs, that he had initiated. The philosophy of the treatment of chest diseases is apparent, when we consider that the lungs and air-passages are the parts affected, and that if we introduce air impregnated with medicated vapors, we thereby bring the remedial agent as directly in contact with the diseased surfaces as a wash to a sore on the leg. But it may be objected that we have no proof that medicines can act thus certainly on the lungs, or on the system through the lungs. To developing this portion of the subject, I shall devote my letter to-day. Inhalation of chlorine will produce a temporary arrest of the secretion of the bronchial tubes, or, in other words, a dryness of the surface. The use of expectorant and emollient vapors will produce the directly opposite effect, and in the first stage of acute bronchitis, when the tubes are dry and tumid, no remedy by the stomach will produce the resolution of this state, with anything approaching the speed with which such inhalants act. Is the patient sitting up at two in the morning choking in all the agonies of the worst fit of asthma, an anti-spasmodic inhalant will procure perfect relief for the night in three or four minutes. Is the case one of chronic bronchitis, where the secretion is profuse and semi-purulent, the use of balsamic and astringent inhalants will soon diminish the quantity and improve the quality of the expectoration. These are facts patent to the observation of every medical man, who will take the trouble to make the trial. But it will serve to make the power of inhaled remedies over the general system more evident, if a few examples be given. The power of chlorine and iodine over consumption is proved by the exemption of workmen from this disease who work in factories where the vapors are floating about in the air, and by cures being effected upon the tuberculized by resorting to such establishments for work.

Piorry gained his fame for curing consumption, by pouring in iodine in every way, by inhalation and otherwise. But he often

left his patients, as Dr. Hingston said, the victim of *iodism*, a scarcely less deplorable state than the victims of mercurialism. This unhappy result is avoided by combining the use of various vegetable discutients, that aid the effects of iodine, and procure salutary effects of their own. A drachm of chloroform will produce little or no effect, when taken into the stomach, but the same quantity inhaled into the lungs will cause profound intoxication, with total loss of sense and motion, and even death. A grain of arsenuretted hydrogen swallowed has little effect, but the hundredth part of a grain, inhaled into the lungs, will cause death, with all the symptoms of arsenical poisoning. The late professor of chemistry in Calcutta College, was exhibiting Marsh's test to his class, and an accidental draught blew the fumes toward him, and he inhaled perhaps not the thousandth of a grain, certainly not the five-hundredth; he was seized with violent arsenical poisoning, and his life was despaired of for some time. Gen. Gates, who introduced the use of stramonium leaves when smoked, for the relief of asthma, fell a victim to an overdose, and yet the quantity of empyreumatic oil introduced into the lungs must have been very minute. The preceding remarks have been thrown together, to prove that medicines inhaled into the lungs produce not only direct local effects, but are capable of acting on the system at large, as alternatives, narcotics, discutients, etc., and these in *very much smaller* doses than by the stomach. They are adduced as specimens of the proofs upon which the practitioners of inhalation rely for the maintenance of their assertions, and these proofs might be accumulated *ad infinitum*. With this preamble my readers will be able to understand the rationale of the process by which a cure is effected in consumption through inhalation, which will form the subject of my next letter.

LETTER XX.

TREATMENT CONTINUED—SECOND STAGE.

In my last letter, I explained the principles upon which the cure of consumption, in the first stage, or that of gray tuberculization, is founded; and that this result is certain in the greater number of cases, by means of Medicated Inhalation. I propose to discuss the mode in which the cure of the second stage, or yel-

low tuberculization, is accomplished. The tubercles, from being gray and glistening, become converted into a yellow, cheesy matter; they may exist isolated, or they may coalesce and form masses of various sizes. When they soften, it is from the outside to the center, which accounts for the appearances noted in the expectoration, in the second and third stages. During the first period, it is sticky, and varies in appearance, from transparency to a dark, blueish gray. When the yellow tubercles soften, this expectoration becomes streaked with yellow, and at last altogether yellow, and small specks of cheesy matter are found interspersed; these are the centers of yellow tubercles which have escaped softening. The chemical composition is changed from that of the gray tubercle, as they are found to contain a considerable quantity of carbonate and phosphate of lime. It is upon the existence of these insoluble salts, that the choice of inhalants is made. If we can introduce into the lungs, vapors which possess the property of attacking these insoluble salts of lime, and converting them into soluble ones, this will produce liquefaction of the tubercles, and their consequent absorption or expectoration. Those familiar with chemistry, will easily recall to their memories several vapors certain to effect this chemical change. Valuable papers on this subject were written fifteen years ago by Mr. Murray, M. R. C. S. L. and Dr. Boudet, of Paris, but seem most unaccountably to have been overlooked by the profession. The local disease being thus removed by inhalation, let it be the physician's care to pay strict attention to the removal of any local causes that may have induced the complaint, and to adopt judicious, constitutional treatment to remedy the depraved state of the blood, that favors the deposit of tubercles. A very few years ago, bleeding, depletion and low diet, were universally resorted to for the cure (?) of consumption, with the effect of removing every chance of a spontaneous healing, and accelerating death. The folly of this course has at last been recognized by the profession, and the opposite plan is now pursued. It is by combining a local and a general treatment, that Medicated Inhalation is so successful; it operates directly on the seat of disease and removes the local affection, while the general treatment puts the system at large in such a state, that the blood is so improved as no longer to deposit fresh tubercle. In this stage, the proportion of recoveries is not so great as in the first; but still a very great number recover by means of

Inhalation, and of course the earlier it is resorted to, the better the prospect of cure. Those who expectorate most on rising in the morning, and perceive yellow streaks in the spit, have reached the second stage; and when this becomes decidedly yellow, the third stage is nigh at hand, if not already begun, when the chances of successful treatment are very much lessened.

The next letter will contain an exposition of the mode of cure in the third stage of Phthisis.

LETTER XXI.

TREATMENT CONTINUED.—THIRD STAGE

In my late letters I have pointed out the mode in which inhalants act, in curing the first and second stages of consumption; and to close this part of the subject, I shall do the same in regard to the third stage. In this case, masses of yellow tubercle soften and are expectorated, carrying with them the lung tissue, so leaving caverns lined with a membrane, secreting matter abundantly, and accompanied by severe constitutional disturbance, indicated by hectic fever, drenching night sweats, etc.

In this state of things, we employ vapors that are capable of stimulating the ulcerated surface to set up a new action, and also of diminishing, and finally arresting the secretion of matter. The sides of the cavity either become glued together, or it is lined with a pseudo-mucous membrane. This is the true explanation of the way that Inhalation performs a cure in consumption, and is so simple and reasonable, as to convince every unbiassed mind at first sight. Until this mode of treatment was introduced, consumption in every stage was invariably fatal; and it does seem the very acme of infatuation for a consumptive to put himself in the hands of a physician, who confesses that he is powerless to do anything to avert the fatal termination of consumption. It seems more in accordance with common sense, that the patient should shun such a Jack Ketch of a practitioner, and put himself in the hands of one who follows a treatment that has been proved to be capable of effecting what it professes, viz: *to cure consumption*; and the only way yet discovered, seeing that the old mode of practice confessedly holds out death as the inevitable result of its treatment. It passes comprehension, that any one afflicted with

consumption can be found so foolish as to go near such ; they should be carefully avoided. Inhalation is daily working its cures, and raising patients from their beds, who, under the old treatment would soon have been tenants of the cold and silent tomb. It is sad to see the young, the lovely, the gifted and the loved marshalled to the grave, in the grasp of the foul ogre—consumption, when so many might be saved by a timely resort to treatment by Inhalation. The statistics of death by consumption, showed such a marked diminution in the city of New York, when Inhalation was extensively introduced there, by Drs. Melville, Hunter, Robinson, etc. that the newspapers noticed the fact with enthusiasm, and were unanimous in attributing it to the success of the new mode of practice.

LETTER XXII.

CONSTITUTIONAL MEDICAL TREATMENT.

The constitutional medical treatment of consumption resolves itself into subduing certain derangements of the functions, which, if not controlled would exhaust the patient, before the local treatment by Inhalation could affect the healing of the lungs. The most prominent of these are night sweats, and colliquative diarrhoea. Defective composition of the blood, dyspepsia and costiveness, may also demand treatment. These include nearly all the circumstances calling for general remedies. It must be borne in mind, that consumption is a disease of debility, and all means that tend to depress the vital powers must be avoided—such as active purging, calomel and other mercurials, tartar emetic, and bleeding. Opium and its preparations act injuriously by impairing the digestion, lessening the appetite for food, deranging the liver, causing costiveness, and producing that very condition of the body that increases the depravity of the blood. It is unfortunate that all advertised nostrums for the cure of consumption, and the ordinary run of orthodox prescriptions, have opium or a salt of morphia as their basis. Temporary abatement of the cough is produced, and the expectoration seems less in quantity, because opium diminishes the amount of water (not of matter), secreted in the lungs, thus thickening the spits without really lessening the quantity of matter, although the spittoon may

take longer to fill, while under this apparent improvement, it is rapidly sapping the constitution, as may easily be inferred from the bad effects just pointed out.

In my next letter I shall review the different modes of treatment that have been in vogue for the last two hundred years, and show that they were, and are, not only useless, but positively mischievous; and that no mode, except that of Medicated Inhalation, has ever been discovered capable of benefiting consumption in the slightest degree.

LETTER XXIII.

POPULAR MODES OF TREATING CONSUMPTION.

It is proposed to show in this letter that the usual modes of treatment, other than inhalation, are utterly incompetent to effect any good in consumption, and to review the various plans advocated. Seeing that the regular practice, homeopathy, hydropathy—all fail, it is no wonder that the public have a deep-rooted belief in the incurability of consumption.

Blood-letting was recommended in this disease, some two hundred years ago, by a Doctor Morton, on this ground, that "consumption, being the result of inflammation of the lung structure, bleedings, frequently repeated, are the proper remedy." Upon this erroneous supposition, from that time to this, crowds of victims have been hurried to the grave, *secundum artem*, by bleeding, leeching and cupping, and that practice has been recommended by such high authorities as Dr. Mead, Sir John Pringle, Dr. Hossack, etc., and it was in full blast as late as eighteen or twenty years ago, but is now totally abandoned, except by some of the less talented or informed of the profession, who, however, only venture to resort to blood-letting in the early stage, yet to the great injury of the patient. Consumption being essentially a disease of debility, and being preceded always by a depression of the powers of life, it requires very little reasoning ability to perceive that so far from lowering the system, by abstracting the arch principle of vitality, the blood, we should build up the strength of the body by all the means in our power.

What shall I say of the cruel and ridiculous practice of giving repeated emetics, even every morning, to cure consumption, and

this supported by the authority of men holding professors' chairs in America, Britain, France and Italy? Like cod liver oil, it excited a furore some twelve or fifteen years ago, and, although not so prevalent, is still persisted in by many orthodox practitioners of respectable reputation in this and other cities. One gives white vitriol, another gives blue, a third prefers squills. Tartar emetic and ipecac, each have their friends. Amidst this crowd, which is most orthodox or regular it is hard to tell. I have known many cases, where white or blue vitriol has been administered a few hours before death. What cruelty! This mode of treatment is only calculated to exhaust the strength of patients, and destroy the tone of the stomach, while it exercises no curative power over the disease of the lungs, and is fast becoming obsolete—happily for the sufferers.

Having extended this letter to a sufficient length, I shall continue the subject in my next, when I think I shall succeed in showing very conclusively that every mode adopted by the regulars hitherto for the treatment of consumption have been only decorous methods of ushering patients surely and swiftly to the portals of the tomb.

LETTER XXIV.

POPULAR MODES OF TREATING CONSUMPTION—CONCLUDED.

In my last letter, I pointed out the injurious results from blood-letting, or courses of emetics, in consumption, and shall pass in review some of the other fashionable treatments.

MERCURIAL TREATMENT.—Some two hundred years ago, this mode was greatly in fashion, but gradually dropped into oblivion, not only because it did no good, but positive harm; and in the opinion of many, brought on consumption in those who would never have been attacked, if mercury had never been given to them for other complaints. Unhappily for mankind, Dr. Wilson Phillips brought out a work twenty years ago, "*On the influence of small doses of mercury*," and it became fashionable to treat consumption with it. Happily the conviction has become impressed on the minds of the profession, that it is *injurious*, and few physicians now use it except stealthily, and they do it in order to be *doing something*, not from any faith in its efficacy. After

killing its thousands, let us hope it is buried never to be resuscitated.

TONICS.—In opposition to those who look upon consumption as an inflammatory disease, and employ bleeding, we have physicians who regard it as a disease of debility, and rely on tonics. Now each of these is *regular, orthodox practice*, and which is right? It is an axiom in practice, that tonics are useless in organic diseases, and often aggravate the disease. *Tonics* have no power to cause absorption or removal of tubercles in the lungs, and consequently the tonic doctors have not been able to sustain their position any better than the advocates for the modes of treatment already discussed.

DIGITALIS AND IODINE have had their days, and very flourishing days they were; but now, alas! they are consigned with ignominy to the tomb of all the Capulets, by the most learned of the profession.

COUNTER IRRITATION means, establishing a running sore on the surface of the body, in the neighborhood of an inflamed, internal surface, with a view of removing the natural, by an artificial disease. With this view, poor consumptives have had, and still unfortunately too often have, their chests seared with hot irons—covered with pustules from tartar emetic ointment—tortured with perpetual blisters, or other modes of effecting the coveted object. The most learned now allow, that counter irritation has no effect in causing the absorption or removal of tubercles, *therefore it does no good*. But it does positive harm; we know that the cause of hectic and night sweat, is to be found where there are surfaces secreting matter. Now if the ulcers in the lungs cause the irritative fever, it is only adding to the cause, by establishing a large, running sore on the outside of the chest, to keep those in the inside, company. Counter irritation is only of use to relieve pleuritic pains; and this can be best effected by a mild rubefacient anodyne liniment, or dry cupping. This cruel, and unphilosophical treatment, is abandoned by the leaders of the profession, but alas! is too common among their humble followers.

COD LIVER OIL.—This great quack medicine—this panacea—this god-send to the stupid physician, who had no trouble in prescribing while it was the fashion. "Doctor, I have a bad cough." "O, your lungs are weak; take Cod Liver Oil." Alas for the tribe that this physis made easy has gone out of fashion. Who

does not recollect the buckets full that were swallowed a few years ago, and now how little ? It is of no use, unless there is wasting of the body. It is not medicine but food ; and like osmazome, alcohol, coffee, tea, etc., possesses in a high degree the property of preventing the wasting of the tissues. Instead of being looked upon as a remedy for every consumptive, cases are selected that are suited for its employment, just as with other curatives ; and with the heads of the profession it is dying out.

CHANGE OF CLIMATE.—That *cheval de bataille*—that convenient way of getting rid of dying patients, has received its *coup de grace* from the recent writers on the subject, and now no longer commands the faith of educated, medical men, although many still keep up the cruel farce of sending moribunds in search of that health, which they will never recover on this side of the grave. The subject of climate, is too extensive to enlarge farther on in this letter.

I might cite Stokes, Billings, Louis, and many others, to prove that, as yet, no mode of treatment they employed was of the *slightest use* in curing consumption ; but they had not tried Inhalation. I shall not detain you, by going over again the names of men of the highest standing in the profession who tried Inhalation, and have given it their unqualified approval. The practice is still in its infancy and confined to a few, but its success is already such, that in a few years it will supersede every other mode of treatment. This it will not until the great mass of the profession shall see the chest practice in the hands exclusively of those who follow the very rational treatment by Inhalation.

LETTER XXV.

ASTHMA—ITS PATHOLOGY AND TREATMENT.

I propose to close this series of letters by giving a description of asthma, its pathology and treatment.

There is no department of human knowledge in which for the last thirty years, such progress has taken place as in the practice of medicine ; but still there is just reason to deplore the mystery which envelops many points connected with the functions of organs, the cause of disease, and the action of remedies. The discovery of the stethoscope has served to dispel much that has

hitherto been deemed mysterious in connection with the lungs and heart, while the introduction of medicated inhalation, as a method for introducing medicine into the lungs, is another grand and important step in the march of science. Thus every year adds some new trophy to the unflagging energy of man, until the whole system of arts become auxiliary to science ; and seem, in reference to human life, to fraternize and hold each other by the hand.

Hitherto all knowledge of the nature and character of *Asthma*, both in and out of the profession, has been extremely limited ; and to labor under a difficulty of breathing, no matter whether it proceeded from the tuberculous deposition on the lungs, or valvular disease of the heart, it was designated *Asthma*, whereby its application was made to denote a variety of morbid conditions, as different one from the other as the heart and lungs are. When I speak of asthma, I mean a spasmodic disease of the lungs which manifests itself in successive paroxysms or attacks, coming on suddenly, attended with great difficulty of breathing, and after an interval of time passing off again with free expectoration. This is the usual course of asthma, though betimes its approach is more gradual, and is indicated by a feeling of lassitude and indisposition to exercise, with an oppressive sense of fullness about the stomach and a sensation about the chest. Others again complain of headache and dryness of the nostrils—sometimes attended with violent sneezing, and a sense of chilliness and discomfort. The attacks are excited by various agencies ; sometimes strong and peculiar odors, the smell of a stable, close rooms, burning sulphur, ipecacuana, particular conditions of the atmosphere, irritation of the stomach or mental emotions, are all known to bring it on. If the attack is very severe, the patient is obliged to assume a remarkable and very characteristic attitude with the body bowed forward, the arms resting on the knees, the chest contracted with the feelings of a cord drawn tightly around or a heavy weight upon it ; the face is suffused with an expression of great distress, the veins turgid and perspiration flowing freely.

By applying the stethoscope to the chest during an attack there is only a weak respiratory murmur heard, but the wheezing and whistling of the air passing along the vascular bronchi into the agglutinated cells, conveys a faint idea of what a Pandora's box might sound like. The attacks generally come on of an evening or at night, but as no man, woman or child, can claim an exemp-

tion from them, so no part of the day will grant an immunity to the asthmatic. I have a patient in this city who, hitherto, was regularly attacked three hours after lying down. If he retired at nine o'clock, he was sure to wake up at twelve; if at ten o'clock he was seized at one, and during a period of years, there was not ten minutes variation in the time. Some suffer as soon as they lie down, but the majority are suddenly awakened out of their sleep in the middle of the night or towards morning with all the usual symptoms attending. The chest seems as if bound with an unyielding girth—the patient gasps for breath—calls for the windows to be raised and the doors to be thrown open, and though the weather is extremely cold, the patient is insensible to every influence and every feeling, except the desire for air. The face and lips grow purple, and the heart palpitates violently, while a sense of suffocation is experienced, and the poor asthmate thus suffers for days, weeks and months. A gentleman of St. Jacobs, Upper Canada, subject to asthma, instead of having a desire for fresh air, when the attack comes on, invariably closes the doors, and *fires up the stove* until the room is uncomfortably warm, when a free perspiration makes its appearance—after which the attack gradually subsides. An emetic of lobelia, also cuts short or modifies the paroxysm, especially when it has been induced (as is commonly the case with him) by excessive eating. This case doubtless had its origin in an irritation of the *pneumo-gastric* nerves, though it has terminated in destruction of the organic integrity of the lungs.

Happily for the victims of this disease, the suffering of the present is ever lightened by the conviction that nature will soon come to their relief—hope and confidence never flag for an instant, and though friends may sympathize, the patient feels no want of it, and as soon as the spasm is relaxed, the paroxysm is at an end, and the poor sufferer falls asleep.

The causes of all this distress, and the reason why asthma comes on so suddenly and passes off so mysteriously, I shall now proceed to show. The air-tubes have a muscular coat, which gives them the power of contracting or expanding. Anything which irritates the nerves that supply the muscular coat may cause a spasmodic contraction to take place on the instant, thereby diminishing the tubes so much in size that it is impossible to force air enough through them to purify the blood. This contraction of the air-

tubes may, like cramp, continue for several hours, and then past off in an instant. From this it will be understood that whatever irritates the nerves of the lungs may cause an attack of asthma, and whatever soothes that irritation relaxes the spasms and relieves the patient.

All forms of this disease arise from causes which act directly and primarily upon the lungs, thus showing that however theorists may contend for the hereditary taint and constitutional character of consumption, they must all admit the purely local character of asthma, and its amenability to local treatment by Medicated Inhalation.

From the Wrightsville Star, York county, Pa.
April, 1861,

AT HOME.—We learn from the Spy of Saturday last, that Dr. N. B. WOLFE is now on a visit to Columbia, his native place, and has met with a most cordial reception by his many warm personal friends. It will interest our readers to know that Dr. Wolfe has attained a distinction in medical science for curing Consumption, by a process peculiarly his own. In Boston, where he has been located for some time, he is said to have cured Consumption, Bronchitis, and other diseases of the air-tubes, where WARREN BOWDITCH and other distinguished physicians had failed. The Boston Medical Journal fully endorses Dr. Wolfe's practice as being scientific and reliable.

From the Boston Journal, March 13th, 1861.

COMMISSIONER TO INDIA.—We learn with pleasure the selection of Dr. N. B. WOLFE, of this city, by the Chief of the Agricultural Bureau of the Patent Office, at Washington, as *Commissioner to British India*. The object of the commission is to introduce for home culture the various agricultural product and garden shrubbery of the Orientals into the United States—to gather information respecting the timber trees of India—its choice fruits, and materials for fabrication, and various applications in the arts; and also to give special attention to the rare vegetable products in use of the *Eastern Materia Medica*, with a view to their introduction into the *Materia Medica* of the United States.

Of Dr. Wolfe's peculiar fitness for this mission all who know him will at once assent: but there are many who will sincerely regret his acceptance of it. For fourteen years he has made a Specialty of treating diseases of the Lungs and Throat, and perhaps to-day he is the most accomplished and successful Specialist in this department of

medical science, to be found in this or any other country. In this city he has been eminently successful in *curing* consumption in its most advanced stages, by a method practised only by himself, but which he is preparing to make public for the good of the world. His tour through the eastern world will enable him to acquire valuable stores of information, to be turned to good account in the future. He has our best wishes in his journeyings, and we hope to be among the first of his friends give him a "welcome home again."

From Forney's Press, Philadelphia, January, 1861.

CONSUMPTION: *Its Symptoms, Curability and Treatment*. By N. B. WOLFE, M. D., Editor of the MEDICAL STETHOSCOPE; *Author of Letters on Diseases of the Lungs and Throat, &c.* Boston: RAND & AVERY, Cornhill, Publishers.

In this particular treatise, which is terse and to the purpose, Dr. WOLFE describes the nature and symptoms of Consumption, a complaint extremely common and fatal in this country. Next he shows, that the disease is curable, by proper treatment, and in this he is sustained by the ablest writers on the disease, in England, France, Canada, and the United States. Lastly, he speaks of the curative treatment to be employed, the method systematized by Er. Elliotson in the Brompton Hospital, England, of Medical Inhalation; the theory being to reach the seat of the disease, the lungs, directly, as medicines swallowed into the stomach do not reach the lungs, Dr. WOLFE, WHO HAS LONG SUCCESSFULLY TREATED CONSUMPTION, has devised a plan for vitalizing the lungs and throat, the results of which have been invariably satisfactory. Dr. Wolfe's practice in treating this disease is very extensive, and he has been gratifyingly successful. He is a man of marked ability.

A LADY INHALING VITALIZING BALM TO CURE CONSUMPTION,

To Relieve Pain in the Breast.

To Heal the Throat.

To Relieve Short Breath.

To Cure Bad Cough.



To Strengthen the Voice.
To Cure Bronchitis,
To Cure Nasal Catarrh,
To Cure Asthma,

To Strengthen Weak Lungs.
To Cure Hemorrhage of the Lungs.

C A R D.

DR. N. B. WOLFE, PHYSICIAN TO THE
PULMONARY INSTITUTE,
86 EAST FOURTH STREET, CINCINNATI, OHIO.

My method of treating Consumption is to prepare medicine so as to be volatile at the temperature of the atmosphere, *which is inhaled or drawn into the lungs, where the disease exists, with every breath we breathe.* To enable my patients to do this, I furnish each with a small glass Inhaler, that can be carried about the person ready at all times for use, and which is so compact as to occupy no more room than a watch or a pocket knife. This enables the patient to take out-door exercise at the same time he is inhaling. *The most weak and delicate females find much comfort from the use of the Inhaler, and thousands, who had been pronounced hopelessly incurable, live to attest the efficiency of my treatment in curing Consumption and strengthening weak lungs.*

To those persons who wish to avail themselves of this mode of treatment, and who live at a distance from the city, and who cannot visit the Institute in person, I would say that I can send them treatment to any part of the United States or Canadas through the Post Office, or by Express conveyance. *The package containing the Inhaler and medicines to be breathed into the lungs, which I send, will not exceed one pound in weight, and carries quite safely through the mail to any place desired, where there is a post-office; so that every person may receive treatment through the nearest post-office to them at home. If, by accident or otherwise, in the transmission of the package through the mail, it should be lost, or sustain any injury, I will in all cases make good the loss without extra charge to the patient.* When persons order treatment in this way, they should either write me a short history of their disease, or send to me first for a circular of printed questions, containing such as I should ask them in person if they were present. To these questions they write replies, and forward to my address.

My terms for treating persons laboring under any weakness of the lungs, throat or air passages, so as to require inhalation of medicated air, is ten dollars per month, and one dollar for postage, if the treatment is sent by mail.

If the treatment is to be forwarded by mail, the whole fee must accompany the order; if sent by Express conveyance, half the fee may be sent with the order, and the balance paid to the Express agent when the package is delivered.

Full directions accompany the package, so that any ordinarily intelligent person may pursue the treatment at home with as much success as if residing in this city under my professional charge. I always correspond with my patients once a week, so that all changes may be noted, and advice from time to time be given.

All letters should be addressed,

DR. N. B. WOLFE,

Box 399 CINCINNATI, OHIO.