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CURABILITY OF CONSUMPTION

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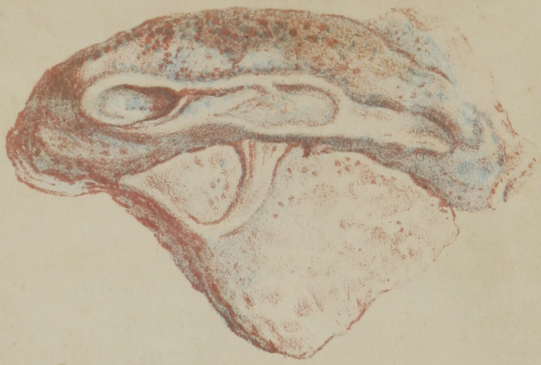

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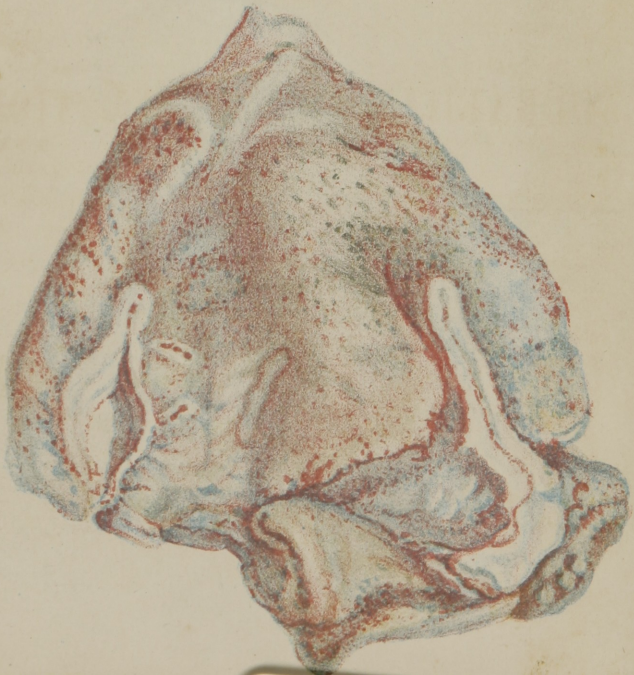

POPULAR PATHOLOGY.

PANCOAST

ON THE

CURABILITY OF CONSUMPTION.

MEDICATED INHALATION.

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SETH PANCOAST, M. D.,

Author and Proprietor, the twenty-sixth day of October, in the year of our Lord, one thousand eight hundred and fifty-five.

R. STEIN, Printer, No. 32 South Third St., Philade phia.

STEREOTYPED BY JESPER HARDING.

OPINIONS AND CRITICISMS.

MEDICATED INHALATION,

&c., &c., &c.

Medical men are, as a rule, fearful of, and averse to innovation; they have long considered Consumption as incurable, and that belief has perhaps filled many a too-early dug grave. They require Pelion to be piled upon Ossa in the way of proof. Incredulity, which is never convinced, should be met with sledge-hammer blows in the shape of facts, until the triumph of true science shall be complete.—*Kentish (Eng.) Independent.*

That *Inhalation* is beneficial and curative must be admitted by all practitioners who have courage and honesty. That it has softened and soothed the path to the grave in those who were rendered incurable by neglect—that in incipient Consumption it has restored health and saved life—are facts which no pathologists will deny.—*London Literary Journal.*

Pulmonary Consumption, in certain stages of the disease, is positively curable, and that under the most adverse circumstances it is possible to afford extraordinary alleviation of suffering by a judicious use of Medicated Inhalations.—ALFRED BEAUMONT MADDOCK, M. D., author of "*Pulmonary Consumption successfully treated by Medicated Inhalations*," &c.

You must aim to accomplish permanent amendment, and with this view must not be satisfied until you have rectified every disordered function. * * * I cannot explain its remarkable efficacy (Medicated Inhalation) but it is a remedy of real value.—THEOPHILUS THOMPSON, Physician to the London Hospital for Consumption and Diseases of the Chest, author of "*Clinical Lectures on Consumption*," &c.

The duty a man owes to himself, when he assumes the function of a teacher of truth that concerns the general well-being, is to be grave, earnest and truthful—to appeal only to the sober thought of the thinking community, and to deliver himself of the true convictions of his mind, no matter what prejudices they offend what practices they contradict, what interests they thwart.—*Dr. Balbirnie.*

I hope to bring forward a sufficient amount of facts to prove that Consumption admits of recovery in several ways, and that we should increase our efforts to save Consumptive patients.—Dr. James Turnbull, author of an "*Inquiry, How far Consumption is Curable,*" Physician to the Liverpool Infirmary, &c.

It is a notorious fact, that by the inhalation of certain noxious vapors, injury is inflicted on the lungs—why, then, should not vapors of another character have a beneficial effects upon the same parts?—*Bedford (Eng.) Times.*

The greatest possible mischief often arises from drenching the *stomach* with remedies, when the *lungs* only are diseased. *Inhalation* is the only safe mode of treatment in these cases.—*Sheffield (Eng.) Iris.*

Although pathological science has made great progress since the commencement of the present century, the *treatment* of disease has not kept pace with it.—Dr. John Hastings on "*Treatment of Pulmonary Consumption.*"

That Pulmonary Consumption admits of a cure is no longer a matter of doubt; it has been clearly demonstrated by the researches of Laennec and other modern pathologists.—*Sir James Clarke.*

He scatters, like atoms in the sunbeams, all the systems of pathology that have gone before him.—*Dr. Robinson on Dr. Rush.*

The whole science of medicine will one day be written on a single sheet of paper.—*Dr. Radcliffe.*

I think it is our duty not to look upon Phthisis as absolutely incurable and fatal.—*Dr. Turnbull.*

No part of the history of Phthisis is so interesting as the question of its cure.—*Dr. Hastings.*

That inhalation is beneficial and curative in Pulmonary Consumption, must be admitted by all practitioners of courage and honesty.—*Dr. Maddock.*

Pathological anatomy affords conclusive evidence of the curability of Tubercular Consumption.—*Dr. Carswell.*

AN

ORIGINAL TREATISE

ON THE

CURABILITY OF CONSUMPTION,

BY

MEDICATED INHALATION

AND ADJUNCT REMEDIES,

AGREEABLY TO THE NEW

PATHOLOGICAL DOCTRINES AND CURATIVE TREATMENT,

AS FOUNDED AND SOLELY EMPLOYED

BY

SETH PANCOAST, M. D.

Late Professor of Physiology and Microscopic Anatomy in the Penn Medical University.

WITH A

Portrait of the Author,

AND NUMEROUS ILLUSTRATIVE ENGRAVINGS.

"To the people, to the million whom it is to serve, I appeal."

NAPOLEON.

PHILADELPHIA:

PUBLISHED BY S. PANCOAST, M. D., 144 SPRING GARDEN ST.

1855.

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THIS VOLUME

IS

Dedicated to the Memory

OF THE LATE

SAMUEL GEORGE MORTON, M.D.,

PRESIDENT OF THE ACADEMY OF NATURAL SCIENCES,

Author of "Crania Americana," &c., "Illustrations of Pulmonary Consumption," and numerous Medical and Scientific Works,

AS A SLIGHT TRIBUTE OF

UNCEASING AFFECTION AND REVERENTIAL ADMIRATION,

BY HIS

DEVOTED PUPIL AND HUMBLE FRIEND,

THE AUTHOR.

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PREFACE.

THE AUTHOR has no apology to offer for presenting this volume to the medical profession and to the thinking millions of the people of the United States. It must speak for itself. Its object is vast and momentous. Its subject one that narrowly concerns nearly every fair home and family circle in our beauteous land. Consumption is a disease so fearfully destructive in its insidious ravages that it behoves every one to make deep and earnest inquiry into the causes of its excessive fatality, and to ascertain if its terrors may not be utterly banished from the world. The present is truly an age of inquiry and *reform*—an era of *progress* in all the moralities of life, in intellectual and in physical sciences. Medicine alone has remained stationary for centuries. It has been for ages veiled in mysteries, and its professors have had uninterrupted licence to slaughter millions on millions of human beings in the quiet sick room, from immemorial time. In the sentiment of an illustrious English writer, Government should either banish medical men and their acts, or else look to the *murders* committed by the dangerous profession, in its ignorance of pathology and curative remedies. It is fortunate, however, that we live in a day of general knowledge. As education advances, the people demand light, and will no longer remain in darkness. They already understand enough of Physio-

logy and the general elemental laws of nature, to know that all the existing systems of medicine are radically wrong in their basis and murderous in their results. They are not disposed longer to submit to the stings of the lancet, nor will they continue to swallow deadly nostrums, without a proper reason for such barbarous excoriations and distressings rackings of the animal economy, in the very face of knowledge, truth and mercy. To satisfy this justly exacting and widely extending class of readers, this volume is designed. To *popularize* the medical art is the primary aim of the author. He claims to have founded a new *Doctrine of Pulmonary Consumption, and a New Method of Cure*, and bodily challenges investigation into the soundness and rationality of his views. Much startling information is given, that cannot fail to arouse the community from its lethargy and infatuation in view of the science of medicine. The author would here remark that he is indebted to many of the most eminent medical practitioners of the old and new world, in illustration of his own peculiar views of pathology and curative treament, but want of space will prevent him from making any especial reference to, or citations of any. This work may therefore be regarded as the essence of the medical science, adapted to the comprehension of the humblest mind, and as essentially and entirely an *original* TREATISE ON CONSUMPTION, in respect to its literary verbiage and scientific principles. The author asks only for a candid and impartial hearing through the medium of his book.

INTRODUCTION.

For upwards of twenty-three centuries, to starve and bleed and purge and torture, has been the all but exclusive business of the man of medicine.—SAMUEL DICKSON, M. D., author of the "*Destructive Art of Healing*, "*Fallacies of the Faculty*," &c.

Neither the philosophy nor the practice of medicine are sufficiently stable to preclude a *novel* idea, to render impossible a more comprehensive theory, or to defy a more efficient and consistent practice.—DR. ANCELL, an eminent British Pathologist, and author of a work "*On Tuberculosis*," &c.

The healing art was once the companion of philosophy and hand-maid of compassion, and will be again; and after being lost in a dark wilderness of error, with greater wisdom, will return to the divine rectitude of her original mission.—DR. JOHN STEVENS, author of "*Manwifery Exposed*," "*Essay on Fever and Cholera*," "*Medical Reform*," &c.

BEHOLD how brightly breaks the morning! Aurora crimsons now the veil of night and heralds in the resplendant sun of joy and gladness. Queenly Isis, that has slept the sleep of ages, is rousing from her lethargy, and clothing herself anew in the heavenly robes of truth and mercy. Alas! while the "Goddess of Health" has thus slumbered, the arch enemy DEATH has entered the vineyard of the race of Adam, and with his ruthless scythe cut down the branches of vigor, scattered the purpling fruit, and bruised it to nothingness beneath his ever-onward marching and devastating tread. Alas! what myriads of human beings have been swept from time to eternity within those many thousand years, by reason of the universal ignorance of

pathology and the elementary laws in the organization of the human being—that curious creature *man*, so fearfully and wonderfully made in the image of his Divine and Omnipotent Creator! From the days of Hippocrates till the commencement of the present century, the Curative Art has been, in the language of Lord Byron, the "Destructive Art of Healing"—literally a science to MURDER, *secundem artum*, without restraints of government. From time immemorial it has been the "established practice" of medical men to reduce the vital force of the patient's system in every possible way—thereby robbing the body of its *reparative material*—the AIR and the BLOOD—which are the real essentials in the life of man, and by so doing, hurrying the victims of misplaced confidence, before they had lived out half their days, to their last eternal sleep in the dank and noisome grave. Dead men could tell no tales, and those who were fortunate enough to *escape* the terrible brutalities of the medical ordeal, were invariably reminded by the doctor how thankful they ought to be for being *cured* of disease! In sooth, the suffering invalid has ever been only too glad to be rescued from the tortures of his physician to look too closely into the obscurity which enveloped medical science, nor has he dared to doubt or dispute the excellence of an art, whose science was supposed to be the accumulated experience of many ages of time. Under the protection of his diploma, from first to last, the medical practitioner has been exempt from the criminal laws—allowed a monopoly to violate every impulse of domestic love and Christian duty—to torture and destroy, *ad libitum*.

Looking through the history of nations, how universal have been the ravages of war on the face of the globe! Every stone beneath our feet would mark, if graven, the locality of a martyr's grave, and each tree would be found waving over a warrior's tomb; yet the ravages of war are as nothing compared to the thousands who are daily hurried from time to eternity, through the errors in the systems of medicine that prevail. Startling facts like these are sufficiently appalling, and might well loudly appeal to every god-like virtue that enobles faith and adorns humanity, for some means of saving mankind from the gulf whose descending vortex drags millions on millions, year by year, to untimely death. Well might the mind be roused from its lethargy and wondering silence, into energetic resolution and action. The deeper we research the more awfully palpable will it appear that the temple of medical science is indeed erected of human sculls and cemented with human gore! In saying all this, the author does not mean to assert that the medical profession have wilfully, and with diabolical intent, lent themselves to the indiscriminate slaughter of their fellow creatures! Though the blood of victims, in countless numbers, may be said literally to drip from their finger-ends, what they have done, has been done in the darkness and ignorance of the true principles of medical science. To our great Father in Heaven, therefore, should they be left for a righteous judgment of their sins, in accordance with his Divine attributes of love and mercy.

Happily, however, the Spirit of *Progress* has recently been abroad upon the face of the earth, and in spreading

through all the ramifications of society, has at length invaded the temple of medical science, and revealed to the popular gaze the many wonders of the inner shrine. That which less than half a century agone was a *sealed* and *hidden* thing, has had the veil lifted from its mysteries, while the oracular *dicta* of musty time have been rendered intelligible to the commonest understanding. Eminent men, in every land, have lately come forward with their discoveries and investigations, and freely made them known, with the avowed purpose of *popularizing* the pathological and curative elements, and affording the largest amount of benefit to the children of sorrow and affliction. Accordingly, at the present moment, a large proportion of talent and ingenuity is being devoted to minute researches of great interest, but which will probably be reserved to another generation to mature and apply. Though slow the triumph of conviction, it is consoling to know that the days are passing away for Error to confront Truth and usurp her highest prerogative. The noxious weeds may indeed no longer grow up side by side with the golden grain. Truth immortal and immutable must prove omnipotent in the end.

Truly the greatest losses that humanity sustains—the cruelest and most frequent inroads that the domestic circle suffers—are from untimely deaths, often of the brightest and best, of tubercular diseases. Consumption and throat complaints destroy annually at least one-sixth of the population of the United States, while they constitute about one-fourth of the ordinary medical practice of the land. Nor are they diseases of one zone or of one clime, but rather are they of

almost universal prevalence. To such an extent is this the case, that there are substantial grounds for the calculation that about *ninety millions* of the present inhabitants of the globe must inevitably be cut off by one form or another of the hydra—Consumption! These are startling, assumptions, but lamentably *too truly* based on undeniable facts. Who then among mankind—what mother, what father, what brother, what sister—is not interested and involved in these appalling horrors? Surely it were legitimate labor then to arouse the public mind to the immense fatality of tubercular diseases, and cause it to inquire if there be really no "Balm in Gilead"—no means by which the ravages of the Fell Destroyer may be arrested and stayed forever.

The present idea of the *necessary* fatality of Consumption has of itself insured failure; for it is of the very nature of despair to paralyze exertion. No one can ever be successful in any undertaking who does not believe success possible. Hence in Consumption, simply palliative treatment has been too much the order of the day. That mankind should be content with mere palliatives, where the possibility of doing better looms up brighter and brighter in the future, cannot longer be believed. The people have already indeed begun to inquire and act for themselves on questions that thus so painfully come home to nearly every hearthstone in the universe of man.

Truly, then, we should rejoice in the wonderful progress that has been made in pathological science since the commencement of the present century. That great pathologist, LAENNEC, of France, through his laborious and unceasing

microscopic investigation of the diseased structure of the lungs, was the first to proclaim to the world that *Consumption is a curable disease!* Since his day, many have been the eminent practitioners who have been able to confirm his views, by further analysis and inquiry. Consumption is ascertained to be curable, not by one simple specific alone—but by various means and different modes of treatment has the dread scourge been mitigated and permanent cures effected. It has, however, been reserved to the present day to develop the reasonableness and importance of MEDICATED INHALATION. The local application of medicated vapors in diseases of the air passages of the lungs, is at once so highly rational and philosophic as to admit of no question on the subject. It is true that the subject has not obtained for itself in the United States that extent of inquiry and examination which its merits deserve. It is not easy to imagine how this mode of treatment of diseases of the organs of breathing should have been so long neglected. Its feasibility is self-evident, and in perfect accordance with the theory, principles and practice of medicine and the teachings of common sense. Every intelligent physician will admit that remedies applied directly to the absorbing surfaces of the lungs, independently of the specific local influence they exert, are carried into the system and produce analogous effects as when directed to the surface of the stomach.

Nevertheless, the majority of physicians still obstinately refuse to acknowledge that *Consumption is a curable disease;* but it is not to be presumed that the children of

affliction are indifferent or adverse to a fair trial of reasonable sanitary agencies, or that they will refrain from investigating the claims to notice of this Curative System by Medicated Inhalation, which professes at least, to stay the destructive course of a hitherto almost unchecked malady.

The inhalation of medicated vapors was known to the ancient physicians. As far back as the second century, Galen himself sent consumptive patients to the vicinity of Mount Vesuvius to inhale the sulphureous vapors which arise from the soil. The system was a right one, but being improperly applied, fell into disuse. Almost all important remedial agents have been the production of modern experience and investigation. *Inhalation*, therefore, may be said to be a *New Mode of Treatment*, while the hope may now be reasonably cherished, from the rapid advances which pharmaceutical chemistry has recently made, that Pulmonary Consumption will shortly be admitted, not by a few individuals, but by the whole body of the profession, to be as much under the control of the art of medicine as in every other formidable disease.

The author of this volume has devoted several years of close study to the phenomena of disease, and from his pathological investigations and microscopic examinations of tubercular deposits in the lungs, he *believes* that he has discovered some *truths* of a novel and important character—*facts*, in sooth, that have enabled him to propound a *New Doctrine* of pulmonary disease, and a *New Method of Curative Treatment*, at once highly satisfactory and conclusive. He finds that *Inhalation* is available not only in Pulmonary Consump-

tion but equally so in Bronchitis, Asthma and Croup; in Chronic, Nervous and Spasmodic Cough; Inflammation of the Throat, Uvula and Larynx, and likewise in any acute or chronic complaint, affecting the mucus membranes of the throat, air passages, or substances of the lungs. It must not be understood, however, that I rely entirely on Medicated Inhalation in my method of treating diseased lungs. The nervous system requires to be built up anew, and the general tone of the animal economy restored to vigor and power, through certain constitutional remedies and hygienic agencies, especially and solely employed in my professional practice. I am able also to produce a number of cases of remarkable cures of several of these maladies, together with many where decided relief was given after the patient had passed to the last stage of tubercular disorder.

This volume is intended to familiarize the subject and prove to the world the *Curability of Consumption.* My own doctrine of disease is briefly delineated and set forth in juxtaposition with the theories of the most eminent medical men of the world. I challenge investigation of my scientific principles, and am ready to show some of the cures effected, under Heaven, through my humble instrumentality, in some of the worst stages of Pulmonary complaints.

CHAPTER I.

PRELIMINARY REMARKS.

THE medical profession, it is taken for granted, are sufficiently acquainted with the rise, progress and present condition of the science of medicine, to render any exposition of this kind entirely a work of supererogation. I would, however, here remark that this treatise is designed for the practical consideration of the millions of intelligent readers in the United States, to whom a succinct history of medicine must be desirable, as enabling them the better to distinguish between the empiric and the man of science, and to understand more fully the prevailing doctrines of disease and the rationality of the curative treatments generally adopted by medical practitioners of the present day. It will not be denied that professional writings are every day being more read by the public. This is a consequence of the general diffusion of every species of knowledge through the periodical press of the land, and that system of universal education which has long since become a leading characteristic of the people of the several States of the American

Union. Indeed the study of physiology is becoming, day by day, a necessary part of the educational course of the rising youth of the land, while the adult population are apt to devour with eager avidity every thing that pertains to the laws of health and the hygienic means calculated to mitigate and remove disease. The American people claim a right to exercise their own powers and means of investigation into the nature and causes of diseases, and only require *data* whereby to judge of new theories and new modes of treatment. As Dr. Balbirnie, a distinguished physician of England, very justly remarks, "no *liberal* professional man of the present day, whatever was the case twenty-five years ago, and anteriorly, will discourage this direction of *intellectual* impulse. In fact, the want so felt and expressed *must be gratified*, and by the properly educated and recognized members of the profession, or *quackery* will assume the responsible office and cater its trash for the sober realities of science." "Independently of this," the same writer very cogently remarks, "every medical man must wish for *well-instructed* patients, as by far the most satisfactory to deal with—the most amenable to treatment—and on every ground desirable for the credit both of the physician and his art. *First*, such patients are prevented placing themselves in improper hands; *secondly*, they are better able to "back" the curative efforts made in their behalf, as being

more discriminative of sources of error or failure; *thirdly*, they are prepared more intelligibly to describe the seats and signs of disordered functions, and better fitted to communicate information on those nice points that guide professional judgment; *lastly*, well-instructed patients are less apt to allow ailments to run unsafe lengths before applying for aid, as being more observant of those alterations in their physical condition, sensations, &c., which indicate the approaches of disease or its new modes of manifestations.

The avowed object of these pages, therefore, is to prove that, however lofty medical science has appeared when clothed in mystery, or flaunting in the false airs of pedantic learning, it is not, if stripped of that mystery, higher than the reach of the ordinary mind, or beyond the attainment of common sense. Indeed, many philosophers, both ancient and modern, have recorded their faith and foreboded a period when the people would become their own doctors, when each father would be the physician to his own family—when the people would mutually assist each other in the study of those general principles of medicine and hygiene calculated to release society of the deplorable sufferings from disease and wrong practice. The day is doubtless approaching when the whole theory and practice of medicine will be written on a single page.

The late Dr. Rush, of Philadelphia, so renowned in both

hemispheres, for his professional skill and manly and Christian virtues, and whose opinions are still quoted by eminent medical writers and teachers of the present day, was wont to console himself with the animating prospect, "that the day would come when medical knowledge should have obtained that apex of perfection, that it would be able to remove all diseases of men."

That day is even now at hand. Nearly every form of disease, to which the "flesh is heir," is capable of being successfully managed. *Consumption*, alone, has hitherto baffled the skill of the physician, for the simple reason, undoubtedly, that pathology had not enlightened him sufficiently upon the character of the morbid structure of the lungs, nor microscopic and chemical examinations and analyses determined the proper therapeutical and hygienic means to be employed in the curative treatment of such complicated disorders.

Happily, however, *Inhalation*, at length, is found to be the most rational and satisfactory method of conveying medicaments to the immediate seat of disordered action. The principles, then, upon which the practice of Inhalation is founded, as well as the various remedies employed and the best modes of using them, prove more interesting not only to the public but to the medical profession. The author, at least, feels abundantly assured, that the people

will not look on with indifference and refrain from using their own individual exertion toward promoting the more common employment of a sanitory agent, by which, in some cases, if not universally, a chance may exist of staying the mighty havoc which complaints of the lungs and throat make in our domestic circles. The author would place at the disposal of every one the means of snatching from the tombs as large a number as possible of the victims of Consumption. It is, however, far from his intention to recommend self or domestic treatment. No friend to his species would advise the uninitiated to treat those diseases which have hitherto baffled the skill of physicians. My sole object is to prevent patients from falling victims to error, by placing themselves in improper hands for medical treatment—which it is not likely any intelligent persons will do when fully imbued with the philosophy of medicine and possessing accurate information of the laws of health—rather their own altered sensations on the approach of disease, will induce them to seek that professional opinion and aid compatible with the knowledge previously obtained by them in the course of their scientific and medical readings. Physicians, therefore, have no reason to be alarmed in view of any especial encroachments upon their ancient rights and privileges. If ever *empiricism* is to be banished from the earth, and the medical profession re-

deemed from aspersion and obloquy, it will be through the general enlightment of the people in respect to the history and mystery of medical science.

CHAPTER II.

TRADITIONS AND MYSTERIES OF MEDICINE.

In the language of the Rev. John Wesley, the founder of the sect of Christians called Methodists, who had studied medicine in his earlier days, "It is probable physic, as well as religion, was in the first ages chiefly traditional—every father delivering down to his sons what he had in like manner received, concerning the manner of healing both outward hurts and the diseases incident to each climate, and the medicines which were of the greatest efficacy for the cure of each disorder."

By the disobedience of our first parents, *Death* came into the world, yet God having implanted certain instincts into the bosoms of mankind, they were soon able to discriminate what fruits and flowers, what roots and herbs, what flesh and minerals, were useful for the healing of the sick and productive of the destruction of human life. In the early simplicity of man's nature and wants, it may be readily supposed that his ailments were comparatively few, and these capable of being speedily alleviated by virtue of cer-

tain medicaments that *Nature* kindly suggested or placed in his pathway of life. Physic, then, was handed down from sire to son, and in time became traditional among nations, before it was exalted to the dignity of a philosophical science. The father delivered to his son what he had received from his ancestors, or what he had discovered in his own *experience*, in respect to the art of healing and the nature of disorders. If any man was sick, or bitten by a serpent, or torn by a wild beast, the fathers were able to tell their children what remedies to apply to give relief and effect a cure. Thus far physic was solely founded on experience and not on any conjectural ideas of the *nature* of disorders. A man said to his fellow-man, Are you sick? Drink the juice of this herb, and you will be restored to health. Are you in a burning heat? Leap into yonder river, and you will be well. Has the serpent bitten you? Eat of this root, and the poison shall do you no harm. Are you wounded by the enemy? Apply this balm, and your ulcers will be healed. It is certain, that this is the method by which the art of healing is preserved among the American Indians at the present day; and, therefore, we have the analogy for supposing such was the philosophy of medicine among all primitive nations on the face of the globe. Thus ancient men, having a little experience, joined with common sense and common humanity, cured both them-

selves and neighbors of most of the distempers to which they were subject.

Other writers think that for the origin of medicine we are indebted to Egypt. At least, it is certain that in the days of *Moses* her medical knowledge was famous, while physicians enjoyed a high celebrity at home and abroad. The invention of medical science is generally ascribed to *Thoth*, or the first *Hermes*, who was regent or king of Egypt, of the second dynasty of *Manetho*. He published it is said, six books on physic. He was tutor to *Queen Isis*, who was herself the discoverer of several medicines. She left her knowledge in the writings of the Cabiri, and was called by the Egyptians the "Goddess of Health." In the course of time, physicians had a provision made them by law, and were required to practice by fixed rules and recipes. So long as they practised by these rules, they were safe, however fatal the medicine might be to the patient. The moment, however, they dared follow their own judgment, and deviate from the rules, it was at the hazard of their lives, which they most assuredly lost, if the patient died. Physicians were required to practice for the army and for strangers traveling in the country without fee or reward. Their medicines were simple and prepared from herbs; while their kings caused bodies to be dissected, for the purpose of perfecting them in the art of physic. Four

thousand years have passed since these laws predominated in Egypt, yet the same tyrant spirit of restriction, though indeed less severe in its penalties, exists at this enlightened day; and, while it maintains monopoly and protects corruption, retards, as in Egypt, the improvement of medicine.

All we know of the state of medicine among the ancient Hindoos, is derived from a number of Sancrit manuscripts, that are yet extant, in Europe.* The East India Company of London, has *eighty-six* works of this kind—some dated as far back as *fourteen hundred* years before Christ, others a thousand and nine hundred years before that era. One of these manuscripts is the AYUR VEDA, by *Susrutas*, divided into six parts, and treating of the principles, diseases, body, cures, antidotes, and co-relative miscellaneous matters in medicine.

Another volume is called *Ayur-Veda-Ayush*, consisting of eight parts, relating to foreign bodies, sores, and swellings—diseases of the eyes and ears—general medicine—

* It is proper here to state that I am indebted to the *manuscript notes* of Dr. WM SCHMŒLE, Professsor of General and Special Pathology and Morbid Anatomy, in the Penn Medical University of Philadelphia, for much of the highly valuable medical information contained in the present chapter of this work. *A succinct summary* of medical science, including the dogmas, theories and doctrines of ancient and modern physicians, has been regarded as a *desideratum* among the medical students in this country. The facts here presented will partially, if not completely supply what has been so generally required.

cure of insanity, produced by witchcraft—treatment of lying-in women and infants—use of antidotes—preparation of an universal remedy—of procreation, &c.

Diseases are regarded of supernatural and natural origin. The natural ones arise according to the preponderance of one or other of several elementary substances by which the blood is infected. The prognosis depends mostly on signs, omens, birds, visions, dreams, &c. *Incurable* patients no physician must undertake! nor such as have chronic diseases that grow worse every year. Many curable diseases of the brahmans and kings are made incurable, because the laws will not permit the use of heroic remedies—such as bleeding—among the highest classes of people.

There are thirty-seven classes of remedies used in compound mixtures, to which are added prayers and hymns. Water is highly honored as a preventive and remedy—especially that of the Ganges. Milk of cows, goats, camels, sheep, bisons, mares, elephants, buttermilk and butter, especially that made of *human* milk—*ambrosia simile*—are among the common medicaments; likewise all sorts of oils, honey, sugar, fats, wines, distilled liquids, syrups, etc. Some of their remedies are—cassia fistula, elateria cardemon, peppers, ginger, acorns, calamus, indigo, figs, catachu, crocus, assafœtida, nitre, fosil salt, arsenic, sulp. of copper and iron, bitumen, antimony, tin, silver, lapis magnes, load-

stone, gold, etc., showing considerable *chemical* knowledge. A special work exists on metalic remedies. A great deal of doctrine is given respecting poisons and antidotes. In external poisons they relied on *surgical* treatment, as tying of the part, actual cautery etc.; cold applications and emetics, together with charms, prayers and hymns. Surgery formed a great and *practical* doctrine, as far as want of *anatomical* knowledge could direct them. They used almost all the bold operations of our days, as bleeding, cupping, sucking, bathing, etc. The extraction of hidden arrow points was a great art.

The most minute doctrines are given for *secret* diseases and midwifery. Infants are tenderly educated and kept veiled to prevent the influence of the demons.

Physicians form a separate class, and must belong solely to the caste of the brahmas. Sudoras are instructed in medicine, but cannot be inaugerated, and so form a sort of assistants. The healing art is the gift of the gods. One of the fourteen retnas, or treasures, produced by the gods, by mixing the earth with the ocean, was a *scientific physician!* A physician, therefore, must be highly cultivated, both mentally and bodily—dressed plainly, without desire to show, modest in his conduct, kind and benevolent, and look upon his patients as his children. Such physicians were, therefore, highly honored—accompanying the kings, and

protecting high places, as far as science could avoid poisonings, etc. After death, good physicians were promised great felicity from the gods, and they entered the heaven of Indra!

The doctrines of medicine being of heavenly origin were strictly *dogmatic*—often in verses—but full of the most diffusive and interesting instruction, entering into all details.

It is particularly insisted upon that medicine and surgery must be *united*, to form a perfect physician. "For," says *Susrutas*, "a physician who knows but one of these branches, would be like a bird with but one wing." He says, also, "In the hands of the *scientific*, the medicines are like unto ambrosia—but in the hands of the *ignorant*, they are destructive swords, lightning-bolts, poisons!"

Brahma is the father of all things. He created five elements—earth, water, air, light, ether—and of these all things consist. They are either movable or immovable—generated, by heat, from eggs, seeds, or born alive.

In men there are seven membranes, seven segments, seven seats or reservoirs, seven elements of bodily substances, 700 vessels, 500 muscles, 900 tendons, 300 bones, 210 joints, 107 vital membranes, 24 nerves, three humors, three excretions, nine organs of senses, and five senses corresponding to the five elements. The blood is the *fountain*

of life—prepared of chyle, which being watery, receives its red color from the liver and spleen. The blood creates the flesh—this the areolar tissue—this the bones, while the bones create the marrow, which is the seed of new bodies.

The most important bodily elements are—air, slime, bile, and organic fire, which pervades and preserves the whole body. The air resides in the hip and rectum—the cooked or digested matters above the air, but below the navel—above this is the bile—and above this, the phlegmatic or crude matters.

Such was the condition of medicine among the Hindoos about fourteen hundred years before Christ. The intelligent reader will admit that their knowledge was very considerable, and he will likewise be able to discern how far the *modern* science of medicine has *advanced* upon the earliest dogmas of the curative art.

With respect to the Chinese, their knowledge was much less than that possessed by the Hindoos. They have old works on materia medica, comprising forty volumes, called "Ching-che-chun-ching," *i. e.* Approved guide to medical practice—seven books being on diseases—mere nosology, or arrangement of diseases according to their classes, orders, genera, or species.

CHAPTER III.

MEDICAL SYSTEMS OF ANCIENT GREECE AND ROME.

THE study of medicine was transferred from Egypt to Greece, by the sage *Chiron*, before the Trojan war. The famous Greek, ÆSCULAPIUS, was the scholar of Chiron, but far surpassed his master in fame. The most dangerous wounds and maladies are said to have yielded to the operations, remedies, harmonious songs, and magical words of Æsculapius. He dedicated all his days to the relief of the afflicted. The Greeks deified him and erected a temple to his memory. The inscription over the entrance of his temple is at once solemn and affecting—*Procul este profani*—"Far hence, ye profane." The secrets of his art he communicated to none but his children; and they were retained in his family until they burst forth with splendor, and shone out to the possession of the world in the character and writings of the immortal HIPPOCRATES.

Hippocrates was born in the Island of Cos, in the year 461, before the Christian era, and was of the Æsculapian family, his father being the seventeenth in the direct line from Æsculapius. The Æsculapian family had carefully

prepared the doctrine of their progenitor, and established three medical schools, in Cos, Cnidus and Rhodes. Their fame had spread when Hippocrates, the master-spirit of the healing art—the Homer of medicine, as he has been called, appeared, perceived with his mighty mind the defects in the system of his ancestors, and set himself to grapple with its difficulties, and find out and apply a remedy equal to the vast importance of the subject. Hippocrates was the first to add *reason* and *theory* to the practical rules of Egypt and Greece, and at once exalt medicine to the dignity of a *science*. This he accomplished, notwithstanding that he was denounced as an *empiric*, with a perseverance and success which have, perhaps, never since been equalled, or honored and distinguished the labors of a single man. *Practice* and *theory* were so remarkably blended in the character of this profoundly original sage, that his decisions in medicines were received, like the Oracles of Apollo, with confidence and veneration. He died in Thessaly, at the advanced age of ninety-nine. During his long life but one sentiment actuated his heart, the *love of doing good.* One *single act* may be said to have made up his existence—the *constant employment of relieving the sick.* His death was greatly deplored by the Greeks. His name is cherished and his memory revered by all nations. The Divine Hip-

pocrates! the Father of Medicine! are the common appellations by which he is distinguished until this hour.

The next remarkable medical character in antiquity was CELSUS, who was born in Rome or Venice, and flourished about the beginning of the Christian era. He seems to have practiced on the system of Hippocrates, and to have acquired great skill in inflammatory and malignant fevers, especially the plague. He was much beloved at Rome and held in high estimation by the Emperors Augustus, Tiberius, and Claudius Cæsar.

GALEN ranks in fame next to Hippocrates, of whom he was a close follower. He traveled through many countries, and his great skill excited the envy of the Roman physicians, who branded him with the name of *Theorist*, and affirmed that he used magical words in his practice. He retorted upon them and called them *Methodics*, but Rome having become too hot for him, after a residence of five years, he returned to Pergamus. When Galen had been some time at Pergamus, the plague made its appearance at Aquileia and Rome, during the joint reign of Marcus Aurelius and Lucius Verres. The fame of Galen in curing the plague induced the Emperors to send for him. He speedily cured the two sons of Aurelius, *Commodus* and *Sextus*, who had been smitten by the infection. This happy effect so established his name, that all hostility

against him ceased. After the death of Aurelius, Galen returned to Pergamus, where he died at the advanced age of ninety years, in the year of our Lord 200. He was naturally of a delicate and sickly constitution of body, yet from his great skill in medicine, and the temperate manner of his life, he passed a useful career, and reached a happy old age. Galen may be said to be the *last* of the great medical men of ancient time, whose memories shine as splendid beacons on the solitudes of time.

It is true, indeed, that after the days of Galen, several practitioners rose to considerable fame in their profession. These were Erastisratus, Herophilus, Heraclides, Scribodeus, Largus, &c., all of whom maintained their individual notions, but passed down to the dust, without having left anything worthy of particular notice in their especial practice and memories.

From this time till the sixteenth century there was no material innovation in medicines, but all humbly trod in the footsteps of Galen. The Arabs, however, introduced into practice several new and valuable medicines, as manna, senna, tamarinds, cassia and rhubarb, and by the cultivation of chemistry laid the foundation of a great and important revolution in the art of medicine.

CHAPTER IV.

MODERN SYSTEMS OF MEDICINE.

PARACELSUS, in the sixteenth century, laid the foundation of the *chemical* system, which was in direct opposition to that of GALEN. The two sects severally attempted to give explanations of the phenomena of health and sickness, but they turned entirely upon the state of the fluids in the body.

Both the *humeral* and *chemical*, after having divided the schools for about two hundred years were thrown into the shade before the splendid light of the seventeenth century, in the discovery by HARVEY of the circulation of the blood in the animal economy, combined with the receptacle of the chyle and of the thoracic duct.

At length SYDENHAM appeared, who adopted the plan of Hippocrates. He did not entangle himself in the thorny paths which led to the mysteries of animal life. His pathology was simple and comprehensive. The *oppressed and exhausted state of the system* comprised his rationale of disease and mode of cure. "To add to the science of medicine," said Sydenham, two "facts must be kept in view,

first, the giving of a full description or history of the disease; *second*, the discovery of a fixed and perfect remedy, or mode of cure. To his valuable facts, the doctor would add the knowledge of specifics; and for so doing was denounced as a quack! He contends that the only specific we have is the Jesuit (or Peruvian) bark, and that calomel and sarsaparilla are not specifics, unless it can be shown that one does not produce salivation and the other perspiration.

But medicine was still, in modern times, doomed to be harrassed with broils and uncertainties.

We see Dr. GLISSEN wearying himself about the vital principle, and contending with vehemence for irritability, as a property of the *vis insiti*, the *innate force*. He falls into confusion about *irritability* and *sensibility*, and attempts to confirm a hypothesis which he frames, by remarking that there can be nothing in the intellect but what we receive by the senses.

Dr. CULLEN held the same view a hundred years afterwards.

BAGLIVI made the phenomena of the vital principle his hobby.

HALLER believed that irritability was independent of sensibility, and *vice versa*.

BELLONI contended that irritability depended on the accelerated motions of the blood.

Dr. WINTER traced all human notions to fibrous irritability and stimuli.

The younger BŒRHAAVE to the moving power of animals.

Dr. KIRKLAND contends that the medullary substance is conveyed by the nerves to the muscular fibres, which causes motion.

Dr. WHYTT asserts that perception is necessary in connection with every or any material substance, to produce motion.

ZIMMERMAN and ŒDERUS demonstrate by experiments that irritation is as general in the animal fibres as attraction in the universe, and is altogether separate from the mind and soul.

Thus we perceive how difficult it has been for the professors of the medical art to fix upon one scheme of principles. The new systems introduced by Stahl, Hoffman and Bœrhaave, were intended to supply a remedy; but, alas! they were new, and instead of removing the disorder, only operated to its augmentation, and inflamed the wounds they ought to have healed.

"The *Autocrateia*, admitted in some shape or other, by every sect, has," says Dr. Cullen, "corrupted the practice

of all physicians, from Hippocrates to Stahl." This is a sweeping sentence, pronounced upon the *anima medica*, by the good doctor of Edinburgh—but his own favorite *Nosology* has received a blow even more severe and decisive from the pen of Dr. RUSH.

Dr. BROWN was a pupil of *Cullen*, and soon set up a theory of disease in opposition to that of his preceptor. He studied twenty years before he brought his great mind to the imperfections of a system that has been progressing for over 4000 years. Being ill with the gout, he found that the disease was the most aggravated when he used a sparing diet, and relieved when he returned to a "generous living." "Led by the hand of nature," the Doctor says, "he walked round the whole circle of *asthenic* diseases, and found that they were all cured by the same remedy—*stimulants*."

I will here explain these terms *sthenic* and *asthenic* of the Brunonian system.

Sthenic diathesis, a Greek term, literally a *strong affection*, means in that system, a diseased habit of body, occasioned by excess of stimuli, and is called *direct debility*, as it arises from an overcharged state of the system.

Asthenic diathesis, literally a *weak affection*, means a diseased habit of the body, occasioned by a deficiency of stimuli, and is called *indirect debility*, as it arises from an

exhausted state of the system. The former was to be reduced by depletion—the latter to be added to by repletion. Dr. Brown by reducing all diseases into two classes, *sthenic* and *asthenic* ascertained at once, to which class the complaint belonged on visiting his patient, and proceeded to apply the remedy accordingly.

Dr. Rush's theory, like Dr. Brown's considers life to be a *forced state*, and the *effect* of *stimuli:* and the stimuli he also divides into internal and external. Disease is an unit. It consists in a morbid excitement. The cure is to restore the equal diffusion over the whole body. *Air*, by exerting respiration, gave the first impulse to life. God breathed into man the breath of life—that is, *atmospheric* air—dilating his nostrils, inflating his lungs, and thus exciting in him the whole phenomena of animal, intellectual and spiritual life. Hence life is the *effect of stimuli* acting on an organized body. Life, as applied to the human body, includes *heat*, *sensation*, *thought* and *motion.*

There is but one other popular theory that requires special notice in regard to the organization and life of man, which is that of Dr. Samuel Thompson's, or the Botanic system of medicine.

Dr. Thompson contends that all bodies are composed of four elements—*earth*, *air*, *fire* and *water*. Earth and water constitute the solids; fire and air, the fluids of the body.

The *healthy state* consists in the *proper balance* and *distribution* of these four elements; while *disease* is their *derangement.* All disease is caused by obstruction. The mode to cure it, is by diffusing heat over the system, for *heat* is *life*, and *cold* is death.

Thus we find how nearly the theories of Brown, Rush and Thompson approximate. Remove the *debility*, says Brown. Let the *morbid excitement* be obviated, says Dr. Rush. There can be no cure unless the *obstructions* of the body are displaced, says Dr. Thompson; and so the whole science of medicine reverts back to the bleeding, purging and vomiting system, that was practised by the "divine *Hippocrates*" *twenty-three hundred years ago!* and with just about the same idea of the elementary principles of Anatomy, Physiology, Pathology, and Natural and Mental Philosophy, as were held by that illustrious philosopher and "Father of Physic." Verily, to "starve and bleed, and purge and torture, has been the all but exclusive business of the men of medicine, for upwards of twenty-three centuries past!" To rob the body of the *reparative material* of the entire animal economy, has been the constant effort of men since the days of the Greek and Egyptian practitioners, from Queen Isis and Esculapius down to the present day—embracing a period of full *four thousand years* of medical DARKNESS and MURDER! Is it not high time,

then, that a NEW DOCTRINE OF DISEASE was propounded, and a new *method of cure* proclaimed, in consonance with modern pathology, microscopic anatomy, physiology, natural philosophy, and *common sense* deductions?

At least the attempt shall be made, and if I fail it will be only another example to show the turmoils and vicissitudes of medical science. I must, however, like Dr. Dickson, in turn, first exhibit the blundering ignorance of the medical profession of the present day, and perhaps add another chapter of *fallacies* to the "fallacies of the faculty," that gentleman has published, in the exposition I have hereafter to offer concerning the "Destructive Art of Healing."

It really behooves the medical men of intellect and genius to break away from the tyrannous trammels of prejudice and ignorance. They should refuse to follow the devious labyrinth of darkness and error that has been pursued by their fathers during the long period of the four thousand years that have just been added to the cycles of time. It is high time that they were guided by the light of reason and common sense, and that the practice of medicine was rendered worthy of its heavenly mission, and redeemed from the just opprobium that has for centuries rested upon the art, through the terrors of the so called "*regular formula*," but antiquated and exploded medical theories and dogmas that have prevailed.

Above all, American practitioners should look to their own *original* resources for information that will advance the curative art. We should rely more upon our own pathological and microscopic investigations than upon the theories and views of European pathologists, be they never so eminent in the profession.

CHAPTER V.

MEDICAL FALLACIES—LEGALIZED BUTCHERINGS AND POISONINGS!

In the language of Sir Humphrey Davy, "nothing, has so much checked the progress of philosophy, as the confidence of teachers in delivering dogmas as truths which it would be presumptious to question. It was this spirit which for more than ten centuries made the crude physics of Aristotle the natural philosophy of the whole of Europe." Time indeed is no sure test of a doctrine, nor ages of ignorance any standard by which to measure a system. From the days of Hippocrates, the professors of the healing art, have been to a man, in all but utter darkness on the subject they pretended to teach. For upwards of thirty centuries the blind has been leading the blind in medicine—the right sometimes, more frequently the wrong. If a physician has succeeded in the cure of disease, he has done so by *accident*, and because he could not help himself—*Nature* having kindly, for the time being, refused to absolve the patient and surrender him over to the murderous brutalities of the antiplogistic practice—the starving, bleeding, purging and

torture—of the medical fraternity. From time immemorial, till quite recently, it has been the established practice, to reduce the *vital* force of the patient's system in every possible way—and more particularly to reduce it, by abstracting and otherwise robbing the body of the *reparative material* of the entire animal economy. The food and drink, the very *income* of life, was *stopped*—and life's *capital*—the blood and elements of blood—has been *wasted*, until the unfortunate patient, whatever his previous strength or stamina, was reduced to a common standard of utter debility and helplessness. Truly, could all the *drainage* of the human body be collected that has been *wasted*, from *salivation*, in the use of mercury, since the days of Esculapius, there would be sufficient doubtless of that essential secretion to float all the ships the world has ever produced, from Noah's ark down to the greatest and last ocean leviathan of modern times! In respect to the *blood* that has been drawn, like precious wine, from the veins of the human being in all ages of the world, it is probable that the basin of the Atlantic ocean itself would not be capacious enough to contain the enormous quantity! However appalling this calculation may appear, it will not be regarded as an excessively *high colored* exaggeration, in view of a statement made by Dr. Watson, of Boston, a year or two since, in a discussion with Dr. Draper, on the subject of

mercury and blood-letting. The former gentleman declared that in four and a half years, he had taken from the inhabitants of Boston and its vicinity *one hundred barrels of blood*, and administered *forty-nine pounds of mercury!* In every human being there are about *four* gallons of blood. Now, if we take one hundred barrels, and allow thirty-two gallons to each barrel, there will be found three thousand two hundred gallons, or twenty-five thousand six hundred pints of blood, or a quantity equal to what would exhaust the lives of *eight hundred persons!* A professor in a medical college in New York, has stated that he has frequently bled his patient to the amount of two hundred ounces, making ten pints in three days! In view of this wholesale *slaughtering* well might Dr. *Hunn* remark: "Abominable is the murdering quack, who, forever impatient to unsheath his blood-thirsty lancet, draws from a poor patient, the irreparable balsam of life." Dr. *King* equally forcibly remarks: "If employment of the lancet were abolished altogether, it would perhaps save *annually* a greater number of lives than in any one year the sword has ever destroyed!"

Is it any wonder, then, that an opinion has been gradually growing up unfavorable to the professors of medicine and their art, from Shakspeare, whose advice was to "throw physic to the dogs," to Byron, who sarcastically termed it

"The Destructive Art of Healing." Such, in sooth, this *pretended* art proved to the noble poet himself. The author of Childe Harold, Mr. Moore tells us in his *Life*, made his mother a promise never to allow himself to be bled—and this promise he intended religiously to keep; but *mens sana in corpore sano*, while suffering from a rheumatic fever in Greece, unable to resist the reiterated importunities of his doctors—one of whom tricked him into the belief that if he would not submit to the operation he would go mad—Lord Byron desperately threw out his arms, and with a fearful oath exclaimed, "Take as much blood as you like and be done with it." The physicians seized the moment and bled him. The result of this bleeding was, that the "fever became *stronger* than it had been hitherto—the *restlessness* and agitation increased, and the patient spoke several times in an *incoherent* manner. To cure which symptoms produced by the first bleeding, the doctors bled him *twice* the following morning, and applied blisters to the soles of his feet, as a remedy for the delirium of his head caused by their own barbarous treatment; and thus in the prime of his life, was this great English poet *put to death*, in the most *legitimate* manner by *doctors*, who had not the slightest doubt of the *correctness* of the "established practice!"

Muhry, a German physician, who came to England in

1836, to see the British practice, writes:—"Mercury, purging, and blood-letting are the three leading therapeutic means in England. The English practitioners hold the human system to be so constituted that it can bear a considerable *loss* of blood."

Professor Alison, of Edinburgh, stoutly maintained that, in all cases of inflammation the only antiphlogistic remedy in which absolute reliance can be placed is blood letting; and that there is no other remedy for *any other* kind of diseased action which can be put in competition with *this*, in *efficacy* and *importance*.

In 1846, Sir *John Forbes*, in the London *Lancet*, wrote:—"One of the besetting sins of the English practitioners at present, is the habitual employment of powerful medicines in a *multitude of cases* that do *not* require their use. Mercury, iodine, colchicum, antimony, *drastic purgatives*, and excessive *blood-letting*, are frightfully misused in this manner."

In addition to these depressing measures, medical men very generally adopted, and many of them still adopt, not only in England, but in the United States, various forms of counter-irritation," comprehending blisters, setons, and issues. Whatever the nature, or wherever the real or supposed "seat' of the patient's complaint—the head, the chest, the spine, the stomach, the joints—these were, and some of

them still are, the common applications—followed up in certain cases, by horrible ointments of savine, tartarized antimony, and similar tortures.

Since Dr. *Chambers* has retired, Dr. *Watson* is the gentleman whom the greater number of the apothecaries of London call in their consultation. His plan of treating apoplexy in an *aged* man is to "draw off the pressure of the brain," by a "*large bleeding*," and by "*cupping from the temples* or by the *nape of the neck*," and afterwards to *blister* him and put him on a "very short commons!" Not content with drawing out the *life-blood* of an aged person, as you would draw away beer from an old barrel, this model physician's next step is to diminish the usual *incrementitious* supply, by "very short commons."

"By such proceedure," as Dr. Samuel Dickson, of London, somewhat bluntly but very truly remarks, "is seen how, to a mathematical certainty, a great London physician may without any scandal, transmute the elements of the yet living organism of his patient's body to *guano* simply." Truly, were this Dr. Watson's avowed object, how could he possibly improve the treatment? What better recipe could he give than this for reducing an honest man's blood and flesh to *manure?*

Dr. Watson, however, is only a type of a class of practitioners who think *such killing* is no *murder*. People

there are nevertheless who will call it *madness*, at least, although they have not yet *dared* to scream *murderer* into the ears of the practitioners of the "destructive art of healing!"

Surely the destruction of human life at the hands of legalized man-killers by bleeding, has been a heavy and needless tax on health and population. Could the voices of all those who have been hastened on their journey to the tombs by the murderous practice, be heard at once, the very earth would tremble with the shriek—"*Murder! murder!!*"

Well might Sir *A. Carlisle* declare that "medicine is a science founded in *conjecture* and improved in *murder*," and Dr. Frank proclaim that the "ravages of war are as nothing compared to the thousands who are daily murdered in their quiet sick rooms."

Thus it is that in the dark the merest pigmy may be taken for a giant—in the dark a giant may not even be seen—in the dark manslaughter may pass for medicine—and in the dark the archest medical rogue may very successfully stigmatize the greatest living physician as a quack. Coming out of the dark it is not very easy to distinguish the true from the false. The *light* of reason and common sense is however beginning to dawn upon the minds of many physicians and others in Europe and America, and

they are incontinently casting aside the shackles of prejudice and ignorance and appearing in full attitude in the blazing refulgence of truth and humanity.

Dr. *Vecemus Knox* says:—"After all that has been said in commendation of the uncertain art of medicine, the most sensible physicians believe that it has done more harm than good to mankind.

Joseph Hume said in the House of Commons in 1834, that the medical profession in England was in a state of absolute barbarism.

Dr. McCulloch, of Dumfries, says:—"Medical men seldom get a chance to practice on the rich till they have maltreated and murdered the poor; or have got what is called *experience*"—*i. e.* massacring the poor in order to make suitable doctors for the rich!

Dr. *Majendi*, the great French physician, says:—"The most contradictory and inconsistent opinions prevail the whole length and breadth of the medical profession, regarding the origin, nature, and cause of disease—not merely the more complex, but even the simplest to which mankind are liable. In short, a complete *revolution* awaits the medical profession."

Dr. *Hunter*, of Glasgow, remarks:—"Some diseases are involved in more than hyperborean darkness. Medical language must remain ambiguous and incorrect, and medi-

cal practice unsettled and empirical," which simply means what the profession themselves call medical quackery.

Said the late Dr. *Rush*, of Philadelphia, who was called the *Hippocrates*, or "Father of Physic in America," "The whole profession is like an unsafe temple, cracked at the sides and rotten at the foundation."

It has, alas! been too long the practice of physicians to furnish their minds as they furnish their houses. They clothe their bodies with the fancies of other men, and according to the age and country in which they live. They pick up their ideas and notions in common conversation or in their schools. The first are always superficial, and *both* are commonly *false!* Now, the first step of a physician in rational medicine, should be to unlearn all that he has been taught in books and schools; otherwise he will be constantly stumbling over the rubbish of ages, and will be eternally confounded with the glaring and self-evident absurdities of the medical teachers of the "olden time." Is medicine the only branch of human knowledge destined to stand still? Must we always be mocked by the mystic gibberish of theorists in medical science, who cannot give us an intelligent idea of the origin, nature and treatment of disease?

"If false facts," says Lord Bacon, "be once on foot, what through the neglect of examination, the countenance of

antiquity, and the use made of them in discourse, they are scarcely ever *retracted*."

The late Professor Gregory, of London, scrupled not to declare in his class-room, that *ninety-nine out of every hundred medical facts were so many medical lies, and that medical doctrines were for the most part little better than stark-staring nonsense*."

Indeed the wits of every age and country have amused themselves at the expense of the physicians. Against his science they have directed all the shafts of their satire; and in the numerous inconsistencies and contradictions of its professors, they have found matter for some of their richest scenes.

Moliere, so long the terror of the apothecaries of Paris, makes one of his *dramatis personæ* say to another, "Call in a doctor, and if you do not like his physic, I'll soon find another who will condemn it."

Rousseau showed his distrust of the entire faculty when he said, "Science which instructs and physic which cures us, are excellent certainly; but *science which misleads* and *physic which destroys* us, are equally execrable; teach us how to *distinguish* them."

La Sage, with more keenness in his satire, once said "Death dubs the doctors only affer having *first made them swear never in any way to after the established practice of medicine!*"

What could persons like Moliere, or Rousseau, or Le Sage know of an art they were not bred to? The great Frederick laughed all his life at the Doctors, and Napoleon expressed a similar contempt for medicine. The Prince de Ligne, who was a wit as well as a warrior, when ill of a fever, had the presumption to thank Heaven he had no doctor near him. He got well, but thanked *Nature* for curing him. Byron, in the same vein of the Prince de Ligne, says, "I got well by the blessing of barley water and refusing to see my physician!"

And yet the established practice of physic, who could possibly think of *altering* it? Altering *perfection!* According to every Professor in every University where medicine and disease are studied, the dogmas of the past are infallible, and are as unalterable as the laws of the Medes and Persians!

So completely at variance with each other are even the *greatest* medical authorities on every subject in medicine, that I do not know a single disease in which you will find any two agreeing. How then was I to know who was infallible and who otherwise? I thought for a time that this difficulty arose from my own obtuseness of mental perception. I distrusted myself and not my teachers—men of the greatest names, ancient and modern—but I have now found that it is safer to *trust myself* than them, and to pro-

ceed by the light of my own understanding rather than wander after the Will o' the Wisps of philosophy.

Of course, I shall expect to meet opposition, and perhaps violent abuse, for venturing out upon a new road of medical science. Nevertheless, I shall go forward undaunted by any lion in the pathway of my professional career. I have an abiding confidence and faith in my doctrine of medicine, and my new method of cures and am already able to produce in tangible numbers a living host of those who have, under Heaven, been rescued from the Consumptive's grave. I contend that *Consumption is a curable disease*, equally so with many kinds of fevers and other maladies that were formerly considered beyond the reach of medicine and the physician's skill.

Consumption, particularly, is a disease, that has for centuries, baffled the skill of medical men. Its mortality constitutes nearly one-fourth of the number of deaths from all other causes combined, while it is computed that of the present inhabitants on the face of the globe *ninety millions* are destined to fill the *consumptive's* grave! Surely, it were a "labor of love" to attempt the alleviation of the sufferings and arrest as far as possible, the ravages of the terrible destroyer.

CHAPTER VI.

PREVALENT ABSURDITIES IN REGARD TO THE TREATMENT OF CONSUMPTION.

FROM the days of the promulgation of the "Knidian Views," of the Esculapian schools of Greece, to the time of LAENNEC, of France, embracing a period of more than two thousand years, medical men troubled themselves very little about the pathology of Pulmonary Consumption, and, by consequence, in the absence of some definite knowledge in regard to the origin and nature of tubercles, could only grope in the dark, and administer curative remedies with a random recklessness calculated to ensure a fatal termination, and cause the disease to become generally regarded as positively beyond the reach of the medical art. That eminent pathologist *Laennec*, was the first physician in modern times who maintained that Consumption was a curable disease; but such was the popular error on the subject, that very few professional men fell into his views until within the last quarter of a century past.

BAYLE, who was a great authority at the beginning of the present century, considered recovery impossible; and I

believe that much of the dogged obstinacy which still prevails among the profession in Europe and America against the admission of the fact of the curability of Consumption, may be attributed to that *learned* yet greatly deceived and mistaken disciple of Esculapius. It is a point worthy of notice here that an unbiased examination of the cases he has himself published ought to have convinced Dr. Bayle of the incorrectness of his sweeping conclusions.

It would seem that *medicated inhalation* was among the means employed by the ancient physicians for the cure of Consumption. As far back as the second century, GALEN sent consumptive patients to the vicinity of Mount Vesuvius, to inhale the sulphureous vapors which arise from the soil. It is probably well known among the medical profession, that the early use of incense and various aromatic fumes in religious rites, originated from their prophylactic effects on disease; which surmise is rendered the more probable when it is remembered that the priests of that period exercised the healing art. The *remedies*, however, resorted to in these earlier times were, comparatively speaking, of *little value*, and to their inefficiency may be attributed, in a great measure, the neglect which subsequently befel this mode of treating Consumption. *The system was the right one, but it was improperly applied.*

Consumption, then, from first to last, I may say, has

always been considered an incurable disease, until modern discoveries have shown conclusively that the difficulty in the curative treatment has arisen from physicians not understanding thoroughly the structure and functions of the bronchial apparatus and the pathology of Consumption. Accordingly medical authorities have ever been completely at variance.

For instance, the celebrated *Stahl* attributed the frequency of Consumption in Europe to the introduction of the Peruvian bark. He does not attempt to account for its frequency and fatality for the several hundred years from the time of Galen to the era of his own professional career.

Per contra to Stahl, the equally celebrated *Morton* considered the bark an effectual cure.

Reid ascribes its frequency to the use of mereury; while *Brillonet* asserted that it was curable by this mineral.

Rush says that Consumption is an inflammatory disease, to be treated by bleeding, purging and starvation. *Salvadori*, on the other hand, with a greater show of reason, maintained that by tonics and a generous diet, Consumption might be cured.

Galen, besides sending his patients to Mount Vesuvius, recommended vinegar in cases of Consumption. *Dessault* says that the disease is brought on by using vinegar too freely.

Dr. *Beddoes* said that foxglove was a specific in Consumption, while Dr. *Parr* found foxglove most injurious.

The celebrated Dr. *Allison*, of Edinburgh, only a few years back, held blood-letting to be a universal remedy in Consumption; but the same professor does not now bleed even in inflammation of the chest.

Dr. *Todd*, while Professor of King's College London, thus wrote on the subject of inflammation of the chest:—

"The plan of treatment which has been recommended by some of the *highest authorities*, I need not tell you, is that by *bleeding* and *tartar emetic*. You bleed early from the arm, and, if necessary, you bleed a *second* and *third* time; and if under this treatment, resolution, (cure) does not speedily take place, you bleed locally by *leeches* or *cupping*, and likewise give tartar emetic, more or less freely; to all which, counter irritation (by *blisters*,) may be superadded in the more advanced stages. I have had ample experience of this treatment; and I must confess that experience has so little satisfied me with it, that I have for some years *ceased to adopt it;* for under this treatment I have seen *too many die;* and when recovery has taken place, in too many instances has it been with a *lengthened convaleseence.*"

There was perhaps never a physician in England who lent the whole force of his "high authority" against a more

rational and conservative treatment of pneumonia than this same distinguished gentleman; yet the light of reason opened his eyes at last to perceive the erroneous views he had so long and pertinaciously entertained.

In the year 1827, with Dr. *Copland*, bleeding, repeated and re-repeated, even to the point of death, was in chest diseases, more particularly, the *sine qua non* of remedies; yet in 1844, the same physician, for the first time, required quinine and bark to be substituted for bleeding in the diseases of the lungs!

Dr. *Watson*, writing concerning the treatment of pneumonia, says:—"A vein may be opened if necessary, *two* or *three* times in *twenty-four* hours." * * * "When the fever is no longer high, and the skin no longer burning, but the expectoration is still difficult, the dyspnœa (difficulty of breathing) considerable, and a sensation of pain or tightness, or oppression is experienced in the chest, then a *large blister* is often productive of very sensible benefit, but it should be a *large* one. The patient should have a *waistcoat* almost, or at any rate, a *breast-plate of blistering plaster!*"

So much for Dr. Watson's treatment of disease, as laid down in his edition of his "Practice of Physic," published in 1845; yet, such is the pertinacity of error, the book in which he perpetrated these terrible blunders, is still to this

hour, both in Europe and America, regarded as *the* text book, *par excellence*, among the apothecaries and medical men, while the author himself is extolled as a model and miracle of professional wisdom.

In further illustration, out of hundreds of others of a similar kind that might be adduced, to prove that the great London doctors, in particular, whatever may be said of American physicians, base their art on no firm or fixed principle, in the treatment of Consumption, I cannot do better than present the reader with an extract from a little volume lately published in London, entitled "My Wanderings," written by Mr. *John Gadsby*, a respectable book-publisher in that metropolis. He says:

"In August, 1843, I caught a severe cold, which settled on my lungs, causing me to expectorate blood, &c. I consulted some of the most eminent medical men of the day, including Sir James Clark, Sir Benjamin Brodie, Dr. Watson, &c., and was then bled, blistered, cupped, and physiced according to their respective fancies, until I was certainly too weak to bear any more; and *then* I was pronounced to be in a consumption. Though these worthies differed widely, not only as to my ailment, but also as to the remedy, one saying that my *right* lung was the worst, another my left! one that I had expectorated blood and pus, the *substance* of my lungs must be affected, and an-

other that it was merely a rupture of one or more of the air-cells, the progress of which might be checked by proper treatment; one recommending leeching, and another dry cupping; one counter irritants and another emollients; one excitants and another depressants; one stimulants and another refrigerants; one acids and another alkalis; one purgatives and another astringents; one tonics and another sedatives; one blisters and another cataplasms; with almost every other contradiction their Pharmacopœia contains; yet, like a lamb, I submitted to all that was prescribed, without experiencing any alleviation of my cough, or the slightest improvement in my health. Moreover, and this fact I must name, as it shows still more strongly how ignorant many of these great practitioners are, some recommended me to go to a *warmer* climate (as Madeira or Malta,) and one to a *colder* (Russia for instance;) one ordered me to keep as quiet as possible, and another urged me to take horseback exercise; one prescribed a Burgundy pitch plaster, and another (Sir James Clark) nearly flayed me alive with an embrocation, the mere *smell* of which caused the faces of two persons to be so swollen that their eyes were partially buried. Dr. Thomas Watson, late of Bartholomew's Hospital, said, that though he was certain ulceration had not taken place in the substance of the lungs, yet there was evidently mischief going on in the left lung, and he

advised me to leave for Madeira with as little delay as possible. He also prescribed for me nitric and muriatic acids, diluted, a wine-glassful three times a day, at the same time cautioning me to be careful of my *teeth* while taking it. Of this mixture I took quarts; I say quarts, for I had it made up by a quart at a time; indeed, I think in one instance I had *two* quarts made up. The design of the medicine was to check the night perspirations with which I was grievously troubled, and also, I suppose, to give *tone* to the stomach. My chest was also rubbed with emetic tartar, and subsequently regularly with the compound camphor liniment. But all was of no avail; my symptoms gained upon me. None of these things, nor all united, either removed the pain, checked my cough, or prevented the occasional recurrence of spitting of blood.

"The winter had now overtaken me. My cough was exceedingly violent, notwithstanding that I regularly wore a respirator, was encased in flannel, and took as much care of myself as the most timid doctor could have wished; until I became so weak that I had frequently great difficulty to dress myself. This winter (1843) was unusually mild up to the end of the year. Dreading that the new year would bring with it severe weather, and not having courage to go to Madeira, I left home early in January for Bath. Here, *to keep up my strength*, as advised by my doctors, I

lived almost entlrely upon new milk, eggs, &c., avoiding all stimulants, spirituous as well as animal, the former entirely, the latter nearly so. Here I also consulted another Dr. Watson, of great celebrity in chest complaints. This gentleman in some degree confirmed the opinion of his namesake in London, as to the state of the left lung, but prescribed the very opposite treatment, substituting belladonna for the liniments, and mild asperients for the acids. A severe domestic affliction (the death of my dear and highly honored father, the Rev. W. Gadsby) causing me to return to Manchester almost at a moment's notice, I was rendered too weak and low to venture back to Bath. All my friends gave me up, and I had certainly the appearance of one whose days are numbered within the compass of *tens*. My cheek bones became more and more prominent, my fingers' ends more shriveled, and my knuckles more projecting, &c. Thus I went on till the autumn of 1844, when I resolved, as a last human resource, to attempt a journey to Grafenberg, to see the celebrated hydropathist, or 'water doctor," Priessnitz. This journey I undertook; and, after traveling through Germany for ten or eleven days, without a companion, and without knowing a word of the language except what I learned on my way from my German and English dictionary, I arrived in Silesia, I found Priessnitz in his corn-field, hard at work with some of his patients.

After a close inspection of me by his penetrating eye, he said my lungs were evidently in a very weak state, but he believed he had cured worse cases, and he advised me to try the milder parts of the treatment, at some establishment nearer home. Sweating and plunging I was *by all means* to avoid. Having taken a brief inspection of his immense establishment, in which there were upwards of 500 patients, I returned home with all due speed, my mind being made up to try the water nearer home. Accordingly, a few days after my arrival, I went to an establishment in ———, having been previously told by two medical men that in my case, it was a very ill advised step, and by one that I should never come back alive, he, at the same time confessing that *he* could not cure me. I remained there during the months of October and November, during which time my recovery was so rapid as to astonish all who knew me. My cough entirely left me, the expectorations nearly ceased, night perspirations disappeared, the pain in my chest rapidly diminished, and I was in fact another man. My eyes were opened to see the *ignorance of the faculty*, and how much the Lord, in his providence, could bless the simplest means."

This case of Mr. Gadsby is certainly a very remarkable one, and proves conclusively not only the "fallacies of the faculty," but that Consumption may be cured, in many

cases *irrespective of the method of treatment.* The mention of Priessnitz and his system, however, naturally leads me to say here, what I have often said in private to my patients, that as a system of medicine, Hydropathy is too *exclusive*, too one-sided, to meet the wants of all curable patients, inasmuch as, in many instances, it is wholly unadapted to certain *constitutions.*

Thus we find that books and lectures teach nothing concerning the proper treatment of Consumption. In all ages physicians, to a man, have had no *certain guide* for their practice, and accordingly have felt constrained to make *terrible experiments* upon the lives of their patients, in the vain hope of stumbling at last upon a specific remedy for the disease; while they were too ignorant and stupid as a class to perceive that the antiphlogistic course they invariably pursued was the very way to prevent the possibility of cure, and the most certain method to hasten the victims of Consumption to a premature grave.

Starving, purging, bleeding, leeching, cupping, and salivating the patient with mercury, (whether for prevention or cure) blisters, setons, issues, and other modes of counter-irritation and *drainage*, have been among the torments and tortures the Consumptive patients have been compelled to endure, with the hope and chance of a recovery from the fell disease. Who will deny that every step of this is all

wrong? Consumptive patients have nothing whatever to lose of the essential elements of life. Instead of depletion, in all cases, the system requires repletion or strengthening of the nervous controlling force. This butchering and excoriating practice is greatly in vogue among physicians in the United States, in the treatment of Consumption. Blood-letting and mercury, in particular, are the principal agents employed. Even in hemmorrhage, copious bleeding in the arm is the first thing that is thought of in order to stop the bleeding from the lungs! What execrable blundering is this? What would be thought of a plumber were he to cut a hole in the lower part of a water pipe to stop the discharge of water from a leakage some distance above? He would be considered a "concentrated ninny," undoubtedly. Would we not suppose a man demented were we to see him bore an augur hole in a cider barrel in order to stop a leakage from the spiggot hole at the other end of the vessel? Yet he would have a right to be regarded as no greater lunatic than the phlebotomist who would undertake to prevent a discharge of blood from the lungs, by letting out a copious supply from an artery in the arm. So with congestion of the lungs. Nearly the entire blood of the body perhaps is concentrated in the region of the lungs and chest. It does not require to be let out of the system, and utterly wasted, by any method of blood-letting. The

patient has no blood to spare. All that the skillful physician should attempt to do, is to endeavor to scatter the blood, and distribute it again in regular operation through the heart, arteries, veins, and capillaries of the lungs and entire body, as speedily as possible, by remedies diametrically opposite to those of an antiphlogistic character. It is thus, contrary to all the "greatest authorities" of ancient and modern times, I maintain, in the impressive language of the Scripture, that "the blood is the *life* of the flesh"—the life of the *sick* as well as the life of the sound. Instead of depleting and lowering the system when suffering from Consumption, the *preservation* of this most precious of the fluids, by every possible means, ought always to be the primary object of every humane and intelligent physician. If he persists in pursuing any other course of medical treatment, he must expect to fail, and further add to the opprobrium under which the profession at present most justly labor.

Nevertheless, I would here remark, that the slow progress made in the curative art, is not to be solely attributed to the physicians; for so long as the public will rest content under their old fashioned murderous treatment, there will be no *stimulus* given to *improvement* and *reform*. It is indeed strange that men should busy themselves with almost everything in nature but their own bodies. Nearly all

bodies but their own are, more or less, familiar to most people; that is the reason why chemistry, astronomy, geography, &c., have progressed, while physic, for three thousand years at least, has scarcely advanced a step. People who will even discuss theology with you all day long—who will dispute and wrangle about what is to be done with their immortal souls in the world to come—in this particular world will leave their poor mortal parts, to the doctor, and his confederate, the apothecary, to mangle and mistreat as they please.

CHAPTER VII.

CONSUMPTION CURABLE AS PROVED BY THE MOST EMINENT DECEASED AND LIVING AUTHORS.

Is Consumption a curable disease? I answer emphatically in the *affirmative.* The evidence in favor of the curability of tubercular disease of the lungs is derived from numerous sources, and is so entirely satisfactory as to leave no room for a shadow of doubt on the subject. Not only am I able to assert the fact from my own professional experience, but shall prove from the most reliable authority that organic lesions of the lungs may be healed, and the patient enjoy as good health as ever. It matters not whether the human lungs be cut, torn, mangled, separated, ulcerated, tuberculated, or in any other way injured, they are capable of being healed, and the person afterwards attain to a longevity equal to the most healthful and favored of the human family.

The opinion of ancient physicians was in favor of the occasional curability of Consumption. Among these were, Hippocrates, Galen, Celsus, Aretacus, Paracelus, Sydenham, and other physicians, till the time of *Lacnnec* and

since. The views, however, of medical men prior to Laennec were formed from observations of the symptoms only, for they were totally unacquainted with the modes of examining the chest, and with the pathological truths of the present age.

The illustrious Sydenham was highly successful in combating the disease.

The celebrated Dr. *Currie* was cured in his own person, by certain hygienic means he adopted, after having been deemed incurable by the ordinary practice.

Dr. *Combe*, by a systematic course of regimen and living, recovered from the verge of the grave on more than one occasion, and lived and labored gloriously for humanity a quarter of a century, with only one lung to breathe by!

Malphighi mentions cases of decay of one lung, and abscess of lungs, in putrid epidemics, which occurred at Pisa as long ago as 1648, where the persons enjoyed good health subsequently.

Fontanus mentions the case of the entire decay of one lung, with but a very slight drawback on the patient's general health.

Haller noticed great changes in the texture of the lungs. In the "Memoires de Medicines" many remarkable cases of lungs being in a dried state where life was prolonged, are detailed.

Rivinus and *De Haen* have recorded cases of the little injury which has resulted from the concretions arising from wounds.

Dr. *Parr* mentions cases where the whole of one lung was completely decayed or destroyed without any considerable inconvenience.

Bierling mentions a case in which one hundred and twenty ounces of blood were lost from a wound in the lungs, and the subject lived!

Old medical works give numerous instances in which the lungs have been wounded by a sword, dirk, bullet, or other foreign substance, where the patients were restored to good health. A case is mentioned where a bullet ball passed through both lobes of the lungs and did not prove fatal. The lungs of soldiers in battle have often been pierced by the bayonets, and cut badly, and afterwards perfectly healed.

Laennec, a modern French author, has the merit of first proving that phthisical (consumptive) persons often recover by the cretaceous transformation of tubercular matter, as well as by the cicatrization of cavities, after the worst symptoms of Consumption had supervened.

Andral investigated the subject very fully, and ascertained that recovery frequently took place by the absorp-

tion of crude tubercles, or by the softening and evacuation of tubercular matter.

Louis, who was the most skeptical of men on the curability of Consumption, presents several remarkable cases of cures—one in a man forty-eight years of age, who, after presenting all the usual symptoms, as well as physical signs, and keeping his bed six months, recovered and returned to his occupation—and another fifty years of age, who had cavernous respiration and pectoriloquy.

Dr. *Young* had all the symptoms of Consumption in his youth, and lived to an advanced age. From his own recovery, he was led to examine the subject, and came to the conclusion that Consumption might be cured in very many cases.

The celebrated French physician, *Broussais*, was affected with tubercles on his right lung. He died at a ripe old age, when undoubted evidence was adduced to prove that he had escaped from Consumption in the healing of the ulcers.

M. Pressat has related the case of a man twenty-eight years of age, who had the signs of an excavation at the summit of the right lung, with other bad symptoms. At the end of six months he was well, and continued so for a year, when he died of epilepsy. A cavity, lined by fibro-

cellular tissue, perfectly healed, was found at the top of the right lung.

Rokitansky remarks in the British and Foreign Medico-Chirurgical Review, that "after the tubercle has passed through its condition of crudity, it increases in density, becomes converted into a small hard lump, and then shrinks into a tough amorphous or slightly horny mass, which forms the basis of a complete destruction of the tubercle, and no further metamorphosis can take place."

M. Rogee, in an able paper on the curability of Phthisis in the *Archives Generales de Medecine*, for 1839, proved in the clearest manner that tubercles may be arrested and transformed into harmless calcareous concretions in the lungs.

Dr. *Valleix*, in a paper called "De la Curabilitie de la Phthisic Pulmonaire," *Archives Generales de Medecine*, 1831, proves that transformation may take place in all the phases of their evolution; in the state of crudity, or of softening, when in the form of gray granulations, or of yellow tubercles.

Dr. *Hughes Bennett* considers the tendency of tubercular matter to disintegrate, as highly favorable to absorption, if fresh deposits can be prevented. He presents many cases of this removal of tubercles, even in elderly persons.

Dr. *Carswell* has observed the healing of cavities in every stage of Consumption.

Dr. *Williams* argues strongly in favor of the curability of Phthisis. He found phthisical lesions in the lungs of numerous persons beyond the age of forty, the disease having been cured by remedial agents in many instances, while *Nature* sometimes performed her own work in others.

Professor *Bennett*, on the "Treatment of Phthisis Pulmonalis," in the *Monthly Journal of Medical Science*, in March, 1850, gives the case of a patient who at the age of twenty-two, labored under all the symptoms of a deep decline, recovered, and died at the age of fifty, of an affection of the brain. The apex of both lungs contained cretaceous tubercles, and were puckered, and the cicatrix, or scar, at the summit of the right lung, was from a quarter to three-fourths of an inch in breadth, and three inches in length.

Dr. *Walsh* has shown that complete restoration to health, not only as regarded symptoms, but also local evidence of active disease, was effected in 426 out of 1000 cases.

Dr. *Stokes* gives cases of recovery where the functions of one lung had been entirely destroyed.

Dr. *James Turnbull*, Physician to the Liverpool Infirmary, presents numerous cases of cures of Consumption, under his mode of treatment. He proves also the impor-

tant fact that the arrest of the development of tubercular disease during pregnancy may be made.

It is not necessary, however, to go to *foreign* lands, nor to seek the gloom of antiquity, for proof of the fact that injuries to the lungs have been healed. There are cases of the kind even in our own land, among persons too widely known for random assertions to be made without contradiction. The illustrious chieftain, General Jackson, the hero of New Orleans, had a riffle ball shot through one of his lungs which soon healed. He lived to become President of the United States, and died at a very hoary age. General Shields, so renowned for his bravery in the late Mexican war, had the ball of a riffle pass through one of his lungs, which was extracted and the wound healed. He subsequently became a Senator in Congress, from Illinois, and "still lives" to do battle against the enemy in the field of Mars, or to render service to his country at the forum of the nation. The late Dr. Parrish, of Philadelphia, a gentleman of wide-spread philanthropic and professional reputation, at his death exhibited cicatrices on both lungs, in proof of the curability of tuberculous ulcerations. These cases ought to be sufficient to remove every vestige of doubt that injury to the lungs may be cured by the use of suitable and timely remedies.

Surely the multitude of illustrations here adduced in

favor of the curability of Consumption ought to be abundantly sufficient to put forever to rest any doubt upon the subject among medical men and people generally. To persist in denying facts as incontrovertible as that the sun shines in the heavens, only shows an obstinacy to maintain exploded errors, entirely incompatible with the nobleness of the human character and that advancement in all the sublime attributes of reason and philosophy, which characterize the age in which we live.

CHAPTER VIII.

PHYSICIANS AS A CLASS OPPOSED TO INNOVATIONS.

If it be true—and no one will deny the assumption—that health stands the first, and is the most important of earthly blessings; if the possession of a sound mind in a sound body be the greatest gift of God to man, then a thorough reformation in the practice of medicine must be a reform in value beyond all others, involving considerations of the highest importance; and especially so when we reflect, that the *Reform* now proposed for the *treatment of Consumption* by Medicated Inhalation and adjunct constitutional agencies, excludes all dangerous remedies, such as bleeding, purging and salivating—the use of poison or any depletion whatever—a reform of universal application and specific power, not only in the hands of the medical profession but the people.

Many are the reasons that might be given to show the necessity of reform in the practice of medicine, in addition to the absurdities and contradiction in theories, dogmas and curative agencies, which I have already presented in the

preceding pages concerning the "fallacies of the faculty." There is nothing in the world demanding reform more imperiously than the present system and practice of medicine. Surely it it high time the enormous evils of centuries should be eradicated from the world. Surely it is not impertinent now to ask what have the physicians of all nations been about these four thousand years past? Surely there is no suffering equal in severity to that inflicted by Consumption and its usual treatment by doctors at the present age; and, perhaps, amid all the extortions and exactions of mankind towards one another, there is none more uncertain or cruel than that of a doctor's bill. The tax-gatherer, for instance, raps at your door, stands on the threshhold, and demands a certain amount levied in proportion to property assessed; but the medical practitioner is allowed with impunity to enter the house of sickness and take *exclusive* right over the prostrate body of his victim—whose blood he draws, whose frame he tortures, whose bowels he secretly poisons, and whose disease he cures, or at will prolongs. *Kill* or *cure*—the first being generally the dread result—his bill is rendered solely in accordance with his mercenary conscience, and the good natured disposition of the sick man or his friends to submit to swindling exactions or extortionate charges. Should death occur, in consequence of the physician's depletion—robbing the system of its balsam of life, and

draining it of its vital stamina, by blood-letting, vomits and purges—nothing can be said against him, for the slaughtering and poisoning were perpetrated *secundum artem*, or according to the rules of "regular practice," or to the established routine and formula of the *Artis Medicinæ*.

It is certainly time that we dealt less in mere scholastic disquisition—had fewer absurd speculative theories, and that there was a larger and more decided expression of disinterested, unbiased *common sense* views of the subject of diseases and their proper treatment.

The ancients endeavored to elevate physic to a *science;* but the moderns have reduced it to the level of a *mere trade.* Nor will it ever be otherwise until the world shall become aroused to the juggleries, tricks and collusions which subsist among physicians individually and in connection with their equally unprincipled confederates the apothecaries. Till the emoluments of those who chiefly practice it, cease to depend upon the quantity of useless drugs they mercilessly inflict upon their deluded patients—till surgeons shall be something more than mere bungling mechanics, and physicians something more than colleagued swindlers and murderers with their allies the druggists—till the terrible system of collusion which at present prevails under the name of a "good understanding" among the different branches of the profession be exposed, the medical art must remain a

continued butt for the ridicule of satirists, and prove a source of wholesale butcherings and poisonings of the human family.

Let an unlettered savage be brought from his native forests to any of our large cities and towns, and he would at once be struck with the many handsome storehouses filled with remedial agents—with the chemists and druggists signs at the corner of almost every street, with their lights pouring streams of vivid colors across the broad pavements, through jars containing drugs (or mere *colored water*) of every tint and hue like the noon-day sun, through the painted windows of a cathedral, and with the internal arrangement of endless gilt phials and labelled drawers, and the poor unsophisticated red man might be led naturally to exclaim, in his admiration and excitement, "Oh happy people! None of you can suffer long, and when you die it is only from extreme old age." Tell the savage, in addition to what he has seen, of our many colleges for training men exclusively for the medical profession—tell him of our thousands of books containing the recorded experiments and experience of many thousands of years—tell him of the specifics for every complaint, and of medicines for the instant relief of every real or imaginary pain—his wonder would instantly be raised to a feeling of exstatic joy and triumph, while his thoughts would immediately rush home

to his copper-skinned people with the "cordial for every wound" and the "elixir of life" that should yield to his brethren the primeval period of existence. But to check such enthusiasm and cool his extravagance to due reflection, take him to the many churchyards and hold with him a sort of Hervey contemplation among the tombs. Tell him that notwithstanding all the medical knowledge and the countless remedies for disease, that people will perversely die far under the very meridian of life. Show him the bills of mortality, and prove to him that thirty-five years constitute the average of life among his white brethren, and that every fourth infant perishes ere the tenth moon of its existence wanes to a crescent. Tell him all this—and *more!* Tell him of the many grades of the medical profession making fortunes upon the "ills to which the flesh is heir"—the invested interest in disease—the respectable livings dependent upon pain, sickness and death—and further explain to his enquiring mind, that three-fourths of those elegantly prepared medicines employed for the cure of the sick are active poisons, at deadly enmity with human health and life—that those who sell them know nothing of their effects, and those who swallow them are unaware of their nature, or even of the *language* in which they are prescribed—what would then be the thoughts of the untutored "wild man" of the superior advantages of civilized

life? Would not his soul be filled with horrors in view of the thousand medical errors that prevail? Would he not suppose we were a nation of madmen sporting with fire and weapons of destruction? Would he not audibly ejaculate "Great Spirit of the unbounded waters! whence comes this confusion of mind to all these *educated reasoners*—thy most favored sons!" After such apostrophical outburst, inform him of other powerful means for *attacking disease!* Show him the cupping-glasses, lances, and leeches—relate to him how frequently we take from our dearest friends that vital fluid, the blood, which he draws only from his detested foe, would he not be apt instantly to think of his war paint, grasp firmly his tomahawk, make the yell of a demon, and hurl his death-dealing weapon into the scull of his more civilized brother, in view of his unblushing confessions of murders and horrors?

Thus it is that we find vast wealth and interest at stake, arranged for the protection and security and perpetuation of errors on one side—with ignorance, indifferance, and prejudice on the other—and both, as a matter of course, opposed to any method to improve the established practice of medicine. The task, therefore, to remove established errors in the practice of medicine, reform its institutions, or supersede it with a *superior* system, is at once an effort superhuman, if not altogether hopeless and impossible. A

universal medical corruption reigns at this moment throughout the world. There is no hope—there can be no hope for the sick, till the sane and sound awake from their lethargy—till the people learn to know and think for themselves.

It is indeed strange that, though in many arts and sciences, improvement has advanced in a step of regular progression from the first, medicine is one of those ill-fated arts whose improvement bears no proportion to its antiquity. This is lamentably true, although anatomy has been better illustrated, the materia-medica enlarged, and chemistry better understood. How forcible the truth of Savage Landor's observation, when he says that "in the intellectual as in the physical, men grasp you firmly and tenaciously by the hand, creeping close at your side, step by step, while you lead them into darkness, but when you lead them into *light*, they start and *quit* you!"

It has been well remarked by Lord Bacon, that in the *Universities*, all things are found *opposite* to the advancement of the sciences; for the reading and exercises are so managed, that it cannot easily come into one's mind *to think of things out of the common road*, or, if one here and there should venture to use the liberty of judging, he can only impose the task upon himself without obtaining assistance from his fellows; and if he could dispense with this he

will still find his industry and resolution a great hindrance to his fortune. For the studies of men in such places are confined and pinned down to the writings of certain authors, from which, if any man happen to differ, he is presently represented as a *disturber* and *innovater!*

What was true in the schools of former times still remains the *law* in those of modern days. If a young man has run his usual course at a Medical University, at least let him not think that he has already learned everything worth knowing. Should he do so, he will soon find himself most egregiously mistaken. There are no medical professors who have now the power, like Joshua of old, to command the sun and moon of medical science to stand still at their nod and bidding. Railroads, steamboats, galvanism and gas, have all come to light within the past half century. A revolution in thought and action has been the result; petty objects have given way to comprehensive views, and petty interests have been destroyed by the general improvement that has already been accomplished. When the monarchs who have successfully wielded the medical sceptre—who, in their day, were looked upon as demi-gods in physic—have, in turn, declared that all they knew of it, was that *they nothing knew*, shall blame be attached to him who would attempt to rescue his profession from the darkness of ignorance and the monstrous absurdities of the past?

The principal reason why medicine has made so little progress since the days of *Hypocrates*, is owing to the spirit of *opposition* that has always prevailed among the medical profession in respect to any new discovery in the doctrine and cure of disease. Every person who has in any way improved the practice of physic, has had to repent it. *Galen* was termed a *theorist* by the *dogmatics* of Rome, and driven out of the country in consequence of his success in making cures. *Harvey* lost his business by discovering the circulation of the blood; Lady *Mary Montague* suffered in her reputation by introducing the small-pox inoculation; and *Jenner*, for a long period of his life, was victimized for the still greater improvement of the vaccine. Before the time of Francis I., surgeons staunched blood by the application of boiling pitch to the surface of the stump; but when *Ambrose Pare* tied the arteries and introduced the ligature, he was howled down by the Faculty of Physic, who ridiculed the idea of hanging human life upon a thread, when boiling pitch had stood the test of centuries. When antimony was first introduced by *Paracelsus*, he was regarded as an arch enemy to the established practice, and driven from the schools. To the Jesuits of Peru the introduction of bark is due, yet Protestant England rejected the drug as the invention of the father of all Papists—the devil. In 1693 Dr. *Groenvelt* discovered the curative power of can-

tharides in dropsy, but no sooner did his cures begin to make a noise than he was at once committed to Newgate, by a warrant of the President of the College of Physicians. For several ages the state of the *blood* was held to be the cause of all disease, and if the patient died it was all owing to the "accursed black blood that remained in the system."

Hence the lancet was introduced to draw from a fever patient the irreparable balsam of his life. Next, we had the doctrine that all disease originated in the *solids*, so that for several centuries the *fluidists* and *solidists* divided the schools, and, like Guelph and Ghibelline, kept up a glorious war of ink and abuse of each other. Then there came the *stomach* doctors; then others, who contended that the *liver* was the great source of all ailments. But the *heart* and *lungs* now eclipse them all. We have no digestive organs in these days—nothing but the "lungs and heart;" and these are in such a deplorable condition of disease and danger, Heaven only knows for what end they were given us, unless our bodies were

"————————intended
For nothing else but to be mended!"

With such contrarieties of opinion and practice, we do not wonder that Professor Gregory, of London, should remark, that "medical doctrines are little better than stark-staring absurdities." In the schools, at this very moment,

the whole *regime* of medical teaching is a system of humbug, collusion and trick. In physic now, as formerly, the clever world

> "————————bows the knee to Baal,
> And, hurling lawful *Genius* from his throne,
> Erects a shrine and idol of its own,
> Some leaden calf"—

who, by virtue of his professional, yet puppet-position maintains a reputation and a rule in matters medical, to which neither his learning nor his skill entitle him.

The first care of the builder of a new system is to demolish the fabrics that are standing. But how can you brush away the cobwebs of ages from the windows of truth without rousing the reptiles and insects that have there so long reposed? To bats and spiders, daylight is death. Truth, like a torch, does two things. It opens up a path to mankind through thorns and briars, and, breaking on a long night of ignorance, reveals the bandits and brigands who have robbed and *slaughtered* without molestation! Look at the number of persons who live, or *try* to live, by physic? Is it in the nature of things that they will welcome a *practical improvement* by which diseases may be cured in a few days or few weeks, when months and years were required to dose their patients with nauseous drugs before they were considered sufficiently *etherialized* to depart to that spiritual "bourne whence no traveler returns?"

In the words of *Burke*, "When IGNORANCE and *corruption* have usurped the *professor's chair*, and placed themselves in the seats of science and virtue, it is high time to speak out. We know that the doctrines of folly are of great use to the professors of vice. We know that one of the signs of a corrupt and degenerate age, and one of the *means of insuring* further corruption and degeneracy, is to give *lenient epithets to corruptions* and crimes." What *Reformer* has not been called a "*violent* person?" None that I ever heard of.

I have built my house—my medical temple. I have *founded a doctrine and treatment of disease*, which I have reason to believe will stand the storm of medical assault, and give proof of its power to conquer and destroy even that dread hydra—*Consumption!* Therefore, until the world shall detect one real—one indubitable fact militating against the views I shall develop in these pages, let not INNOVATION *be charged against me as a crime!* Hippocrates, Galen, Bœrhoave, Cullen, were all innovaters in their day—nay *revolutionists* in physic. The revolution I meditate over those of my predecessors is neither painful nor sanguinary in its character, but such as is based in *common sense* principles, and admirably adapted to prevent and arrest pulmonary disease.

CHAPTER IX.

EXCESSIVE FATALITY OF CONSUMPTION.

The *curability* and *treatment* of Consumption are subjects that imperiously demand the serious consideration of a very large proportion of the race of man. Consumption, in sooth, is the most fatally destructive of all other maladies incident to the human constitution. It is a disease not only of general prevalence throughout the world, but one whose amount of mortality is frightful to contemplate.

By a reference to the bills of mortality of any country or city in the world, the preponderance of deaths from Consumption will be found to be full one-sixth of the deaths from all other causes. In some places the waste of life is nearly *equal* to that from all other diseases and casualities combined! This is a startling assumption; but a slight investigation will affirm the terrible fact.

In London, which has a population of about *three millions*, the number of deaths from pulmonary affections exceeds *seven thousand* annually. In the whole of England it is computed that *sixty thousand* die annually from the

same complaints. If to these are added numerous other complaints of the respiratory organs and of the heart, it may be fairly estimated that one half of the deaths in Great Britain depend on diseases of the chest.

In New York, containing a population of *half a million*, or one sixth of that of London, the deaths from Consumption average about *seventy* a week, or *three thousand five hundred* a year—a waste of life *three times* as large as that of London, according to the relative number of people in each city! Were the mortality equally great in all other parts of the United States, rating the population at 25,000,000, the aggregate of deaths would swell up to the enormous amount of from *seventy-five thousand to one hundred thousand* cases annually.

Taking such *data* for proof of the ravages of the disease, in connection with the entire population of the globe, we would have an aggregate of mortality from Consumption utterly bewildering and astounding. All the desolations that have ever occurred from plagues, pestilence, famine and war, in the sum total of their horrors, would not begin to compare with the millions on millions of souls that have been swept from time to eternity by the unerring shafts of that insidious monster, *Consumption*—literally, Death personified and stalking abroad on his "*pale* horse," crushing

and hurling down his victims on every hand in inconceivable myriads!

To such an extent is this the case that there are pretty good grounds for the calculation that about *ninety millions* of the present inhabitants of the globe will be prematurely cut off by one form or other of chest and throat diseases. Imagine the *extent* of a grave yard capable of containing the last earthly remains of those who were living in joy and health only a single year before! Stretch their graves in single line, and then calculate the *miles of dead*, literally slaughtered year by year, in the United States alone, through the stings of the lancet, and the horrible poisons administered to the helpless sick, while stretched on their beds, or languishing in the quiet sacredness of their chambers, by a class of men called physicians, groveling in their ignorance and stupidity, and wearing a diploma entitling them to kill and crucify without restrainsts of law or fear of the vengeance of the gallows.

Were sixty or one hundred thousand inhabitants of England or the United States to perish annually from Cholera or Yellow Fever, universal consternation would prevail, while the heart-torn prayers for mercy and abatement of the scourge would be sufficient to rend the very heavens! Indeed, were a like number of people to be cut off, year by year, in any war, however rightly and patriotically

commenced and waged, it would be universally execrated as peculiarly fiendish and *murderous*, while the government that would dare attempt to justify and continue such sacrifice of human lives, would be incontinently hurled into nothingness by an infuriate and indignant populace. Nay, the stoutest throne would be unable to resist the popular clamor, and would fall to fragments by its own infernal enginery of war.

It would be absurd to deny the fact that diseases of the lungs and heart have been among the chief difficulties of the medical faculty, and that comparatively few have been able to give the subject adequate attention, or to make the *experiments* necessary to enable them to discover anything in the shape of a *cure*, Rather have they been too long in the habit of regarding this class of diseases as beyond the reach of medical, art, and thus many a patient has sunk slowly and silently into the grave who might have been saved by greater skill and knowledge. Alas, how many dear and happy homes have been desolated of its inmates by being death-stricken in the bloom of youth and beauty!

Consumption selects its victims, not like some diseases, from the extremes of life, childhood and old age, but chiefly from those who are in the prime and vigor of their days, The greatest number of individuals of both sexes, who sink of this disease, are between the ages of twenty-five and

thirty-five; and next to this, between the ages of fifteen and twenty-five.

Though it may be a melancholy satisfaction to realize with the Poet, that

> "The *good* die *first*,"

there can be no reason why the lives of the fairest and noblest of the sons and daughters of earth should not be spared equally with those

> ——"Whose hearts as dry as summer dust,
> Burn to the socket."

Yet, notwithstanding such apalling facts, the community look upon the awful waste of life from Consumption with an apathy at once disgraceful to humanity, were it not palpably evident that a most deplorable ignorance of such excessive mortality is prevalent even in the midst of the most enlightened and philanthropic communities.

Then is it not time to cry aloud against existing medical abuses, and spare not the profession who persist in continuing their butchering business, without even seeking to mitigate the woes and pain of humanity, but rather add torture on torture to pangs and sorrows already incomprehensible and insufferable?

My acknowledgements are due in courtesy and kindness to numerous parties who have consulted me in their own individual cases, for the handsome and candid manner in

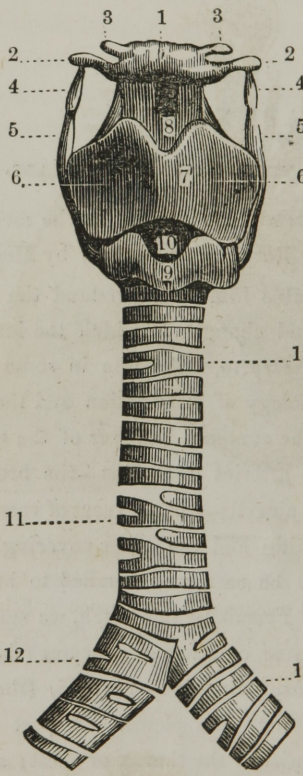
which they have borne the most ample testimony as to the superiority of Inhalation, in affections of the chest, over all other remedial means; and I doubt not, that other corroborative testimony will continue to be added, until an amount of evidence shall have accumulated, sufficient to shake the unbelief of the most inveterately sceptical. For although we are all doomed to witness the painful spectacle of Error frequently confronting Truth, and usurping her highest prerogatives—just as the noxious and unprofitable weeds are seen to grow up side by side with the golden grain—yet Truth, immortal and immutable, will ever be omnipotent in the end—and so with the practice of Inhalation, which is raised upon and bound up with Truth—its destiny is the same; it may encounter prejudice and opposition, but its triumph will yet be signal and complete.

CHAPTER X.

DESCRIPTION OF THE RESPIRATORY ORGANS.

To give the general reader an interest in the method of treating diseases of the Respiratory organs, by Medicated Inhalations, and to enable him to understand the nature and action of the morbid changes to which the lungs are subject, it will be necessary to make him in some degree familiar with the Physiology of Respiration and the Anatomy of the Lungs. The contents, however of the chest—the heart, with its great arteries and veins—the bronchial tubes and passages—the air cells—the plexuses of vessels and nerves—the interior lining and the outer covering of the lungs—are all things to be seen and handled to have an *accurate* idea of them. Premising this much, we may state that the respiratory organs embrace the larynx (the superior part of the trachea, (windpipe) bronchi, (the tubes leading to the lungs,) lungs and pleura. A part of this apparatus is contained within the thorax or chest; another part is exterior to it, and the whole is acted upon by a complicated series of muscles. [*See engravings, Fig. A,B,C,D.*]

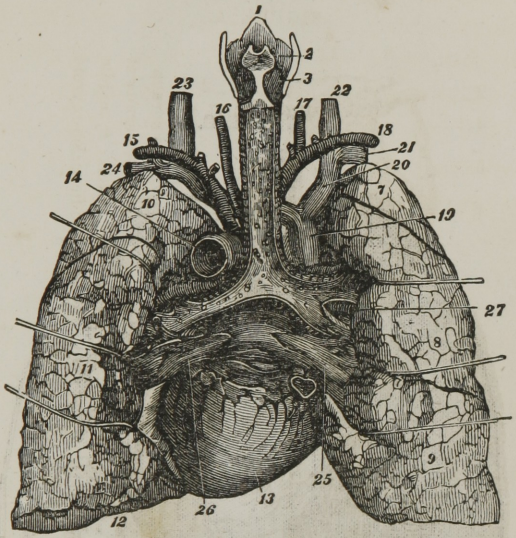
FIGURE A.



Larynx and Trachea. After Weber.

Fig. A.—Larynx and trachea viewed in front. 1, os hyoides; 2, 2, its cornua; 3, 3, its appendices; 4, 4, lateral thyrohyoid ligaments; 5, 5, superior cornua of the thyroid cartilage; 6, 6, body of that cartilage; 7, pomum Adami; 8, middle thyrohyoid membrane or ligament; 9 cricoid cartilage; 10, middle crico-thyroid membrane; 11, 11, trachea; 12, bronchi.

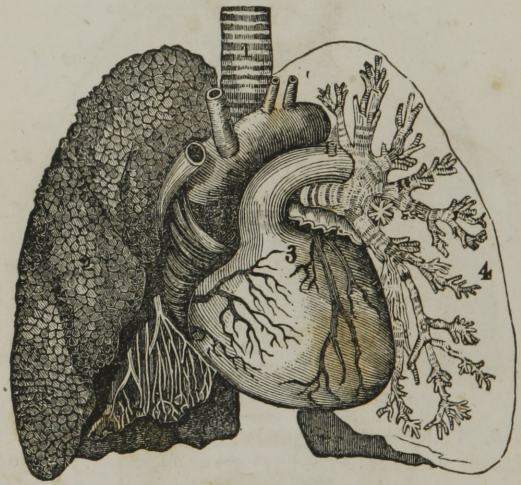
FIGURE B.



Posterior view of the Lungs. From Bourgery.

Fig. B. Posterior view of the larynx, trachea, lungs and heart. 1, epiglottis cartilage; 2, oblique arytenoid muscle; 3, posterior crico-arytenoid muscles; 4 trachea with its mucous follicles; 5, 6, right and left bronchi; 7, 8, 9, right lobes of the lungs; 10, 11, left lobes; 12, 12, base of the lungs; 13, heart; 14, aorta; 15, left subclavian artery; 16, left primitive carotid; 17, right primitive carotid; 18, right subclavian artery; 19, vena cava descendens; 20, right vena innominata; 21, right subclavian vein; 22, right internal jugular; 23 left internal jugular; 24, left subclavian vein; 25, 26, pulmonary veins; 27, pulmonary artery of right side, which is also seen bifurcating as it enters the left lung.

FIGURE C.



1, Windpipe. 2, Right Lung, or Great Air-Bag 3, Heart. 4, Left Lung half cut away, showing the air pipes and air cells. 5, Midriff, or floor of the Lungs.

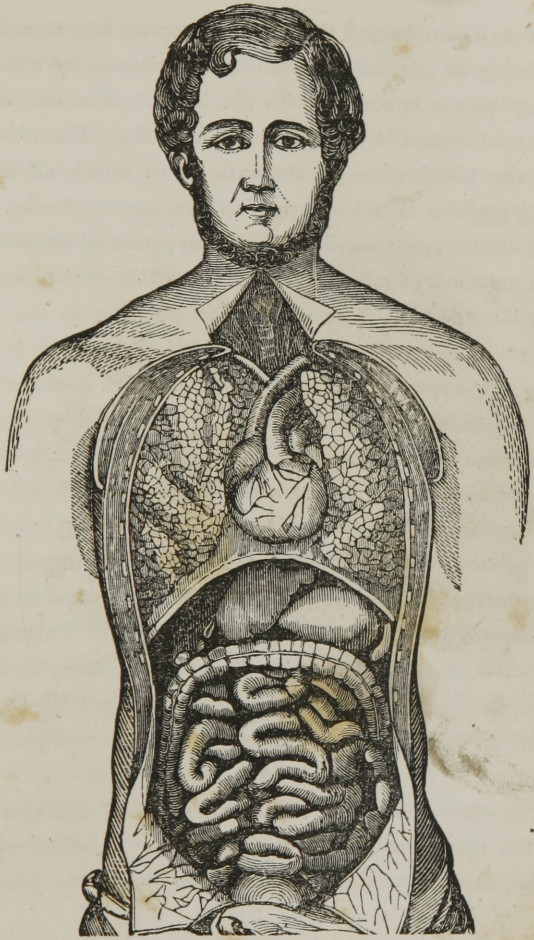


Fig. D.—Front view of the heart, lungs, large blood vessels, and abdominal viscera.

It may be remarked that all the apparatus here mentioned is simply an exquisite mechanical contrivance by which to bring the air in contact with the blood. The essence of this contrivance is the system of air-cells. The air-cells are the terminations or the extremities of the air-tubes. They may be considered truly as the vast expansion of a fine, delicate, gosamer-like membrane, pervaded by an intricate net-work of minute vessels whose blood is to be exposed to the air. The capillaries ramifying in the cell-walls are ærotated on both sides, being enclosed in the folds of the spider-web-like membrane, which form the partition between contiguous cells. The entire arrangements fully ensure the mutual reactions that take place between the contents of the vessels and the air. In this way the black venous blood of the Pulmonary artery—that which has gone the rounds of the circulation, and is, therefore, so far *spent*, and charged with the products of corporeal decay—is changed into the real arterial blood of the Pulmonary veins—is, in short, purified and renovated—made fit once more, as revitalized material, to perform anew the replenishing circuit of the body, and to fulfil again the purposes of life.

The effect will now be readily conceived of whatever fills up the minute cells, and obstructs, their communicating-tubes; thereby unfitting them for their functions—prevent-

ing at once the access of air to them and impeding the circulation of the blood in them. Such an obstacle is tubercles in the lungs of persons laboring under consumption. The average weight of the healthy lung is about 46 ounces—that of diseased lungs 72! This increased weight is not, however, from tubercular deposit exclusively but from other infiltrations of fluids, serum of the blood, &c.

The chest, or thorax, is a cavity situated at the upper part of the body; it is longitudinally divided into two parts by a membraneous partition called the mediastinum, stretched between the breast and back-bone, or from front to rear. On one side of the partition is placed the right lung, which is divided into three sections, or lobes; on the other side the left, being divided into two lobes, the place of the third being occupied by the heart, which lies on this side of the chest. [*See figures A, B, C, D.*]

The lungs are of a dark-purplish, mottled appearance, and are composed of air-cells, congregated in small groups or clusters, not unlike the clusters of the grape. Attempts at calculating the number of air-cells have been made by some physiologists. Keill, distinguished for his mathematical attainments, computed them at 1,744,000 in each lung; Leiberkuhn, a German anatomist, represents them as equal in superfices to 20,000 square feet. Around the cells, binding them together and forming, as it were, the matrix in

which they are imbedded, is a quantity of cellular substance, which may be said to constitute the substance of the lungs.

The air penetrates the lungs through the windpipe, or trachea, a round tube of about an inch in diameter, which may be easily felt running down the front of the neck. [*See Figure A, for a more definite idea of the trachea.*] This canal is kept open by cartilaginous rings, inserted in its sides, which prevent the possibility of the tube being compressed by external means, or by food passing down the œsophagus, (meat tube) or gullet, in the act of swallowing; and thus respiration is preserved from interruption. At the bottom of the neck, the windpipe terminates in the bronchi, or bronchial tubes, which divide, like prongs of a fork, into two principal branches, a right and a left; and these again sub-divide, the right into three, the left into two, corresponding with the number of lobes in the lungs which they severally supply. Plunged into these lobes, the bronchial tubes continue still further to ramify and divide until their branches attain an extreme degree of minuteness, and finally terminate each in a number of air-cells, formed of similar structure. If the reader will picture the lungs of the exact shape and size required to fill each side of the chest, allowing a space for the heart on the left; and will further consider these organs of a light elastic spongy texture—an interwoven series of

air-tubes, air cells, and blood-vessels, and each tube supplied with a nerve to direct its proper use, and to give warning when irritated or diseased; he will have a tolerably correct idea of their form and structure. [*See Figure B and C.*]

The chief duty of the lungs is to bring air in contact with the dark or venous blood, or blood which has already performed its round of the body, by which exposure it is converted into red, or arterial blood, or that blood which is circulated by means of a great artery called the aorta. This change, which is necessary for sustaining the freshness or vitality of the blood, for generating and keeping up the heat of the body is chemically produced by the oxygen of atmospheric air being absorbed, and a corresponding volume of carbonic-acid gas, which the blood had acquired in its circulation through the system, being given off.

The lungs have no *action* until after the birth of a child, They are then *inflated*, and air becomes necessary for physical existence.

Their weight is usually of one to eighteen of the whole body. In shape, they are like a sugar-loaf—contain thousands of air cells, as already stated, from which the air is never entirely expelled. They largely expand when filled with air, or contract amazingly when the air is pressed out of their cells. Every air cell of the lungs, with its bron-

chial tube, investing plexus or net work of capillaries—which are the minute tubes that intervene between the arteries and veins—may be said to be a *miniature* lung. Hence, it follows, if one, or a dozen, or a hundred, or even a thousand of these air cells, or miniature lungs, should become diseased or destroyed, the rest of the cells might still perform the work of respiration and prolong life.

It is, therefore only when the *great mass* of lungs becomes diseased or broken down by tuberculous matter or otherwise, that immediate death is to be apprehended. If the physician is able to discover the *seat* of the disease or tubercles, it may be in his power to arrest their further progress—keep the remainder of the lungs in sound condition, and restore the patients to perfect health.

Before tuberculous deposits take place, there is a relaxation of the capillaries, which allows an increased quantity of blood serum to pass through them, while a limited quantity is always passing for the renovation of the tissue of the lungs.

The blood, when oxydized by the oxygen of the air, becomes a cherry red, which color is owing to a change in the *shape* of the corpuscles of the blood from a bi-convex to a by-concave form. The chemical union of oxygen is in relative proportion. For thirteen ounces of carbon, thirty-seven ounces of oxygen gas is required. Nitrogen seems

to possess no decidedly active properties of itself, and its use is evidently merely to dilute the oxygen, which, if taken pure would prove highly injurious. Of the two compounds oxygen is the only sustainer of life. It gives vigor and power to the whole nervous system, and keeps in active and healthy operation the entire animal economy. Oxygen, cannot be breathed in safety, if taken in greater quantity than is designed by nature. If this gas is *below* the quantity found in the atmosphere, it will cause disease and will greatly debilitate the system.

The amount of air necessary to be inhaled at every inspiration to sustain life, is from three to five cubic inches. The amount inhaled in ordinary breathing is from thirty to fifty cubic inches, but it may be increased, by fully inflating the lungs, from 150 to 400 cubic inches. The first evidence of *Consumption* is the diminution of the capacity of the chest—which is made known to the physician by means of a spirometer. The pedestrian known as the "American Deer," who has often won in races against men and horses, could inhale six hundred cubic inches of air at a single inflation, while that great musical celebrity, Jenny Lind, it is stated, could take in nearly as much. In short, AIR is the most essential life sustaining elementary compound given us by Nature.

The reader will now understand, from this description of

the air passages and lungs, that if a patient, laboring under any diseases of these parts inhales medicated vapors in the same way as he breathes common air, the remedies must necessarily come in *immediate contact with the organs affected.* It requires but little exposition to show the importance and value of inhalation in these particular diseases, and its advantages over the ordinary mode of taking remedies; for it will at once be apparent, that medicine thus administered escape the many changes which would otherwise be produced upon them, by the processes of digestion, chylification, absorption, assimilation, and by being circulated through the system before reaching the seat of disease.

CHAPTER XI.

PATHOLOGY OF CONSUMPTION—WITH THE AUTHOR'S VIEWS.

In all ages of the world, since the days of Esculapius, various opinions have been entertained respecting the nature and origin of tubercles; but none of the theories hitherto advanced have come up to the mark of demonstrable *facts*—rather, on the contrary, they have proved fallacious, and supremely absurd in a large majority of cases. Some of these theories, however, contain much of the genuine ore of truth, mixed up with a large amount of the alloy of error. These errors, nevertheless, have proved negatively advantageous, inasmuch as they have served to show in what direction research has been futile, and therefore been as the buoys and beacons guiding modern pathologists to the soundings of the true channels of the intricate subject. I repeat, physicians and philosophers, from age to age, have vainly endeavored to solve the enigma and anomalies of tubercular disease; yet in view of this fact, without presuming to arrogate to myself any especial merits for new discoveries, I believe I can say it without egotism or vain-

glory, that I now feel myself in a position to offer for the *first time*, a perfect solution of the formation and true character of tubercular deposition, whether in the lungs, or in any tissue or organs of the body.

It is proper here to briefly mention the chief theories that have been propounded, and then proceed to state the conclusions to which I have arrived, after a careful analysis of all the phenomena of tubercular matter, and all the best ascertained facts regarding its causation.

Beginning with the ancients, I would remark, that Hippocrates, Galen, and others, considered tubercles to be putrified phlegm lodged in the lungs.

In later times, Sylvius de la Boe, Trallas, Portal, Broussais, and Wepfer, conceived that tubercles were lymphatic glands, and liable, as all other glands are, when irritated, to become inflamed, and eventually to suppurate. Dr. Reid considers tubercles to be a collection of inorganic mucus. Dr. Barrow and M. Dupuy endeavor to show that tubercles are hydatids, (very minute animals distended with fluids, which have been discovered in several cavities of the body.)

Laennec says, that a multitude of facts have convinced him that the development of tubercles is the result of a general depraved condition of the system.

Dr. Carswell believes that tuberculous matter, ready formed, exists in the blood, and is deposited in the lungs.

Dr. Campbell gives his opinion, that the blood becomes charged with particles derived from the materials of nutrition, which being carried forward to the lungs, in some organizations, on passing through their extreme vessels, and hence producing no effect; but which, in other cases, are retained by the capillaries, (the small ramification of arteries) and thus by gradual accumulations, form masses apparently homogeneous, to which is conventionally applied the name of tubercle.

Dr. Flood, tries to prove that tuberculous deposits essentially arise from some defect in the functions of nutrition, from disease of the mesenteric glands, and consequent obstructions in the lacteal vessels and the progress of the fluid they contain.

Dr. Carmichael, and also Professor Bennett, if I rightly interpret his views, makes the generation of an acid in the *primæ viæ* the principal factor in the mischief.

Dr. Todd holds that plethora of the portal circulation is the *fons mali*.

Professor Shultz would trace the malady to imperfect formation of the chyle or lymph granules, which are the rudiments of the future blood-globules. This last idea may be considered the germ of the theory of Canstalt—that of "degenerate albumen," further developed by Dr. Ascherson of Berlin, and perfected by Professor Bennett, of Edinburgh.

The theory of Parola refers the origin of tubercular disease to imperfect functions of the lungs, insufficiently compensated by the function of the liver.

Dr. Copland's theory makes the cause of the disease act primarily on the nervous system, and only secondarily on the blood.

Dr. Addison contends that the defects of structure characteristic of tubercular diseases are retrogradations of organic processes.

Dr. Madden's theory is that of poison in the blood, though what that poison-principle is, he has been unable to detect.

M. Baudelocque holds that the blood becomes irritated by the respiration of an atmosphere not sufficiently renewed. The blood being thus defective, the tissues it makes are of bad quality to match—the more the solids and fluids are thus modified, the more the scrofulous constitution manifests itself.

Others have contended that tubercles are the products of inflammation. A vast number of different theories have been broached as to the origin of tubercles; but as they are based on mere hypothesis, it would be tedious and of no practical use to advert to them, for it must be admitted by all candid minds, that the true character and mode of development of tubercles have hitherto baffled all research.

Before proceeding to give my own views of the *origin* of tubercles, it will be proper to present an analysis of tuberculous matter.

The membrane which lines the windpipe and the bronchial tubes in all their minute ramifications, and which terminates by forming the air-cells, is endued in its whole extent with the power of *secreting;* that is, of separating from the blood certain materials which form a thick viscid matter, well known under the name of mucus. This mucus moistens the parts, and in all natural states just a sufficient quantity is secreted for this purpose and also to make up for what is lost by evaporation, or that moisture which every one knows accompanies the breath on its return from the lungs; but should the lining membrane be injuriously acted on by any cause, such as breathing an acrid vapor, or a sudden change in the temperature of the air inspired, the membrane then becomes inflamed, and a greater quantity of blood than is natural is determined to the part, and, in consequence, more mucus is secreted than is necessary; it therefore collects, and, as the watery parts evaporate, condenses into pellet-shaped masses in the bronchial tubes, in which it has been formed, and a partial obstruction is thus offered to the passage of air into the air-cells supplied from this tube. Notice of this impediment is at once given by the nerves which supply the part, and nature endeavors

by a cough—that is, by a sudden and forcible contraction of the chest—to expel the air from the cells and tubes behind the obstruction, and thus dislodge the offending matter. This is a plain and simple account of that very common affection called a "cough," and will explain to our readers the pathology of coughing.

As secreting surfaces separate the materials of mucus from healthy blood, so will they remove any morbid products from vitiated blood; and the air tubes and air-cells which in health secrete mucus, which is not only harmless but, as we have shown, beneficial, will in a state of disease creates a new matter, termed tuberculous deposits.

According to Dr. James Turnbull, physician to the Liverpool Infirmary, in his work called "An Inquiry how far Consumption is Curable," tubercle has not yet been detected in the blood by chemical analysis or microscropical examination. Therefore we are not to infer that it exists in the blood, as a morbid product, but must look to some other source for it.

Analysis, however, of tubercle itself has shown that it consists chiefly of albumen, with a little caseine and fibrin, a considerable quantity of fat and some extractive matters, probably the kreatine and kreatinine discovered by Liebig in the muscles and urine.

Crude yellow tubercle contains only about 2 per cent. of

earthy salts, and 98 per cent. of animal matter; but when it has undergone the cretaceous formation, the proportions are reversed, the quantity of animal matter being about 3 per cent. and the remainder consisting of earthy salts, carbonate and phosphate of lime, with a little muriate of soda.

Tubercle being partially an exudation from the blood of the liquor sanguinous, imperfectly vitalized, and therefore less highly organized than the fibrinous exudations of healthy inflammation, we naturally expect to find—what chemists have discovered in regard to its ultimate analysis —that it differs very little in composition from the proteine compounds. These facts, it must be confessed, are almost negative as regards any practical value.

There are also seen in tubercles the filamentous remains of the air-cells, fat globules, which increase in quantity as the softening takes place, pus, and other exudation products of inflammation, epithelium cells, and, in cretaceous tubercles large dark particles and crystals of cholesterine, a crystallizable substance which may be dissolved out of inspissated bile, by ether; it is also a constituent of the brain and nerves.

I will now refer to some of the changes which take place in the human system, inducive of and connected with the deposition of tuberculous matter in the lungs.

The first I shall mention is the change that takes place

in the blood vessels of the lungs. The capilliaries, like the muscles, are kept in a passive contracted state by the nervous centres. If nervous stimulus is increased, an increased tone is given to the capilliaries, and they become contracted. If this stimulus is continued for any length of time, there is an exhaustion of the centres, loss of nervous action, or innervation, and relaxation or enlargement of the vessels. This is what causes the increased redness in inflammation; or we may have the constitutional or predisposed weakness of the nervous centres, or an exhaustion by some physical or depressing causes; and at the same time we may find a relaxation, there is increased amount of blood serum passing through the vessels into the surrounding tissues, which is intended to be organized by Nature. After the blood is eliminated, it must have imparted to it a certain amount of innervation, or nervous action, to form it into cells, and finally into tissues. If this does not take place, it remains unorganized, and the fibrin of the blood is converted into pus-cells. It is a well settled fact that no cells of any kind can be formed without fibrin. An example of this kind may be seen in Serous dropsy, where there is no evidence of any formation, while in Fibrous dropsy, pus-cells are found in great abundance.

There is in all persons predisposed to Consumption imperfect innervation. This imperfect nervous action allows the

capilliaries to relax, and an increased amount of blood serum is thrown out, part of which is not organized. The lining membrane of the cells in Consumption is imperfectly formed, owing to a want of innervation. This membrane consists of a layer of cells, like all other secreting membranes, and is continually being thrown off, and becomes mingled with the tubercular matter as it forms in the lungs.

It is a well-established fact that the same membrane that lines the trachea and bronchial tubes, also lines the air-cells which secretes a mucus for lubricating the lungs, and it is also acknowledged that the sympathetic or ganglionic nervous system controls the function of all the secreting membranes, and I would also remark that the calibre of the capillaries also depends upon the function of the same class of nervous centres, the nerves from which centres we find distributed to them.

Therefore, impare the nervous functions of the ganglionic nervous system and we have a contraction or dilation of the capillaries as well as the formation and secretion of the lining membrane of the lungs impaired.

If these things be correct, we will find that the capillaries are liable to become dilated—allowing a larger amount of blood serum to pass out than is required for the formation and repair of tissue; we also find from an imperfect innervation an imperfect formation of the lining membrane of

the lungs, and we have in the place of a healthy lining epithelium membrane, an imperfect and degenerable one, which is observed in the first formation of tubercles in the lungs and other organs of the body—the first evidence of tubercles observed is the thicking of the cells forming the lining membrane; this may be confined to a single epithelium cell. When it becomes filled its membrane is ruptured and it mingles with the products of the blood vessels that have also been eliminated, and assists in forming tubercles. If the cause is not removed, cell after cell secretes in the same manner until the whole lining membrane of the lung is secreting a similar product. If tuberculous matter be allowed to remain in contact with the capillaries and the tissue of the lungs they become destroyed in the same way as if some thorn or foreign body were brought in contact with them. In this way hemorrhage takes place and cavities are formed.

The thickening of the lining membrane of the lungs, no doubt, causes that coarseness of respiration which is observed in Phthisis, before any of the prominent symptoms exists and which is characteristic of that disease.

A thickening of the membrane also prevents the absorption of oxygen into the blood and elimination of carbonic acid, which fact must rapidly impair the whole system. This impairment is observed in all cases of Consumption.

Thus, we readily perceive, that Consumption is occasioned by a want of innervation, or nervous action. This diminishes:

First, the cavity of the chest.

Second, allows the capilliaries to enlarge, or dilate, and a larger amount of blood serum to pass out than is necessary for the repair of the lung tissue; and,

Thirdly, it prevents the blood liquid from forming into tissues.

Fourthly, it changes the secretion of the lining membrane of the lungs.

In proportion to the diminution of innervation will be the symptoms, extent, and rapidity of the disease—carrying off such persons to their graves in a few weeks. If the physician can re-establish healthy or normal innervation, he may confidently hope to save his patient. Otherwise, he cannot.

When tubercles are first deposited they appear of a greyish hue, are transparent, and are named milliary, from their supposed resemblance to the millet seed. They seem to the naked eye round, but the microscope shows them to be angular; they are very adherent to the lining membrane of the lungs, and cannot be separated without also detatching the pulmonary texture. After a longer or shorter period they gradually enlarge, and eventually soften, generally first in the

centre, and sometimes simultaneously at several points, and running into each other form a cavity, or excavation, in the substance of the lungs. When the tuberculous mass is completely softened, it becomes of a dull yellowish white color; and pus, generally of a thick, tenacious, cheesy-like nature, is expelled from the lungs through the bronchial tubes into the windpipe, and from thence is expectorated.

Softened tuberculous matter may be decomposed by chemical changes into an inchorous fluid, similar to that which is observed in softened cancer. It is then very destructive to the surrounding lung tissues, the effect being similar to the application of a diluted caustic.

When the tuberculous matter becomes softened, and absorbed or expelled, it leaves a cavity, which will soon be again filled by the same material, unless prevented by the re-establishing of healthy action. If it should cease, these cavities will heal, and form a cicatrix or seam, similar to that which is observed to take place in ulcers or injuries on the external surface of the body. [*Refer to colored plate of lungs.*]

There are two forms of Consumption: one much more rapid in its course than the other.

In the latter form the tubercular matter is diffused through the whole lung and in common parlance is called the *galloping* Consumption, which may run its course in a few weeks. In this form of tubercles, we find the

greater portion of the lungs involved—which can be understood by supposing all the air-cells to become filled with tuberculous matter, which must of course destroy the functions of the lungs, and consequently produce death.

In the other form, the disease attacks some part of the lungs, and is confined there, and goes on gradually destroying the tissues surrounding the deposit. The general location is in the upper part, or apex of the lungs—above and under the clavicle, or collar-bone.

The rapidity and fatality of Consumption will depend on the extent of the lungs diseased. As we have elsewhere stated, a thousand or more air-cells may be filled with the tuberculous matter, and not produce death; but when nearly all become filled, it runs its course very rapidly and it is *Galloping Consumption.*

The only effectual method of removing tubercles is by *inhaling medical substances directly into the lungs, so as to come in contact with the tuberculous* matter. To take these substances into the stomach is like building a dam at the mouth of a stream to change its course.

As a general rule, patients experience speedy relief, and often recover entirely from Consumption, by reason of the fact that the lungs are relieved from all irritating substances, and the absence of tubercular deposits necessarily causes the ulcers to heal, and the cavities to close in healthful cicatrices.

Having given the views of others, as well as my own, in respect to the origin and nature of tuberculous matter, I would repeat that the primary cause of Consumption is *diminished nervous energy*. Any external, hereditary, or constitutional cause that tends to depress the *nervous centres*, may produce the deposits of tuberculous or scrofulous matter in any tissue or organ of the body. *Diminished* nervous energy operates in the following manner:

1st. It impairs assimulation, or prevents the conversion of chyle into blood—increases the amount of fibrin and diminishes the amount of red corpuscles.

2d. It allows the capilliaries to become relaxed, and a large amount of the blood serum to pass into the air-cells.

3d. A want of nervous energy prevents the formation of healthy cells, from which tissues are formed, after the blood serum has been eliminated from the blood vessels.

4th. It prevents the formation of healthy secretion in the lining membrane of the lungs.

5th. Diminished nervous energy reduces the capacity of the chest and prevents a proper supply of oxygen, or atmospheric air, from being taken into the system, and likewise prevents the elimination of carbonic acid—which, in turn, depresses the nervous centres, and so proves one of the most injurious agents that can possibly be brought for the engendering of tuberculous deposits.

CHAPTER XII.

SYMPTOMS AND PHYSICAL SIGNS OF DISEASES OF THE LUNGS.

I agree with Dr. *John Balbirnie*, of Hill Cottage, *Great Malvern*, Scotland, author of the "Water Cure in Consumption and Scrofula," and numerous other valuable medical works, that the course of an ordinary case of consumption is legitimately divisible into *four* principal stages —a division accordant with the anatomical character of the disease, and corresponding to the four great phases, or natural gradations, of tubercular development in the human system. There is, however, no line of demarcation between the several stages—one merges into the other imperceptibly; nor does one set of symptoms characterize unequivocally any particular period. The order of the sequence of the symptoms arises in almost every individual case. In some patients the symptoms are so latent, insidious and slow, as long to be unnoticed and ignored; in others they are so marked and prominent as at once to arrest attention. The morbid phenomena of the disease are two-

fold in character, viz: those which indicate, firstly, the *local* lesions in process of action; and, secondly, the *general* disturbance of the system thus symptomatically or secondarily induced. The shades of these are as endless in diversity as are the varieties of the human constitution.

The First, or Incipient Stage of Consumption.—A state of general *malaise*, or undefinable out-of-sorts condition, with declining strength, or languor and inability to perform customary exertion, is usually the first noticeable symptom —at a time, perhaps, when all else conspires to promise enduring health, and tends to mark the secret undermining of the constitution—even the occupation by the foe of the very citadal of life. Suspicion is lulled, and caution thrown off its guard. Life is high, and the spirits often bouyant. In the midst of these deceptious appearances, however, the face, to the practised observer wears no mask—it tells its own tale: the features assume an unusual sharpness as if care-worn. The skin presents an unwonted delicacy, fineness and fairness—the complexion is pallid or yellow. There is a sort of nervous hurry or morbid vivacity about the bodily movements, with a corresponding captiousness, caprice, anxiety, and irritability of mind. If any allusion be made to the possibility of consumption threatening, there seems to spring up a rebellious instinct against the supposition—as if entertaining the bare idea were an act of

treason against the body, to be put down and scounted by every means.

It is impossible to describe correctly by any symptoms, a disease so varied in its course and duration as consumption; but the first indication is most commonly a slight tickling cough, which from being unattended with any great difficulty of breathing, or constitutional disturbance, is too frequently regarded as a *simple cold*, and is oftentimes treated improperly, or altogether neglected. After a short time the cough becomes more frequent, and is accompanied by a little mucous expectoration. Cough is a symptom, which may arise from almost any disease of the lungs, and even from derangement in the function of some distant organ. It is rarely absent, in any case, during the whole progress of Consumption. The pulse is slow and feeble in the morning, always excitable at the best, and accelerated towards evening. *Expectoration* is at first either absent or scanty consisting of stringy saliva, when clearing the throat. There is an acrid acid heat of skin, with a *markedly chilly feeling* or a morbid sensitiveness to the impression of cold, and with perspiration sensibly diminished. The feet and hands are colder than usual. These little febrile attacks often come on after meals, morning or evening, ending with perspirations light and limited to the face, neck, and chest. When they have passed, the skin is cool to the

feeling, soft, and perspirable. The breath is heated and fetid. The urine inclined to deposit a whitish sediment. Sleep is unsound and unrefreshing. The loss of weight is progressive, but varies in rapidity—sometimes scarcely noticeable, at other times sudden and marked. Occasionally a "stitch" in the side is complained of. Sometimes the pain is at the upper part of the chest, or in one shoulder, like rheumatism. Even at this incipient period of mischief, the patient's countenance is an organic intimation to the blindest that something wrong, vitally wrong, is going on below the surface.

This stage of Consumption is the nick of time for interposing an effectual check to its progress—often for eradicating it altogether. At this stage, I contend, that Consumption is as curable as any other equally grave disease. If proper remedies were used at this juncture, few deaths would happen. But this favorable time being passed, we are plunged in a sea of difficulties, which requires a combination of corrective circumstances, skillful pilotage, and persevering exertions to emerge from.

The Second Stage of Consumption.—Grey indurations or milliary granulations constitute the form of tuberculization most characteristic of this epoch. This stage is denoted by loss of appetite, emanciation, and diminished strength; the fever increases, the cough becomes more frequent, and

the expectoration more abundant. Perhaps at this period, from the tubercular deposits pressing on the side of some vessels, thereby obstructing the flow of blood through them blood becomes extravasated, and is spit up, or streaks of it, mark the expectoration. The cheeks are patched with a hectic flush—chills and heats are complained of. The patient becomes more restless, or, perhaps, now, for the first time, really is alarmed about himself. The feeling of exhaustion, mentally and bodily, augments. The face is pale—emaciation more persistent—the pulse more frequent —more difficulty of breathing and oppression at the chest are experienced, for less air being taken in at each inspiration, more frequent inspirations become necessary, and the person who formerly breathed but fifteen times in a minute will now breathe twenty; the perspirations are more copious, and the general power is so diminished, that the patient is no longer capable of active exertion or exercise.

The phenomena of the present stage will convey increasing evidence of the constitutional taint, and of the extension of the local disease—of the infraction of the pulmonary structure, blocking up the access of air to the cells. This solidification of the lungs is a mechanical obstruction to their motions, as well as to those of the chest, giving an unpliancy and immobility to the springy texture of the intervening sound portion of the lung; at the same time it

acts as a dead or foreign body, becomes a centre of irritatation, creates an afflux of fluids to the parts, promotes additional congestion and determines new deposits. The abundance of purulent expectoration during this period arises from the tubercular abscesses opening into the air-tubes, and it consists, as before remarked, of greyish-yellow purulent sputa, which are rounded, and some sink in water while others float at various depths.

As regards the cure of the disease at this stage, there is still hope left, albeit, matters have usually proceeded too far. There is time to strike a blow, though not with the same chances of success as in the earlier epoch of the malady.

The Third Stage of Consumption.—This is the period for transforming hard, grey, semi-transparent granulations into the opaque, soft, yellow tubercles. Consumption may now be said to be confirmed. All the preceding phenomena are present in an exaggerated degree. The increasing general cachexa, or tubercular taint of the system and the spreading local irritations and obstructions hasten the development of new deposits, and promote the maturation of the old. The tuberculous deposits being increased in size and number, are clustered together, and running into each other from an excavation into which the air has now free admission, and acts on its raw and unhealed sides. Hence

the advancing inertia of all the functions—the universal languor—the loss of flesh and strength and weight. The cheeks and lips become blanched, painfully contrasting with the circumscribed hectic patch of the former. The expansion of the face is more and more tubercular—more sharp, haggard and depressed—as if indicating a mental and corporeal *incubus* whose oppression the patient vainly tries to conceal or throw off. The cough increases in severity and frequency—being at first dry and irritating, or barking, or occurring in paroxyms, while the expectoration is changed in character and consists of pus, or mucus, containing softened or occasionally solid tuberculous deposits, shreads of lymph, and sometimes particles of pulmonary tissue in a fetid state. Should the disease be principally confined to one lung, the patient generally lies on that side, by which means the sound lung, which is now called upon to perform the greater part of respiration, unimpaired by the weight of the body, and can thus be more fully and easily dilated; but this alleviation is merely slight and temporary; fresh collections of tubercles burst, and additional exacerbations are thereby excited—the night sweats break forth heavy and profuse—emanciation advances—the flesh gets flabby and then inelastic. The sleep is disturbed and unrefreshing—the extremities swell, and the powers of the stomach failing, its contents are not unfrequently ejected by the

violent fits of coughing. The tongue is white and furred, and red at the edges. There is thirst, costiveness and turgid urine. The intestines share in the general state of the disease, the interval membrane of which becoming irritated, or ulcerated, diarrhœa alternates with or accompanies the profuse evacuation of the skin. There is flushing in the face, and burning in the palms of the hands and soles of the feet. A sense of chilliness along the spine is commonly experienced towards noon, followed by increased heat towards the evening; or the febrile paroxysm is delayed till repeated in the evening, followed by chills. The eye assumes a pearly whiteness and has a certain wildness of expression; the brain supplied with imperfectly aërated blood is also affected, and mental excitement, common from the commencement, occasionally towards the close heightens to languid delirium, or total imbecility; but the senses most frequently remain entire and the poor patient gradually and imperceptibly sinks into eternity—oftentimes anticipating to the last moment a recovery.

At this stage hardly any thing will advert the malady. Medicated inhalations are much more safe and reliable than any other mode of treatment. Cod-liver oil and other similar remedies I find comparatively either entirely worthless or inapplicable. The grand idea should now be the correction of the constitutional taint—the restoration

of innervation, or all the nervous powers of the system, by remedies calculated to rebuild the constitution, of whatever kind, accompanied by the best hygienic agencies. Inhalation, with suitable adjunct constitutional and hygienic treatment is the readiest means of arresting the frequency and reducing the fearful mortality of Consumption.

The Fourth and Last Stage of Consumption.—Here a totally different phase of the malady ushers in, and an entirely new scene of things is presented to the view. With the increasing complexity of the local phenomena, the symptomatic sufferings advance; a great suppurating surface is laid bare in the body—a deep polluted fountain sends forth its corrupt streams—poisoning the channels of life and sapping the foundations of the system. The hectic, the chills, the heats, the perspirations, the diarrhœa, the emaciation, the difficulty of breathing, the cough, the expectoration, the local pains, loss of strength and appetite, &c., all keep pace with the extension of new tuberculous deposits and the ulceration of the old—while a swelling of the ankles, and aphthous state of the mouth also appear and mark the fatal advance of the disease. The nose and cheeks assume a marked prominence—the chest sinks in and becomes flat—the shoulders are raised, the shoulder-blades prominent, projecting like wings. The neck appears elongated and stiff in its movements. The angle of the lips is drawn

back, producing a bitter smile. The fingers seem unnaturally long and their joints enlarged. The nails are incurvated. In cases of long standing cavities in the lungs, the ends of the fingers are singularly clubbed. The expectoration alters in character—is of a greenish hue and streaked with yellow opaque lines. Often there is a slight spitting of blood, but the instances of actual hemorrhage from the lungs are by far the most infrequent. In the acuter forms, the patient, if previously able to go about, will now take to bed; in the more chronic and lingering cases, he will often walk about till the very day of his death. At this last melancholy period are opened up the sources of the most intractable and protracted sufferings imaginable, namely, those arising from ulcerations from the larynx, epiglottis, intestines, &c., and sometimes of the peritonæm. Small sores appear upon the mouth. The skin gets excoriated on the projecting surfaces of bone, and over the sacrum there is often painful and extensive ulceration from this cause. Perforation of the lung, and effusion of the contents of cavities sometimes occur at this period to enhance the sufferings, and to hasten the doom. The fever continues with exacerbations, consisting of shivering fits, followed by heat and perspirations. Emaciation makes fearful progress, and the patient dies in the last stage of marasmus. He is sometimes choked by the bursting of a suppurating font,

long before the natural course of the disease had worn out the fabric and shivered forever the silver chords of life. Such is a faithful portraiture—*drawn from the life*—of the ordinary course of a case of common tubercular Phthisis, or Pulmonary Consumption. Those who have seen most of the disease will best recognize the fidelity of the description. Besides the symptoms already enumerated, there are a variety of physical signs by which the skillful practitioner is able to discern the condition of the lungs and chest, and mark the duration, extent, and progress of the fearful malady. These will be noticed more particularly in a subsequent chapter, when treating of the Diagnosis of Consumption, &c.

CHAPTER XIII.

DIAGNOSIS OF CONSUMPTION.—AUSCULTATION, PERCUSSION AND MENSURATION, WITH AN ACCOUNT OF THE INSTRUMENTS USED FOR SUCH PURPOSES.—PROGNOSIS.

Diagnosis.—The term diagnosis is used to express the act of discerning the character of diseases, and also for distinguishing one disease from another, being employed in two senses, with a slight shade of difference. In many instances the signs of very different diseases are so much alike, that without caution they might readily be confounded. In such cases it is advisable to compare the symptoms with all the diseases about which there might be doubt, and determining which must be excluded. We must look beyond the symptoms *to* the disease—must not be content with putting morbid phenomena together and then call it a disease—we should penetrate the *source* or cause of such disturbed functions of the animal economy. Were we to do otherwise, the science of Pathology would soon cease to make *progress* altogether. The history of medicine shows that physicians in all ages have blundered sadly in the

dark, in consequence of the want of that pathological light necessary in arriving at a legitimate diagnosis of disease.

Certain rules ought to be observed in conducting the diagnostical examination. Physicians should guard against all professional display, and not regard his patient as a mere subject for medical analysis. Rather should he endeavor to consult the feelings, prejudices and mental peculiarities of his patient, in as agreeable manner as possible, in order, by producing kindly impressions, to greatly facilitate his immediate object and secure the good-will of the patient.

In order to a full exposition of the subject of diagnosis, I propose, therefore, in the present chapter, to present a succint account of the mode of proceeding and of the implements usually employed. The explanatory processes which require distinct notice may be included under the head of auscultation, percussion, measurement, &c. It would be foreign to my present inquiry to describe each of the signs and their mode of combination and succession. I accordingly shall confine myself more particularly to an examination of the subject in reference to the *Curability of Consumption,* and chiefly to the signs of the *incipient* stage, for I consider that the evidence afforded by those of the later stages of so positive a nature that it cannot be doubted, by any who have acquired a practical knowledge of this formidable malady.

Auscultation.—Physical examination has often furnished the counterpart of some of the proofs of the Curability of Consumption, derived from Pathology, more especially in regard to the healing of cavities; and it often enables us to tell tubercular disease long before it could be detected by symptoms alone. In these cases it gives us a kind of positive information as to the extent and stage, which symptoms are incapable of doing. We must not, however, suppose this occurs invariably, for, in some instances, symptoms furnish earlier indications, especially where a limited number of tubercles are separated by healthy pulmonary tissue. The information which it affords, even in such cases, is still, however, of a very valuable nature; for if some symptoms of tubercular disease are present, it enables us to affirm that it either does not exist, or if present, is so only to a limited extent; and that it must therefore be in its earliest stage, when means may be used with the best chances of success. I am aware that there are some physicians who ridicule the use of the stethoscope and other instruments, by declaring that they are only used for "professional effect and to frighten and to fatigue a poor invalid." This, however, is far from being the case. These instruments are invaluable in the hands of the adroit and skillful physician, while their use is unattended with the slightest pain or uneasiness to the suffering patient. When phy-

sicians question the accuracy of the information the stethoscope for instance is capable of affording, the fact can only arise from their not having learned and practiced the use of it sufficiently to be able to depend upon the knowledge it furnishes. A physician who is *hard of hearing*, would find no use for the instrument, but the practitioner whose hearing is good or acute, will be able quite readily to detect the exact *seat* and condition of the disorder at the time the physical examination is made. The act of inspiration and expiration, or the passage of air into and out of the lungs and the motion of the blood in the heart and blood-vessels, produce certain sounds, or signs which reach the ear when placed next to the chest, the seat and nature of various diseases of the respiratory and circulating organs. Should the lungs or heart be diseased, these sounds become changed, and thus the altered condition of their structure will be detected; but the application of the ear itself to the chest, more especially of the female sex, is objectionable for obvious reasons, added to which it is impracticable thus to institute a proper examination of some parts. To remove these difficulties, a little instrument called the stethoscope, consisting of a hollow tube or trumpet, about a foot long and two inches in diameter, was invented by the eminent pathologist, Laennec, in the year 1816, which not only enables the practitioner to explore all the parts of the chest,

but communicates the sounds in a more perfect degree. It is well known that sounds conveyed by a tube, or any other body in direct contact with the ear, are much more distinct than when widely diffused in the air; hence the reason of deaf people employing hearing horns. *Skoda*, however, is of the opinion that sounds are heard louder by the unaided ear than through the stethoscope; but if this be the fact, as I am disposed to doubt, the ear cannot be applied to every part of the thorax, while the disease may be of such a character, or the person to be examined in such a condition, as to render immediate auscultation very repulsive to the physician. My own opinion is that the stethoscope is indispensible, but physicians should also be familiar with *immediate* auscultation, for it often happens that from the situation of the patient or the position of his bed, the ear can be more readily applied to the chest than the stethoscope. Physicians, therefore, should practice both mediate and immediate auscultation.

Whether the auscultation be mediate or immediate, every care should be taken not to render it wearisome to the patient, and no more pressure should be used by the ear or stethoscope than is necessary to exclude all communication with the external air. By paying attention to the position of the patient while using either mode of auscultation, the practitioner will cause little or no annoyance even to the

most sensitive individual. Were the whole weight of the head to fall upon the chest of the patient it would be sufficient to impede respiration even in healthy persons, while the stethoscope would produce some pain, in consequence of the small extent of surface which receives the trumpet-shape instrument, if the physicians should make the pressure too hard. The stethoscope, although it has been ridiculed as quackery and absurdity, nevertheless, is now regarded by all honest and intelligent physicians as one of the greatest boons presented to the medical world in modern times.

Percussion, or the mode of artificially producing sounds, consists in striking the chest, and is equally simple in its principles as is auscultation by the stethescope. Suppose we strike with the finger any hollow vessel, a certain sound will be produced, varying, of course, in kind and intensity, according to the size of the vessel, the nature of its parietes or walls, and their thickness; but if any solid substance be placed in the vessel, the sound will become much duller and altogether changed in character. It must therefore be evident that the chest, (which may be regarded as a hollow reservoir) when there are no morbid deposits in the lungs to increase its density, will emit sounds of a different kind from what they would be if such substances were present. It is, however, not sufficient that certain sounds be communicated to the ear that disease will be detected—the mind

must be made familiar with the objects from which the sounds proceed, and the ear must be musical and well tutored to be capable of discriminating between the healthy and morbid sounds.

It would be foreign to the object of this work, and incompatible with its assigned limits, to enter minutely into the various and delicate sounds which indicate different diseases of the lungs and heart, and it is also difficult to render intelligible by words the special character of the sounds elicited from a healthy or diseased chest; but we may generally remark that the respiratory murmur, which in a state of health is scarcely audible, becomes, in tuberculous disease, more distinct, the voice more resonant, and the sound produced by percussion duller. These alterations in the respiration, and in the signs elicited by percussion, take place from the summit to the base of the chest, and are most frequently confined to the superior lobes of the lungs on one side, where the development of tubercles usually first takes place. In bronchitis, with which consumption is some times confounded, the morbid sounds proceed from fluid in the bronchical tubes, and not from an increased density in the lungs; and, unlike consumption, they are generally discovered at the inferior part of the chest, and usually at both sides. The physical signs which denote suppuration in the latter stages of consumption, consist in

the superior parts of the chest being dull on percussion, accompanied by a hollow, coarse respiration, giving rise to a peculiar phenomenon, called pectoriloquy, which is said to exist when the voice is heard through the stethoscope applied to the chest, and sometimes by a tinkling echo, or metalic ringing. Should there be much fluid in the lungs, arising from impeded respiration, a mucous räle, or rattle, which has been compared to the sound caused by blowing through a pipe into soapy water, is then perceived over the diseased parts. When the air passes through the cavities, a peculiar cavernous respiration is heard, induced by the passage of air from the bronchical tubes into the cavities, instead of entering the minute air-cells. To demonstrate the presence of tubercular disease, the physical signs must exist collectively, and be accompanied by the general symptoms to which we have alluded in the previous chapter.

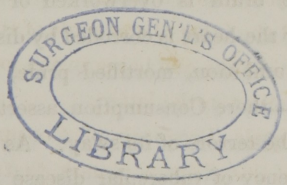
The number of diseases which are liable to confounded with consumption has diminished since auscultation and percussion have been generally adopted. The symptoms of chronic pleurisy sometimes closely resemble those of phthisis; but, when the chest is examined with the stethoscope, all difficulty at once disappears. When cough from common cold occurs along with a deranged state of general health, such as is present in chlorosis, it may sometimes be doubtful if the state of the patient be dependent upon the

early stage of the tubercles ; but physical examination and close attention to the distinctive characters of the two diseases, will almost always enable us to distinguish them without much difficulty. Chronic bronchitis and chronic inflammation of the lungs have been considered the diseases most apt to be confounded with phthisis. I think that, if due attention be paid to the different parts of the lungs affected in the two diseases, and to the characteristic symptoms of each, difficulty will seldom be experienced except when there is a complication of the two diseases.

Much difficulty has, I believe, arisen from cases, which had been regarded as consumption, being afterwards considered as chronic bronchitis, simply because the patient got better by change of air and other means. Chronic pneumonia and phthisis are the two diseases which approach most nearly in their symptoms and essential characters; both being capable of producing cavities in the lungs. The chief distinction between them consists in the one affecting the base, and the other the summit of the lung; and in the physical signs of the one being in the former situation, and those of the other in the latter.

Respecting the Prognosis of Consumption, I would, in conclusion of this chapter, remark, that it may be regarded as favorable, where the disease is confined to one lung and unattended with purulent expectoration, hectic fever, noc-

turnal perspirations, or material diminished strength. The most unfavorable circumstances are the complaint descending from tuberculous parents, and attacking both lungs, great emaciation, high degree of fever, colliquative sweats, expectoration of pure pus, diarrhœa and swelling of the extremities, which symptoms may be regarded as infallibly denoting tuberculous excavations. Such advanced cases, however, are *not invariably* incurable, as they have been and are still regarded by many members of the medical profession. In confirmation of the Curability of Consumption, even in the late stages, it is impossible to appeal to a higher authority than *Laennec*, the greatest patheologist of modern times, while a mass of other testimony can be easily adduced—all of which shows how inexcusable it would be to neglect curative treatment, whether by Inhalation, or otherwise. I give the preference to Inhalation and concomitant hygienic remedies, as at once more rational and philosophical.



CHAPTER XIV.

PULMONARY DISEASES—HOW FAR INFLUENCED BY CLIMATE, RACE, OCCUPATION, AGE AND SEX.

Climate has very little to do with the production of tubercular disease. It is by no means the cause of its variable prevalence and intensity in different localities of the globe. Climate is often wrongly accused, and made to answer for anti-hygienic causes. Wherever *impure* air is breathed—wherever out-door exercise is neglected—wherever the lungs have not full play and development, and thus the due interchange between the air and the blood prevented—wherever all sorts of debilitating causes operate—wherever the brain is overworked or overstimulated—and wherever the heart is corroded by disquieting passions, disappointed ambition, mortified pride, hope deferred, or blighted love—there Consumption asserts its prerogatives and scatters the terrors of its sway. As to the absolute or relative frequency of tubercular disease in different countries and climates, exact numerical data are wanting; but from the general statements of observers, enough is known

to prove that Consumption is not affected by latitude or longitude.

The question of foreign residence—*if it should be entertained at all*—can be entertained only in the second and third stages of Consumption. Earlier, it is unwise, decidedly—later, it is worse than useless! It is *cruel!* For the majority of patients only go to die abroad—and amid what discomforts? Sorrowful, indeed, is the lot of the many who seek irrecoverable health in foreign lands. Many die on the passage, or, sustained by hope till their arrival, soon sink under the bitter disappointment, surrounded by strangers, cut off from the comforts of home and the solaces of friends, and this at the time of all others when most needed, and therefore most prized and missed! It is surely a grand point for the physician properly to discourage these cases and to resist these disasters.

I am decidedly against this fleeing from home altogether. At best it is bootless—*unnecessary*. Every object can be, or ought to be, obtained at home. Our country contains every advantage of air, from the States of the balmy South, where the roses bloom in winter, to the Northern, where the bracing air rivals the pole. I contend that *Nature adapts the constitution of man to the climate of his ancestors. Change of air at home* will effect whatever good climate can effect in Consumption—without the expense,

hardships, peril, inconvenience, and the severance of life's best ties, that attend expatriation. Not *change of climate*, but CHANGE OF HABITS and of HYGIENE is the grand *desideratum*—the one thing needed by Consumptive patients. Physicians who advise going abroad make a grand mistake, and commit an egregious professional blunder.

Unquestionably it is evident, man is adapted to a great diversity of climate; and men might live in any, long and happily, *provided they obeyed the physiological laws*. On the subject of seasons and weather, great errors and prejudices prevail. *They have no marked influence on the consumptive*. Climate accounts for nothing in the causation of tubercles. It implies, and is inextricably mixed up with a multitude of complex combinations, the separate influence of each of which should be taken into account in an attempt to arrive at an accurate judgment. But what analysis is to assign its precise share of causation to temperance—to humidity—to variability—to density—and other conditions of atmosphere—to soil, to cultivation, to food, to modes of life, to customs, to occupations, to temperaments, and to races of men? These queries are all satisfactorily answered by the course of medical treatment adopted in my professional practice.

In respect to the sex, it is found that the greater number of consumptive patients is among the females. This is more

particularly the case in the United States and other parts of the world, although in Great Britain the males are the greatest sufferers by this dreadful malady—the fact resulting from their sedentary pursuits—the overtasking of mind and body, and all the depressing influences engendered of the lack of constant employment, suitable exercise in the open air, unwholesome household accommodations, unsuitable clothing, &c.

The bills of mortality show that the larger portion of deaths of both sexes occur between the ages of from fifteen years to thirty-five.

I would repeat that in whatever place, by whatever system of treatment, a patient is permitted or enabled to live more in the open air, and to breathe a purer atmosphere—to take more exercise—to cultivate a healthier activity of the grand excretory functions of the body, the skin, lungs and bowels—to live freer of disquieting cares and anxieties—and to follow out a more carefully planned diet and regimen than before—there will be seen the most certain chances of cure. *These are the things implied in a change of climate—the conditions on which very greatly hang the hope of cure.*

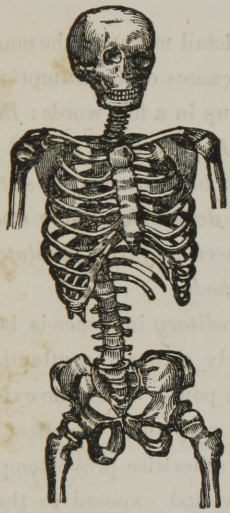
CHAPTER XV.

THE CAUSES OF THE DISEASES OF THE LUNGS AND THROAT.

The essential cause of Consumption is impaired INNERVATION. Whatever produces or favors the dsposition of tubercles, interferes with the functions of the nervous system, and impairs *Innervation.* So numerous are these causes, that it is scarcely possible to mention the whole of them, although we may present some of the more prominent ones, and show in what way they influence the *nervous action.* As a general rule, I would remark, that every influence, external or internal, acting directly or indirectly on the nervous system, so as to depress it, favors the development of tubercles—either in the lungs or some other organ; much more so, if a *pre-disposition* to Consumption exists.

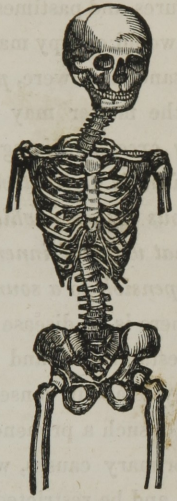
Dress is a frequent cause of Consumption. The practice of tight-lacing, the wearing of heavy skirts, and thin shoes, are the means of carrying thousands of the fairest and loveliest of the female sex to an untimely grave, through the aid of Death's prime minister—*Consumption.*

FIGURE E.



Healthy Chest.

FIGURE 1



Consumptive Chest.

Another pernicious practice is keeping late hours—during the winter season in particular—attending balls thinly clothed, partaking of hot suppers, stimulating viands, and indulging in dancing and other excitements of the hilarious occasions; and then leaving the heated atmosphere of the saloon, or theatre, and going out into the storm and wintry blasts. I am far from wishing to proscribe rational and innocent enjoyment, but the blessings of good health should

ever be held paramount to every consideration of worldly pleasures and pastimes.

It would occupy many pages to detail minutely the many thousand, as it were, *predisposing* causes of Consumption; but the matter may be summed up in a few words: *that every excess, or irregularity of whatever kind, mental or physical, is destructive, in a greater or lesser degree, of the nervous system; while with such destruction there must be that want of innervation, or nervous force, absolutely indispensible to a sound mind and body.*

There is no disease in which *hereditary* influence is better established, and that peculiarly claims the attention of physicians in consequence of the power which the existence of such a proneness implies to perpetuate the effect of the primary causes, which might otherwise prove temporary and be restricted to the individual exposed to their agency. This hereditary influence may be traced much more frequently in women than in men; partly, perhaps, in consequence of their being exposed to the same class of inducing causes as their parents. The female sex is generally better acquainted with their medical history than the male.

It is a common thing to attribute the prevalence of Consumption to the vicissitudes of the weather, but it will be found that a fair amount of exposure to the weather is

rather calculated to avert than to induce Consumption. It is indeed only in cases of prolonged exposure to wet and cold that we can trace any evidence of connection between the physical cause and the first manifestations of the disease. Rapid transitions and short continuance of cold and heat are comparatively inoperative; but, as before remarked, the *prolonged application of cold*, particularly in the form of wet clothing, is peculiarly apt to depress vital energy and induce congestion, with its incidental perils.

It will be readily believed that confined and deteriorated air tends materially to the production of Consumption. Assuming such to be the fact, we should expect tailors, printers, bakers, and other workmen, to suffer in a high degree. Tailors constitute 72 per cent. of the male patients in the London Hospital for Consumption, while they constitute 58 per cent. of patients at a general hospital.

Everywhere there is a remarkable liability among soldiers to Consumption. Among the English Dragoon Guards, the annual mortality is 63 per cent. from Consumption; while the mortality of the whole population of England and Wales, from the same cause, is only 37 per cent. The selection of tall men for the army is given as a reason for the great mortality from Consumption among soldiers. It is true, rapid growth is by no means favorable, either in animals or vegetables, to firmness of structure; but the expla-

nation given by Dr. Duncan, in an interesting communication in the Dublin Medical Journal, is more nearly the truth, namely, "the listlessness of their (the soldiers') life and the dull monotony of drills and parades."

Sailors very seldom die of Consumption. There are some diseases that favor Consumption, such as inflammation of the lungs, measles, small-pox, hooping-cough, scarletaria, typhoid fever, &c., by depressing the nervous system, either directly or indirectly.

Cold is one of the most common exciting causes of Consumption. The inhaling of dust and solid substances into the lungs will favor the disease. Grief, despondency, fear, religious excitement, &c., all are inducing causes of Phthisis.

As before remarked, some climates favor Consumption. Low, damp neighborhoods will induce the disease. A residence near the sea-shore is injurious to persons predisposed to Pulmonary diseases. Hence we find Consumption more prevalent in New York and Boston than in Philadelphia, and towns that are remote from the sea-shore. A northern climate that is dry is much more favorable to Consumptives than a warm and humid latitude.

The medical statistics of our prisons affords striking evidences of the influences of depressing emotions. The mortality from Consumption is *four times* the average in the general population. The rule will hold in the same

proportion under every variety of climate, diet, and general regulation.

It is a part of an American female's education to wear tight dresses and thin shoes; she esteems herself degraded if she does not do it. Well may the physician ask, what becomes of the blood—that is, of the four or five pounds out of the twenty-five that she has in her body—when it is driven from her extremities by cold upon her heart and lungs? These organs struggle to overcome their bonds, and to pass it through the lungs fast enough to preserve the balance of the circulation—but they must fail. A dozen powerful hooks and eyes, if not a corset to boot—and one is just as bad as the other—resist the efforts of the muscles to raise the ribs, while the delicate blood-vessels lining the air-cells, becoming tender from congestion, give way here and there, and she spits blood. It is merciful that she does; it had better come out than remain in the substance of the lungs.

If the lungs have not room to play, they will force other organs out of their place. The heart, deprived of comfortable space, will palpitate, and become diseased. The stomach pressed down—by the superincumbent diaphragm—will damage the functions of digestion, while the abdomen viscera, the bowels, &c., will be pressed out of place, and become more or less injured. A fashionable pair of cor-

sets will add to the weight of resistance in the abdomen from ten to thirty pounds! What wonder if something gave way? It would be a wonder if something did not! *Fashion*, in fact, is the hand-maiden of Death! In illustration of this truth, I would state that there are about 700 principal corset-making establishments in Paris alone, employing about five thousand workwomen, and exporting a million and a half of corsets, whose value is rated at $1,500,000! To this large amount must be added the large number of corsets and stays manufactured in other parts of Europe and the United States.

In view of all these and thousand other depressing elements of health, it is not at all surprising that the mortality arising from Consumption is so fearfully large in all parts of the world. Till the races of man cease to violate the laws of *nature* and until they return to habits of primordial simplicity and purity, Consumption must ever remain the great scourge and curse of humanity.

CHAPTER XVI.

HOW CONSUMPTION MAY BE PREVENTED AND MITIGATED.

On most rational grounds, *suitable* exercise may be said to be the *sine qua non* of cure in cases of Consumption. The excretory outlets of the body cannot be kept thoroughly open without exercise, and without adequate excretion there can be no good blood-making, and without good blood-making it is impossible healthily to "reciprocate" the body attenuated by disease. The condemnation of active *breathing* and *active exercise* in Consumption, is a *remnant of the old leven of error which mistook Phthisis for an inflammatory disease, and which made its heroic treatment by anti-phlogistics the orthodox practice of the day.* It is an offshoot of error that still too much paralyses the hand of practice. *Physicians are afraid to advise active exercise, lest it should excite the circulation and quicken the breathing; whereas, to get well, and keep well, the patient must thoroughly exercise both limbs and lungs!* Inactivity of limb and lung has directly or indirectly brought on the pulmonary mischief. The North

American Indians, so long as they were unsophiscated by the white man's habits, knew nothing of Consumption. Nor do any tribes of men, or any single individual, so long as they *habitually* but not *necessarily*, exercise the limbs and lungs, ever become Consumptive. *To deliver over the respiratory organs to quiescence is the surest way to induce Consumption, and certainly must be a bad way to cure it!* The habits of patients are accordingly not sufficiently active. There is not stimulous enough for the mind or body. They mope over the fires in winter, and *lounge* about the parlors in summer. Limbs, nor lungs, nor brains get proper exercise! Walking is perhaps, the best kind of exercise for those who can take it. *Hill-climbing* affords that activity to the respiratory functions—that full development of the pulmonary organs—that perfect expansion of the air-cells, which nothing else can so completely give.

Those who are strong enough to bear it, and rich enough to afford it, should alternate horse-riding with walking—taking care not to *overdo* the riding. Those who make excursions on horse-back—going at an easy pace, and only at a moderate distance each day—will find their account in so doing. *Violent exercise* must be avoided—also sudden halts, delays, and rests when overheated, thereby checking perspiration by unseasonable cooling. A steady exposure,

even in bad weather, when *properly clothed*, will never give cold.

Hard walking involves the greatest amount of muscular exercise; riding next; carriage exercise the least. Sailing is beneficial, according to the proper *hygiene* of the vessel. Rowing in an open boat on a river or lake, is advantageous, in suitable weather. Swinging is a good passive exercise *in its place*. It constantly renews the air to the patient without his active participation in the effort—an *inactivity* necessary and serviceable on some occasions. Passive exercise is only for those who cannot take active exercise.

It is well known that the strength and development of muscle increase in proportion to their healthful exercise, and that when deprived of action, they waste and become enfeebled; and, by continued disease, the nerves become changed from their natural structure, the blood-vessels are obliterated, the bones are softened, and the contractive power of muscles and their appearance are altogether lost.

From the construction of the human form it is clear that man was intended for an *active* existence. A *sedentary* life is the bane of millions. All persons should accustom themselves to take daily exercise in the open air—the extent of which must, of course, depend on circumstances, such as the state of health, the strength, and habits. As a

general rule, all those in comparative good health, should employ themselves in the open air at least two hours every day.

I repeat, that horse and carriage exercise, gymnastics, sailing and rowing, by which the mind is amused as well as the body exercised, may be adopted with great advantage in the incipient stages of Consumption. Of all means, however, for exercising the body, walking is decidedly the most beneficial. It is that which nature intended for us, and there is no other accompanied with such uniform and regular exercise of the muscles and joints; and from the valvular structure of the veins of the extremities, it is better fitted than any other to promote the circulation, and consequently all the functions of the system.

A moderate use of the vocal organs materially contribute to strengthen the lungs; hence we see that players, lawyers and public speakers, undergo great exertion without inconvenience, and are also less liable to pulmonic disease than persons of other occupations. Care, however, must be observed that the labor is not carried too far, for over-exertion may irritate the lungs.

Young persons in whom there exists an hereditary or acquired predisposition to Consumption, usually discovered by the formation of the chest and other circumstances, will derive great benefit by directly exercising the pulmonary

organs by a regular use of my "Inhaler." When the object is to prevent, or assist in overcoming disease, my Inhaler and Chest-Expander will be found of signal advantage. I have frequently observed in patients of naturally weak and sunken chests, who have inhaled for a short period, a most marked and beneficial change take place in the external appearance of the thorax; for not only are the lungs themselves expanded by means of the dilation of their cells formerly compressed, but the ribs become elevated, and the muscles concerned in breathing acquire a greater degree of power and volume and symmetry by this increased action of other parts.

That the pulmonic system may be strengthened by artificial means, is in some measure exemplified by the extraordinary powers of the lungs which characterise the inhabitants of mountainous countries, where, from the frequent ascent of acclivities and the necessity of deep and continued respiration, the general power of the pulmonic system is so much invigorated, that they are enabled to bear an amount of fatigue which those unaccustomed to such exercise would speedily sink under.

An eminent, but somewhat eccentric, medical writer, treating on hereditary predisposition to Consumption, uses the following pungent and characteristic language:—"I believe it to be utterly impossible to find a perfectly healthy

child born of delicate, sickly parents. The unsound constitution of the parents is usually transmitted with increased intensity to the offspring, and no character of morbid predisposition is more surely and more unfailingly transmitted than a predisposition to pulmonary Consumption. When we consider the influence that the mother's health must exert on the health of her children, it is strange that so little attention should be paid to the physical education of girls. Why from the hour of her birth is a female child subjected to one eternal imprisonment? Why is she to be cooped up within doors, confined to patch-work and nursing her doll, and taught to consider it quite unlady-like to move faster than the dignified gait of some superannuated dowager? Turn your girls out of doors, let them play at ball and trundle the hoop, and laugh and shout as much as they please, and they will be finer ladies for it at thirty, even if not quite so graceful at fifteen. By the laws of Lycurgus, the wise and immortal lawgiver of the Spartan Republic, the most especial attention was paid to the physical education of women, and no delicate, sickly woman on that account was allowed to marry. Supposing a provision like this would be carried into effect here! What an army of unmarried ladies we should very soon see! If a young man wants to choose a wife, let him invite the lady he has in view to take a walk, a long one, and when he comes

back if he finds his companion obliged to go to bed with headache, let him look somewhere else for a wife, unless he is fond of paying doctor's bills. In this country very few ladies are fit, either physically or mentally, to become mothers before they reach the age of twenty-one, twenty-two, or three, but so precocious are our young ladies, that if they happen to pass twenty without having made definite arrangements, they begin to consider themselves old maids, and before a school girl is fairly out of short-dresses and pantalettes, she is looking up beaux. Among the ancient Germans, than whom a finer race of men, physically, perhaps never existed, it was *death* for any woman to marry before she was twenty, and were this law to be enacted and rigorously enforced among us, the amount of suffering, the actual amount of human life that would be saved thereby, would be past all computation."

CHAPTER XVII.

TREATMENT OF DISEASES OF THE LUNGS, AIR-PASSAGES AND THROAT BY MEDICATED INHALATIONS, ETC.

In treating any disease we should first become familiar with its character or pathology. Without such knowledge the physician would necessarily grope in the dark, and, by consequence, virtually play the assassin—and *murder* his victim—instead of mitigating his sufferings and proving a benefactor to the human race.

Thousands of lives are doubtless annually destroyed by medical men, in consequence of their ignorance of pathology, or the nature of the diseases to which the flesh is heir. With many, the "art of healing" is one entirely of *chance* or *guess* work! It is like placing two men together in a dark room and giving them clubs wherewith to beat out each other's brains. In hurling about their cudgels in random recklessness, the chances are greater that both will perish by the onslaught than that either or both escape with their lives. A physician when treating a disease he knows nothing about, may possibly give a remedy that will effect

a cure; the chances, however, are ten-fold that he will *kill* his patient by such random administration of medicines.

Before I attempt to treat Consumption, I endeavor always to obtain a proper knowledge of the pathology of the disease, not only by closely marking the symptoms ordinarily developed, but by making such physical examinations as guarantees diagnostical certainty in the matter. By such critical inspection I am generally able to discover or detect the exact condition of disorder, and accordingly am at no loss to prescribe a remedy best calculated either to arrest or cure entirely the disease. My success in the treatment of pulmonary affections is conclusive evidence that my new doctrine of pathology and curative agencies are altogether rational—at once consistent with physiological laws and the dictates of philosophy and common sense. My *theory* of disease therefore is reduced not only to a palpable medical dogma but to a positive and demonstrable science.

I have heretofore stated that Tuberculosis or Consumption, is occasioned by an impaired innervation or nervous action. Therefore, to remove the disease there must be a re-establishment of normal nervous energy. This is accomplished by *Inhalation* and adjunct constitutional remedies that are employed *only* in my own professional practice.

Inhalation accomplishes the following results:—

1st. It loosens the tubercular matter that has accumu-

lated in the bronchial tubes and air-cells of the lungs, and allows it to be expectorated.

2d. It stimulates the nervous centres, thereby contracts the capilliaries, prevents the deposits of fresh tubercles, and restores healthy secretions to the secreting and lining membranes of the lungs.

3d. It increases the capacity of the chest by increasing muscular vigor. It also ensures a fuller supply of oxygen, a deficiency of which causes a diminution of the capacity of the thorax.

The adjunct remedies that I use in my practice invigorate the general system—promote digestion, assimilation, and carry forward the functions of all the organs of the animal economy.

When these several conditions are brought about, *healthy* action must be re-established and the patient enjoy a favorable degree of health—which, with a proper amount of precaution, will remain permanent. In my judgment and experience it is folly to attempt to remove pulmonary disorders in any other way.

In respect to dietetics and hygiene, they are necessarily included in my course of treatment. The organic integrity of the vital mechanism must be continually maintained. Health consists in the due balance of the reciprocal functions of supply and waste—of nutrition and excretion. As

the matter of our bodies, and the losses they sustain, are not composed of one single principle, so the alimentary substances are equally compound. The most simple diet comprehends at least three substances—oxygen, hydrogen, and carbon. The chief nutrient food contains beside these, nitrogen, sulphur, phosphorus, &c.; they are in fact rich in assimilative principles just in the ratio in which they contain these latter elements. The union of the simple chemical bodies in various proportions produces the immediate nutritive principles, namely, *albumen*, *fibrine*, *gelatine*, *caseine*, *starch*, *sugar*, *gums*, *&c.*

As to the kind and quantity of food that should be used by Consumptive patients, no standard is capable of universal application. The food that would suit one individual would be hurtful to another. Human development and the improvement of races are as much affairs of nutrition and judicious crossings, as the breeding of fine cattle or other animals. A rabbit or guinea-pig fed exclusively with wheat, corn, oats, or carrots, will die in a fortnight. The same articles given altogether, or separately, will suffice for perfect nutrition. The admixture of bread with meat augments the nutrient power of both in man. The income of food must be proportionate to the expenditure—an ever-varying element with most people. The quantity should be proportionate to the real wants of the system. As a

general rule in healthy people, appetite is a safe guide as to quantity, provided they exercise duly, eat slowly, and masticate thoroughly. An instinctive feeling emanating from the stomach of every healthy individual, suggests the conduct relative to his diet—when to eat and when to stop eating. The stomach is the most abused organ of the body. Nature suffices with little. Moderation is the grand rule to be observed in all cases.

The sanguine temperament is that which best admits the largest *vegetarian* element in its diet. Fruits, farinaceæ, milk, herb-soups and broth, and white meats are the most suitable. Patients inclined to plethora, should avoid rich succulent food, concentrated soup, beef, mutton, game, &c. They must be careful of the *quantity* of the purely *farinaceous* food they take, while they will find dried and preserved fruit, jellies, &c., extremely unsuitable to them. *Herbaceous* foods, with fresh fruits, should preponderate in their diet. Persons of moderate sanguine temperaments may indulge in a varied diet, using, however, sparingly stimulent seasonings, spices, liquors, &c.

The bilious temperament must exchew milk, eggs, all fatty or oily substances, preserves, sugar, honey, spices. Fruits, vegetable and herbaceous food, will best agree with persons of this temperament.

To *nervous* temperaments, *vegetarianism* is highly un-

suitable. It is also inimical to spices, seasonings, strong liquors, tea and coffee. Their diet should contain a large proportion of red fibre, beef, mutton and game; bread well fermented, stale or toasted; stimulating fish, as salmon; milk, eggs, chocolate, &c.

The lymphatic temperament requires savory and nutritious food in small bulk. Roast-beef, mutton, game, &c., best agree with persons of this constitutional element. They may also indulge moderately in piquant spices and seasonings, in tea and coffee, and even in ale, beer, porter, red wine, where their abuse is guarded against. White meats, flour-puddings, unfermented bread, and fatty substances, must be banished from the tables, &c.

In short, the choice and quantity of food must be subordinate to the digestive organ, the bodily waste, and the exigencies of every individual case, premising as a general rule that that food is most suitable and allowable which is the most easily digested and affords the necessary amount of nutrition to restore the regular or natural drainage and waste of the animal economy.

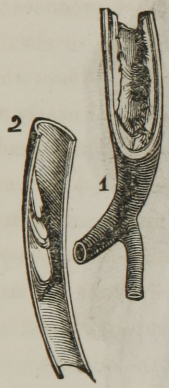
In respect to clothing, it is proper to say that it has great influence in creating a predisposition to diseases of the respiratory organs, and ought to be regulated according to the temperature and season of the year. In this variable climate, at all times the Consumptive patients, as a general

rule, should wear flannel next to the skin. It keeps the surface of the body warm, and prevents the pores of the skin being clogged up by the absorbtion of the oleaginous and aqueous secretions which are constantly exuding from the body. In some persons, however, flannel produces a too copious perspiration. In such cases, merino, or elastic cotton, may be advantageously substituted. Adopt the clothing to the warmth and cold of the seasons as nearly as possible is the only rule that can be suggested on this head. Were persons to pay attention to their clothing and the temperature of their houses in summer and winter, pulmonary and other diseases would be of much less frequent occurrence. In fact, we are more injured, as Sir James Clark justly observes, by the variations of temperature *created* by ourselves than by the actual vicissitude of the climate.

In treating pulmonary affections I duly weigh all these things and adopt the constitutional and hygienic remedies accordingly, and generally with much success.

I would impress upon the minds of all persons that it is not only in Pulmonary Consumption that Inhalation is available. It is equally valuable in Bronchitis, Asthma, Croup, Nervous and Spasmodic Cough, Inflammation of the Throat, Uvula, Larynx, or in any acute or chronic complaint affecting the muscuous membrane of the throat, air-passages, or substance of the lungs.

Although medicated inhalations must be regarded in many complicated affections of the respiratory organs rather as powerful auxiliaries than being *per se* sufficient—yet I frequently meet with cough and bronchial irritation which



are susceptible of cure without the intervention of other remedial means. Albeit, hundreds, nay, thousands, in the enjoyment of excellent health at the commencement of the year, fall victims, before the close of it, to bronchical and pulmonary complaints consequent upon a neglected cough or cold. *Figure* 1 is an example of the thickening of the mucuous membrane and diminution of the air-tubes. *Fgure* 2 shows a portion of the bronchical tube in which are seen accumulations of mucus.

In no case should a cough ever be neglected. In the language of the late illustrious Dr. Beddoes, of England, "if the patient *bark* but once, let him fear a *murderer* within his system."

The reader is referred to the plate, showing a healthy or non-consumptive figure in contrast with a consumptive chest and figure, as developed in a remarkable case of cure presented in the appendix to this volume.

The Consumptive Chest and Figure. The Healthy or Cured Patient.

CHAPTER XVIII.

THE RATIONALE AND METHOD OF INHALING.

The reasonableness and importance of *Inhalation*, or the local application of medicated vapors in diseases of the air-passages and lungs can be no longer questioned. The mass of testimony showing the Curability of Consumption by means of Inhalation and concomitant remedies is happily of that kind to convince the most skeptically inclined among medical men and others. If men are disposed to listen to reason and abide by the irrefragible lights of occular demonstration, they will find such proof exhibited in the numerous cases of cures of Consumption in Philadelphia and elsewhere, effected through Inhalation and adjunct constitutional and hygienic agencies, as employed in my professional practice.

A discussion has recently arisen in regard to the *origin* of the system of Inhalation, as now being *popularized* in Europe and the United States. In this matter, I have to say that *Inhalation*, of itself is no *new discovery*. Inhalations of medicated vapors were much employed by the an-

cient physicians, and can be traced as far back as the second century, when Galen sent Consumptive patients to the vicinity of Mount Vesuvius to inhale sulphureous vapors which arose from the soil. The remedies, however, resorted to in these earlier times were, comparatively speaking, of little value, and to their inefficiency may be attributed, in a great degree, the neglect which subsequently befel this mode of treating disease. *The system was a right one but it was improperly applied.* It will not be denied that full and deep inspirations are necessary to perfectly distend the air-cells and to aërate the blood. With the production of pure blood there is always good health. When the chest is contracted, the lungs are consequently weak, and incapable of taking into the system that due supply of oxygen or atmospheric air necessary for the generation of suitable arterial blood. The direct exercise of the lungs in any way, is one of the most efficacious means for promoting the healthy development and warding off Consumption. The lungs follow the law of muscles and other organized parts. They are constituted with reference to incessant activity. Hence the violation of this fundamental condition is attended with innervation, or want of vital force, and, by consequence, with the development of pulmonary tubercles, whenever this inactivity co-exists with unhealthy blood, which blood has become vitiated, owing

to a diminshed capacity of the chest rendering it incapable of receiving that necessary or normal supply of atmospheric air that is required to *vitalize* the entire animal economy. The direct exercise of the lungs, as in practicing deep inspirations, speaking, reciting, singing, playing on wind instruments, &c., is powerful for good or evil, according as it is duly or unduly used. These means tend to give freedom to the circulation of the blood in the pulmonary vessels, to expand the air-cells, and to bring into play the whole of the muscle and apparatus of the chest. They increase the pliability of the upper ribs. If properly carried out before the frame has becomes hardened and consolidated, nothing tends so powerfully to alter the narrow thorax and wing-like projection of the shoulder-blades into a broad, well-expanded chest. By promoting free expansion of the chest and a movement of the remote pulmonary tissues, we find the best preventives of tubercular deposits in any structure. The Chest Expander invented by myself and introduced into my practice, is admirably adapted to keep the chest fully expanded, for it calls into play all the muscles of the trunk and upper extremities. To the same ends, fencing and dumb-bells should form a part of the exercise of all persons inclined to Consumption, or who are confined within doors by sedentary pursuits. For young ladies such muscular exercises should be replaced by the

game of "*the graces*," or similar gymnastic exercises in the open air. An indispensible condition of benefit from these exercises is the removal of all obstructions to the natural movements of the chest. All tight garments and the use of stays to tuberculous females are forbidden.

All these modes of exercising the chest, however, require precautions. They are powerful for good or evil as they are used or abused. A greater proportion of artisans are Consumptives whose occupations require violent exertions of the upper extremities—thereby promoting distentions and congestions of the pulmonary vessels, hermorrhage of the lungs, &c.

In cases of pulmonary disease the *rationale* of Inhalation is extremely simple. It requires no professional learning to perceive that from the relative position of the stomach and lungs, remedies must necessarily be more effectual in diseases of the lungs, when introduced into the whole aërial cavity and to the absorbing surfaces of these organs, than when exhibited through the stomach, where they must undergo great and unknown changes, from the process of digestion, &c., and can only reach the seat of disease by means of the circulation. Inhaled remedies are not only invaluable as *local* treatments, but they are beneficial in a *constitutional* point of view. This is susceptible of the strongest demonstrations. Let a person inhale foul air, and

he will be immediately affected by it, while instant death has often been produced by noxious gasses. If ether or chloroform be inhaled, sensibility may be destroyed in the most distant part of the body in a few seconds. Ammonia will quickly arouse the system from a death-like faint, if applied to the nostrils; while ten times the quantity would produce no such result if taken into the stomach. Inhale certain balsams, and the odor may be detected in the blood and urine immediately afterwards. All the blood (about 25 pounds,) in the human system passes through the lungs every two and a half minutes; hence it must become impregnated with whatever is carried into the lungs along with the breath. If poisons accidentally inhaled produce death, surely it is not unreasonable to suppose that *curative* medicines *intentionally* inhaled, under professional advice, will be productive of the happiest results. Indeed, *experience* proves this to be signally the case, and hence all doubt on the subject is at once set to rest.

But while I am able to assert that Consumption may be cured by Medicated Inhalation, let it not be supposed that I regard it as a *certain* catholicon possessed of the power of overcoming the disease in every stage and under all circumstances. Nevertheless, science has fairly grappled with this inveterate enemy of mankind, and triumphed in a very large number of instances. Pulmonary Consumption in

the earlier stages is positively curable, and under the most adverse circumstances it is possible to afford extraordinary alleviation of suffering, agreeably to my own pathological discoveries and in connection with Inhalation and adjunct constitutional and hygienic remedies employed exclusively in my practice. The medicines I employ are prepared by and known only to myself, and not used by any other practitioner, that I am aware of, either in Europe or America. I have spent a number of years in perfecting these dicoveries

The Inhaling Apparatus, Chest-Expander, &c., which I employ are likewise of my own invention, and essentially different from all of the many ingenious apparatuses that have been lately introduced to convey pneumatic remedies to the respiratory organs.

CHAPTER XIX.

CONCLUDING REFLECTIONS.

It is a matter of no trifling moment that we possess the means of arresting the terrible disease of Consumption in a very considerable number of cases, even should this prove in some instances only temporary. I would remark that it is to the earlier stages that we must look for the chief proportion of *permanent* cures, and not to that period when the lungs are extensively ulcerated. I believe that in a large majority of cases, under favorable circumstances and with due attention on the part of patients, the injury sustained to the lungs will be permanently repaired.

In cases where it is found impossible to prolong life, the skillful and attentive physician may yet do much to render the path-way to the grave one of serenity and resignation. Although it is a melancholy office in the last stage of Consumption to watch the relentless progress of weakness and decay, still it is in our power to palliate suffering and by suitable administrations to contribute to the comfort of the patients. To mental consolations they are peculiarly ac-

cessible, for in a majority of instances the mind remains clear almost to the closing scene. It is the practice among some practitioners to administer chloroform by inhalation when death is approaching. This plan I would utterly condemn. At the solemn period of transition to another state of existence, it cannot be justifiable thus wilfully to suspend the exercise of the intellectual functions. Such a measure was justly rebuked by the Empress Maria Theresa. When urged in her last moments to destroy by opium the consciousness of pain, she replied, "I would meet my Maker awake;" or I might refer to a venerable lady, more than ninety years of age, who refused to sustain the circulation with brandy, by saying "let me go home sober," and thus gracefully passed off the stage of life. By such scenes we realize that death is not the end of existence. When art can do no more, and friends "weep at the vestibule as the spirit passes out of doors," we may win glimpses of brighter scenes, where the cares and passions of this lower life shall cease to engross, and the germ of opening science shall expand into the fullness of infinite Truth.

APPENDIX.

EXTREMELY INTERESTING NARRATIVE.

Extraordinary Statements—A very Characteristic Letter from Col. M. Hardin Andrews, of Philadelphia.

To S. PANCOAST, M. D. late Professor of Physiology and Microscopic Anatomy in the Pennsylvania Medical University of Philadelphia.

My Dear Doctor:—How true it is that Detraction loves a shining mark! How significant the apothegm, that the tree which bears the goodliest fruit is the oftener clubbed by the midnight thief and the midday wayside robber! *Truth*, however is mighty, and *must* eventually prevail.

I have observed in certain *secret* quarters that an attempt is now being made to bring ridicule and contempt upon your new "Doctrine of Disease" and "Curative Treatment," through the means of "*Inhalation*" and concomitant constitutional remedies and hygienic agencies, in immediate connection with that dread scourge of mankind—*Consumption*. Ah! truly the quiver of death has no arrow so fatal as Consumption. In all ages it has been the giant foe of life. It blights the ruddy hue of youth, and cankers the damask cheek of beauty. It invades the domestic circle, and strikes down in the haunts of business and walks of pleasure. Insidious in its commencement and fatal in its termination, it spares neither age nor sex, and extends its ravages to every climate; and more fearful than the fabled maladies of Pandora's box, Pulmonary Consump-

tion has, until very recently, left its victims without hope. It is surely therefore, highly consolatory to know that the influence of *medicated inhalations* at last bids fair to conquer its extensive fatality. If sixty thousand persons in Great Britain and one hundred thousand in the United States die annually of Consumption, assuredly such alarming facts demand the serious attention of the community: while it is a matter of no slight regret that this fell destroyer should have so long baffled the skill of the Faculty, and been ranked as the opprobrium of the *artis medicinæ*.

Of all men, it would seem the professors of the medical arts are the most determined opponents of every innovation. They appear to regard every new discovery with as much alarm as the orthodox in theology look upon heresy or schism. He is indeed a *bold* man who dares to propound a *new theory* in medicine, or a *new mode* in the curative process. If he cannot quote Hippocrates in support of his principles, or if Celsus is silent upon the subject, he is assuredly the *doomed* man. The profession will be apt to set upon him, and like a pack of yelping hounds, Tray, Sweetheart and Blanche, raise their noisy cry as they rush forth in pursuit of the proud antler, in order to worry him, and howl dismally when they come in at his death. You, my dear Doctor, seem now placed in a similar category. The barking wolves of Esculapius are beginning to cry at your heels; but let me hope that when they bring you to bay, like the proud creature of the fleet speed, you may at least prove the "stuff your dreams are made of," and make the adversaries feel the majesty of the stalwart antlers of your mental powers. To descend from this stilted phraseology to more grave and sober terms, my dear Doctor, let the world believe that the time is fast approaching when the *modus medendi*, now pointed out by you, will be universally adopted, and be the means of removing a stain from the practice of medicine, and of banishing the dogma that "*Consumption is incurable*, to the region occupied by exploded error.

Each age has had its attractive cry around which it rallied all its powers; but, thank Heaven, *Reform* is the peculiar charm of our

day and generation. It often commences with the honest conviction of a few obscure persons—nay, of a single individual, and acting like the seed sown in the fallow grown, germinates before the warmth of enthusiasm, and the rays of truth, takes deep root, spreads far and wide its branches, and yields finally the fragrant blossoms and the golden fruit.

Alas! too long indeed has medicine, as a science, been founded on conjecture and improved in murder! Let us hope that the period is at hand when the heart strings shall no more be torn and lacerated by sorrow and death. Who is there that would not exult in anticipation of that blissful, halcyon hour? Yes, let us believe that the dream of a *universal* medicine, which has prevailed since the days of Isis and Osiris, may not prove merely the nightmare vision of appalling death! Let us anticipate the prophecy—"*For the days shall come, saith the Lord, when there shall be nothing to hurt or annoy in my holy mountain.*"

It is said that Dr. Gregory, a learned and accomplished physician of Great Britain, once observed that "Phthisis (*Consumption*) was not only an incurable disorder but would always remain so, for that it was one of the ways the Almighty had taken to destroy a portion of the human race!" Now, had the immortal *Jenner* held a similar doctrine, it is possible that the would would still be ravaged with that most loathsome disorder—the small pox! Yet the discovery of vaccination was met wtth ridicule and contempt. Jenner was persecuted and oppressed—nay, a holy father of the Holy Church gravely attempted to prove from Scripture that vaccination was the real *Anti-Christ!* And what was the fate of *Harvey*, the discoverer of the circulation of the blood in the animal economy? In his own language, the Faculty "rose up against him as a legion of devils," and tortured him with all the calumnies imaginable." Again, how fared Galileo, the discoverer of the solar system? It is true he recanted when his flesh was being scorched at the burning stake on account of his astronomical heresies. He recanted, however, only in words, in order to escape the fiery wrath. His soul scorned the *lie* he had

just uttered, and bade him defiantly hurl back upon his priestly foe his original sentiment, "the *earth moves* for all!" What of Arkwright, and Fulton, and other illustrious discoverers and inventors of modern times?

Where would now be the cotton gin? the steamer? the locomotive? the telegraph and all the other improvements and reforms in physical science? had their illustrious projectors hidden their "light under a bushel," nor ventured to proclaim the mighty truths, that, like Archimedes' lever, now move literally the moral and social world? Then why should the godlike science of medicine remain stationary, and not keep equal pace with the intellect and capacity of the present age? Why should millions of human beings be dragged down to untimely death, through the horrid butchery and poisons of the medical fraternity, with their keen lances and their horrible drugs? Like the temple of the Thugs upon the Ganges' silent shore, it will surely be seen that the throne of Medical Science is built of human skulls and cemented with human gore! Oh! apalling thought, to think of the millions who have been quietly slaughtered in the silent sick room! Oh! terrible the agonizing and warning of the myriads of ghosts, as they come up in the midnight air from every grave and sepulchre in the universe, stalking forth in winding sheet and rattling bones, and pointing with ghastly scorn to the murderous crew of the medical faculty, and in grand chorus screaming: "*Murder! and ye have done the foul deed!*"

It was an axiom of Dr. Currie, of England, as you doubtless are aware, "that it were better for medicine, like other branches of medical knowledge, to be brought from its hiding place and exhibited to the world in the simplicity of science and in the nakedness of truth." Professional writings, in sooth, are every day being more read by the public. This is a consequence of the advanced views of education which now obtain, and of the popular diffusion of physiological knowledge characteristic of the times in which we live. Intelligent patients instinctively desire to become critics in their own cases. They claim a right to exercise their own powers and means

of investigation, and only desire *data* whereby to judge of the grounds either of new theories or of new modes of treatment. Surely no liberal professional man of the present day—whatever was the case twenty-five years ago and anterior—will discourage this direction of intellectual impulse. In fact, the want so felt and expressed *must be gratified*, and that too by the properly educated and recognized members of the profession—or *quackery* will assume the responsible office and cater its deadly horrors for the stern yet loveable realities of science. Independently of this, every medical man must wish for well instructed patients as by far the most satisfactory to deal with —the most amenable to treatment and on every ground desirable for the credit both of the physician and his heavenly art.

First. Such patients are prevented placing themselves in improper hands. *Secondly.* They are better able to "back" the curative efforts made in their behalf as being more discriminative of sources of error or failure. *Thirdly.* They are prepared more intelligently to describe the seats and signs of disordered functions, and better fitted to communicate information on those nice points that guide professional judgment. *Lastly.* Well instructed patients are less apt to allow ailments to run unsafe lengths before applying for aid, as being more observant of those alterations in their physical condition, sensations, &c., which indicate the approaches of disease, or its new modes of manifestation.

With these views and sentiments, my dear Doctor, allow me to renew my expressions of earnest gratitude to you for the benefits I have received in my own person from your treatment of Pulmonary disease by means of *medicated inhalations* and associate curative agencies. About two months have passed since I felt constrained to tender you a brief acknowledgment for your professional skill and personal kindness in my behalf; but as every day confirms my faith in your new doctrine of disease and modes of cures, allow me again to intrude myself upon your notice, and voluntarily declare that if ever a man was rescued from the jaws of death—from the already-dug grave itself—under God, through a physician's instrumentality,

that miserable mortal was myself, by your attention and wonderful yet simple discoveries in medical science.

Having been connected with the press of Philadelphia and New York in an editorial and prominent position for the past twenty-five years, I trust I am too well known to have my veracity impeached or my motives impugned, in the statements I propose at this time to make. I shall speak the truth, and nothing but *the truth*; and were it necessary, am ready now to back its power by the solemn oath, though I would "affirm" that the man, whose word is only to be believed on his *oath*, would still *lie* withal, and violate unscrupulously the sacred injunction of Holy Writ, so rigidly maintained by the *Christian* "Society of Friends," (of which you are, I am well assured, an exemplary member,) of "*Swear not at all?*" After an absence of twelve years from Philadelphia, during the most of that time associated with the newspaper press of New York, I returned to this city about the middle of June of last year, suffering, in some slight degree, but supposed sufficiently recovered, from an attack of a heavy cold I took in the preceding month of May, during an excursion from New York up the East river to New Rochelle, on a visit to the home of an intimate friend. On my arrival here, I accepted of an engagement in the office of "*The Evening Register*," edited by Wm. Birney. Esq., where I remained some seven or eight weeks, when I found my strength so completely exhausted from the rapid ravages of *Consumption*, that I was compelled to abandon my post and place myself under medical treatment. I called in a gentleman, recommended to me as a highly skillful physician, (and certainly his practice warranted the idea,) but whose name, of course, it is unnecessary to mention, who pronounced unhesitatingly my disease to be that of *Consumption*. He promptly said that "one lung was seriously tuberculated, and that the other was in a *collapsed* condition." The expectoration was profuse, and occasionally streaked with blood—there was an intense pain in the left side, and also in back under the shoulder blades; so much so that I could only sleep when I lay partly on my right side. The cough was incessant and

racking to the last degree. My appetite was gone, and what little I could eat was almost invariably speedily ejected by fits of coughing. I was already so weakened by debility that I could scarcely walk across my room. The physician attended me about two weeks, and retired incontinently, for reasons I have yet to learn, unless he was apprehensive I would die on his hands, and that he thought he would be "charged with my murder!" I then began to "doctor myself," and to make a drug store of my provision repository, by swallowing down all manner of patent medicines which were sold as "certain cures for consumption," including all kinds of syrups and pectoral compounds. I even had the temerity to venture upon a trial of Dr. (?) Watts' Magnetic treacle, although I had known him formerly in New York, as the keeper of a stall for the sale and purchase of second-hand books and pictures.

My case was desperate, certainly. But "drowning men will catch at straws." If the "magnetic treacle" did me no harm, it at least did me no good. I daily grew worse. I became bedridden entirely, and so remained during several weeks. The cough was constant; the pain in my breast acute and insufferable; the night sweats so profuse as to leave the bed clothing as wet as if I had undergone the "steaming" of a "botanic doctor," or the "douche" of a hydropathist. My usual weight is about 128 pounds, but before six months had passed from the time I was seized with affliction, I was reduced to less than a hundred pounds weight—nay, in sooth, the veriest skeleton—literally a fair representation of death personified. I then asked myself, in the language of the Bard of Avon, "who can control his fate?" and realized keenly, "the fierce thirst of death that still remained unslacked."

I gave myself up to die, and none of my friends thought that I would live to see the opening of the "buds and flowers of the Spring that has just passed away. During all this time I received the fraternal ministrations of the glorious Order of Odd Fellowship, through the brethren of Adelphi Lodge of Philadelphia, in obedience to a sympathetic response and call upon them from Mercantile Lodge of

the city of New York, of which I have the honor and privilege to be an humble member. At length I saw the essays of Dr. Hunter, of New York, on "Inhalation in Consumption," as published in the *Home Journal* of that city. I resolved (my strength having temporarily rallied,) on the approach of Spring to return to New York and place myself under that gentleman's charge, as a *dernier* resort. I mentioned my intention to a brother of Adelphi Lodge, who informed me that you, my dear Doctor Pancoast, had treated cases successfully by the *method of Inhalation.* I sent for you, and literally it has been "*veni, vidi, vici*"—for you "came, saw and conquered" my disease! Under your medical *regime*, in less than one month's time I was able to walk several squares, although you declared that my lungs were sadly affected, and that the disease was complicated with that of hypertrophy of the heart. In less than two months, I "felt well enough" to discharge myself from the Lodge, after an illness of about ten months, and returned to the laborious business of a writer for a daily and weekly paper of this city. I have been thus actively engaged for over two months, without suffering the slightest relapse, although I have been exposed to a heavy shower of rain, and to considerable irregularities as an *attache* of the press. I have gained in flesh at least twenty pounds since I placed myself under your professional charge. I still gain—and bid fair to regain my usual standard in two or three months more. My appetite is excellent and unvarying—my spirits are buoyant—my whole system is regular—my chest is expanding—my lividity of countenance is rapidly assuming the rubescence of vigorous health, while I am now able to walk (from preference) a distance of two miles to my business, each morning, and the like distance on my return in the evening. I, however, have not ventured to dispense with your chest expander, inhaling apparatus, and adjunct agencies. My cough and expectoration have almost entirely ceased, and I generally feel as free from pain as I ever did in my life. I am sanguine, that if I perseveringly continue a little while longer under your medical and hygienic treatment, I may have an excellent chance to be placed in

the category of those "children of men" described by the late Dr. Rush, "who lived to die at a hundred years of age!"

> And like the golden fruit that mellow'd long,
> Drop down at last, as Newton's apple, into dust.

With high esteem and deep respect, allow me to claim to be your sincere and grateful friend,

M. HARDIN ANDREWS.

Philadelphia, Aug. 21, 1855.

CORROBORATIVE EVIDENCE IN FAVOR OF THE CURABILITY OF CONSUMPTION.

The following letter to Col. M. Hardin Andrews is from the Hon. Thomas B. Florence, Member of Congress from the First District of Pennsylvania, Philadelphia city, President of the Farmers' and Mechanics' Insurance Company, President of the West Philadelphia Homestead Association, and universally known and highly esteemed not only in Philadelphia, but over the whole of the United States.

LETTER FROM COL. THOS. B. FLORENCE.

OFFICE OF THE FARMERS' AND MECHANICS' INSURANCE COMPANY,
N. W. cor. of Walnut and Second Sts., Philadelphia, Sept. 18, 1855.

COL. M. HARDIN ANDREWS, *Evening Argus Office.*

My Dear Sir:—In reply to your note of this day, I hasten to say that I have been intimately acquainted with you for nearly or quite twenty five years, and have labored with you conjointly in the Editorial and Political fields, and have been associated with you in the publication of the *Spirit of the Times*, which you originated, the *Magician's Wand*, and other Democratic journals in Philadelphia, and have every confidence in your statement in regard to your restoration to good health from what, I verily believed to be, the last stage of Consumption. When I saw you last Spring, on my return from Washington, I found you exceedingly attenuated, and remarked to you that, in my humble judgment, you certainly had Consumption, and I feared then you would scarcely survive over a few brief weeks.

I condoled with you then, and rejoice now, that in God's Providence, you seem to be in the enjoyment of very good health, and really bid fair to attain the longevity ordinarily allotted to man. I trust my hopes and wishes may be realized.

Truly your friend,

THOMAS B. FLORENCE.

LETTER FROM JAMES REES, Esq.

Mr. Rees is a merchant of high standing, and extensively known for his many valuable literary and philanthropic labors in Philadelphia.

To Dr S. Pancoast, *Late Professor of Physiology and Microscopic Anatomy in the Penn Medical University of Pennsylvania.*

Dear Sir:—My name having been used as a reference in the extraordinary case of Col. M. H. Andrews, and his restoration to health through the agency of Dr. Pancoast, I am happy to state that all the facts set forth by Col. Andrews are strictly true, and I was the first one to recommend inhalation to him, and called his attention to an advertisement of a physician in New York, who was using inhalation in his practice. Col. Andrews not being in a condition to go to New York, and having incidently heard that Dr. Pancoast was practicing that mode of cure, he placed himself immediately under that gentleman's care. The result is known. Col. Andrews is a rejuverated man, and is likely to live and add still more to the cause of literature, in the field of which he has ever been a faithful laborer. At the time I called Col. Andrews' attention to the Inhalation system of cure, he was extremely low—suffering under a severe, hollow cough, night sweats, dyspnœa, or shortness of breath.

He was evidently, at least it seemed to me, in the last stage of Consumption. Physicians had told him his days were numbered, and even went so far as to state the exact time (three weeks) he would be likely to take his departure to that "bourne from whence no traveler returns." He had appointed me his executor, to the extent of taking charge of his published and unpublished works, MSS., &c.,

&c., and arranged his wordly affairs, believing as we all did, that his days were indeed numbered. Such may still be the case, but as that number is somewhat indefinite, and his present appearance favorable to their extension, my labors as an Executor, are also, for the present, indefinitely postponed To subserve the cause of suffering humanity, and to place Col. Andrews' statement in its true and proper light, is my only motive in writing this.

Respectfully, yours,

JAMES REES, 196 Fitzwater Street.

Philadelphia, Sept. 17th, 1855.

LETTER FROM SAMUEL C. UPHAM, Esq.

Mr Upham is the gentlemanly and popular editor of the *Sunday Mercury*, a journal of the first class, and of great circulation and influence in Philadelphia and vicinity.

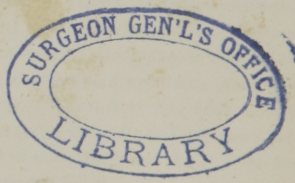
Office Sunday Mercury, Philadelphia, Aug. 28 1855.

Col. M. Hardin Andrews.

Dear Sir :—In reply to your note of a late date, asking permission to use my name as a reference in your case, and also requesting me to give my opinion of your personal appearance during the early part of the present year, I have to state that you appeared to me at that time to be in the last stage of "galloping" consumption; and I recollect on one occasion saying to you, that you looked like a galvanized corpse, and were hastening to kingdom-come at 2.40 speed. You replied that you had already appointed an executor to take charge of your MSS and other effects—had made your peace with God and man, and expected soon "to shuffle off this mortal coil." The next time I saw you—some two months afterwards—you looked, to use a common expression, like a *new man!* The corpse-like hue had disappeared from your countenance—you breathed freer—your step was more elastic, and you informed me that your cough had nearly subsided and you expectorated very little. I asked by what process such a wonderful change in your condition had been effected. You informed me that after two *eminent* physicians had pronounced

you incurable and given you up to die, a friend advised you to consult Dr. S. Pancoast, who declined treating your case at first—thinking you beyond the reach of human aid—but at your earnest solicitation, finally consented to administer his INHALING REMEDIES, which afforded immediate relief, and were rapidly restoring you to health and vigor. From that time to the present, I have seen you several times each week, and I am happy to state, that so far as I am capable of judging, you appear to have nearly, if not entirely, regained your former good health. Wishing you a long life and a merry one, I subscribe myself

Your friend and fellow sinner,

SAMUEL C. UPHAM.

REMARKS.—I have in my possession numerous letters of similar import, showing the curability of Consumption under my own special method of treatment, but it is not deemed necessary to present further testimony at the present time.