## ARTICLE VII.

## A DISSERTATION

ON THE

## UNCERTAINTY OF THE HEALING ART.

By GEORGE CHEYNE SHATTUCK, M. D.

Read before the Massachusetts Medical Society, at their Annual Meeting, June 4, 1828.

The Massachusetts Medical Society was organized, that individual feebleness might be sustained by associated strength; that the retreat of self-love and private interest might be occupied by a laudable esprit du corps; that Ishmael might feel the touch of a brother's love; that physicians, by the interchange of experience, might more successfully oppose the inroads of death.

The Fellows of this Society meet like neighbours, somewhat removed. Neighbours, a little removed, on coming together, usually fall into discourse on some topic within the compass of their common trials. The trials of the physician are numerous.

On the commencement of his career the lowering indignation on him of his neighbourhood as casting the VOL. IV. 23

shadow of the Doctor without his healing power, is a bitter trial. This he patiently bears, because he knows full well that time is a sure remedy.

"The horrors of nothing to do," which resemble the death-bed pangs of the Pagan, "the horror of sinking into nought," summon into exercise his firmest principles. "Hope deferred maketh the heart sick." Like a good soldier, if he stand at his post through these withering shocks, active trials follow passive. The siege raised, and famine survived, the extension of practice extends his trials. He now braves the midnight tempest, and the pestilence, which wasteth at noonday. But all these trials to which the physician is subjected, do not equal that which proceeds from the uncertainty of the healing art.

The charitable attention, and forbearance, and forgiveness of the Fellows of the Massachusetts Medical Society, are therefore now solicited, while a feeble attempt is made briefly to discuss this grave subject.

Why is the healing art uncertain? Its administrators are less tinctured with credulity than other men, they more confide for their creed in the direct revelation to their own senses. The eye may deceive, the ear may deceive, the senses of smell and taste may deceive, but none doubt the evidence of touch.

Even the doubting disciple yielded up all scruple on touching the prints of the nails in his blessed Master's person!

Touch does not approach vitality. Life is uncertain. In its journey onward by the human family, the Paculty are posted as centinels to sustain, by all the

invigorating agents within reach, the drooping ones, who are threatened with faintness by the way.

Still according to a bill of mortality formed by Simpson for the City of London, more than half who are born, die within the first three years. Less than one in eighteen arrives at the common age of man, i. e. threescore and ten. Dr. Halley's table on the bills of mortality at Breslau, presents a different result. Different bills of mortality at different places present results still varied. All agree in the great proportional mortality during infancy.

Is this disastrous result chargeable to the faculty? God forbid! The astronomer reads, in the starry heavens, duration. The physician reads in the microcosm, man, perishableness. Were we to leave, in the solution of this great question, the flat of the Creator, and to speculate on secondary physical causes, it might be added, that old age is engraven on all ages in the decay from a minute to a century—from the first gasp to the last gasp of life; i. e. the mortal machine may exhibit the incapacity longer to endure the action of vitality. The perfect child is a rare occurrence, as well as that of the perfect man. The imperfection may not be stamped on the external form, and still exist in the internal organs. The lusus naturæ is not taken That is preserved in the cabinet of into the account. the curious only, as the marvel that erring nature is sometimes sportive in her productions. The principle of vitality is variously imparted to the different members of the human family. The well organized, the strong, and those carefully provided for, alone abide the season of trial. But the wasting epidemic often carries off the beautiful, the apparently robust, and those kindly cared for.

It sometimes occurs that the very atmosphere of a district may contain poisonous or pestilential vapours, which destroy all who breathe them. This again refers to the great Moral First Cause, whose overruling providence, experience teaches, sustains us in all our out-goings and in-comings. But to return to the secondary physical causes of the great relative mortality among children, original sin stands revealed in all its hideous deformity. The "sour grapes," which the fathers have eaten, ferment in the children's blood. "The wages of sin is death." All indiscretions in parents, which diminish their power enfeeble their offspring, and accelerate their march to an early grave. Accidents and casualities to heedless and neglected childhood swell the catalogue of secondary causes. The uncertainty of human life to all ages, has the concurrent testimony of common experience and holy writ, which, as history and observation, present us with the monuments of human destiny in the arrangement of the grave, "without any order."

If human life be uncertain, no wonder that the healing art, which is to prolong that life, should also be uncertain.

The strength of the human constitution is not the subject of calculation. The various agents, which are destined unequally to act on that constitution are equally without calculation.

The truth therefore can never be ascertained, but may be neared by approximation. The general uncertainty of human life, the particular uncertainty of the individual constitution, and the uncertain casualities which may way-lay that life in its course, all admitted, does it follow, that the general means of preserving life are uncertain? Are shelter, and food, and raiment of equivocal utility? To all the arts of life, which minister to human comfort, experience and common sense have assigned their just value, and the common experience of mankind is neither to be gainsaid, nor resisted.

The natural history of a healthy man from birth to death is as susceptible of register as the tonnage of a ship. Nature in course according to the philosophy of Lord Bacon is readily to be traced, while her wanderings, which constitute exceptions to her general laws, involve her interpreters in a labyrinth. Health, the accompaniment of nature in her uninterrupted free course, is seen and felt, and known by all. Disease, the opposite to health, is the accompaniment of nature in her wanderings, and perplexes her interpreters in all their efforts at comprehension as well as description.

Let a master spirit on Hygiene proclaim that man is a breathing animal, and that a pure, genially attempered, and changeable atmosphere is essential to the maintenance of life and health, and all the world will understand him; and all violators of this simple law of nature, whether a judge on the bench, a mechanic in his workshop, or a traveller in his dormitory, will pay the penalty of transgression by the pangs of disease.

Introduce the physician to cure the disease; anxiety is on his brow, perplexity in his thoughts, indecision in his course. After careful examination and due deliberation, he acts, because, whether he be christian or pagan, he well knows continuing to doubt, will be to lose both patient and reputation.

The alternation between feeding and fasting, between shelter and exposure, between labour and repose, and the change of raiment with the change of weather and season, are equally comprehensible as important, and even essential in the maintenance of life Habitual departure from the maxims of common experience, in the wholesome changes with changing condition, circumstances, and seasons, in conformity to the simple laws of nature, entails disease on the transgressor. Disease again presents nature in her wanderings, and she is difficultly followed. origin and seat of disease are often investigated with the extremest difficulty. The selection, and adaptation of the force of the remedy to the severity of the disease involve nicety in the skill and judgment beyond the reach of human power.

The uncertainty of the healing art has almost a withering influence on the practitioner, when he beholds friends and kindred, neighbours and strangers, glancing on him imploring looks, mixed with confidence, for relief, to which he feels his art is inadequate. Is medicine then to be abandoned to empiricks, because it is uncertain and difficult? The merchant and underwriter, because the navigation is difficult and

uncertain, do not commit the ship to the untaught and inexperienced pilot. The more perilous the voyage, the higher skill and experience and the more science, are concentrated in the commander. Medicine, from its difficulty and uncertainty, demands deeper preparation.

Are not the records of the Faculty so many charts by which the junior practitioner may safely steer his course?

The entire catalogue of human suffering has been made out, and the name of the remedy is appended to the name of every disease. What else is required than reference to the name of the disease to find its remedy? In the mechanic arts the knowledge of the name of a tool does not necessarily imply the skill to use it.

Physicians have done themselves a wrong, and their noble art a wrong, by reducing to system what defies all system. They sometimes contradict themselves, and oftener one another in their nosologies.

The Nosologica Methodica of Sauvages comprises ten classes, twenty orders, three hundred and fifteen genera, and two thousand five hundred species; while Cullen has four classes, twenty orders, one hundred and fifty-one genera, and upwards of one thousand species. Good has cast his comprehensive mind on this difficult subject, and his nosology presents seven classes, twenty-one orders, one hundred and thirty genera, and four hundred and eighty species. Our distinguished countryman, Rush, has discovered disease to be a unit, and he proceeds fractionwise in his systematizing labours.

As well may poetry be written from the perusal of Aristotle's Art of Poetry, as disease be cured from the perusal of a nosology, or even the book of a system-The energizing spirit of the invisible Creator must be seen and felt from the observation of all surrounding nature, and experience acquired in the use of the language to express every change and passing sensation, to make a poet. The heart to feel a brother's sorrows, and experience acquired in the means of allaying the pangs of mortality, are essential to make a physician. The former is the gift of God. The latter is a toilsome march, commencing with a pilgrimage to the tomb of mortality, and followed by perils to comfort, character and even life, ere yet "the harp of thousand strings" has revealed in its fabric the wisdom and special design of its maker.

"Hoc opus, hic labor est"—Anatomy is the alphabet of the healing art. How difficult to learn the alphabet of our profession, notwithstanding the labors of Harvey and Haller, of Hunter and Bichat, of Morgagni, and Mascagni, and Scarpa and Magendie, and their numerous associates and worthy successors on this as well as the other side of the Atlantick. The laws of the land are cruelly against us. Might not a wise legislator turn the spirit of moral reform which hovers over the age into the channel of publick good, by securing the enactment of a law authorising the commitment of the vagrant and harlot, on yielding up life, to the extension of the light of medical knowledge? Fear might come over them and stay their steps; or if

carried along by their depraved natures in the current of abomination, their fate might open the dark recesses of truth to the healing of the sick. The first step towards a medical education being attended with such difficulty and hazard, is one of the prominent sources of the uncertainty of the healing art. The more is known of nature in course, the more readily is nature traced in her wanderings. The more is known of man in his structure, and the economy of his healthy existence, the more readily are traced the aberrations from that healthy economy in the form of disease, and the better is understood the history and termination of disease in the morbid structure it produces.

The functions of the healthy animal economy must be understood, that functional disease be understood. The structure of the healthy man must be understood, that structural disease be understood.

The uncertainty of the healing art is increased by the difficulty of access to the proper sources of knowledge. Personal experience is of slow acquisition. It is true that books on medicine are abundant; but they oftener abound in theory founded on hypothesis, than in theory founded on fact; they contain more arguments to demolish preceding or contemporary theories, than true history of human suffering.

Most of the medical authors of celebrity have received an answer to the prayer of the pious man in holy writ, would "that mine adversary had written a book." No medical book is worthy of a perusal, which is not a transcript from the book of nature.

vol. iv. 24

The treasures of medical experience to be found in medical libraries need sifting, that the true may be separated from the false, the certain from the doubtful, the doubtful from the palpably untrue. The knowledge thus attained, should be arranged according to the leading divisions of anatomists and physiologists. All that is known and which has been published on the diseases of the heart, and arteries, and veins, and absorbent vessels, which constitute the system of circulation, accompanied by engravings to represent to the eye the appearance of the morbid structure, would constitute a valuable addition to the library of every practitioner in the Commonwealth.

In the engraving part, lithography steps in and volunteers her services at a very cheap rate.

The diseases of the brain and nervous system, the diseases of the organs of respiration, the diseases of the organs of digestion, the diseases of the glands and organs of secretion, the diseases of the organs of reproduction, the diseases of the bones and muscles, or organs of locomotion, and the diseases of the skin, constitute other leading divisions for the distribution of the fruits of medical experience, from the time the healing art was a separate calling, to the present moment. Were it practicable to call order out of chaos and present all the medical knowledge which has been given to the public in a neat, condensed, well arranged edition of medical classics, embellished by engravings true to nature, much time and expense might be saved to the practitioner, and the economy of human exis-

tence essentially promoted. "There is nothing new under the sun, what has been, is, and shall be again."

This is the sound of true orthodoxy to all ears not heathenish. The power to reason on the future is derived from the history of the past.

A good medical history of this Commonwealth would be an important acquisition to all the Fellows of the Massachusetts Medical Society. A register of all the births and deaths is needful for a basis on which to found the calculations for insurance on life.

The influence of cultivation of the soil, in draining the sources of putrid exhalation, and in clarifying the atmosphere is seen in the disappearance of intermittents and bilious remittents. The extension of the arts of life to the promotion of human comfort has contributed also to the increased health of the inhabitants of this Commonwealth.

While a better replenished wardrobe, and a more comfortable dwelling are promoters of health, increased luxury, diminished industry, and the undue use of intoxicating liquors are impoverishing the fortunes, ruining the characters, and destroying the lives of the immoral devotees to idleness and appetite. The visions of the future will become revealed in the history of the past. "The prudent man forseeth the evil" and avoideth it. The uncertainty of the healing art almost disappears on its approach to a sound constitution; because it contains within itself the power simultaneously to endure the action of remedies, and to resist the progress of disease.

A sound body natural, as well as a sound body politic, speedily recovers, by skill in the use of means, from the greatest disorder.

Another mode of obviating the uncertainty of the healing art is the adoption of means to strengthen the human constitution. Let the Goddess of Health be invoked to visit the congregated artists, who clothe the human family. Let every one give ear from the hatter down to the shoemaker, and there would be constructed a coat of mail to protect naked mortals against the warring elements, which surround them. All personal constraint would cease, and the slaves of fashion set free, would recover their full power of action, and "walk over dry shod." This would release from a thraldom like the spell of witchcraft.

Let the celestial visitant approach those who feed the human family. Meat in due reason would be distributed to every member. The diseases of repletion and the diseases of inanition would stand rebuked in her presence.

"Fruit forbidden," no beguiling serpent in the form of grandam, could present as fair to the eye of hungry curiosity or starving mendicity.

Suppose the invocation extend her visit to those who build houses, and she pour by her whisperings into their ears the sublime truth that man is a breather, and that air is the material of breath, and that the old woman died for want of breath, and that the air, the feeding element of the breath of life, must have free circulation around him, sleeping or waking, or he sickens and

dies. The Architect would come to the conclusion, that the edifice is not for the exclusion of the atmosphere, but for its temperate enjoyment under a regulated but free circulation. This said daughter of Esculapius, called Hygeia, might also be invoked to pour her notes into the ears of the sluggard, and the value of exercise in promoting health and long life would be understood.

If the Massachusetts Medical Society would excite an experienced mind to instruct the people of this Commonwealth, in adapting their diet, exercise, clothing, and habitation to their situation and variable climate, there might be recovered a hardy constitution, which was a birthright from hardy ancestors. This great boon secured would obviate much of the difficulty and uncertainty of the healing art. In a simpler state of society disease would become more simple.

The present age is the era of improvement. The clergy are sending the glad tidings of the gospel to farther India—the politician is teaching nations in bondage the art of freedom—the jurist is holding up, as in a mirror, the science of law, where man may read his rights as well as his duties; the farmer is reducing animal and vegetable production to the precision of a science; the artist, and manufacturer, and merchant aré tasking the raging elements to toil for the extension of human comfort. Let not the Physician remain behind his neighbour in his efforts to prolong and render more comfortable human existence.

The founders and supporters of medical schools are

entitled to everlasting remembrance for their labors in calling the attention of the Faculty from speculation to nature, from the hypotheses of antiquity to the study of the structure and functions of the living man. have constructed for medicine a beautiful temple; but its avenues and foundation are buried in a rubbish. which requires much labour in the removal. Let the youthful aspirant be sufficiently encouraged, and these avenues will become cleared. The State has granted to the Massachusetts Medical Society a fund, which might be distributed in rewards to successful adventurers, to whom should be assigned the labor of solution of the difficult and hitherto uncertain problems in the healing art. In what the funds of the society might fall short, private, individual, voluntary contribution might readily supply; for medicine to very many, if not to most of its fellows, has been a truly liberal profession in its rewards as well as its labors. In the above remarks is disclaimed all intention to withhold from the benefactors to the profession, who have elevated its standard, their merited acknowledgment.

There are no regular bills of mortality extending through the Commonwealth for a series of years, from which a comparison might be instituted to measure the extent of the improvement of the profession within the last twenty or fifty years. In the city of Boston, where its Board of Health keeps an accurate register, a result truly flattering to the sons of the healing art is obtained.

Annexed is a transcript from the records of the Board of Health, which presents an accurate obituary in the metropolis of our Commonwealth from 1813 to 1827 inclusively. In 1813 a population of about thirty-five thousand furnishes 786 deaths. In 1827, a population of 60,000, has but 1022 deaths. The whole is so interesting a document, that it is here presented entire.\*

The Massachusetts Medical Society, and the constituted authorities of Boston, have been, under Providence, associated instruments of this alleviation of the lot of mortality. This Society has frowned on the presumptuous empiric, and encouraged unpretending skill to go forward in its labours. The Mayor of the city and his judicious associates have increased the comforts and improved the morals of the city poor, and at the same time diminished the tax for their support. This has been accomplished by their removal from their former close confinement to a farm, where a more wholesome diet and air, and increased occupation have supplied the elements of renovated health. The materials of pestilence they have also removed by the increased cleanliness of the streets, and more perfect drains from the cellars of the dwellings. Its quaran-' tine has also been an important safeguard.

The regularly diminishing ratio of deaths with the regularly increasing ratio of the population, fairly deduced from the annual bills of mortality and the estimated census of the people, presents every encouragement to proceed in the march of improvement.

<sup>\*</sup> See Table.

The time is fast approaching, when an approving recognisance for having discharged our duty as a connecting link in the chain of being, will constitute our only imperishable reward.

Since the last anniversary of this Society, death has invaded the ranks of our fraternity. The poor man's friend, Dr. Horace Bean, has departed at the age of fifty-four. The courteous gentleman and skilful physician, Dr. Oliver Prescott, has vacated his seat at our board, at the age of sixty-two. His vacant chair is the mournful remembrancer of a name, with which is associated honour in the history of the civil, military, and humane institutions of the Commonwealth. dlesex, Worcester, Suffolk and Essex are the four counties, where his healing power was kindly exercised, and is now gratefully temembered, by those who had been his patients. On the sixteenth of November last, Dr. Samuel Danforth, some thirty years ago President of the Massachusetts Medical Society, "shuffled off this mortal coil" at the age of eighty-eight, · a source of rejoicing that he is released from these bonds, because he had survived the power both of usefulness and enjoyment. Neither christian nor philosopher could desire his name or character associated with an empty mansion, which is but a lure to the pity of insolence or the scoffings of folly. Gathered, in a good old age, to the tomb of his fathers, his character, as a kind, upright, and skilful physician, survives to enlighten the Faculty, his associates and successors, in the same laborious but liberal pursuit.