

ARTICLE V.

A REVIEW OF MEDICINE,—
ITS WORK AND ITS WORTH.

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OF ATTLEBORO'.

READ AT THE ANNUAL MEETING, JUNE 13, 1877.*

MR. PRESIDENT AND FELLOWS

OF THE MASSACHUSETTS MEDICAL SOCIETY :

As American citizens who have survived the first century of national life, and participated in its review, to regret its failures and to recognize its successes, determined to avoid a repetition of the former, and to crown the latter with still greater achievements, is it not meet as students and votaries in the republic of letters and the sciences, that we should devote this hour to a review of medicine, its work and its worth, and consider also our relation to questions external, yet of vital concern to medicine and to the American public as well? That medicine is not, and has never been regarded a luxury, but a necessity, history

* At an Adjourned Meeting of the Mass. Medical Society, held Oct. 3, 1860, it was

Resolved, "That the Massachusetts Medical Society hereby declares that it does not consider itself as having endorsed or censured the opinions in former published Annual Discourses, nor will it hold itself responsible for any opinions or sentiments advanced in any future similar discourses."

Resolved, "That the Committee on Publications be directed to print a statement to that effect at the commencement of each Annual Discourse which may hereafter be published."

clearly and positively declares. The earliest tradition recognized it a factor vital to its highest interest. Ancient history records its value, and subordinates it only to the question pertaining to *spiritual* life. Nay, there has never been a nation, or kindred, or tongue, where medicine has not been recognized and taught, by physician, priest or magistrate; however crude and superstitious its character, it has always kept pace with the physical and moral sciences of its age; and while we may be unable to trace radical improvement in any two consecutive eras, yet if we select distant periods for comparison, we shall find evidence of signal intellectual advancement and improvement, and that, too, prior to the knowledge of human anatomy, physiology and chemistry, when the human body was recognized as a homogeneous whole, and any variation from a physiological standard in any particular was regarded as the evolvment of a diseased condition embracing the entire organism. For down to the days of Hippocrates human anatomy was unknown except in its osteology, centuries after the Egyptians, the Romans and the Grecians had established a medicine, enunciating principles of hygiene, creditable to any generation antedating the last century. While these ancient nations were wading in the depths of paganism, here and there developed a mind that shook the universe of thought, to doubt, to wonder, to proclaim some new dogma, or revive some old superstition, till the advent of *Æsculapius*, who wielded an influ-

ence singular to contemplate; for while he attempted to establish medicine upon a plane of philosophy, he had recourse, in grave surroundings, to songs, to prayer and invocation to the gods, thereby repeating the most ancient of practices, and revealing a phase of character in perfect harmony with the superstitions of the times in which he lived. Yet he combined practical genius and wisdom with loyalty to the faith of his day, which won for him a reputation above all his contemporaries or successors, till the advent of Hippocrates the Second, four hundred years before the Christian era, who by common consent is denominated the Father of Rational Medicine. He arose in the majesty of unexampled strength, and threw off the shackles of superstition which enshrouded medicine, and enunciated a system of investigation, which the subsequent light of science affirms to be the only rational system that ever has or ever can be employed, to successfully cope with the innumerable problems which disease and its manifestations are calling upon medicine to solve.

Forbidden by the laws of his time to molest the human cadaver, his only knowledge of human anatomy was derived from a study of comparative anatomy and of human osteology. Nevertheless he was a voluminous writer, and wherever he confines himself to the study of disease, especially of inflammatory and periodic type, we marvel at the wisdom he displays. He describes pleurisy, pneumonia, intermittent and remittent fever, with an exactness that would do credit to the student of

the present century; and his antiphlogistic treatment of inflammatory disease has, in principle, a large discipleship to-day in rational medicine. He first taught the necessity of aiding and assisting nature in her recuperative efforts to throw off disease; a doctrine so sound that no physician of respectability will to-day do other than indorse it. He was so far in advance of his contemporaries, so radically original in his reasoning, so patient of observation, that at his death his mantle found no immediate successor; his sons attempted to assume it, but were unequal to the effort required; there were none to carry on his work, none to build upon his foundation principles for nearly a century, till the school at Alexandria was created, when and where his written works were gathered and taught, resulting in a new and vigorous discipleship, whose influence became world-wide and far-reaching in the succeeding centuries; and to-day we recognize him peerless in ancient medicine. His doctrines of "coction and crisis," and of "four primal elements," were rational, and philosophically applied, from his stand-point of observation, without the aids of science to guide him; doctrines embraced by the best minds of that epoch. Plato, Aristotle and Celsus endorsed him, and his "Collection" constitutes the most ancient authentic monument in medical science, well worthy of the study of any physician.

Early in the Christian era advances were made in medical science, based upon anatomical and physiological study. Galen came upon the stage

early in the third century, in the midst of severe dogmatic contests in medicine. The schools, and notably that of Alexandria, had done a grand work in the field of medical literature, which was manifested by an accession to medicine of a brilliancy of mind, unexampled with one exception in history. They also gave birth to an independence of thought and expression, culminating in new medical theories, with their necessary discussions and dissensions. It was in the midst of these that Galen appeared, and led medicine back to the more rational ground that distinguished the school of Hippocrates. He was a man of rare acumen, and possessed a power over mind and man rarely equalled. Having had the advantages of study at Alexandria, his scientific knowledge gave his influence, as a teacher and a dogmatist, a leverage and an authority that largely swayed the medical mind of the world for fifteen centuries.

From our stand-point of observation, his theory of disease, his pathology, abounds with absurdity, though more rational at that, than we find in any of his contemporaries. From his death to the close of the middle ages, medicine, in common with the other sciences, made but little advancement. The convulsions incident to the dawn of the Christian era, the wars and aggressions, the awakening of new superstitions, and the proclamation of Christianity, so absorbed and diverted the public mind as to cast a pall over medicine and its kindred sciences for centuries. The rise

and fall of medicine were typed by the rise and fall of empire; that of ancient Greece fell with the empire into temporary oblivion. The destruction of the library and school of Alexandria was succeeded by Arabic literature, and the foundation of the school of Salernum, which exerted an influence throughout Europe unparalleled at that day. When in the midst of its glory, early in the fifteenth century, the discovery of the art of printing, the invention of the compass, the telescope and the microscope, aroused occidental Europe to efforts in the field of literature and science, which she pursued with results at once eclipsing all previous efforts; schools of medicine were established by her upon a basis of scientific endeavor; her students increased with great rapidity; books and libraries multiplied. Latin and Greek literature were subjects of careful study, and their translations were of inestimable value. Hippocrates was restored in his purity. Galen and his compeers were carefully studied. Anatomy and physiology, during this and the next century, unfolded their mysteries to careful research as never before. Pathology and therapeutics, which had made but little advancement for centuries, were placed under contribution, and during the last quarter of this century pathological anatomy was for the first time made the subject of professional study, notwithstanding the prejudice to autopsies which prevailed in many localities. To Anthony Benivieni is entitled the credit of first suggesting the value of studying the traces

of disease upon the human cadaver; and he was ably seconded by Eustachius, Marcellus Donatus, Fernel and others, who gave to medicine in this department a literature truly fundamental and of permanent value. The foundation of chemical science was laid in this century also.

The seventeenth century constitutes an important epoch in medicine. The discovery of the circulation of the blood by Harvey was the first important event of this century. The establishment of this fact in medical science produced an immediate revolution in the domain of anatomy, physiology and surgery. The microscope was immediately utilized; the course of the blood corpuscles in the minute vessels was demonstrated, and the relation of the arterial and venous circulation was also established. Notwithstanding these discoveries, practical medicine and therapeutics failed for half a century to avail themselves of these fruits.

Paracelsus, Von Helmont and others had made such inroads upon rational medicine the century previous, that it required the mind of a Sydenham, Morton and Baglivi, to apply the lights of these scientific discoveries to rational medicine as promulgated by Hippocrates; and they came to the rescue with a wealth of resource and perseverance of effort that reestablished it on the foundation of observation and practical experience, from which it was never subsequently dislodged. Sydenham's accuracy of observation and sagacity in the treatment of disease, in an age when specula-

tion pervaded the entire realm of thought, entitle him to rank above every contemporary.

The next and last century was also one of great interest and excitement throughout European medicine, based upon the enunciation of new and conflicting pathological doctrines by men of consummate ability, who defended them from their varied stand-points with an earnestness and skill never previously witnessed in medical history. Stahl, Hoffman, Von Haller, Boerhaave, Brown, Darwin, and Cullen, were authors of theories, or systems of practice, based upon their varied pathology, which speedily drew partisans to each, and resulted in advancing the science by an elimination of error, and placing pathology upon a plane more nearly commensurate with its importance. For the entire century, Stahl and his expectant medicine were largely adopted in Germany and France, and to a limited extent in Great Britain; but in the latter, and in this country, Cullen held sway over all his contemporaries, partly by reason of his great merit, and partly by reason of the immense influence upon American medicine of Dr. Rush, who was an ardent disciple of Cullen, and edited his works.

Near the close of this century Edward Jenner immortalized his name by placing humanity beyond the most fearful of scourges known to ancient or modern times.

The history of foreign medicine, both ancient and modern, to the dawn of the present century, shows that it was confronted at every stage of its

advancement by obstacles other than those that are inherent to a solution of its problems and the revealing of its mysteries. Envy, jealousy and superstition, notably the latter, sought to contest its advance and to disparage its results. In view of this, it is worthy of the highest encomium for its perseverance under trial, and for the grandeur of its achievements. "It builded better than it knew." Some of the brightest gems in the crown of science belong to it, if not of its setting.

American colonial medicine had its birth at a period when European medicine was being agitated by rival pathologists, who had produced temporary professional anarchy throughout western Europe. Harvey's discovery of the circulation was unknown, and the profession was at sea, without compass, rudder or ballast, save those which Hippocrates and Galen furnished nearly two thousand years before. Laboring under these embarrassments, in a foreign land and an inhospitable climate, surrounded by a native savage foe, isolated from all the world except at long and uncertain intervals, we wonder that it survived the shock at all; but the law of necessity asserted itself. The clergy and the civil magistrate came to the rescue, and essentially repeated the history of trans-atlantic medicine in its infancy, though upon a plane of intelligence far in advance of the medicine of antiquity. For nearly one hundred and fifty years, till about the last quarter of the last century, our colonial medicine presents but little

of interest to the medical student. It was in full sympathy with the low colonial condition of its time, and as that rallied by associate force, by wealth of product, by increase of domain, by culture, by independence of will, medicine rallied to new purpose, and though having lost more than a century of time by isolation and other depressing influences, migration to and fro, and a war upon our northern frontier, gave medical and surgical accession to the colonies, which resulted in associate efforts to establish American medicine upon a plane more nearly in accord with European medicine. In 1754, Dr. William Hunter, of Scotland, delivered the first course of lectures in this country on anatomy and surgery, accompanied by dissections, at Newport, R. I. In 1762, Dr. William Shippen, of Philadelphia, delivered a similar course in that city, which culminated in founding the first medical school in this country, now the University of Pennsylvania. In 1768, the first medical college of New York was established, with a full corps of professors, all of whom were educated in Europe. This constituted the entire body of public medical instructors prior to the revolution. During the short intervening period they did good work in the profession, but gave way to the excitement incident to that event, and freely threw themselves upon their country's altar in its defence. Our profession figured honorably and conspicuously on the field of battle, and was ably represented in the councils of the nation at her birth. The Declaration of Independence in-

spired all along the avenues of thought a resolution to establish an independent literature as well as government, with results professional and otherwise, eclipsing those of any nation within the century. Immediately succeeding our independence, the old medical schools were reorganized and new ones established. The Medical Department of Harvard was established in 1782, and of Dartmouth in 1794, fully organized for professional work, with accomplishments of incalculable value to American medicine. During the first half of the present century medical schools multiplied with great rapidity, far too rapidly for the best interests of the profession. Dependent as they were upon students' fees for support, a rivalry for numbers was created, which resulted in lowering the standard of admission to an extent that sensibly affected the intellectual status of American medicine. Nevertheless, she has steadily advanced along the century, and to-day is recognized the peer of Europe in her general anatomy, surgery, chemistry and materia medica, and as advancing rapidly upon her in her specialties, which are of comparatively recent date upon our shores. These have been watched, and with many regarded with disfavor, as invading the precincts and disparaging the skill of general medicine in the public estimation. I can conceive of a subdivision sufficiently minute to justify this view.

Dr. Barnes, in the *London Lancet*, illustrates it by saying: "I have been recently honored by a visit from a lady of typical modern intelligence,

who consulted me about a fibroid tumor of the uterus ; and lest I should stray beyond my business, she was careful to tell me that Dr. Brown-Séquard had charge of her nervous system, that Dr. Williams attended to her lungs, that her abdominal organs were entrusted to Sir William Gull, that Mr. Spencer Wells looked after her rectum, and that Dr. Walsh had her heart. If some adventurous doctor should determine to start some new specialty, and open an institution for diseases of the umbilicus, the only region which, as my colleague Mr. Simon says, is unappropriated, I think I can promise him more than one patient." But bear in mind, gentlemen, this is British, not American medicine, of which Dr. Barnes is speaking. Our medical educators, who reflect the true intent of American medicine, demand a thorough theoretical knowledge of general medicine as an indispensable prerequisite to the adoption of any specialty. They recognize the law that the head, the heart, the lungs, and the digestive organs, are the great life motors, and have established relations with every fibre and tissue of the human organism, and in the study of disease must be recognized as the great factors in the economy of life, bearing vital relations to disease, wherever located ; hence a knowledge of general medicine is necessary to a knowledge of the reciprocal relations of these organs in their diseased manifestations.

Moreover, the rapid advancement of medicine in its literature and practical achievements, during

the last quarter of a century, is largely indebted to the scientific specialists, who are ornaments in general medicine as well.

I have but to indicate the names of Bowditch, and Kimball, and Williams, and White, and Knight, and Blake, of our own Society, in confirmation of my position ; and till subdivision exceeds its present limits in this country, general medicine should welcome the specialist as indispensable to its own best interests.

Medical advancement in this country is due also more largely to the peculiarity of the American mind, to its restlessness, its aggressive character, its persistent determination to reach the ideal, regardless of the obstacles to be overcome, than to the didactics of our schools ; for the fact is patent to all before me, that our system of public instruction has been unchanged till within a very recent period. The average school has repeated the blunders of its course of instruction for seventy years, though it has advanced with the profession in the recognition and proclamation of scientific results accomplished.

The medical student, fresh from the farm, the work-shop and the common school, matriculated upon the same basis as the bachelor or master of arts, and together for six hours a day, for four months, or the term, listened to scientific disquisitions upon theory and practice, surgery, obstetrics and therapeutics, before anatomy, physiology, pathology, materia medica or chemistry had revealed their first ray of light to their untutored,

uncultured minds, and nought but the genius of an American mind could have evolved and classified, from this crammed admixture of scientific lore, the fundamental elements of a medical education.

These errors of low standard of admission and order of instruction have been admitted and deplored for many years, till at last our own Harvard University has broken the fetters which years of custom had welded, and is the first to declare a new departure in her demands for a higher intellectual basis of admission, and a more rational, philosophical system of instruction. As a result she is universally acknowledged to stand without a peer in this country, both in her curriculum and system of instruction ; and though radical the change, it is but the prelude to an advance still to be made, which will place her along side of the leading universities of Europe. The medical profession of this commonwealth must rally to her encouragement and support in her every endeavor to elevate and advance her standard of matriculation ; for view it as we will, our schools must type the profession where they exist. The science of medicine embraces so wide a field of research, that the most thoroughly trained and disciplined mind enters that of practice, to be often embarrassed by anomalies, which have not their counterpart in number or character in any other realm of observation. This fact alone furnishes an argument unanswerable for insisting that our graduates shall be more thoroughly qualified to solve them philo-

sophically. General principles, and not fixed laws, must govern the practitioner of rational medicine ; and he who is unable to comprehend a general principle (for want of proper discipline or otherwise), will fail in the application of suitable means to desired ends. While we concede that medicine does not furnish an exact science, nor can it till the laws of pathology become fixed, yet careful research and untiring industry have given a wealth of scientific results and principles, that challenge comparison with the world beside. Although therapeutics has hardly kept pace with the other departments of medicine, yet one has but to take the retrospect of a decade to learn that it too has made rapid advancement ; and to-day chemical science is furnishing its products for application in greater abundance and in more elegant form than at any other period in its history.

It is not my purpose to review American medicine of the present century ; her rapid advancement and the brilliancy of her achievements have been chronicled by able pens and proclaimed from kindred platforms, showing scientific products in value and number eclipsing many previous centuries. They confirm old discoveries, and voice new ones of inestimable value, that place medicine upon a foundation philosophical and indestructible. Yet the whole field of legitimate medicine has not been compassed ; and I desire to call your attention to some of the waste places demanding immediate consideration and culture.

Clinical instruction, the "indispensable comple-

ment” of a thorough medical education, has never received that attention at the hands of American educators that its merits demand. It was the glory of ancient Greek and Egyptian medicine. Hippocrates gives clinical narrations, admirable for his time, in his first and third books on epidemics; but after the foundation of the school at Alexandria this method of instruction was abandoned, and for centuries we rarely find a trace of it, till the fifteenth century, which fact accounts largely for the sterility of medicine during this long period. Early in this century the first editions of the ancient works of Greek physicians were published, with the effect to restore clinical study somewhat in this century; but the physicians of this period were chiefly devoted to philological research, by which they were richly rewarded in the purity of a revived literature; though clinical medicine suffered temporarily as a result. In the sixteenth century it was taught in the St. Francis Hospital at Padua. Early in the seventeenth, it was taught in the university of Leyden, and in the last century clinical chairs were endowed in the leading universities of Europe; in the present century it constitutes, as it deserves, the leading feature in foreign medical and surgical instruction. The private instruction in this country has been chiefly of this character; but it has been sadly neglected by our professional schools and hospitals.

I regard careful, persistent clinical study by the student as indispensable to a thorough medical

education. Not that form of study that consists in running through hospital wards twice a week, in the rear of a learned professor, to see and hear and smell one knows not what; but a careful, daily bedside study of disease and its manifestations, supplemented by lecture and text-book, and a careful observation of the means employed, and their effects as well. This constitutes the only clinical instruction worthy of the name. Clinical medicine can be studied advantageously only in our larger cities, where, and only where, material as diversified as disease itself abounds.

The practical application of this view would necessitate the closing of our country schools, and should do so at once. It would bring public instruction within such limits as to more perfectly control it in the interest of a higher standard of studentship and a more perfect education. I may be pardoned if I seem to take radical ground upon this important question; for as a graduate of a country school more than a quarter of a century ago, my earlier professional life was daily embarrassed by a want of such practical training in bedside observation of disease, and the application of means thereto, as every large, well-regulated hospital furnishes to all who have eyes to see and judgment to appreciate and appropriate.

Hygiene and preventive medicine have received but little consideration from the profession of this country. Bowditch, Hunt, Toner, and a *very few* worthy compeers, may be justly considered the pioneers in this department of medicine. The

laws of established disease, have largely occupied the profession, to the exclusion of a study of the laws of *prevention*, till within the last decade. The necessity of private and public hygiene was recognized by the ancient medicine of Egypt, of the Hebrews and the Greeks, as a life and health factor worthy of their most careful study; and the success attending the medicine of these peoples was largely attributable to this fact. The Egyptian priesthood, in whom was embodied the medicine of that epoch, were the first to enunciate and teach hygienic medicine. Hebrew medicine, in the writings of Moses, embraces hygienic principles of wonderful sagacity for that age. The Grecians also entered this field of research. The topography of the country, drainage, irrigation, and a variety of other means, were considered for the prevention of disease. The temples of Æsculapius were located with especial reference to health-giving influences. The sick who were brought hither for treatment were quarantined (so to speak) for a greater or less length of time as their condition demanded. Greek medicine, as far as I have been able to discover, is entitled to the credit of the first written treatise on hygiene, entitled, "Airs, waters and places." During the middle ages this lapsed with general medicine. In the sixteenth century it revived in Europe, and since that time it has been given a large and constantly growing place in European medicine. The increasing density of our population and its cosmopolitan character, the

development of new territory, and with it new disease, or modifications of old newly typed and disguised, furnish a necessity for active work in this department of medicine hitherto unappreciated by general practitioners. The profession have here a subject worthy of its most careful and wise consideration. And the laity can be secured as aids in this vast field of sanitary science. Lemuel Shattuck, Esq., of this city, is an eminent illustration of this proposition.

It is a subject so broad and far-reaching in its scope that the professional and lay worker will be amply able to exhaust every resource at their command in departments widely differing in character, and yet resulting in fruits that can be utilized in the interests of science and a common humanity.

The Public Health and Social Science associations, though in their infancy, are doing a good work in sanitary science. Our State Boards of Health, especially that in our own commonwealth, are gathering a fund of scientific material of inestimable value to the present, and emphatically to future generations ; for the period is not remote when from this storehouse of material, popular sanitary literature will issue and be disseminated, as vital to the health and life-interest of every household ; and medicine must take the initiative in this matter. In the country districts, especially, it cannot longer escape the responsibilities attaching to this subject. The law constitutes the boards of selectmen health officers, in our mu-

nicipalities where local professional boards do not exist; and though they represent the average intelligence of our population, they have as a rule never given thought to the subject of hygiene, and hence are of little value, except as executive officers, to isolate small-pox, which is the only disease they recognize as coming within their jurisdiction, and happily that is of rare occurrence. Therefore the country is destitute of any organized force in this department of medicine. The district societies, conjointly with the parent society, are the natural allies of the board of state medicine, to study and report the endemics and epidemics, embracing their laws of development, originating external to the human organism, both geological and meteorological, the latter, by reason of the intervention of artificial laws, furnishing a prolific field for medico-scientific research.

The time and strength of American Medicine has been so largely absorbed in developing science for its own purposes, that it has given but little thought to questions that may be denominated medical politics, upon which hang its reputation in morals and its rights in legislation. In 1639 the colony of Virginia passed "an act" in the interest of educated medicine and the public also.¹ The colony of Massachusetts passed a law in 1649, which was repeated in the Duke of York's grant, in 1665, for the protection of the public against the medical impostor. But to New York belongs the honor of creating, in 1760, the first

¹ Toner's *Annals of Medical Progress*, page 50.

statute recognizing the right to protection of *both* physicians and people, entitled, "An Act to regulate the practice of physic and surgery in the city of New York."¹

The preamble to this act expresses so perfectly the situation of to-day, that I venture to quote : "Whereas many ignorant and unskilful persons in physick and surgery, in order to gain a subsistence, do take upon themselves to administer physick, and practice surgery in the city of New York, to the endangering of the lives and limbs of their patients, and many poor and ignorant persons, inhabiting the said city, who have been persuaded to become their patients, have been great sufferers thereby ; for preventing such abuses for the future, Be it enacted * * * that no person whatsoever shall practice as physician or surgeon before he shall first have been examined and approved" by specified authority. In 1767 the first general regulations for the whole state were adopted.

In 1772 the colony of New Jersey passed "an act" of similar import ; the penalty affixed to its violation in each case was £5. In the year 1806, and at various periods since, till 1874, New York has legislated in the interest of educated medicine. Her present statutes bearing upon this question clothe the censors of the state and county medical societies with authority to examine every practitioner of medicine who has not a diploma or other satisfactory evidence of proper

¹ Harris's Abstract of the principal laws of the State of New York relating to the medical profession, 1875.

qualification, and to reject any not duly qualified. To practise medicine in that state without proper credentials constitutes a misdemeanor punishable by fine or imprisonment, or both, at the discretion of the judge trying the case. In the year 1872 the state of Texas passed a law, which was amended in 1875, regulating the practice of medicine and surgery within its borders. It compels every person practising medicine and surgery to submit to an examination in anatomy, physiology, pathological anatomy, pathology, surgery, obstetrics and chemistry. It provides for the appointment of a board of not less than three physicians by the judges in each judicial district. This law is being vigorously enforced throughout the state, with results as satisfactory as its friends had reason to anticipate. It will be observed that theory and practice, therapeutics and materia medica, do not come within the purview of this law; but persons educated in the branches of medical science embraced by this statute, may as a rule be regarded qualified to practise medicine. To have attempted to embrace the whole, would have prevented any enactment.

The legislature of New Hampshire passed "an act" in 1875, "to regulate the practice of medicine and surgery." By section 1 of that act each and every medical society, organized under a charter from the legislature of that state, shall at each annual session thereof elect a board of censors consisting of not less than three members, who shall hold office till others are elected, which

board shall have authority to examine and license practitioners of medicine, surgery and midwifery within the state, except practitioners who have at the date of this act resided five years in the city or town of their present residence. All persons found qualified by proper diploma or upon examination, are furnished a certificate of the fact by said board, which certificate must be duly recorded in the county where said practitioner resides, and may be revoked or annulled by the authority granting it. If the holder violates special provisions of the law, and attempts to practise without a certificate, it is made a misdemeanor punishable by severe penalty.

The State of Vermont passed an act in 1876, identical with that of New Hampshire, except that it recognizes *midwives*, and permits them to practise midwifery where they reside, and exempts them from examination.

A law of similar character, provisioned to conform to our peculiar requirements, would result to the advantage of educated medicine, and emphatically to that of the people.

This Society possesses the wisdom and the influence to draw, and cause to be engrafted upon our statute books, a law adapted to the necessities of this commonwealth; and that too before the expiration of another legislature. The medical profession has hitherto occupied a false position regarding questions legitimately hers. She should *direct* legislation upon all questions involving the public health; this is a right conceded to other

professions and occupations, where there is a substantial agreement among the parties in interest, as to the necessities for, and character of, the legislation sought. Then why not to medicine, when in the interest of a universal humanity? This commonwealth sustains an anomalous position relative to scientific medicine and the public weal, in view of her recognized culture, and her professed regard for and protection of the rights of her humblest citizen; for she pays no tribute to learning, to experience, to honest professional work, so far as statute law is concerned. The cultured and uncultured, the honest man and the knave, occupy a common level, and her citizens are permitted to be preyed upon, and robbed of their substance, their health and their life even, with impunity by charlatans who infest every city and populous town. The burglar, the highway robber, the midnight assassin, are recognized enemies to safety and good government, and severe penalties await the perpetration of their crimes; while an infinitely greater enemy to both has no recognized status under our criminal code of law; a fact demanding instant remedy by legislative enactment, prohibiting the practice of medicine and surgery by any person within this commonwealth who cannot give evidence by diploma from a legally organized medical college, or who upon examination by a competent legally constituted medical board, is not found to possess adequate knowledge of anatomy, physiology, chemistry, surgery, pathology, pathological anatomy, obste-

trics and medical jurisprudence. That society is infested by enemies who are wrecking the physical constitution, degrading society, and undermining the very foundation of our civilization, is patent to the most superficial medical observer; and no voice is heard in protestation, nor arm raised for protection.

Medicine has here a work to perform that it can no longer afford to shirk or ignore. Our guardianship of the public weal is neither self-appointed nor limited by diseased relation; but is inherent, and comprehends the health-interest of every community also. Permit me to call your attention somewhat in detail to some of the more important questions demanding the immediate consideration of medicine, with the view to establish principles upon which concerted action may be taken by the profession, comporting with its dignity and rights, and with their importance. The highest interests of American medicine are indissolubly associated with the physical, mental and moral welfare of the public, and that any agency that tends to the injury or degradation of the latter, involves the former, all will concede.

The next foe to which I advert, is the professional abortionist, who is plying his nefarious practice in every community, involving all classes of society, ravaging the folds of the flock all over our commonwealth, and nation as well, consigning mothers to untimely graves, and robbing the generations of their legitimate fruitage. There is not a physician of five years' experience in this

presence, who cannot point to broken, stricken households, or to wrecked constitutions, from this cause. The ethics of our Society voice its condemnation, and here and there it has been rendered effective by the trial and expulsion of the culprit ; but this has been a spasmodic demonstration, an exceptional act. If there are any of this class still within our jurisdiction, our first duty to ourselves, to the profession at large, and to humanity, is to arraign them and visit upon them condign punishment, and that speedily. But the large mass of offenders are vile charlatans, without our jurisdiction, who assume the title of doctor to deceive the unwary and replenish their coffers.

Medicine should at once proclaim itself upon this subject, in language and manner not to be misunderstood and worthy of a noble profession. It is a crime against the body politic that cannot be totally suppressed, but it can be greatly diminished, and the honor of the profession in the effort vindicated. The means to this end are, first, by creating in the public mind a realization of the physical danger attending its perpetration. Second, by efforts to elevate the moral sense of the public to a more adequate appreciation of its criminal character; and third, by causing a revision of our criminal code of law, that it shall recognize the wanton destruction of foetal life a crime coëqual with maternal sacrifice.

Allied to this question is another of an importance to demand legislation, both state and national. I refer to the wholesale distribution of

quack medicines over our country—declared panaceas for every disease possible and impossible, within the limits of a single cover. These medicines are swallowed and applied to an extent fearful to contemplate, in view of their contents. Some contain narcotics, notably those prepared for childhood and infancy; some contain poisonous elements, destructive to tissue by continuous use; and some contain in large proportion alcohol; three powerful agents for good when rightly applied, or potent for destruction when used indiscriminately.

This has assumed the proportions of a monstrous evil, and yet its invasion has been so gradually and quietly conducted, that its presence has hardly been recognized by the philanthropist, who has with great vigor assaulted evils of comparatively little importance.

At the threshold of life, "soothing syrups" and "pain killers," in the hands of careless mothers and nurses, are proving the American Ganges to the infancy of this generation.

Nor is the curse limited to this class of our population. These narcotics, with "balsams, bitters, hair-restorers," and their like, are depraving taste and inciting functional and organic lesion among all classes to an alarming extent.

Nor do the responsibilities of medicine rest here. The educational system of our country, of inestimable value, constituting the chief bulwark of our civil liberty and of our republican institutions, when properly directed, has developed errors

of physical and mental discipline demanding the earnest interposition of medicine. The physiologist has long since discovered and called attention to these evils, but they have never been voiced, nor their eradication attempted by the medical profession.

Our school law recognizes children of from five to fifteen years inclusive, its wards ; demands attendance at school for thirty hours a week, and forty weeks in a year. Our educators, desirous of obtaining the largest possible mental development, subject this plastic material to a strain in excess of nature's law of toleration, which must ultimate in physical and mental degeneracy ; when by proper modification the interests of both would be subserved. The absurdity of subjecting the child of five years to the same physical discipline as the one of ten or fifteen, seems too apparent for discussion in this year of grace ; but the fact remains, and medicine is called to solve the problem for its correction in the interests of humanity. The curriculum of study for the advanced classes in our schools embraces elementary anatomy, physiology and chemistry, and while exceptionally they are taught, as a rule they are ignored for the reason that the teacher has no adequate appreciation of their value. Instruction in these departments of science should be made obligatory, and not permissive merely. The importance of this question is too apparent to require elaborate argumentation in this presence ; therefore the great necessity of urging upon our boards of edu-

cation attention to this subject with a view to its correction.

The question of mixed schools for the education of the American girls who have reached the period of puberty, is one worthy of earnest, immediate attention. The transit of girlhood to womanhood involves an important change in the physical, mental and moral constitutions; with mutual relations so intimate, that to neglect or pervert either, involves the whole; a truth which renders this subject of great importance to the race whose motherhood of the generations is involved.

Dr. Clarke, an honored Fellow of this Society, in his "Sex in Education," has fully and admirably discussed this question. His portrayal of the evils resulting from an associate education with the other sex, viewed from a physiological standpoint, is clear, forcible and unanswerable. Our female seminaries, as at present conducted, are chargeable with violation of hygienic laws to an extent inexcusable and requiring instant remedy. They are devoted to education in the arts of polite literature, and give but little time or thought to conserving the physical forces. Chairs of hygiene, as well as physiology, should be established in every seminary of this class, and competent instructors secured for the work so long neglected in this department of science. I shall hardly be charged with exaggeration when I affirm that the average adult in this country knows less of his own mechanism and its governmental laws, than of any other science that has engaged the popular

attention, and to this fact is due the popular indifference to instruction in its fundamental principles.

The Germans have given the subject of physical and mental education of their children and youth an attention, and have furnished a system of instruction covering the entire educational period, more in harmony with the most advanced hygienic laws than can elsewhere be produced. German philosophy, applied to physical and mental science, has given to Germany a power and pre-eminence among the nations of the earth, illustrated recently in the Franco-German war, and long since recognized in the domain of science and letters, that she could not otherwise have attained.

Female membership to this Society is a question that has forced itself for solution, and will do so again. That a majority of the profession through our country look with disfavor upon female medical education is undoubtedly true ; and the arguments in defence of this position are numerous, well founded, and we believe unanswerable. That the women of the country concur with the profession overwhelmingly, is also true. But a small and aggressive minority entertain an opposite view. They believe that theology, law and medicine furnish suitable fields for female effort, and one of the number appears at our doors for admission to membership. She has been educated in all the branches of science contemplated by our by-laws ; her credentials are faultless ; she can sustain the most searching examination by our

board of censors; she is to assume the responsibilities of professional life; the public will give her its confidence, accept her services, bestow its emoluments regardless of our preferences or acts. What we may think of female or mixed colleges in the abstract is foreign to the question at issue; in that, we are essentially agreed; but we are organized in the interest of science and the public weal. We welcome a new scientific disclosure, regardless of origin or authorship; its value is not commensurate with either, but with its possibilities. Can we therefore go behind the exponent, to the color, race, or sex, without inviting and surely receiving severe criticism? And is not such position illogical, nay, indefensible from a scientific stand-point? Arguments, pro and con, of marked ability, from some of our ablest membership, have been made; legal interpretation of our rights to admit her under the act of incorporation has been invoked, giving an affirmative response; yet the antecedents of our Society are negative in spirit and practice. I do not share in the solicitude lest the women of this country are to drop from the high estate and sacred sphere which God, and civilization in its highest type of development, have placed them. I do not fear lest they unsex themselves by entering our dissecting rooms and by joining in surgical exploits. I have too much faith in the law of their effeminacy; in its immutability which they cannot transcend if they will, they will not if they can. Therefore, when confronted as a society by this mystery in

nature, armed with the mysteries of science, must we not admit the latter, if lost in amazement at the former ?

Efforts have been made to disparage this Society in the public estimation, by foes within and foes without, because of the exercise of a right inherent in every corporate body to prune and slough off any excrescence damaging to its vitality and to its dignity. These efforts have originated in quarters, and have been prosecuted with such pertinacity, as to induce some to question the wisdom of our course. The cry of persecution and of proscription was adopted for the purpose of intimidation, hoping thereby to stay the hand of justice in the execution of her decrees. Timidity always exhibits weakness, or guilt, or both, and most emphatically where principle is involved; and to hesitate or take retrograde steps in such an emergency, causes, as it deserves, the chagrin of friends and the contempt of foes.

As a Society we are united by cords of mutual responsibility and good faith, which can never be broken by a temperate and wise enforcement of our by-laws and code of ethics. They are our Magna Charta, and must be kept inviolate. They are wisely drawn and catholic in spirit. They permit the widest diversity of opinion and practice consonant with science. They frown upon all dogmas, pathies and isms, as frauds in their assumptions. Yet they appropriate and absorb all of truth embraced in either. They forbid professional affiliations with exponents of any exclu-

sive system or dogma as degrading to our science and damaging to our reputation. They declare there is but one true science of medicine, which embraces within its scope all truth, from whatever source derived, that can be applied to ameliorate human suffering, to promote longevity and the greatest possible physical, mental and moral perfection. They pronounce modern eclecticism a fraud, for it elects from a limited field in its materia medica and therapeutics. They declare hydrotherapy a fraud, because it converts water into a universal panacea, denying all philosophy and *drowning* all reason. They assert "allopathy" a fraud in significance and application; a creature of desperation, conceived by empiricism to disparage rational medicine before the judgment of the world. They denounce homœopathy as the giant fraud of the nineteenth century, and so do its nominal advocates and practitioners; for they repudiate its fundamental principles in their daily practice, and this duplicity constitutes their chief shame. Homœopathy, as taught by Hahnemann and his earlier disciples, was so grossly unphilosophical and inert, that the generation of its birth would have witnessed its death and consignment to oblivion, had it not been abandoned in the domain of materia medica, and therapeutics. With so powerful an ally as nature furnishes for the dislodgment of functional disease, homœopathy was compelled to abandon its tenets, or alarm and dispel the household of its faith; yet it has never risen to that plane of moral honesty to admit that

rational medicine is furnishing it principles of treatment and means for their application. In Germany, the place of its birth, and in France, that of its adoption, there are rarely to be found those so poor as to do it homage. In Great Britain it has maintained but a precarious, sickly existence, and is rapidly dying out, to pass into history with a reputation less enviable than its sister frauds, the royal touch, chrono-thermalism, and Connecticut Perkinsism; and in this country, though having abandoned its system while it still wears the cloak, it has passed the zenith of its power even in its disguise. The public mind has but to be illumined by these facts, to enable scientific medicine to mount to that plane of influence to which its merits have long since assigned it. Our duties to the public performed, we have no fears for the medicine to come. Pressing forward with the inspiration of the centuries behind her, she is prepared for new triumphs, and is filling all her opportunities with results rich in material, and grandly efficient in their practicalities. The collateral sciences are yielding their proportionate quotas, in enriching medical literature and in arming the practitioner, for the daily conflicts of professional life. The work of rational, scientific medicine universally made known, its incalculable worth will be acknowledged by the race who constitute our constituency.

And here let us pause in our festivities and pay homage to the honored dead.

Since last we met, the sickle of the destroying angel has entered our circle, and consigned to another and larger circle beyond the shores of time, some of our ablest and best ;—the veteran in years and accomplishments; those in the meridian of life; and the young in the midst of their hopes, while reaching forth with all the ardor of youth to a name and fame in this their chosen life avocation. Death is no respecter of age or acquirements; all must bow alike to its decrees. While we cherish the memory of all of our fellowship who have deceased during the year, I might seem derelict in the duty custom imposes upon my position, did I not recall the name of Channing,¹ who for scores of years upheld the banner of our profession as teacher, practitioner and Fellow of our Society, dying at last full of years, with a life-work behind him worthy of the highest emulation; or of Morland,² cut down in middle life, in the midst of his strength and usefulness, leaving no physical lesion to tell us why; or of Buckingham,³ the sound of whose voice has hardly died upon our ears in promulgating and defending scientific medicine, a beloved instructor, a successful practitioner, an honest man, whom to know was to respect and love. Let us, in recounting the memories of these, and of

¹ Dr. Walter Channing, died July 27, 1876, aged 90.

² Dr. William W. Morland, died Nov. 25, 1876, aged 58.

³ Dr. Charles E. Buckingham, died Feb. 19, 1877, aged 55.

the others who have passed from death unto life from our fellowship, so live, that when our summons comes to go hence to join them, we can lay down our armor, conscious of having fulfilled our obligations to diseased humanity, to each other, to society in its highest and noblest relations, and to God who is able to give us the victory over sin and death, and reward us with a crown of everlasting life.