College Addresses

BY

JOHN B. HAMILTON, M. D.

GEORGETOWN COLLEGE.

Alumni Dinner at the Arlington Hotel, June 23d, 1886.

ADDRESS

IN

RESPONSE TO A TOAST, "*THE MEDICAL FACULTY.*"

THE NEW MEDICAL COLLEGE BUILDING.

(*From the Georgetown College Journal.*)

Professor HAMILTON said:

GENTLEMEN: Why our venerable and witty toast-master should have singled out the junior member of the Faculty to respond in its behalf is a mystery I shall not attempt to fathom, unless it is that the modesty of the seniors prompted each of them separately to decline the proffered honor. It is, however, a task of no light import to speak appropriately while the air is still laden with the earnest eloquence of our President, and when the speaker will be followed by one so famous for his forensic skill and legal lore as the distinguished member of the Law Faculty, Prof. Hoffman. But, sir, it needs neither silver tongue nor fluent speech to utter the language of the heart, and the words of welcome which I here speak, if unstrained, are from the heart.

We rejoice in your presence here to-night; in your prosperity and the increasing power and influence of your great *Alma Mater*. We welcome you as worthy representatives of the growing numbers of the brotherhood, owing allegiance to the University whose jewels are the bright minds she has trained, and whose crowning glory is your success. A thousand welcomes to our banquet hall, and the welcome can only deepen

with each recurring season when commencements are ripe, and the clinking glasses and wassail-bowl usher in the human harvest.

I presume, sir, that I might, as my friend Judge Merrick would say, "rest our case" here with the assurance that the visiting alumni fully appreciate the length, breadth, and depth of the welcome with which the Medical Faculty join in greeting them; but as the meat of a letter is frequently in its postscript, so, in the few moments left me, I shall for once unfold a professional secret which will no doubt be public property in due course.

The Medical School looked over to New York and saw the great laboratory founded by the Pittsburgh iron merchant Andrew Carnegie; the five hundred thousand dollar college building given by Vanderbilt; the two hundred thousand dollar building now nearing completion in Cleveland, and we felt that unless help came from some quarter we could no longer with credit to the University, maintain a separate department. The ill-provided building on E street, occupied for so many years, was inadequate for the purposes of medical teaching; this age of learning had left our school behind in the march of progress. Just here the University lent a helping hand, and now, I am happy to say, we have bought the site, matured the plans, and expect, Providence willing, to have a new building ready to receive our medical classes next October.

It will, indeed, be a modest building compared with some of the mammoth structures lately erected for similar purposes; but after all, gentlemen, it takes something more than bricks and mortar to make a successful medical college, and while ours will be comparatively small, yet it will be ample for the accommodation of the class, and will, in fact, be a "grander temple than of old was erected to Æsculapius and Hygeia, for it shall be dedicated to the sacred cause of *truth* and *humanity*;" a fitting cause in which the Medical Faculty can labor as part and parcel of our grand old University, whose spires glow with brightness in the morning sun and cast their evening shadows on the placid bosom of the Potomac, and the music of whose chimes will ever ring with silvery sweetness in the ears of its alumni while memory holds its sway.

INTRODUCTORY LECTURE

DELIVERED MONDAY, OCTOBER 4, 1886, IN THE NEW MEDICAL COLLEGE BUILDING,

By JOHN B. HAMILTON, M. D.

PROFESSOR OF SURGERY, MEDICAL DEPARTMENT, GEORGETOWN UNIVERSITY.

(*From the National Republican.*)

AN EPITOME OF THE HISTORY OF MEDICINE.

LADIES AND GENTLEMEN: That distinguished physician whom we all admire and love; Dr. Oliver Wendell Holmes, once compared the ceremonies at the commencement exercises of a medical college to that other ceremony which united a man and woman for life; on the one hand he pictured the bride and the bridegroom, the bridal veil, the orange flower-garland, the giving and the receiving of the ring, the mysterious whisper of the clergyman in the ear of the maiden, the curious look of the spectators; and on the other, the simple ceremony that united his young friends to the profession of their choice. So, now, in giving a variation to the keynote so well sounded by the venerable autocrat, we might easily say that as the ceremonies attending the graduation of our young men reminded us of a wedding, so those attending the introductory exercises remind us of a betrothal; we see here the young men full of love for their chosen profession, burning with laudable sentiments of faith in mankind, hope for the future, and boundless enthusiasm. They here in your presence formally plight their troth. That they are in earnest is manifest from the public character of the ceremony, and the invitation they have extended to you to be witnesses. But we must not be unmindful of the real nature of this occasion. This is no time for mere speculation, for stage whispers among ourselves, as to the char-

acter and physical peculiarities of our neophytes. This lecture is introductory to the general course of lectures for this thirty-eighth annual session, and in order to comply with the terms of the ante-nuptial contract it must have some connection, direct or indirect, with the subject-matter of the course, or consist of preliminary hints for their future guidance. During the courtship they frequently need guidance, for not every one that signs the betrothal papers finally wins the bride. She is a bit of a jade at times, and if the young lover devote the passing hour to pool rooms and billiards and politics, instead of paying her his undivided attention, the wedding may never take place. You will then, I am sure, excuse me if the remaining portion of the hour is devoted exclusively to them.

YOUNG GENTLEMEN: On behalf of the college I bid you welcome to these halls, forever dedicated to the search for and the promulgation of truth and to the cause of humanity. We shall try to guide your pathway to the medical profession so that you will be a shining exemplar and a credit to the school when you leave us, but there must be active, hearty, sincere co-operation on your part. The most brilliant teacher in the world can only place treasures in your hands; he cannot show you how to keep them or to multiply them. You must work and think, study and think, be sincere and earnest, and, if you feel your mind is not clear on a subject laid before you, try to master it. Ask your professor, if you cannot master it alone, but master it before you let go. Do not attempt too many things at once. Keep on at what is once begun until you shall have finished, and finally, gentlemen, when you are studying medicine study medicine. Do not run after strange gods; keep to your books, and do not fall in love with anybody or anything but truth and medicine. A medical student in love is not only usually a very foolish lover, but a very ridiculous one. He can scarcely indite a "woful ballad to his mistress' eyebrow," but anatomy, chemistry, and physiology combine against cupid, and the combination, as our sporting friends would say, is a hard one to beat, and the medical student gets laughed at for his pains. Few people are enamored of fledglings.

"Be lovers indeed," says Bruno, "but love in subordination

to a celestial love, the only affection worthy of the complete surrender of a human soul: The love for truth, the search for what is true in all the domains of thought and life is the glory of existence."—[*W. D. O'Connor, Hamlet's Note Book.*]

Now let us turn seriously to the business in hand. I take it you wish to know something of the past history of the healing art. Its importance has doubtless already engaged you, an importance second only to life and strength itself, for these frequently depend upon the faithfulness with which the maxims of the art are adhered to.

The present flourishing state of the medical art was not reached in a day. On the contrary, centuries have come and gone since the first man began the study of medicine, and the antiquity of the study is thus added to its other attractions.

The Mosaic writings, commonly placed at about 1,500 years before the Christian era, contained the earliest doctrines of sanitary law known to European civilization until recently. The recent researches that have been made in Hindoo lore place the medical study in India at a much earlier period. Centuries before Homer wrote; and even that period is so thickly enveloped in the mists of time as to be problematical as to date, the Brahmins taught medicine with their mystic mythology. Their books on medicine the Shastres were held sacred, and were "not allowed to be read at unseasonable times or unlucky days, as on the two first days of a new moon, or when the sun is obscured by clouds; when it thunders; at the morning dawn or evening twilight. The student must not study on holidays, or on the day on which he touches a corpse until purified, or when the governor of his province is sick, when fighting occurs, or when war approaches."

"The pupils usually remained five or six years reading the Shastres, attending oral instructions, which were delivered in open places, under the shade of a sacred tree."—(*Wise.*) Although the Hindoo thus held medicine so high, it must be confessed, that when the Aryan race finally overran eastern Europe their successors still further exalted the opinion held of medicine by enrolling their favorite practitioners among the gods.

The worship of Æsculapius as a god is said to date back about fifty years before the destruction of Troy. He was al-

leged to have been the pupil of Chiron the Centaur, who was taught by Apollo. Homer, you will remember, makes many allusions to the surgeons, and especially to the sons of Æsculapius—Podalirius and Machaon:

> Of two great surgeons Podalirius stands
> This hour surrounded by the Trojan bands,
> And great Machaon, wounded in his tent,
> Now wants the succour which so oft he lent.

And again to Patroclus:

> Patroclus cut the forky steel away,
> And in his hand a bitter root he pressed;
> The wound he washed and styptic juice infused;
> The closing flesh that instant ceased to glow,
> The wound to torture and the blood to flow.

In all ages the surgeon has been highly extolled in his military capacity. Thus Homer makes Nestor say—

> A wise physician skilled our wounds to heal
> Is more than armies to the public weal.

And this sentiment was manifested in a somewhat peculiar way when Alexander was approaching India. Taxiles endeavored to conciliate the Greek envoy by presents. He said, "I shall send to the great conqueror, your master, my beautiful daughter; a goblet made of a ruby that replenishes itself with liquid, a philosopher of great knowledge of the sciences, and a physician who has such skill that he can restore the dead.*

This indeed was high praise of the physician, but it reminds us that history almost repeated itself in the anecdote of the celebrated French surgeon, Paré, who had been surgeon to four successive kings of France, and who, when the ancient city of Mentz was besieged by an army of 100,000 men, commanded by Charles the Fifth in person, was sent by the king to the beleaguered army. Within the walls of Mentz were gathered nearly all the nobility and princes of France; "Decimated by famine, disease, and by wounds received in the protracted defence, the garrison was reduced almost to extremities." Paré was introduced into the city at night by an Italian captain, and

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* Malcolm's History of Persia.

on the following morning, being requested by the governor to show himself upon the breach, he was received by the soldiers with shouts of triumph. "We shall not die," they exclaimed, "even though wounded, Paré is among us!" From this time the defence was conducted with renewed vigor, and to the presence of this single man it has been universally conceded that the city was indebted for its salvation, although the siege was not raised until the "gallant army which lay around it had perished beneath its walls."

But when this digression took place I was speaking of the high esteem in which physicians and surgeons were anciently held by the Hindoos. One of the causes of that esteem was the character of the curriculum and the moral sublimity of the teachings of the Hindoo sages, and the rigid discipline enforced.

Wise has given us the ancient formula. [*Review of the History of Medicine, by Thomas A. Wise. London: 1867.*] "A fortunate day is to be selected for the pupil to commence reading the Shastres. On that occasion he is to be clean in his person, and the place in which he is to study should be purified. A raised part of the room, or place of study, a cubit square, is to be cleaned with cow's dung and strewn with kusa grass, after which fire is to be placed upon it with several kinds of sacred wood, upon which ghee is poured while prayers (mantras) are repeated. The pupil while being initiated should stand near the fire with his face toward the east if he seeks long life; if exalted fame, to the south; if prosperity, to the west; if truth and its reward, to the north.

"The guru and other Brahmins are then to pray over some dried rice, and the former should sprinkle water over the assembly. He is then to place a Brahmin on his right hand, over which he prays as he throws a mixture of curdled milk, honey, and ghee over the sacred fire. The scholar does the same and his lesson begins. The guru declares that he must henceforth discard lust, anger, covetousness, ignorance, laziness, vanity, pride, envy, revenge, cruelty, lying, and evil actions. He must always be engaged in the search after truth and in the performance of good actions; he must be clean in his person, wear an humble and peculiar kind of clothes, and his beard and nails should not be cut during the period of his religious study.

Before and after meals, as well as on many other occasions, the student must carefully perform his ablutions; after bathing and being purified, he is to offer fresh water to the gods, sages, and munis, and to convey wood for the oblation to the fire. He must always respect his teacher and parents, put the dust of their feet upon his head, and obey them in everything, or he will be unfortunate in this world and will be born in a degraded position in another life."

The guru thus addressed the pupil:

"When I say you may eat, drink, sleep, or arise from bed, you must immediately obey. If the scholar does not perform all this he sins, his understanding will diminish, and his glory will be quenched. Whatever I say you must believe, and follow my instructions. You must be careful to act so as to please me, and if I do not acknowledge your good actions I shall sin, and my knowledge will be barren.

"In the treatment of the diseases of Brahmins, gurus, and the poor and helpless, or persons who come from a distance, you must be as careful as you would of your own relations, by which you will make more friends and acquire virtue, health, and a good name. You must not be displeased at my treating you as a son, a servant, or a beggar; you must harbor no bad thoughts; you must be moderate in the indulgence of your appetites, and contented with small recompense. By night and by day your anxious desire should always be to consider how you are to relieve and cure the sick under your care. You will avoid bad company, and neither give medicines to a culprit who has been condemned by a rajah, to a woman whose husband and guardians are absent, nor receive anything but food from a wife without the consent of her husband. You must avoid entering a house as a medical man without an invitation; you must walk slowly without gazing, and observe deliberately, but you must only observe the patient and the symptoms of his disease; and you must not predict the period of a fatal disease. You must not vaunt your own knowledge, for, although the learned may be pleased, the ignorant will be angry at the exhibition of learning in such a situation. After visiting the sick, should the disease be complicated, you must detail the symptoms, and consult other physicians as to their nature and treatment."

"The student," says the guru, "must know the theoretical as well as the practical part of medicine, for he who knows the power, and is unskilled in the performance of operations, on approaching a patient is like a timid soldier going to battle; and the person well versed in operations who presumptuously neglects the theory does not deserve the esteem of good men. Each is only half instructed, and are equally incapable of exercising the profession properly, is inefficient, and resembles a bird with one wing.

"As the Shastres contain the precepts of numerous prophets and great physicians, with their descriptions of diseases reduced to a proper order, you must study them with care, by which the stupid and illiterate pupil will be instructed in his duties, and the intelligent and industrious, in the manner in which his knowledge is to be improved and extended."

Such, young gentlemen, were the instructions given by the ancient Hindoos, whom we term heathen, and divested of some of their mystic mummery, we see the doctrines of truth and the origin of modern ethics—I might say the ancient expression of a sentiment that has pervaded the minds of medical men for countless centuries.

Probably subsequent to the early medical records of the Hindoos we find those of the Egyptians and the Semitic races, but some medical historians claim for the Egyptians the origin of medical training, but all agree that India alone may dispute claim to precedence with Egypt. The Greeks, as we shall presently see, derive the origin of medicine from the gods, but the idea was evidently borrowed from the Egyptians, who traced the art to the goddess Isis, to whose anger they attributed all diseases, and who alone could give power to medicines to act. The Greeks also borrowed this conceit from the Egyptians in the assigning of certain diseases to the anger of Proserpine, the goddess of the infernal regions. Osiris, the husband of Isis, was the father of Orus, whom the later Greeks probably identified with their Apollo, the child of the sun.

Medicine in Egypt was taught in the temples of Isis at Memphis and Busiris. Egypt also had its Æsculapius in the person of one of the kings of Memphis, who was named Tosorthros, from the words Tuse-Tho, signifying "physician of the world."

The early Egyptian teachings being secret, the student forbidden to impart any of his new acquired knowledge, except in the manner in which he received it, it is not astonishing that few of their opinions have survived as their own. It is only the fading glamour of their mysteries, taught in cypher, that remain. Tangible indications of their knowledge of chemistry and surgical handicraft may be seen in the mummies, thousands of years old, in the Smithsonian Institution.

No modern surgeon can even imitate bandaging as practised by the Egyptian embalmers. There is no doubt, however, of the great medical knowledge of the ancient Egyptians, for it was manifested in their longevity, the direct result of the faithful application of hygienic principles. The ancient Greek historians mention the remarkably healthful appearance of the Egyptians. Isocrates wrote of the old age to which they attained, which Herodotus attributed to the equability of their climate. We ourselves may see some evidence of their healthfulness in the rarity of caries in the teeth of mummies.

As for surgery, this branch is known to have attained great perfection among them. Among the comparatively modern Egyptians, the famous school of Alexandria has furnished many examples of genius. The famous anatomist and surgeon, Hierophilus, whose name you find perpetuated in that of the junction of the sinuses of the brain, was one of its professors. Erasistratus, not less celebrated, and the teachings of Rhazes, Aboukasis, Avicenna, Mesuch, Averroes, the Arabians, are directly in line from this ancient school.

The state of medical science among the Hebrews may also be claimed to fairly represent that of contemporaneous Egypt. The habits, manners, and customs of the two peoples were nearly identical, with the single exception, perhaps, of the theology. The voyages of Abraham and his children, the long residence of 400 years of the children of Israel in Egypt, and the fact that Moses was trained as an Egyptian prince, give ample reason for the belief that the famous sanitary code of Moses was simply an Hebraic version of public hygiene as understood in Egypt. Further corroborative evidence of this is seen in the fact of the art of magic being associated with the Mosaic history, magic being taught in Egypt in conjunction

with medicine, the transmutation of the rod of Aaron being the most conspicuous example of the Hebrew knowledge of the art. Let us now turn to the study of the history of the art of medicine among the Greeks, for it is from Grecian medicine that we claim direct descent.

The custom among medical historians, for convenience sake, is to divide the history into periods according to the general epochs of the history of the world. The division of Sprengel I shall follow as, on the whole, the most satisfactory.

General History.	Period of Time.	Medical History.
1. Expedition of the Argonauts.	1273 to 1263 B. C.	1. First traces of Medicine among the Greeks.
2. The Peloponesian war.	432 to 404 B. C.	2. Hippocratic Era.
3. The Christian Era.....	....	3. Methodist School.
4. Emigration of the Barbarians.	A. D. 430 to 530.	4. Decadence of Science.
5. Crusades	A. D. 1096 to 1230.	5. Arabic Medicine Predominant.
6. Reform of Martin Luther.	A. D. 1517 to 1530.	6. Re-establishment of Greek medicine and anatomy.
7. The Thirty Years' War.	A. D. 1618 to 1648.	7. Discovery of circulation.
8. Reign of Frederick the Great.	A. D. 1740 to 1786.	8. Haller.

I shall take but little time in speaking of the first epoch, for the sweet visions of the golden fleece, the staunch craft the Argo, the voyage of Jason, the perils, trials, and pleasures of the Argonauts, and the famed shores of Colchis are rather themes for the flowing imagery of poetry than the trenchant pen of history. But it is to this mythical romantic period that we are indebted for the medical mythology of the Greeks, the story of Æsculapius, and of Chiron the centaur. Medicine, as portrayed in the Homeric poems, did not, as in Egypt and India, become a subordinate part of religious teaching, nor were the physicians priests. It is clear, however, that the science was even then far from being in its infancy. Homer, however, refers to Æsculapius as a Thessalian king, and his worship as a divinity belongs to a later date. When the temples began to

be erected to Æsculapius, they were, in fact, hospitals, to which the sick were brought, who, after prayer and sacrifice, were made to sleep on the "hide of the sacrificed animal or at the feet of the statue of the god, while sacred rites were performed; while asleep the appropriate remedy was indicated by a dream." (Payne.) It is said that the custom of recording cases arose from the custom of inscribing on the walls of the temple the record of the cures, and thus the clinical experience was made available. But there were no distinctively medical writers before Hippocrates. That there were many physicians is evident from Thucydides' account of the plague which raged at Athens during a part of the Peloponesian war; and this brings us down to the second epoch. Pythagoras, although a teacher of medicine as well as philosophy, left no written statement of his medical views; but, as Pythagoras had traveled much in Egypt and the East before founding his school, it is doubtless true that his knowledge of medicine was acquired in those countries, and the same system. His bent toward mathematics, however, influenced him, and we see the same tendency in the Hippocratic doctrine of crises. But this was the golden age of Greece, when philosophy and literature freed themselves from the trammels of superstition.

Hippocrates had for his contemporaries the orator and statesman Pericles; the poets, Æschylus, Sophocles, Euripides, Aristophanes, and Pindar; the philosopher, Socrates, and his distinguished disciples, Plato and Xenophon; the venerable father of history, Herodotus, and his young rival, Thucydides; the unrivaled statuary, Phidias, with his illustrious pupils, and many other distinguished names which have conferred immortal honor on the age in which they lived.—*Adams.*

Whether or not the ancients were correct in tracing the descent of Hippocrates from Æsculapius, it is at least certain that this great man was the son of one of the temple priests, and that his early training was at the bedside of the sick brought to the temple on the Island of Cos. We may well pass in silence the vile slander that Hippocrates destroyed all the records of his predecessors, in order that his own works might shine more brightly to posterity; for surely no one whose transmitted thoughts were so pure could have committed so unworthy an act. Hippocrates held that to be an eminent

physician it was necessary to be not only an anatomist, but also to be skilled in logic, astronomy, and the other sciences, and he practiced the art of inductive reasoning to its fullest extent in making diagnoses. He was, therefore, the father of rational medicine. The ideas inculcated by the master remain to-day in many things unchanged by the hand of time, and one of the strongest evidences of his power and keen observation is the fact that for centuries after his death the ablest medical writers were obliged to content themselves with writing commentaries on the works of Hippocrates. Not only is medicine indebted to him, but general literature as well. Nobody expressed better than he the sentiment that "life is short, and the art long; the occasion fleeting; experience fallacious, and judgment difficult;" or that celebrated description of the appearance of a dying patient: "a sharp nose; hollow eyes; collapsed temples; the ears cold, contracted, and their lobes turned out; the skin about the forehead becoming rough, distended, and parched; the color of the whole face being green, black, livid, or lead-colored." This passage, it has been surmised (Adams), must have suggested to Shakespeare the description of the way Falstaff's death was foretold: "For after I saw him fumble with the sheets, and play with the flowers, and smile upon his fingers' ends, I knew there was but one way; for his nose was as sharp as a pen, and he babbled of green fields." But the greatest debt to Hippocrates owed by physicians is the high conception of the character of the profession. The "oath" inculcated the highest character, the furthest remove from mercenary motives and from superstition. Hippocrates recognized that the processes of disease were governed by laws as definite as those of health, and that by observation those laws could be applied so as to form a judgment of the manner of termination of any case. Not only did this remarkable man show a deeply ingrained knowledge of pathological laws, but he also possesses surgical handicraft and inventive genius. The identical pattern of the trephine used by Hippocrates more than 2,000 years ago you will find in your instrument cases to day. He tapped the chest for pneumo-thorax, and laid down useful rules for the management of fractures and dislocations. His theories were, of course, largely based upon the state of the collateral branches of science of his

time, and there is much in them that has long since been completely disproved, but as a practical physician his teachings were skilful, wise, and conscientious. He placed as much, or more reliance, upon diet than upon medicine, and the book on "Regimen in Acute Diseases" is well worthy of a careful reading. After Hippocrates, a full century elapsed before any discovery was announced, or any essential variation in the principles laid down by the master. As is frequently the case, however, as time went on, while the least valuable of Hippocrates's work were exalted, his theories, the really valuable part, the practical, became entirely neglected. The celebrated anatomist, Herophilus, was the next eminent physician. He had been a pupil of the Hippocrates school at Cos, and was deeply imbued with the doctrines of Hippocrates. He became attached to the school at Alexandria, and was the greatest anatomist of his time. The story would be entirely incomplete if he had no rival, and it is here no exception to the rule. The rival school at Alexandria was that of Erasistratus, only a portion of whose work remains. He also greatly distinguished himself by his discoveries in anatomy and the theory of inflammation. He decried Hippocrates as vehemently as Herophilus eulogized him, and naturally the Alexandrian pupils left the schools as far apart in their opinions as their masters. It was doubtless the opposition of Erasistratus that laid the foundation for the establishment of the empiric school. This school subsequently became the most famous in Alexandria, and professed to believe nothing that was not based upon experience. They rejected anatomy, and had confidence only in drugs. They claimed that experience had three sources—observation, history, and judgment by analogy. It is due to this school that the practical knowledge in the Hippocratic writing was once more brought out. In practical matters, being entirely freed from the cramping theories of the times, they were very successful as compared with the rationalists. The fact is that the latter very largely reasoned from a false premise, the facts from which to draw were few and far apart. Could the Alexandrian anatomists have foreseen some of the physiological truths lying metaphorically at the point of their scalpels, they could not have been supplanted by the empirics.

When Greece became a part of the Roman empire, many of her scholars and artisans came to Rome, established themselves, and flourished, greatly to the disgust of the Roman "know-nothings" of the period. Among the earliest of the physicians was young Asclepiades, who was not only a physician, but an orator as well. He was a friend of Cicero, and introduced a new medical creed, based upon the Epicurean philosophy. His doctrine was that of the "atoms"—that is, that all diseases depended simply upon the arrangement and displacement of the atoms of which the body was composed. Asclepiades introduced the gymnasium as a means of overcoming diseases by athletic training, diet, cold bathing, and friction. One of his later pupils, Themison, elaborated the doctrines of Asclepiades, and founded the school known as the Methodist. This singular sect cared nothing for the cause of diseases, or to know the particular organ affected. They were satisfied to ascertain in a given case the general condition of the system. The system, according to them, was either relaxed, contracted, or in a state midway between relaxation and contraction. The state of the excretions was for them the measure. They united with the empirics in despising anatomy, and one of the most ignorant of this sect made himself conspicuous by disagreeing with the aphorism of Hippocrates that "Art is long"—and agreeing to teach this whole science of medicine in six months. The only great man the Methodists may be said to have produced is Soranus, who wrote the famous treatise on diseases of women, which is still extant. This Soranus used the speculum for the perfection of his diagnosis.

The quarrels and rivalries of these sects in opposition to the orthodox faith brought up a new sect, who called themselves eclectics, who assumed to seize all those doctrines of the warring schools that were good, and out of the combination make a sect that would stand the test of time, but nothing worthy of note was evolved from this movement. The only Roman medical writer of note of the first century, with the single exception of Galen, was A. Cornelius Celsus, whose easy, graceful, polished Latin, and general accuracy have caused him to be widely quoted and generally praised. He seems to have been rather a medical writer than a practicing physician; more

of a commentator than an originator, but his descriptive powers are unrivaled and his elegance of diction unsurpassed. Galen, who was thirty years his junior, was as much of an original investigator as he was a historian and commentator. Galen followed Celsus in bringing about a revival of the Hippocratic methods. The study of anatomy was with him a passion, and the functions of the organs began to be investigated, and the foundation of the science of physiology was laid. His mind, however, was full of subtile theories, and he unfortunately was able to bring them forward with such skill, ingenuity and adroitness, that they remained for a long period as stumbling blocks to advancement, but the world's indebtedness to Galen can scarcely be measured when we remember the chaotic state of medical science at the period of Celsus and Galen. Galen's forceful style impressed his pupils that with solid anatomical and physiological facts as the premises, the conclusions must be drawn by inductive reasoning, and that this process must be applied to all problems of disease, as well as therapeutics. With Galen, Roman medicine practically died; he had no immediate successors worthy of note, Aurelius being the only prominent Roman writer whose works had survived. He was, however, thoroughly saturated with the Methodist heresy. The history of the world shows that when any particular place was pre-eminent for its learning, its academies, and its progress in the arts, there also was to be found the dominant medical school of the age, and after the founding of the Byzantine literary and historical schools, the one on medicine became famous. It was here that Paulus Ægineta wrote his wonderful compilation of the writings of his predecessors, his commentaries, and his work on obstetrics. He also wrote a work on surgery, which was translated into Arabic, and on which the Arabian surgery was founded. They in turn, when they overran Europe, left their knowledge to mediæval surgeons. The medical literature of the Byzantine school had little to recommend it to posterity, and, with the exception of Paulus, was notably barren. Oribasius is frequently quoted as belonging to the Byzantine school, but he was a Greek, educated at Alexandria, wrote many of his books there, and had already an established reputation when he came to Byzantium. Paulus, who was

educated at Byzantium, quotes him approvingly. The fourth epoch, as is implied in the fable, was the period of decadence in Europe of learning in all sciences, and medicine was no exception to the rule. It was during this period Arabian medicine attained its greatest vigor, for as the Mohammedan conquests became consolidated, medical schools arose at their chief capitals. Damascus and Bagdad once more became prominent. Rhazes, the Arabian, was distinguished as the most voluminous writer of the age. Hali Abbas, a Persian who followed Rhazes, wrote the "Royal Book," which was the guide of the Arabians for a long period. Albukasis wrote an encyclopædia of which the original portion is highly valued. It was written at Cordova during the Mohammedan occupation of Spain, and was translated into Latin. The Hispano Arabians were prolific in medical encyclopædias. Avicenna has always been looked upon as the greatest of the Arabian writers (Payne), but there are no discoveries of note attributed to him. Avenzoar, Averroes, and Rabbi Maimoindes were also great compilers, indeed it nowhere appears that the Arabians did more than preserve Greek and Alexandrian medicine. We are indebted to them for the description of smallpox and measles.

It was in the fifth epoch, or the period of the crusades, that Arabian medicine began to be widely translated and circulated throughout Europe, but Hippocratic, or rational medicine, began to gain ground through the influence of the Benedictine monks. They established schools in the kingdom of Naples—one at Monte Casino and the other at Salernum. Of these schools that at Salernum became the most famous. Its salubrious situation on the shores of the Mediterranean, surrounded by a forest, extending down to the foot of the mountains, made it an attractive resort for invalids at an early period. Adalberon, the archbishop of Verona, visited the place in 984. At that time a great portion of the cures was supposed to be due to the relics of St. Matthew, which had been carried there in 954, and he was the patron saint of the school. Other relics were carried there at different times. In the tenth century the monks of Salernum studied the medicine of the Greeks and Arabians, made translations, and by this means brought themselves far

in advance of their contemporaries. At the time of the crusades the school of Salernum had become the first school of medicine in the west. The state of learning of this school is well shown in the famous "Flos Medicinæ." This celebrated poem, in leonine verse, was written at the request of Count Robert of Normandy, the son of William the Conqueror, who, on his return from the crusades, went to Salernum to be cured of his wound. This book was a code of health to guide him when he should leave. It was called "The Flower of Medicine," and has passed through more editions than any book on medicine, with the single exception of translations of and commentaries on Hippocrates. The works published by the school of Salernum were of much practical utility, although the age was one of poly-pharmacy; this school, in true Hippocratic spirit, paid more attention to diet than to drugs. They insisted on the cultivation of anatomy, "without a knowledge of which one was not able to practice surgical operations, nor treat a wound or an ulcer." Galen was the infallible oracle in this branch of medicine, and was naturally the text book. After the beginning of the decline of the school of Salernum, its rival, Montpellier, revived and flourished, and Bologna and Padua became prominent. As in the centuries immediately preceding, little of the originality was developed, and although the medical literature is voluminous, it mainly consists of compilations. From about 1290, when John Gaddesden wrote his "*Rosa Anglica*," down to about 1450, surgery progressed more than other branches of medicine. The names of William of Saliceto, Lanfranchi of Milan, Guy de Chauliac, are of this period. This period was also distinguished by its publications of case reports in the fourteenth century.

At the revival of learning many learned men devoted themselves to the study of the ancient medical classics, and as there was then a furor against everything Arabic, the Saracenic influence waned and Greek medicine gained the ascendency. There was in Germany one brake on the wheel of medical progress; the arch quack Paracelsus, who burnt the books of Avicenna and Galen and said his shoe-buckles were more learned than they. He did have some respect for Hippocrates, and wrote a commentary on his works. As Paracelsus was an example to

avoid, I shall not dwell on this topic, but he was largely instrumental in bringing up the influence of chemistry, so that he did some good after all. One cause of the advancement of medicine in this period was the rise and spread of many epidemic diseases apparently unknown to the ancients, and which the Galenical remedies were powerless to cure. The "sweating sickness," the "black death," and "dancing mania," are examples of these epidemics, of which you will find a full account in Hecker. One other reason for the great advancement of medicine at this period is found in the establishment of the hospitals that were made necessary by the contemporary wars. Padua led in establishing clinical instruction. It was in the seventeenth century that the Iatro-physical school was started in Naples by Borelli, and the Iatro-chemical school by Sylvius. The former held that all processes of the body were to be explained by mechanics, the bones and muscles were so many levers and pulleys, digestion was simply a trituration, while the latter held that all changes and acts were due to chemical forces, and that chemical disturbances of physiological processes constituted disease. The discovery of the circulation of the blood was the turning point in the study of physiology, and, in fact, the key that unlocked many human mysteries. Early in the eighteenth century its most industrious physiologist was born, the celebrated Haller. He graduated in medicine at Leyden in 1726, and after a three-years' travel in foreign countries, founded an anatomy school at Berne. It was there that he wrote the celebrated "Icones Anatomica" and some 12,000 reviews for a scientific journal at Gottingen. His was a prodigious activity, and he, by his labors, clearly established the right to be called the father of modern physiology.

And now we have glanced at the medical history from the earliest times down to the eighteenth century, and the hour has waned. It is your privilege to continue its study at the point where I have left it, for your text books will all contain references to the modern discoveries. The future is in your hands, and whether you will belong to the scholar class of physicians, or those who simply float on the current, depends on your employment of your time, and we, the faculty, hope in this that you may be guided aright, so that when you leave us you may

often feel the happiness of "discovering motion returning to the muscles of one apparently dead, thus experiencing the rapture of Pygmalion perceiving the marble becoming animated under the touch of his chisel." May you young gentlemen be not only successful in study, but seek to add to the general stock of human knowledge for the benefit of mankind.

THE MEDICAL VARIATIONS:

AN ADDRESS TO THE GRADUATING CLASS OF THE MEDICAL DEPARTMENT, GEORGETOWN UNIVERSITY, MAY 10, 1887,

By JOHN B. HAMILTON, M. D.

PROFESSOR OF SURGERY.

(*From the Medical Register*).

LADIES AND GENTLEMEN: In this beautiful springtime, while the sky is blue, and the air is laden with the perfume of fragrant blossoms, we meet to assist in the ceremony of ushering into the ranks of the medical profession these young gentlemen, who, as you see, bear their blushing honors with the characteristic grace of the neophyte, and the modesty of carefully trained youth.

In accordance with a custom more than a century old, we take advantage of the present occasion, while extending to them the hand of fellowship, to load them with good advice, and you shall see how like trained soldiers they submit to this last infliction without wincing to any apparent extent.

GENTLEMEN: By the application of the rules governing the medical faculty of this college, the duty of administering last advice upon this important occasion has fallen to my lot. I feel assured that you will agree with me that the time devoted to the history of our noble art is not lost, for a study in itself both interesting and instructive cannot fail to impress upon us lessons of permanent value. The introductory lecture was devoted to a brief summary of the history of rational medicine from the most ancient times down to the day of modern physiological research, and it has occurred to me that an appropriate corollary to the study of the topic glanced upon in that lecture would be an epitome of the *heresies* or, if we adopt the mildness of the famous Bishop Bossuét, we might term them, in-

stead of heresies, THE VARIATIONS. You must know that in every age of the world there have always existed sentiments of opposition to established truth, as well as to promulgated dogmas. Truth has not come down to us unmixed. There has always been that element of uncertainty in the conclusions of rational medicine, which is inherent to the condition of proceeding from a false premise. By the inductive reasoning adopted by learned men of all professions since the time of Aristotle, if the premise be true, the conclusion flowing therefrom must be equally true; but as poor humanity may not lawfully pick the lock to mysteries when the Almighty has vouchsafed no key, there are from necessity many false theories put afloat by reason of an assumed premise. Thus, what is called hypothesis is often urged with vehemence and sometimes with intolerance. True rationalism in the sciences demands that the premises shall be actual. To supply this demand for facts investigation and experiment have been carried on from the earliest times. This process is necessarily slow and tedious, as was set forth by the great master of rational medicine, Hippocrates, in the first aphorism, "Life is short and the art long; the occasion fleeting, experience fallacious, and judgment difficult."

Think how long a time in the world's history was covered before the full details of the circulation of the blood became common property, and how, by means of accident alone, a full knowledge of stomach digestion was given to the followers of rational medicine. It is a curious thought, but one abundantly verified by the facts, that each discovery increases the knowledge of the human frame by arithmetical progression, and, although the limits of human research now seem circumscribed, who will boldly say that all the subtile operations of the human body will not one day be fully known? As time progresses each age realizes that it is more wise than its predecessors; but while we glorify our own times, let us think with due humility on the future wisdom to us unknown, that will one day belong to you and your children's children. And it is in this spirit of thankfulness for the past and hope in the future that the devotees of rational medicine apply themselves to the problems of to-day, and welcome with enthusiasm the new aspirants for medical honors; and it is this spirit that

distinguishes legitimate medicine from charlatanry. The charlatan lives for himself; he affects to despise the labors of the past, although he daily makes use of their fruits. He arrogates to himself knowledge superior to every one of his time and especial superiority over his associates; but he takes care never to add anything to the general stock of medical information by divulging any of the great knowledge of which he alone is the possessor. He always makes it a point when called to a patient, suffering from a disease no matter how trifling, to convince that patient that the mere fact of his having been called early, has saved his life, you will find the community more or less full of these rescured creatures. These characteristics have belonged to the charlatan in all ages, so far as contemporary history has limned his portrait. There is one difference between the ancient and modern charlatan, and that is, that owing to the existing state of science, and the many morbid processes unknown generally, the ancient quack was frequently able to stumble on some physiological fact or especial line of treatment.

Asclepiades, who flourished in the first century of the Christian era, may be taken as a primal type of the charlatan. He treated the writings of the past with contempt; Hippocrates' system of medicine he nicknamed "a study of death." He rejected publicly the various classes of medicines that had come down to him from the past ages; but he handed down his name to posterity by applying the atomic theory then prevailing in physics to medicine, and he founded a medical school. Astrology, theosophy, and uranoscopy were other variations, and is it not a little curious that we still see advertisements announcing that such and such a person casts nativities, and treats cases by the aid of the stars?

When uranoscopy was finally overthrown by the increase of knowledge, it was deemed necessary to come somewhere near the human body in ascertaining its condition. And so we see that as knowledge increases these variations die out, so far as their popularity is concerned, and when they continue to exist it is only in a surreptitious way. During the reign of Justinian indignities were everywhere heaped upon the followers of rational medicine; the medical school at Athens was destroyed,

and throughout the Roman empire legitimate medicine and the study of anatomy was suppressed so far as official orders could do it. Laying-on-of-hands, charms, relics, and superstitions of all sorts, incantations and the like, were the means resorted to for the cure of disease and the prevention of epidemics. It was then that the Arabian schools sprung up through the influence of the Nestorians, and legitimate medicine was transferred to the Arabs. It was the age of intolerance; the slightest differences between Christians gave rise to internecine feuds and bloody wars. And when Rome was overrun by the barbarians, nearly every vestige of medical learning based upon anatomy was extinguished in Europe.

The ecclesiastics then took up the study in secret, but nearly a thousand years elapsed before the truths of medical science were again brought forward. The general ignorance of the people through the suppression of letters was of course the real cause.

The arch quack Paracelsus did the world some service by reviving interest in chemistry and overthrowing alchemy. His general style has seldom been improved upon even by the most modern quacks, with all the aid that this age of letters can give them. His real name was Hohenheim, and he was born in Zurich; but as soon as he had imbibed a smattering of the effect of chemicals on the human body he imagined himself the wisest of mankind and gave himself the name, by which he has since been known, of Paracelsus, or if you care to remember his full pseudonyme, it was Phillipus Aureolus Theophrastus Bombastus Paracelsus! He was a drunken scoundrel; but then, as now, there were hundreds of men who viewed this habit as an undoubted evidence of genius of the highest order. He claimed that reading never made a physician; that "countries are the leaves upon which Nature's laws are written, and patients are my only books." It should be remembered, to the credit of Paracelsus, that at that time the general habit of the medicasters of the day was to put a very little medical truth in a vast deal of astrology and so-called climatology, by which each hour was assigned a particular force on each organ of the body, according to the decision of the horoscope. Among the Chinese at this period, and perhaps long previously, this

belief was universal. The sign most important to observe was the position of the moon. When that romantic satellite was found in the sign of Cancer, then was the proper time to give medicines with the greatest effect, and her conjunction with Saturn absolutely forbade the use of medicines, by rendering them nugatory—especially purgatives. Theosophy, with its mind cures, and the mystic rites of the Rosicrucians, seem almost to reach the extreme limit of absurdity. This singular sect was instituted by Father Rosenkreutz, in Germany, early in the fourteenth century. The exact date is unknown, and although their existence was known at the time, they seem to have well preserved their secrets. They became almost extinct until the year 1615, when the society was revived, and, printing being general, their secrets were no longer kept. The neophytes swore fidelity, promised absolute secresy, and wrote in hieroglyphics. The sect believed that the secret philosophy of the Egyptians, the Magi of Persia, gymnosophists and Brahmins of India, and all ancient oriental medical lore was embodied in their teaching. They also claimed, in imitation of the Masonic fraternity, that much of their information was handed down by King Solomon to King Hiram at the construction of the Temple. It is probable that many golden grains of truth were contained in the doctrines of Orientalism, but these were in great part the sheerest nonsense. It is in Japan and China to-day that we find present the actual teachings of those Mongolian ancients, and the following is a sample of the Mongolian therapeutics. Bakin, the Japanese novelist, tells us that in the *Re-shun Rojin* is found the following prescription: "When any one is struck by thunder, make him lie upon his back, and place a live carp on his bosom; if the carp jumps and moves, the patient will recover and the carp die. This is infallible."

Sir Kenelm Digby, who flourished in the seventeenth century, gives a prescription for the cure of fever and ague, which is so nearly of this kind as to warrant the supposition that he was either a Rosicrucian himself, or at least borrowed their doctrines. Here is the prescription: "Pare the patient's nails, put the parings in a little bag, and hang the bag around the neck of a live eel, and place him in a tub of water. The

eel will die and the patient recover." Sir Kenelm also gives us a recipe for making a sympathetic powder for the infallible cure of wounds. This association of the direct or indirect contact of animals with a patient for the cure of disease or wounds still exists. You will find hundreds believing in things as absurd. One of the most common delusions of this sort prevails in certain regions of America where venomous snakes are common. It is thought that the application of a freshly killed chicken to a snake-bite is a certain cure, and many an unlucky pullet, that otherwise would have graced the larder, has been sacrificed to this folly. The horse-chestnut or potato worn in the pocket to keep off rheumatism, the "liver pad," "magnetic" or "electric" belt, and the sugar-of-milk globule box are tangible evidences that the follies and superstitions of mankind still survive, but little changed by the light of learning. It is one of the duties of the medical profession to set their faces against these superstitions, and publicly denounce them.

It is somewhat singular that the art of war—the science of destroying mankind—has been preservative of legitimate medicine. Each commander, while anxious to destroy his enemy, is quite as anxious to preserve the vigor of his own force; consequently, we find that armies have early made effort to eliminate the charlatans from their medical staff. That good old surgeon, Thomas Gale, who flourished in the sixteenth century, has left us a graphic picture of the military surgeons attached to the English army in the time of Henry the Eighth. "I remember," he wrote, "when I was in the wars at Muttrel, in the time of that most famous prince, King Henry the Eighth, there was a great rabblement there that took upon them to be surgeons, some were sow gelders with tinkers and cobblers. This noble sect did such great cures that they got themselves a perpetual name, for, like as Thessalus' sect were called Thessalians, so was this rabblement for their notorious cures called dogleeches. For, in two dressings, they did commonly make their cures whole and sound forever, so that they neither felt heat, nor cold, nor no manner of pain after. But when the Duke of Norfolk, who was then the general, understood how the people did die, and that of small wounds, he

sent for me and certain other surgeons, commanding us to make search how these men came to their death: whether it were by the grievousness of their wounds, or by the lack of knowledge of their surgeons. And we, according to our commandment, made search through all the camp, and found many of the same good fellows which took upon them the name of surgeons. Not only the names, but the wages also. We, asking of them whether they were surgeons or no, they said they were. We demanded with whom they were brought up, and they, with shameless face, would answer, either with one cunning man or another who was dead. Then we demanded of them what chirurgery stuff they had to cure men withal; and they would show us a pot or a box, which they had in a budget, wherein was such trumpery as they did use to grease horses' heels, and laid upon scabbed horses' backs; and others that were tinkers and cobblers; they used shoemaker's wax, with the rust of old pans, and made therewithal a noble salve, as they did term it. But, in the end, this worthy rabblement was committed to the Marshalsea, and threatened by the duke's grace to be hanged for their worthy deeds, except they would declare the truth what they were, and of what occupation; and in the end they did confess, as I have declared to you before." This is the record of the first medical examining board of which there is account, and the army was well rid of its charlatans. But that the general public also suffered much at this period is evident from Burton, who writes that there are "in every village so many mountebanks, empirics, quacksalvers, Paracelcians, as they called themselves (*caucifici et sanicidæ*, so Clenard terms them), wizards, alchemists, poor vicars, cast apothecaries, physicians' men, barbers, and good wives professing great skill, that I make great doubt how they shall be maintained, or who shall be their patients. Besides, there are so many of both sorts, and some of them such harpies—so covetous, so clamorous, so impudent; and as he said, such litigious idiots, that they cannot well tell how to live one by another; but as he jested in the Comedy of Clocks, they were so many (*Major pars populi arida reptant fame*) they are almost starved, and ready to devour their fellows (*et noxia calliditate se corripere*); such a multitude of pettifoggers and empirics, such imposters,

that an honest man knows not in what sort to compose and behave himself in their society, to carry himself with credit in so vile a rout."

The pages of history glow with accounts of the exploits of particular charlatans, but singularly enough, although a large proportion of the human family seem to love dearly to be humbugged, they seldom like to mention it after they have experienced the consequences of their folly. One of the most noted quacks of the last century was a certain Dr. Graham, who was a graduate of Edinburgh, and settled in London in 1782. Practice opened very slowly for the doctor, and he established himself in a Pall Mall mansion, which he named the "Temple of Health!" He covered the front of the building with emblems of Hygeia and an enormous gilt sun. The interior rooms were superbly furnished; the walls were covered with mirrors; there were candelabra with gilded and tinsel mountings; birds sang in unexpected corners; rare plants lent their fragrance to the air; and the enchanted palaces of the East were sought to be reproduced. Here this interesting person delivered lectures on health and procreation at the rather extravagant price of two guineas each. This price, together with the novelty of his subject "and the elegance of his apartments," drew together large audiences of the wealthy and dissipated class. "He entertained a female of beautiful figure, whom he called the goddess of health, and it was her business to deliver a concluding discourse. As a further means of attraction, Dr. Graham hired two giants, provided with enormous cocked hats and with showy and bulky liveries, whose business it was to distribute bills from house to house. But his two-guinea auditors became exhausted and he dropped the price of his lectures to one guinea, one-half guinea, five shillings, and finally, for the benefit of all, to half a crown, and when this failed he exhibited the "temple" itself. This talented individual also discovered an elixir of life, whereby a person taking might live as long as he pleased, and he demanded £1,000 for the supply of it, and more than one nobleman paid the price. These barefaced swindles after a time became known, and he had resort to earth or mud bathing. As before he commenced his exhibitions at a guinea, and finally descended to a shilling. Both he

and the "goddess" allowed themselves to be exhibited while immersed in earth to the chin; their hair was powdered and dressed in the best fashion of the times. In conclusion, our veracious chronicler states that the doctor lost his money, and "died at the early age of fifty-two, despite his elixir of life."*

A faithful record of the comings and goings of this class of mountebanks, even in our day and in American cities, would prove to be very amusing reading.

But let us return to the variations proper—passing the so-called "eclectic conciliators," founded by Sennertus and the "mathematical school" of Borelli—let us consider a curious delusion that at one time prevailed in the United States and extended to Europe. This delusion was Perkinsism. It took its name from a Dr. Perkins, of Connecticut, who found the practice of medicine but dull work, and therefore abandoned it. He began to raise mules for the East Indian market, but the demand fell off and he retired from that business also. While in retirement he invented the metallic tractors.† One of these tractors (which were made something like the electrodes of an ordinary galvanic battery) was made of brass and the other of iron, and they were used by drawing the ends of the tractors in parallel lines over the surface of the body. The late Dr. Frank H. Hamilton, of New York, had a pair of these tractors presented him by a member of the Perkins family, but the good lady confessed at the time that the virtue had gone out of them. Perkins published notices of his tractors, which sold at $20 per pair, and his dupes exceeded his most sanguine expectations. Hundreds purchased them and sounded their praises; the clergy were furnished tractors gratis, and gave certificates. America and the State of Connecticut proved too contracted to contain this man of genius, who exhibited his tractors in Copenhagen, and then opened a hospital in London. In the latter city his pecuniary success was immediate, but being severely criticised by the profession, he employed Peter G. Fessenden, of Vermont, to write an attack on his critics. This poem, entitled "Terrible Tractoration," is a severe satire on the London

**Professional Anecdotes, or Ana of Medical Literature.* London, 1825.

†F. H. Hamilton, *Conversations on Medical Ethics*, New York, 1884.

profession, and was an exceedingly witty production. He was finally exposed by Dr. Hogarth, of Bristol, and was obliged to leave London. Shortly after his return to America he died of yellow fever. In the meantime there had sprung up in America a new variation known as Thompsonianism. This was the invention of an impecunious, uneducated, but probably honest, citizen of Western New York, named Samuel Thompson. He claimed to originate the "theory" of the elements of man, that he was composed of four elements, earth, air, fire, and water, and that disease was "animal heat confined." He published a work on medicine, and his followers were found everywhere. His book abounds in curiosities; for instance, his opening remark on the subject of carbuncles is unique: "The carbuncle is a large bile," and of furuncles he says, "The bile is a distressing visitor." Thompson secured a patent on his "system," and his followers paid for the right to use it in their own families. We have had one other set of indigenous pretenders, some of whom still live. But America was now tired of home quacks; it sighed for the genuine imported article; as the supply is always in proportion to the demand, homœopathy, hydropathy, mesmerism, clairvoyance, and phrenology came in a single cargo.*

Samuel Hahnemann was born at Miessen, near Dresden, in 1755. His father was a china painter, but young Hahnemann preferred letters, and began the study of medicine at Leipsic, and finally was graduated in Vienna in 1784. Hahnemann became the founder of a sect whom he named homœopathists, a sect which, while at present somewhat numerous in America, has almost died out in Europe. Hahnemann claimed for his "system" that it required the administration of a single remedy at a time, and in infinitesimal doses. He set forth as the prominent dogma of his sect, the alleged law *similia similibus curantur;* namely, the paradox that diseases are cured by medicines which produce upon the human body symptoms resembling those of the disease. It is said that his views on this subject were produced by his having taken quinine to cure an ague, and, finding himself afterward with a chill and fever, he assumed that the quinine caused it.

* F. H. Hamilton, *loc. cit.*

It is now believed that quinine simply acts as a poison to the minute organism producing the disease. Hahnemann was fortunate in choosing a spirituelle theory of attenuation, for the hypothesis of similars has long since gone. The Hahnemannists are now divided into about three classes: 1. Pure "homœopathists," who believe that the "law" of similars is the only therapeutic law, and that high dilutions and triturations, which have been properly dynamized, constitute the only medicines proper to be used. 2. Those who believe the law of similars the only law, but use either high or low dilutions. 3. Those who believe that the law of similars is not universal, although a law, and consequently use high and low dilutions, and occasionally doses of the crude drugs.* To which might be added that large and growing class that make use of concentrated remedies in the same doses as that laid down by the regular faculty. These concentrations are now put up in such form as to be indistinguishable from the true Hahnemannic pellet. As our time is growing short, I will not take up your time by considering in detail these different tenets; but before dropping the subject, let us pass to the question of attenuation. This is the true Hahnemann gospel. It is, in brief, that the more a medicine is diluted the more powerful it becomes. That medicines have a peculiar "dynamic" property imparted to them by the process of dilution, agitation, and trituration. This theory is the outcome of the necessity for explaining the alleged potencies. It is altogether spiritual and immaterial, and I am bound to say that I have usually found those persons entertaining the religious views known as spiritualism were Hahnemannists. Homœopathy seems now bound to succumb in its turn to that other heresy, mind-curing.

And here we will take our leave of this subject which, owing to the limitations of time allotted to this address, has necessarily been merely glanced at, and, in closing, urge upon you to be always true, to obey the code of ethics, which teaches the golden rule to do unto others as you would have them do unto you; to love your country, and respect the law. And, finally, do not let anybody apply to you the term "allopathist," which was in-

* *Medical Heresies.* By Dr. G. C. Smythe, Philadelphia, 1880.

vented by Hahnemann to plague the regular faculty. And now, gentlemen, your collegiate course is completed, and the faculty look with pleasure upon the record you leave of your student life, and, although our relations as teacher and pupil are thus pleasantly ended, we can but linger over the farewell.

FINIS.