

Andrew Jackson Howe, A. B., M. D.

By

Harvey Wickes Felter, M. D.

Editor of

The Eclectic Medical Gleaner,

A

Serial Publication of

The Lloyd Library,

Cincinnati, Ohio.



DR. ANDREW JACKSON HOWE.

At 65

Andrew Jackson Howe, A. B., M. D.

Andrew Jackson Howe was born in Paxton, Massachusetts, April fourteenth, eighteen hundred and twenty-five. He died in Cincinnati, Ohio, January 16, 1892. Himself distinguished, he came of a conspicuous ancestral line, honored in early American annals. His parents were Samuel H. Howe and Elizabeth Hubbard (Moore) Howe. With the earliest history of the towns of Watertown, Sudbury, and Marlboro is linked the name of Howe. According to a writer in the *Worcester Magazine*, one of the earliest printed records of New England, and quoted by Professor John Uri Lloyd in a sketch of Dr. Howe, is the tradition that "John Howe, of Watertown, came from the parish of Hodnel, in Warwickshire, England, and that he was connected with the family of Sir Charles Howe, of Lancaster, in the reign of Charles I." The John Howe referred to subsequently lived in Sudbury, and his name appears in the petition for the grant of Marlboro in 1657. Thus Dr. Howe's paternal ancestor was prominent in the settling of New England within forty years after the memorable landing of the *Mayflower*. Watertown was near Boston, and from there many, striking out to found other towns in the wilderness fringe of our eastern seaboard, became the pioneers of statecraft from whence our great nation has evolved. To the privations and toils of the home-builders on the rugged and inclement shores of Nova Angliæ do we owe the building of our great commonwealth, and Dr. Howe was fortunate indeed to have descended from one who was an active participant in the evolution of this great gift to posterity. In 1743, a grandson of this same John Howe bought a tract of land farther inland and built a home in which Andrew J. Howe was born, and in the bosom of the sacred soil of this purchase all that is mortal of the great surgeon now reposes. Not only is the name of John Howe's line treasured in the early history of New England, but it has found an abiding place in the classics of American literature, for the poet Longfellow, in his delightful "Tales of a Wayside Inn," has immortalized the famed colonial hostelry—the "Red Cross Inn," kept by another grandson of John Howe of Marlboro. The poetic record reads:

"Proud was he of his name and race,
Of old Sir William and Sir Hugh,
And in the parlor, full in view,
His coat of arms, well framed and glazed,
Upon the wall in colors blazed;

Upon a helmet barred; below
The scroll reads, "By the name of Howe,"
And over this, no longer bright,
Though glimmering with a latent light,
"Was hung the sword his grandsire bore,
In the rebellious days of yore,
Down there at Concord in the fight."

IN PREPARATION.—The boyhood life of the subject of our sketch was much like that of the average country boy favored by the diversified environment of hill and valley, forest and stream, and the quaint old roads and by-paths of the New England country. Born with an unbounded love for nature, his naturalist spirit fairly revelled in the beauties of landscape and sky, the advantages for observation, and in the sports of the season—sports ancient and more satisfying, perhaps, in the older settlements than can ever come into our faster and more artificial life of to-day. To young Howe were known the haunts and habits of the birds, fishes, and fur-bearing creatures, and so well did he observe them that in height of his career as a teacher and surgeon he recalled these most useful and vivid assets, and they went far toward making of him one of the most gifted comparative anatomists of his time.

While yet a small boy. Dr. Howe's father removed from the farm at Paxton to the neighboring village of Leicester. Here the preliminary schooling was obtained, under several different instructors, in the district schools. The earlier education was also largely and wisely directed by his mother, "a woman of remarkable energy and decision of character, and of an affectionate disposition." She came of a people of worth and standing from ancestors living about Worcester, the neighboring city to Leicester. The teachings and guidance of his mother Dr. Howe was wont to refer to as among the chief blessings of his early life. The youthful Howe was not inclined to idleness. He worked on the farm and at other work that he could obtain during vacations, and at all odd times could be found upon the fox trails and trout streams for miles around. While such pastimes absorbed his soul and formed the basis of a sound knowledge of things, his ruling passion was his love for books. One who had known him in his youth wrote him in the last years of the doctor's life, "I soon found you were not suited with the interests of ordinary village life—that books and study were your needs."

Perhaps it was through the influence of this discerning friend that



DR. ANDREW JACKSON HOWE
In the 80's



ANDREW JACKSON HOWE
Before graduation at
Harvard.



ANDREW JACKSON HOWE
When he graduated from
Harvard College in 1852

Howe went into an office in Worcester to study medicine with the celebrated Dr. Calvin Newton as preceptor; he remained a good part of a year struggling with medical terminology, and attending lectures at the Worcester Medical Institution. While thus engaged he gave especially close attention to anatomy, and worked assiduously with the Demonstrator of Anatomy. He soon became convinced, however, that something was lacking. He recognized it as want of preparation to pursue this study properly. Therefore he made it his business to acquire a more complete and general education before proceeding with his medical studies. This meant toil and the prospect of many years of struggle before him. With characteristic will-power he drove his plow deeply into the soil and cultivated the new field. Returning to Leicester he entered the Leicester Academy, famous throughout New England as a preparatory school for college entrance. There he came under the beneficent influence of the noted educator, Josiah Clarke. After three years of close application he was ready, in 1849, to enter Harvard. Then came four more strenuous years in that famous seat of learning under the most celebrated teachers of the day. The great naturalist, Professor Agassiz, was then thrilling the classes with his matchless presentations of natural history subjects, and the enthusiastic Howe followed him in his lectures, and frequently went with him upon geological excursions. In 1851 Sir Charles Lyall came from England to lecture upon geology in the Lowell Institute at Boston. These lectures were also closely listened to by the young student, who had now about made up his mind to adopt geology as his life work. His career in college, however, was not without incident. "He met with some obstacles to progress, such as small pecuniary means often create, but his happy temperament, combined with great determination, found in these difficulties incentives to new resolution." He graduated in 1853, and had for classmates, among others more or less distinguished in later years. Dr. Charles William Eliot, who has but recently retired, one of the most famous of Harvard's presidents, and Justin Winsor, one of the most painstaking and accurate historians the world has produced, and whose "Narrative and Critical History of America" is a monument to his industry and ability. To be privileged to be under such teachers and among such classmates is a heritage bound to bear sound fruit.

Graduation from Harvard did not put an end to study for Howe, neither did geology claim him, for medicine, which had first attracted him, now lured him again, and he returned in the autumn of 1853 to the office he had left six years before to better qualify himself for the work before him. Dr. Newton, his first preceptor, was now dead, and Dr. Frank H.

Kelley¹ had succeeded to his practice, and was doing a large and lucrative business among the best people of Worcester. Howe then engaged for a time to study under Dr. Kelley (whom he always regarded as his real preceptor) when, in the winter of 1853-4, he left Worcester to attend Jefferson Medical College at Philadelphia. Among his teachers there were the brilliant lights of the profession—Professors Mütter, Pancoast, and Meigs. He applied himself diligently, and of the vast concourse of students in attendance there were two that could be found at work in the dissecting room in the small hours of the morning—Howe and a student named Ives, from New Haven. The following year—1854-5—he attended medical lectures in New York City at the College of Physicians and Surgeons and at the New York Medical College in Thirteenth Street, and walked the wards of the hospitals for every available advantage in clinical medicine and surgery. True to his first love, he now returned to the Worcester Medical Institution, to graduate in 1855. His great ability and splendid attainments at once secured for him the post of Demonstrator of Anatomy, from which he promptly rose to the full professorship of anatomy. He was also made an assistant editor of the *Worcester Journal of Medicine*, the college organ.

¹ Dr. Frank H. Kelley was born at New Hampton, N. H., September 9, 1827, and died at Worcester, Mass., October 25, 1890. He came to Cincinnati in 1847 with Dr. B. Keith (who had conducted a small hospital at Dover, N. H.) to attend a course of lectures. The engagement with Dr. Keith terminating in 1849 he formed another with Dr. Aaron Ordway of Lawrence, Mass., who had a large practice. In 1851 he went to Worcester where he formed a co-partnership with Dr. Calvin Newton, who being otherwise engaged a large portion of the time, left most of his practice in Dr. Kelley's care. Dr. Kelley attended a Physiological Medical College in Cincinnati at various periods between 1846 to 1852, when he received the honorary degree of Doctor of Medicine. His practice was large and lucrative, his social standing high, and his influence in the community of Worcester recognized. He retired from practice in 1883, having practiced thirty-two years. He wrote "Reminiscences of New Hampton, N. H.," with genealogical sketches of the Kelley and Simpson Families and a brief autobiography. Dr. Howe wrote of him (B. M. J., 1890, p. 611) :

"October 25th In Worcester, Mass., Dr. Frank H. Kelley died, at the age of sixty-three. He was born in New Hampshire, and studied medicine with Dr. Bethuel Keith, a Thomsonian practitioner, of Dover, N. H. Dr. Kelley took a course of medical lectures in Cincinnati, under Alva Curtis, the then unrivaled champion of Thomsonism, pure and undefiled.

"After practicing medicine as a Reformer and Botanic for several years Dr. Kelley became the successor of Dr. Calvin Newton as editor of the *Worcester Journal of Medicine*

"After the Worcester Medical Institution and its organ went out of existence, Dr. Kelley joined the local Allopathic organization, yet he was eclectic in doctrine to the end of life

"The doctor was for a term elected mayor of Worcester and was often made one of the officers of the city government. The circumstance is cited to demonstrate his popularity as a citizen

"At length his health became permanently impaired, so that he traveled for recuperation and recreation. While in California he broke a hip or femur through a railway accident. This injury quite incapacitated him for any kind of business and tended to shorten his period of existence

"The presence of the doctor was calm dignified, grand, and as a sympathetic physician he had few equals in the profession. He was my preceptor and cordial friend. Pleasant memories of his inflexible integrity will ever abide with me and with a large circle of personal admirers "

A full biographical sketch of Dr. Walter Burnham appeared in the *ECLECTIC MEDICAL GLEANER*, May, 1906 page 169 and of Dr. Calvin Newton, January, 1910, page 1

A new opportunity for practical experience now came to Dr. Howe. At this time the Professor of Surgery, Dr. Walter Burnham, of Lowell, Massachusetts, was elected to the Massachusetts Senate, and Dr. Howe was invited to care for his large surgical practice during his absence, which he did with great satisfaction for six months, when he returned to Worcester to open an office for himself. While waiting for business he busied himself with post-graduate reading in medicine and writing articles, and in increasing his knowledge of comparative anatomy by dissecting small animals, and the heads of bears and other larger creatures.

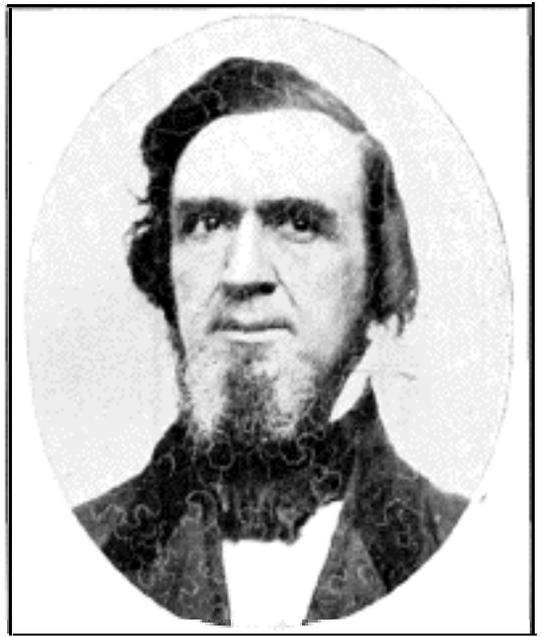
The autumn following his service for Professor Burnham Dr. Howe was invited to lecture in the newly formed College of Eclectic Medicine and Surgery in Cincinnati, Ohio. At the close of the term he returned to Worcester, where he expected to remain. He was again invited to lecture the following year in the Cincinnati College, and was induced to remain in the latter city. When the college in which he was teaching, which was established by seceders from the Eclectic Medical Institute, merged with the latter in 1859, Dr. Howe was shortly thereafter appointed Demonstrator and Professor of Anatomy, and upon the resignation of Professor Zoeth Freeman, in 1861, he succeeded to the chair of surgery, which he filled with great efficiency and distinction until his death in 1892.

Dr. Howe was united in marriage, on February 3, 1858, with Miss Georgiana Lakin, eldest daughter of George S. Lakin, of Paxton, Massachusetts. Mrs. Howe is still living.

THE SURGEON.—Without question Andrew J. Howe is the foremost and greatest surgeon the Eclectic School has produced. He was especially well-skilled in surgical diagnosis, and this led him to operate where others had failed to make the attempt. Bold, quick, and careful, he was extremely fortunate in securing a successful issue, and this now seems a marvel when we realize that he operated in preaseptic days, and with little of the surgical preparation now thought absolutely essential. Just as Howe was leaving the theater of surgical activity the new methods of surgical precaution and technic were being evolved. The veteran surgeon, whose results had been so marvelously successful, looked upon these innovations with distrust and even ridiculed them, yet it was the extremes to which some operators seemed to go that excited his opposition rather than the ground that has now been reached— surgical cleanliness. The sprays of Lister and such methods,.



DR. Andrew JACKSON HOWE
About 1835



DR. WALTER BURNHAM
With whom Dr. Howe was associated
in Lowell



DR. CALVIN NEWTON
Dr. Howe's first preceptor



DR. Frank H. KELLEY
Dr. Howe's preceptor

though perhaps necessary in giving eclat to new methods, and though subsequently discarded by Lister himself, were targets for Howe's wit and satire. Perfectly fearless, knowing his anatomy and pathology thoroughly. Professor Howe never hesitated to operate upon an operable case, nor did he unwisely subject one to the knife where the issue—operation or no operation—was sure to be fatal, provided no good or relief to the patient would come of surgical intervention. Good surgical judgment, a well ordered mind, and steady hand and head made him sought for far and near, and he was sent for from every State in the Union to perform operations.

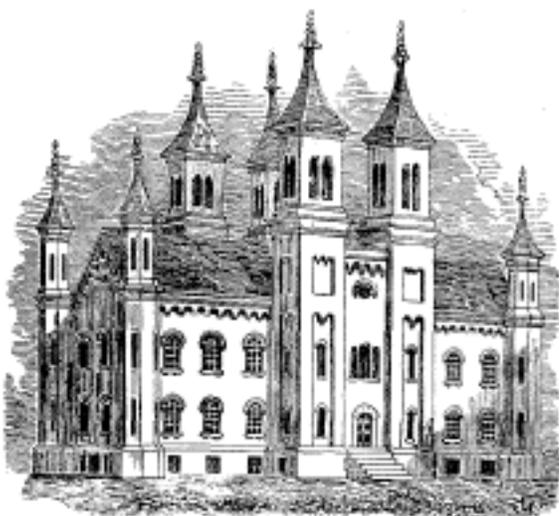
THE TEACHER.—Professor Howe was an ideal teacher, genial and beloved by his pupils. He was a good speaker, and reminded one more of an able forensic orator than the medical professor. Possessed of a magnetic presence, and a vivacity that made things move with celerity, he proved an exceedingly interesting and entertaining speaker. His lectures were not long and heavy, and were never dull. He was inclined to contract a lecture rather than to expand it, hence his auditors were never wearied with much talk and little instruction. He was concise, direct, and never ambiguous, illustrating his meaning largely by gestural movements, or by means of charts and illustrations, and by impressing students into service as impromptu clinics. It was in the quiz, however, that he appeared at his best. Starting off with a surgical question put with apparent ferocity while his keen eye snapped with merriment —almost deviltry—he would frequently carry the astonished student through the mazes of physics, geography, or astronomy, and drop him somewhere in Africa's torrid sands or on the planet Mars. The student who answered promptly and with assurance was sure to get several pointed questions, and if still unvanquished, received an approving grunt from his interrogator. The student who promptly acknowledged that he did not know the answer to a question put to him was promptly passed and left unmolested. But woe to the comfort of him who vacillated or sought to display knowledge he did not possess or who attempted to guess or dodge the issue, for his grilling usually took up the major part of the hour. While such an one was most generally persistent, defeat was sure to come, and to the class his discomfiture was the challenge for merriment. It is always funny when it is the other fellow. Yet at the end of it all the student felt no resentment, for it was too apparent that the questioner was giving him gratuitously a liberal education, and doing it in the most humorous, if persistent, manner. The questioner would touch upon everything under the sun but surgery, for as he often said, "If a man has a general knowledge of

things and good common sense he is the better prepared to learn surgery and will do it." If we were asked to point out the secret of Professor Howe's success as a teacher we would say it was his power to instill his own enthusiasm and courage into the student. He was not only a great surgeon himself, but he made surgeons, many of whom have proved an honor and credit to their greater master.

THE AUTHOR.—Over the well known H. the pages of the *Eclectic Medical Journal* fairly teemed for years with crisp and breezy editorials from the pen of this versatile scholar. Almost every conceivable subject was touched upon that would enlighten physicians concerning their work. These articles show great range of learning and an ever ready mind, and abound largely in a happy quality of contrasts and citations showing the widely read author. Every sort of topic from the commonplace to the sublime flowed from his pen; wit and satire, argument and exposition; encouragement to the weak and restraining caution to the over sanguine mark these papers. If published alone they would form an exceptionally useful series of commentaries upon legal medicine, surgical procedure, medical history, geological studies, and physical phenomena, as well as the natural history of animate beings, botany, geography, astronomy, and ethics. Many of the papers that were subsequently embodied in his famous work on surgery appeared as leading articles in the *Journal*. For over thirty years these editorials and leading articles appeared monthly, and whenever the editor, Dr. Scudder, was absent, Dr. Howe assumed full editorial responsibility. The text-books by Dr. Howe were few but important, and at once displaced among Eclectic practitioners all other works upon the same subjects. These were "A Treatise on Fractures and Dislocations," appearing in 1873, "Manual of Eye Surgery" in 1874, "Art and Science of Surgery," 1876, and "Operative Gynecology" in 1890. Of these his work on Surgery is the best known and most characteristic. Unlike the ordinary text-books in being evolved after a set fashion, it is rather a collection of surgical essays, exceedingly interesting and instructive, and for its day a remarkable and new style of text-book. While science moves on and new discoveries displace old theories and methods—and some of Dr. Howe's will go with them—yet will this book remain a delightful and valued repository of surgical lore stored in choice and chaste language. As a piece of literature it will never grow old, and one wonders at the immense scope of the matter stored up in this compact volume. It shows the wide range of the author's reading and experience told in a delightfully entertaining classic. Long out of print the physician who is fortunate enough to pick up a volume of Howe's Surgery will have



DR. HOWE'S BIRTHPLACE



WORCESTER MEDICAL INSTITUTION
Where Dr. Howe graduated in 1855

secured a treasure that will be valued more and more as time rolls on, and one that will lend honor to the record of the surgical status of the Eclectic School at the period in which it was published.

As stated above. Dr. Howe very early in life showed a love for natural history studies. This never left him, and all through an exceedingly active professional life he found rest in this as an avocation. He never neglected an opportunity to enlarge his knowledge upon his favorite studies. Comparative anatomy was his delight, and few physicians other than those scientists whose life work is the teaching of that science were better posted in it than was Dr. Howe. This made him one of the best known members of the Cincinnati Natural History Society, before which he read many profound and scholarly papers. While deep in subject matters these productions ring out so clear in thought and diction that one little versed in natural history can not fail to be instructed and interested by them. He made collections of interesting specimens, dissected large animals dying at the Cincinnati Zoo and in Robinson's Circus, and published interesting papers respectively on the "Autopsy of a Lion," "Autopsy of an Elephant," "Autopsy of the Whale," "Autopsy of a Tiger," etc. Dr. Howe was also an active member of the Association for the Advancement of Science, the Cuvier Society of Natural History of Cincinnati, and of the Ohio Historical and Philosophical Society.

The love for animal life which was so dominant a trait he loved to instill in others. Especially did he endeavor to interest the youth in studies of this sort. To that end he spent several of the last years of his life at odd times in the preparation of a volume for the young, which should reveal to them the wonders of animal, bird, and insect creations—giving instruction and amusement which the young ever crave. His death, however, prevented his bringing this work out, though the manuscript and hundreds of dollars worth of engravings were long in readiness for the printer's art. It was fitting, therefore, that after his demise Mrs. Howe published this production under the title, "Conversations on Animal Life." This, together with a choice selection from his published papers on varied topics, published also by Mrs. Howe after the doctor's death—"Miscellaneous Papers by Andrew Jackson Howe"—are worthy memorials of their distinguished author. Shortly after publication and when but few of these two productions had been distributed, a disastrous fire occurred in the publishing house, and the plates and entire undisposed stock of books were destroyed.

IN THE FORUM.—Dr. Howe was a member of several State societies and of the National Eclectic Medical Association, to the presidency of which he was elected at New Haven, Connecticut, in 1883. The latter position was actually thrust upon him, for he always preferred to be upon the floor rather than the rostrum. He seldom missed a meeting, and was easily the most conspicuous member present. Taking a seat near the platform he listened intently to every phase of the proceedings, and was ever ready to debate and perfectly fearless to express his opinions. It mattered little to him whether an antagonist was a friend or foe, and no man had fewer personal foes; he would go to the limit in debate, and usually came off victorious. He was the very life of a meeting of the National, and many considered it as good as a post-graduate course to hear Professor Howe annually discuss surgical and gynecological topics at these sessions. His brusque manner, though it obscured the most kindly heart, often drove the less fearless to cover, but occasionally he would find a debater worthy of his mettle, and then the arena of debate would fairly scintillate with wit and wisdom, to the intense enjoyment and admiration of the auditors. These discussions carried no bitterness even when matters of medico-political policy were at stake. As one has truthfully written: "In conventions, after openly opposing the advocates of a principle with the great energy that he commanded, upon adjournment he gave and received pleasantries with his adversaries. He contended for principles, and as no underhand advantages were taken, no painful recollections remained to embitter his feelings." He was at all times an eloquent and valiant defender of Eclecticism.

In the preparation for professional life Dr. Howe added to his other accomplishments a thorough knowledge of the principles of common law and medical jurisprudence. Evidence of this appears frequently in his Journal articles and editorial comments. He stood ready to advise and protect the rights of physicians in court when sued for damages upon various pretexts. To such he was ever willing to give assistance, and frequently made long journeys to appear as an expert witness in behalf of his professional brethren, whether of the Eclectic or other schools of practice. But especially did he oftenest appear for the Eclectic, for the odds were oftenest against him on account of professional bigotry and intolerance. Never would he appear for one whom he was satisfied was guilty of criminal malpractice, though like every judicial mind he recognized that even such an one has some rights in the law. His rare fund of medico-legal knowledge, his acknowledged skill as a surgeon and scholar, and his dignified bearing and deportment made him a

respected antagonist in the courts of justice, and his testimony had great weight with intelligent juries.

THE THERAPIST.—As a rule surgeons do not acquire distinction as therapists, some having no aptitude for any but the surgical side of medicine; while, besides, the more visible and brilliant triumphs of surgery are apt to obscure the apparently lesser achievements of medicinal therapy. Many have looked upon Dr. Howe as being little versed in therapy, if not wholly skeptical regarding the efficacy of medicines. He had his own views as to specific medication, in which, in some respects, he differed from the specific medicationist as understood at present. Essentially, however, he believed in the specific action of medicines, and while extremely conservative in the use of medicines he was thoroughly conversant with the values of a chosen few old remedies, and was instrumental in developing and introducing several new agents, chiefly compounds, which have attained wide recognition as valuable therapeutic preparations. It was his habit to study but few agents, and those thoroughly, and to experiment long and carefully with them both as to their pharmaceutical construction and their therapeutic efficacy. He demanded the best quality of drugs, and when he put his name to a medicine it was sure to be a good one. His pupils will recall his partiality for veratrum as a fever remedy and an alterative, morphine judiciously and fearlessly used as a pain reliever, Fowler's solution, chloral, Epsom salts, salicylic acid, thymol, and syrup of lactophos-phate of calcium. He was probably the first to introduce "Aqueous Pinus Canadensis," though his name is in no way connected with the pinus preparations now marketed. He devised "escatol" in three strengths as an escharotic; "juniper pomade" for itching and scaly skin eruptions; "acid solution of iron," which, in our opinion, is the best active iron preparation for internal use as a tonic and hematic; "viburnum cordial," a delightful stomachic and uterine sedative; "leontin" as an emmenagogue; and "dynamyne" for the relief of local inflammation and pain. His developmental studies of thuja as a remedy in hydrocele, warty excrescences, and vascular blemishes are all well known to the student of Eclectic therapeutic history. He also named and introduced "asepsin" into practice. Most of the agents introduced by Dr. Howe are now employed to a far greater extent than during the lifetime of their author.

THE MAN —As time clears the vision it is plain that Dr. Howe was a great man—great and good. The dominant traits of his character were courage, patience, and simplicity. He was kindly disposed toward

humanity and the brute creation. His capacity for work was marvelous, and he lost no time in unworthy pursuits. He would often say, "How little one can do!" yet fewer men accomplished more than did Professor Howe. His personality was largely reflected in his literary work, and he used to say that there was more of him in his little book, "Conversations on Animal Life," (then only in manuscript) than in anything he ever wrote. Dr. Howe was portly and of more than medium height. His face and keen and searching eye portrayed the thoughtful scholar and the manly man. In manner he was somewhat brusque, and betrayed his English ancestry, but with all his brusqueness and self-assurance there lay in his breast the kindest of hearts. To the young man he was an inspiration, and many an uplift did he give to the despairing and desponding young practitioner struggling to obtain a foothold in the profession. No amount of work appalled him, and a distant journey to render surgical aid was welcomed by him, whether it meant a luxurious trip in a Pullman across the continent or a perilous horseback journey into the fastnesses of the Ozarks. He did his work cheerfully and completely, but without that prudence for self-preservation which might have prolonged his days. Belonging to a long-lived race he had reason to expect and did expect to live a life well rounded in years, but it was decreed otherwise. It was the irony of fate that he should succumb to a surgical malady, and he died from a huge carbuncle upon his neck. Of Dr. Howe's personality let the following words of Professor John Uri Lloyd, his life-long friend and colleague, bear testimony :

"I have never known a more zealous and determined man than was Professor A. J. Howe. His professional life was one of activity from early morning until late at night. To him money was of secondary consequence. His advice to the class was, do not make money a god; do not sacrifice your honor for gold. Indeed, his own professional life stood before his scholars as an example, for while, with his young energy, he was laying the foundation of his future sufficient fortune, his purse was open to individual and public needs. He always gave his time liberally to work in other interests than his own. He performed surgical operations in nearly every State in the Union, and never to my knowledge refused an appeal for such assistance. If he received a just recompense in cash, well and good. If he paid his own traveling expenses in behalf of the poor and worthy sufferer, it was to him a cheerful gift. He was many times called to various parts of the United States as an expert witness in surgical cases. It was his custom to discourage, when consulted, patients and physicians from bringing malpractice cases into the courts. He was fortunate in never having had the disagreeable experience of such a

case, but he recognized the injustice to surgeons that often attends suits for damages, and steadily refused to be a witness against his competitors. . . .

“He has taught thousands of physicians, who remember him with constant gratitude. Words are inadequate to describe the veneration of the Eclectic profession for this man. He stood before them as a leader, censuring, guiding, soothing them, taking upon himself responsibilities others shirked or could not bear. As a professional man, the term ‘freeman’ in every way that the word can honorably be employed, is exemplified in the life of this characteristic personage, Prof. A. J. Howe, M. D. . . .

“Professor Howe was of portly figure, and invariably commanded the attention of strangers. Something about him impressed the beholder that he was a leader among men.

“His deep fund of information, derived from his extensive reading, made him a good conversationalist. He had traveled much in America in the interests of his profession, and in 1886 he made a tour in Europe. He could tell a story with piquancy, or converse on graver topics with divines. He joked and laughed with children, and comforted the aged. As a companion none stood higher in the esteem of his acquaintances; as a citizen and neighbor none were better loved.

“It was a high tribute that Dr. Cooper paid to his memory by saying, when his death was announced, that the children in the neighborhood wept upon the street.”

THE PHILANTHROPIST.—Dr. Howe's childhood was spent in a picturesque part of the commonwealth of Massachusetts. As he neared the setting of the sun his heart thoughts reverted to those happy childhood days, and the old ancestral home of the Howe's, purchased in 1743 Though he had lived but a few years in the old homestead and visited it but occasionally, it remained ever the dearest place to him in all the earth He planned for years to become the owner of that sacred tract, and finally accomplished his cherished desire. It was his purpose to bequeath the estate entire, with its typical New England dwelling, to the town of his birth, to be used as a natural park forever for the benefit of posterity. Death cruelly thwarted the consummation of this plan, but his wishes were faithfully executed by his wife after his death, who, in July, 1892, made the town of Paxton the richer by this munificent gift

of the house and one hundred and two acres of land. Of a truth

"None of us liveth to himself and no man dieth to himself " (Rom 14:7)

PROFESSIONAL AND POPULAR CREDULITY

PROFESSIONAL AND POPULAR CREDULITY—Pliny who for centuries was considered authority in matters pertaining to natural history, declared that pearls were formed by drops of dew falling into the open valves of the oyster. It was a pretty fable, and told by a well known scientific writer. Nobody thought of questioning the soundness of so beautiful a story. Once charmed with the tale, who would stop to inquire whether the gaping valves of the animal were ever exposed to the taling dew, whether the shell of the oyster ever opened except under water? Or, finally, whether, if the dew did fall in, it would assume the rounded form, and continue thus till the drops changed into pearls? Another classic author has informed us that if the blood of toads be topically applied to warts, it will cause them to disappear. Probably the resemblance between the knotty skin of the reptile and the warty excrescences led to the therapeutical hypothesis. The earlier medical writers furnish plenty of similar incongruities. A delusion once started, has never failed to find a host of believers, and few doubters.

In our time equally absurd fallacies have become popular among credulous members of the community and the profession.

It is useless to employ argument with individuals who are bewildered with the subject of medicine. If they have embraced a wild theory, there is little hope of restoring their senses by words.

The *obsolescent* doctor never doubts the universal efficacy of "hydrargi chloridum." The drug overcomes constipation and checks diarrhea, excites, the liver to action, and restrains bilious overflow, it is a gland stimulant and a sedative, and then it is so good when the physician does not understand the nature of the disease! There is no medicine of equal value, except "antimonium tartanzatum." This infernal tormentor will, in skillful hands, keep a patient sick longer than any article in the materia medica. It was, no doubt, this medicine which was employed in treating the woman spoken of in Scripture (Mark 5:26), who "had suffered many things of many physicians, and had spent all that she had, and was nothing bettered, but rather grew worse."

Medicine, like other sciences, needs to be enriched by well-attested facts, and the

zealous supporters of parties and theories contribute nothing but confusion —A. JACKSON HOWE, M. D., *Eclectic Medical Journal*, 1864.

ASEPSIN

ASEPSIN—This preparation was so named by Professor A. J. Howe, and introduced into practice as an antiseptic and anti-fermentative agent. For these purposes it is very pleasant and effective, lacking the dangerous qualities of some topical agents, and being devoid of unpleasant odor. We value it as an addition to medicines compounded during the summer season to preserve them from decomposition when an alkaline preservative is admissible. It is a fairly good corrective of stomach and bowel disorders depending upon putrefactive changes. For borborygmus we employ it almost exclusively. It may be added to anti-rheumatic mixtures with the prospect of enhancing their effectiveness, as the compound is practically a sodium methyl salicylate. Combined with chlorate of potassium it makes a fine deodorizer. In gastric troubles we have administered it triturated with sodium bicarbonate, sodium sulphite, and sodium salicylate. There is no pleasanter mouth wash than a solution of asepsin, and as a liquid dentifrice it may be used alone or combined with a glycerinated solution of borage. As a dressing for simple abrasions, cuts, lacerations, contusions, and small scalds and burns, we combine it with distilled hamamelis. For the washing away of foul discharges asepsin dissolved in hot water is effective and pleasant. It may be thus employed in nasal and vaginal catarrhs. For rhus poisoning it is one of the pleasant and soothing topical agents, and it may be used to cleanse fetid feet and axillae. In dressing wounds of the hands we use it with echafolta. Where dangerously infective discharges are present, or where infection is virulent, asepsin is not equal to some of the more powerful antiseptics. But for most purposes we value it as a safe, pleasant, and effective agent, and one we would not like to do without after so many years of successful use of it—FELTER.

ASEPSIN.

Asepsin is a sodium salt of methyl salicylic acid introduced to the medical profession about 1880. It was first noticed therapeutically by Howe in the *Eclectic Medical Journal*, May, 1884, p. 241, and at his suggestion the name Asepsin was given the new antiseptic as the trade designation, the following being Professor Howe's (1884) introduction of the preparation:

Asepsin is a delicate crystalline body, bearing the pronounced odor of checkerberry. The crystals readily dissolve in water, thus surpassing salicylic acid, and the agent in moderately strong solutions is not irritating to sensitive structures. A leading feature of Asepsin is its power to prevent both fermentation and putrefaction. Not a strong solution will preserve meats indefinitely. Inasmuch as the bichloride of mercury is an irritant poison, it has to be used with caution; therefore, something like Lloyd's discovery has long been a desideratum. I am now employing Asepsin where I have previously used boro-glyceride, carbolic acid, mercuric bichloride, etc., and obtain the most satisfactory results. In eczematous and epitheliomatous manifestations Asepsin may be utilized to advantage. It may be mixed with vaseline as a vehicle or with any nice cerate. It may be used in the nose instead of menthol to ease headaches and to prevent nervous rigors of various kinds, especially those of tuberculosis. In future I expect to use Asepsin to keep wounds as free as possible from putridity. The agent is not expensive, and consequently is economical, considering how far a small quantity will go.

I have not employed Asepsin internally to a considerable extent. I found it to do excellent service in relieving a case of dyspeptic flatulence; and in minute doses it encourages digestive action. In as large as grain doses it increases respiratory activity, and slightly raises the temperature of the body.

Asepsin in Antiseptic Obstetrics.—A correspondent wishes to know what antiseptic obstetrics means and how it is to be conducted. In reply, I would say that clean hands wetted with a solution of Asepsin before manipulations are made to constitute about all there is in midwifery antiseptically conducted. Clean beds, napkins, towels, and binders are aseptic and need not be medicated with antiseptic solutions. If coagula and fragments of the placenta remain in the uterus, the cavity of the organ should be douched with a warm and weak solution of Asepsin. Ten grains to a pint of water will make the antiseptic strong enough to wet the obstetrician's hands, or to be used as an intra-uterine injection. If a tampon be employed in the vagina it is well to wet the fabric forming the plug with the least objectionable antiseptic known—with a solution of Asepsin. Carbolic acid and efficient solutions of corrosive sublimate are irritating and poisonous.

It is not necessary to render the ligature which constricts the funis antiseptic, yet there is no objection to the precaution. I sometimes employ the aseptic animal ligature which I use in general surgery. Ligatures preserved in a solution of Asepsin are soft and pliable as silk and not hard and stiff, as they used to be when kept wet in carbolized oil.

The blades of forceps and other obstetrical instruments should be mopped with a solution of Asepsin before use.

A plug or pledget of antiseptic lint kept in the os tincae or in the ostium vaginae, after delivery, is not required. Too much zeal in the matter of employing antiseptics in deliveries is not evidence of greatness.—**Howe.**

CANTHARIDES: AN UNSAFE REMEDY.

So far as we are aware, this is the first signed article from the pen of Dr. Howe. It was in the year of his graduation in medicine, and he had been made an assistant editor of the college paper, "The Worcester Journal of Medicine." While some of the unsigned editorials may have been written by him, this paper is the first to bear his signature. It marks the beginning of a long and fruitful career of authorship, and true to his mission, he begins by attacking a common abuse in practice at that day. What he wrote is now commonly recognized as true, and all text-books on medicines give the cautions he penned concerning the dangerous effects of the cantharidal blister upon the urinary organs and the general system.—**Ed. Gleaner.**

CANTHARIDES: AN UNSAFE REMEDY.—One after another heroic remedies heroically administered go out of use. Many a bloodthirsty lancet now lies in its case in a state of inglorious rusting. Not, however, laid away on account of its unprofitableness, for it has "bled" many a victim in bygone days, as often at least as once a year, to relieve distended veins, and make plethoric the doctor's pockets. But its use has been discontinued, both on account of a popular prejudice having grown up against it, and the results of a thorough examination of its merits, which has blunted its point.

With the lancet, mercury, antimony, and arsenic are going out of use with the great body of practitioners, at least as leading remedies, being used by them only in particular cases, for the simple reason that substitutes of a more harmless character are now well known.

Another leading article of the old materia medica is cantharides, and their use is likely to be continued till a popular prejudice as strong as that against blood-letting shall arise against them. For the great body of physicians are too lazy to seek out a more harmless substitute, while the people do not shrink from the deformities of the old remedy.

Cantharides are used as a stimulant of the genital-urinary organs, and as a topical stimulant in low forms of fever; also to produce vesication. And if these indications alone were fulfilled by cantharides, and no injury produced, the remedy would deserve a eulogy next in power to that on antimony “by Basil Valentine, a Benedictine monk.” But in numerous instances they prove a remedy worse than the disease—producing distressing symptoms of tenesmus and strangury, even when taken in officinal doses. At times they aggravate the disease which they are intended to relieve. In other cases mischief arises from want of uniformity in the action of the remedy. When given as an emmenagogue it often only excites the kidneys and urinary passages; and when given as a diuretic or excitant of the urinary organs, it spends its force on the intestines. Also, when used for vesication, it performs not that alone, but the veins becoming absorbed, it brings on the most violent and distressing symptoms.

The external use of cantharides, under my observation, has oftener produced mischief than when administered internally; for the reason, I suppose, that they are exhibited thus with less regard for their poisonous effects. A blister can not be raised with cantharides without danger, especially if the blister surface be extended. Even death has taken place from the constitutional disturbance excited by extensive vesication. In low grades of fever, when cantharides are often used as a topical stimulant, their evil effects are not observed sometimes until days afterwards, when sloughing will commence, and not infrequently prove fatal. Several cases have come under my care after the fly blister had been improperly used. One was that of a lady who primarily was threatened with symptoms of pneumonia. Her physician, to relieve the lungs, which began to be oppressed, applied cantharides over the greater part of her chest, and allowed them to remain until enough of the poison had been absorbed to produce tenesmus and the most violent symptoms of strangury. When I was called, the lady was suffering from nothing but the effects of cantharides, and her physician had been obliged to use the catheter for twenty days, with no apparent approach towards relief from this unpleasant situation, except that the urine had ceased to be bloody. I ordered slippery elm injections to the vagina, and prescribed carbonate of potassa and mucilaginous diuretics, to be taken several times a day. And so fortunate was the treatment that I was not obliged to use the catheter at all. Another case was that of a laboring man who had been treated with the fly blister over the abdomen to relieve him of colic. The catheter had been used for three days, and its introduction produced intense pain. He suffered from a constant desire

to micturate and from obstinate priapism. Cooling mucilaginous diuretics, together with demulcent injections into the bladder and rectum—those into the latter allowed to remain near the neck of the bladder—soon afforded permanent relief. Other cases milder in their character have always yielded to a similar course of treatment.—HOWE, *Worcester Journal of Medicine*, Vol. X, No. 11, November, 1855.

SURGERY OF THE HAND.

The selection from the “Surgery of the Hand” is made to show the character of the articles which Professor Howe began years ago to contribute to the *Eclectic Medical Journal* and which were subsequently embodied, modified as time necessitated, into his “Art and Science of Surgery.” This production is marked by the impress of a master of both surgery and writing. The style is direct and free and the language appropriate—points which apply to all that Dr. Howe wrote—even his earliest productions. Differing considerably from the set form of surgical article of the text-books, this paper constitutes more of an essay covering all the possible phases of injury to the hands and their possible complications in the briefest manner. This style of composition made his surgical articles easy to read and to remember. The element of personal experience also pervades his writings upon surgery, giving an added value to them not possessed by those compiled most largely from the works of others.—**Ed. Gleaner.**

SURGERY OF THE HAND.—The hand, on account of its complex construction and high functional endowment, requires some special rules or suggestions for the treatment of its diseases, injuries, malformations, and deformities. A distorted foot can generally be corrected by the division of contracted tendons and the application of proper apparatus. The success is often complete or satisfactory. Not always so with the hand or fingers. Adhesions take place between the tendons and their sheaths, which prevent motion; and the knife may divide nerves essential to the nutrition and function of the finger. The aponeuroses from slight injuries become atrophied, thickened, or puckered, so that not only the tendon distorts the finger, but all the subcutaneous investing tissues of the digit. A finger which is rigidly contracted from the effect of cellulitis, abscess, or the penetration of a needle, spicula of glass, iron, or wood, is seldom restored by surgical or other means. The use of apparatus does little permanent good, and the application of salves or ointments is next to folly.

Sometimes a peculiar distortion of the hand and fingers arises from an abnormal contraction of the flexor carpi radialis. This deformity may be overcome by dividing the above tendons near the wrist, and dressing the limb in a splint for a few days. I have always obtained satisfactory results from this operation. The spaces in the divided tendons fill up as they do after a club-foot operation, and no atrophy or paralysis follows.

Notwithstanding the unsatisfactory results which generally follow attempts to straighten morbidly contracted fingers, the hope of lifting the finger nails out of the palm of the hand, and the prospect of relief from the nettling of vesicles which are apt to form on rigidly flexed digits, will make almost any sufferer from these causes beg for all the benefit that can be obtained by an operation. A subcutaneous operation upon the finger is not very painful, yet it is best to employ an anaesthetic, so as not to be opposed or thwarted in attempts to break up adhesions about the joints and tendons. In dressing the finger the position of semiflexion is generally more desirable than complete extension, if ankylosis takes place. The patients wishes may be consulted in regard to the position he would prefer the finger to assume in the event of immobility. Fingers are often distorted by the cicatrices which follow burns. The texture of the skin and structures beneath is so altered that bands or bridles of modular tissue form and resist all attempts at restoration. All physicians are familiar with these peculiar cicatrices following burns. It does little good to resist their tendency to contract, or to cut the bridles across. Some good results have followed this treatment, yet it will fail much oftener than it will succeed. When the fingers have been denuded by fire, an attempt should be made to prevent the digits from uniting, though dressing the fingers apart is about all that can be done.

A narrow cicatrix may be entirely excised, and the edges of the wound brought together so as to cover the raw surface. In other cases a piece of normal elastic skin may be partially transplanted and twisted around from the neighboring parts to give flexibility. Anchyloses, alteration of articular surfaces, and marked atrophy of the finger may be considered as serious objections to surgical interference. In all cases of manual deformity it is best not to promise too much. The wounds necessarily inflicted in the execution of an operation upon the hand may be followed by untoward results.

Amputations.—In cases requiring amputation of parts of the hand the rule is to save as much as possible. A finger so badly crushed as to have

parts of it slough away may still be retained and prove serviceable. I once saw a hand so badly mutilated by the accidental discharge of gun powder that an accomplished surgeon decided to amputate at the wrist. A stubborn resistance on the part of the patient to such a severe measure caused the medical attendant to attempt to save the thumb and little finger. The other fingers and part of their metacarpal bones were taken away. At length the wound healed, leaving the thumb and little finger in a useful condition. This fragmentary hand was worth infinitely more to the patient than any artificial substitute could be. A lacerated hand needs a careful examination before it is decided what parts require amputation. A poor patient who has a family depending upon him for support can ill afford to lose what a little attention or higher grade of surgical skill might save. In certain cases the metacarpal bones may require removal, though there may be no injury to the proximate fingers. The unsupported digits, however, are of little use, and often obstruct the practical working of the rest of the hand. If the periosteum can be preserved, and with it the hope of a reproduction of the bone, then the fingers should not be sacrificed.

In amputating a finger it is not necessary to have equal or well-formed flaps. The torn flesh on one side of the digit may furnish all the covering needed. These parts are well supplied with blood and nerve force, so that there is little danger of sloughing. Mere shreds of lacerated flesh will often form a good stump. Amputations may be performed at the joints of the fingers or between the articulations. There is little choice except that already given, "save as much as possible." In the removal of the terminal bone it is well to preserve the pulp of the finger in which the tactile sense is best developed.

Whitlow or Felon.—A forming whitlow should have the tincture of aconite root kept constantly applied to it. This will generally arrest the inflammatory action, but if it does not, and the suppurative stage be reached, a poultice should be used until the abscess or tense, distended parts need incising. After the pus is set free a poultice may be employed until a cerate dressing is more convenient. Any exuberant granulations that spring up during the healing process may be occasionally touched with a crystal of sulphate of copper, or any common caustic.

Extracting Broken Needles.—Fragments of needles sometimes remain imbedded in the hand for years without producing great inconvenience. At length the point will reach a tendon or sensitive structure and produce pain or excite alarm. Before commencing a search for the

foreign body, let the patient point out, as near as possible, the place of entrance and the present seat of the fragment. Experimental pressure in various directions may excite a pricking sensation. The location of the needle should be opened by a V shaped incision, with sides about an inch in length and the flap, beginning at the apex, dissected up. This exposed space is then to be carefully and thoroughly explored in order to find the needle which may be deeper or more distant than at first supposed. After the fragment has been found and removed, the flap is to be turned back and secured in place. If the patient is first put under the influence of an anesthetic the exploration can be more thorough and satisfactory. The dangers from hemorrhage and other accidents are not great.

Ulcers.—Intractable ulcers about the finger nails need an active caustic applied to the matrix of the nail. A thin spatula of wood dipped in nitric acid and carried to the bottom of the ulcerative surface will answer a good purpose. The removal of the nail altogether often serves to expedite the cure. After the vicious ulceration has ceased, the sore may be dressed with any common cerate. —HOWE, *Eclectic Medical Journal*, 1865.

THE GOOD AND BELOVED PHYSICIAN.

The following extract is a small portion of an annual address delivered by Professor Howe before the meeting of the National Eclectic Medical Association in 1868. It embodies his conception of the ideal physician. He believed the profession of medicine to be one of the noblest of the callings of men, and sought always by his professional life and teaching to uphold the dignity of the doctor. Himself clean and honorable, he could not brook anything unclean and disreputable in the make-up of the physician. The picture of the good and beloved physician as he paints him is not a rare one and many of the men that Dr. Howe knew and labored with could easily have prompted this artistic touch. Who would deny to Dr. Howe himself the title of “the good and beloved physician?”—**Ed. Gleaner.**

THE GOOD AND BELOVED PHYSICIAN.—The practice of medicine calls for the highest and best qualities in men. Its varied and arduous labors test the physical stamina of the strongest; its delicate and sacred trusts demand a refined and faultless moral culture; its general duties can not be performed well without education, genial manners, engaging and enlivening conversational powers, barring levity or insincerity. Such qualities are not found in a man with a beastly countenance, for

they invariably imprint upon the features of the possessor a spiritual and intellectual expression, which no base impostor can assume at will.

The good and beloved physician carries hope and comfort to the hearts of the sick and suffering. He breaks sad news with such discretion and regard for the feelings of the near and dear that the weight of the blow falls less heavily. His step is so gentle and his words so musical that they charm the ears of the helpless. His hand is soothing as a woman's, yea, his heart is that of a lion. His ways are so peculiarly winning that the little child instinctively sees in him a friend. He has a cheerful word for every one—is fond of pleasantries, though he never descends to a rude joke. His life being spent in doing good, he becomes so devoted to the welfare of his friends that he does not feel like absenting himself for pleasure or recreation. There are fish in the streams and birds in the covers, but he can not leave his duties to bag them.

His declining years are as sunny as the days of boyhood, and his final departure is mourned by all except the young upstart, who has been impatiently waiting for the coveted patronage. He leaves with a smiling trust in the mysterious ways of Providence, though his sectarian friends can not tell of what branch of the church he pinned his faith. All his life he has been impartial in ministering to the spiritual comfort of the dying. In his younger days he had been a little given to materialistic reasonings, but as the shadows lengthened in the evening of his earthly existence he saw more clearly the will of the Master, and more firmly believed in a happy immortality. As is written expressly for him, he had cherished and oft repeated that beautiful Arabic injunction:

"So live, that sinking in thy last long sleep,
Thou alone may'st smile whilst all around thee weep."

—HOWE, *Eclectic Medical Journal*, 1868.

MEDICAL RECRUITS.

Were the advice given by Dr. Howe in the following excerpt generally acted upon by Eclectic Physicians there would be no dearth of good students to carry on the future work of Eclecticism. "Let every physician," he says, "look about and endeavor to discover an embryo Hunter or Velpeau." Again he writes: "Give no encouragement to the ignorant, the idle, and the imbecile, for they would bring reproach upon a high-toned profession; but seek the promising youths in humble vocations." This he

believed to be the bounden duty of the physician—to aid, encourage, and direct some worthy young man to take up the profession of medicine. Truly some of the best physicians have sprung from the trades and many more from the farms and the little red schoolhouse. If not throttled by the desire of the few autocrats in high places to place medical education only within the reach of the wealthy, we hope for many years to see our own ranks recruited from the youth whose best assets are health, courage, ambition, and the disposition to toil—the farmer, the school teacher, the mechanic, and toiler—the “hewers of wood and the drawers of water.” Dr. Howe never penned a truer saying than when he wrote: “The most sparkling intellectual diamonds come to the lapidary from obscure regions. There is a rough 'brilliant' within the scope of every physician, and it is a sin to leave it undiscovered, uncut, and unset.”— **Ed. Gleaner.**

MEDICAL RECRUITS.—A young man rarely takes it into his head to become a doctor, unless somebody asks him why he does not study medicine, or offers a suggestion which kindles in him the desire to engage in a lofty pursuit. A young man on a farm or in a workshop has not the courage to go to a physician and say, “What shall I do to become a doctor ?” He is afraid his aspirations will be ridiculed by the august personage who deals with life and death. How, then, is the crude material to be transformed into a valuable product? By the “busy practitioner” in his perambulations; he is to scrutinize the young men in his professional rounds, and when he sees one who has a good education and an ambition to advance his position in the world, the leading question is put to him, “How would you like to study medicine?” If a ready response is not obtained, it may be because the “hewer of wood and drawer of water” has not the self-assurance to make a reply. However, he has now the right to revolve the question in his mind, and as he becomes familiar with the topic he gains confidence, resolves to make inquiries of his questioner, and if properly encouraged will make preparations to enter upon a career which leads to professional life.

It is often said that there are too many doctors already, that the professions are overcrowded, that the young farmer or mechanic better adhere to his ancestral calling, and a score of other threadbare aphorisms which are calculated to smother modest aspirations, and to keep the rising generation in old ruts.

Some of the best surgeons have sprung from “the trades,” and as the surgical art is emphatically mechanical, the more surgeons know of the trades the quicker they comprehend a surgical principle. A distinguished Philadelphia surgeon was a New Jersey blacksmith at the age of

twenty-five; John Hunter was a carpenter at twenty, and could scarcely read and write; Ambrose Pare was a barber at twenty-two, and paid his way while studying medicine in Paris by working at his trade at odd hours; Velpeau was a weaver at twenty-two, and resolved to outdo his countryman. Pare, in work and study; an eminent American surgeon, now living, therefore his name can not be mentioned, was a shoemaker at twenty-three, and now boasts that he learned how to keep his knives sharp while at work at his trade.

Let every physician look about and endeavor to discover an embryo Hunter or Velpeau in his circle of acquaintance. The profession of medicine is tolerably full, yet there is plenty of room for a high grade of accessions. Give no encouragement to the ignorant, the idle, and the imbecile, for they would bring reproach upon a high-toned profession; but seek the promising youths in humble vocations. The most sparkling intellectual diamonds come to the lapidary from obscure regions. There is a rough "brilliant" within the scope of every physician, and it is a sin to leave it undiscovered, uncut, and unset.

The Eclectic division of the medical profession needs first-class recruits, and the way to obtain them is for every medical man who has the success of liberal and enlightened medicine at heart to be instrumental in bringing one high private into the ranks every year or two.—HOWE, *Eclectic Medical Journal*, 1875.

KLEPTOMANIA.

Professor Howe frequently wrote upon medico-legal topics to remind physicians and jurists of the dangers of condemning unfortunates apparently guilty before the law, but in reality so perverted mentally, though knowing right from wrong, as to be unable to resist the impulse to commit a crime. If physicians especially would give more attention to the important study of medical jurisprudence they would be slower to condemn, without investigation, those who commit misdemeanors and felonies that shock communities, when the perpetrators are wholly irresponsible through some mental defect or perversion. The kleptomaniac is one of these. For enlightenment in respect to other forms of perversion the physician should read Kraft-Ebing's *Psychopathia Sexualis*.—**Ed. Gleaner**.

KLEPTOMANIA.—In 1860 an elderly woman of my acquaintance, in comfortable circumstances in life, was arrested for stealing articles from a drygoods store. She was detected in the theft by a lady who was

shopping at the time. A parcel was clandestinely slipped under a cloak while the salesman's attention was distracted. After the arrest upon the charge of petty larceny, and bail given, a re-arrest was made upon the charge of grand larceny. In the woman's house were found hundreds of dollars worth of goods abstracted from various stores, many of the parcels being in remnants and original packages with tags attached. The accused had always stood so well in the community that the extraordinary larcenies were regarded by her friends as the result of a disordered mind. When asked to give a reason for the strange and guilty conduct, she gave as an excuse that her married daughter was about to be confined, and that her expected grandchild would certainly freeze to death if she did not provide ample clothing for it. This kind of reasoning on her part led to a re-examination of the properties purloined, and it was discovered that a very large part of the goods were in the line of baby clothes. Ten dozens of little socks in unbroken packages were in the plunder. This evinced so unreasonable a procedure that the cases were dismissed on the ground of a settled state of mind called kleptomania. The unfortunate woman admitted that she knew she was doing wrong at the times she stole the goods, yet she said she could not help stealing for such a worthy object.

The English court records furnish a case of kleptomania in the wife of Dr. Ramsbottom, the eminent writer upon midwifery. She was suspected of pilfering from a draper's shop in London. She was of middle age and highly respected, yet she was watched, seen to steal, and put under arrest. Stolen articles were found concealed in different parts of her dress. The only point that could be relied upon in the defense was that the articles taken were so trivial that no sane object could exist for intentional theft; and the only suggestion that could be made in her favor was that she was not responsible for her actions, being compelled by an uncontrollable impulse, or, to use a technical term, that she was a victim of kleptomania. She was not convicted, though it was thought the acquittal was more out of regard for her husband than a belief in her innocence.

The death of the accused occurred soon afterward, and had been probably hastened by remorse and worry. After the funeral the doctor had the house ransacked; and in every drawer and cupboard were found packages of goods that had been taken years previously, and never put to any use. Mrs. Ramsbottom was a religious woman, yet probably thought the commandment, "Thou shall not steal," was written for common thieves and not for doctors' wives.

These cases, and others of similar import, call to mind the senseless remarks of the unfeeling, and the libellous comments of newspapers, when medical experts express opinions favoring the theory that insane individuals are not responsible for criminal acts. If a theft be committed the average citizen cries out, "Send the scoundrel to the penitentiary," if a murder takes place, and a suspected person be arrested, the cry is raised, "Hang him." While this may not be wrong in the abstract, we should be humane enough to allow an inquiry on accountability before the sentence is passed.

A physician should not lend himself to the bid of every attorney who may need an expert witness in behalf of a lame cause; neither should he allow himself without due consideration of the facts, and a thorough differentiation of doubts, to join the popular clamor—"Crucify him, crucify him."

The judges charge, in alleged insane criminals, will be that the accused is responsible if he knows the difference between, right and wrong as pertains to the act committed.

A man may abstain from stealing through a consciousness that theft is wrong; yet commit murder under the impulse that he is doing God's will, or serving his country.

When Ravailac assassinated Henry IV of France, he thought he was executing God's service; and so perhaps it was with Guiteau, yet the latter only turned against the President when he found he could not use him for selfish purposes. In this he manifested no zealot's love of God or country, but exhibited responsibility, inasmuch as he knew he was not doing right. His claim that he was divinely commissioned was an after thought.

Charlotte Corday was responsible for the deed that brought her head to the guillotine. Maddened with the thought that her kith and kin had been murderously beheaded, she started for Paris with the definite purpose of killing one of the leaders of the Revolution, having in mind Robespierre, though would accept Marat. The opportunity presenting to stab the latter she embraced it. On her trial she justified the deed, and exulted in it. Her motive for the assassination was revenge. She was not insane, and therefore not irresponsible.—HOWE, *Eclectic Medical Journal*, 1883.

TREATMENT OF NÆVUS.

Dr. Howe was the first, so far as we are aware, to treat nævi by means of injections of an alcoholic preparation of Thuja. The success attending this procedure has justified its employment, and small nævous patches at least should have the benefit of this treatment. Though an old, old remedy for many affections, it was through Dr. Howe's advocacy that Thuja became a remedy for verrucous and vascular blemishes, for which it is now largely employed. See also papers on "Thuja Again," and "Thuja in Anal Prolapsion."—**Ed. Gleaner.**

TREATMENT OF NÆVUS.—There are several recognized and legitimate ways of treating "mothers' marks," as nævi or vascular stains are denominated. One method is to remove the discolored integument by a series of elliptical excisions; and another is to puncture the disorganized skin with a cataract needle; and still another is to paint the nævoid spot with tincture of thuja.

Lately I have had under my treatment a nævus—arterio-venous—of the eyelid. It involved the integument and the conjunctiva, so that incision was impracticable. Besides, the alcohol of the thujal tincture provoked undue irritation of the eye. To hasten a cure I injected a few drops of the tincture of thuja into the vascular mass every week, using a small hypodermic needle for the execution of the purpose. Some inflammation followed the injections, yet this was in no way baleful. In ten weeks no deformity existed. Injections were made on six different occasions. The result was highly satisfactory. Nævi of the vulva may be cured by the same method.—**HOWE, *Eclectic Medical Journal*, 1883.**

ETHICS.

Many Eclectic physicians are opposed to all restrictive laws and rules of order governing their actions within their own branch of the profession. This subject frequently came up for discussion among members of the earlier conventions, where the disposition seemed toward a trend of the "free for all" methods of conduct. This article by Professor Howe is a sensible answer to such as would be wholly unrestrained and ungoverned. The Golden Rule or any code of ethics based upon it can not be objectionable and must of necessity have an elevating influence upon the profession. Such a code is that of the National, and such was the ground taken by Professor Howe. Lest some have forgotten, let us quote Article III—Ethics—from the National Transactions: "The members of this Association shall exercise toward each

other, toward all physicians. Eclectics especially, and toward all mankind, that courtesy and just dealing to which every one in his legitimate sphere is entitled, and any departure therefrom shall be deemed unprofessional, undignified, and unworthy an honorable practitioner of an honorable profession. It shall also be regarded as unbecoming to engage in any form of practice or of advertising which shall tend to lower the physician in the esteem of the community, or to reflect discredit upon his professional associates.”— **Ed. Gleaner.**

ETHICS.—The “Golden Rule” is a formulated expression of conduct which accords with an educated conscience; and every expanded code of morals must be founded upon this. To do unto others as we would be done by is a comprehensive dogma in ethics. It covers all human actions. No man need err if he will consult his sense of right and wrong. But in the application of justice, in the complex affairs of life, it is not always easy to see ourselves as others see us. Selfishness imparts a bias to our understanding. We may intend to be just, yet labor under a misapprehension. An explanatory by-law is needed to aid in the adjustment of a disputed point, hence our somewhat extended or expanded code of ethics. If a professional brother do what he ought not to do— or would not like to have done to himself—he can be summoned before a council, and there, in a judicial manner, have the cause tried and passed upon by disinterested parties. Pure justice may not always be awarded, for the facts may not all be presented, yet there is a close approximation to that which is desirable. The freebooter may complain that ethics interfere with his liberties, and claim the right to do as he pleases—he may declare that restraint is tyranny, and law a method of exercising oppression; but good citizens recognize the necessity for the coercion of libertines. That the greatest good may come unto all, we must, to an extent, compromise our interests, and give support to wholesome laws. And in order that rules may be passed and enforced, the respectable in a community must, by joining hands and hearts, form a legislative body, whose influence is coercive. Such is our “National,” and the members thereof make it what it is from year to year. If there be any tyranny in the organization, its members have introduced it, and they can readily abrogate it. It is in no respect a one-man power.

Here it may be stated that our code of ethics has been potent to control those inclined to violate the spirit and meaning of our laws. Flagrant abuse has been attended with expulsion, and seemingly will repeat such action unless coming Conventions grow lax in ethical matters. Possibly they will retrograde, yet there are no indications of such a course. If any

member has violated the published "code," he has an opportunity to apologize, and escape with a censure, but he has no chance to avoid the force of charges preferred against him. If he would stay in the Association he must abide by its decisions. A party who does not like the ethics of the "National" may advocate amendments; and as soon as he can secure a majority of voters he may modify rules. Ours are not "Old School" ethics, but those of our own framing. Although only binding upon members of our organization, they exert a beneficial influence upon all in sympathy with a high grade of professional standing.—HOWE, *Eclectic Medical Journal*, 1884.

EDITORIAL ADVERTISING.

A journal of medicine should be as honest as a practitioner of medicine. To lend its pages to editorial comment upon paid advertisements is beneath that dignity and honorable course demanded by the Eclectic code of ethics. The writer has always been violently, almost viciously, opposed to "reading notices" and "interleaved advertisements." Therefore he is glad to reproduce this brief article on this shameless practice, for it voices not alone Professor Howe's dignified position as a journalist, but that of all editors who have at heart the best interests of the profession and the chastity of their journals. The Gleaner (new series) never would permit a "reading notice" in its pages, and the management has long since cut out all other advertising pages. So far as we are aware, the Gleaner is the only medical publication free from even the so-called legitimate forms of advertisement.—**Ed. Gleaner.**

EDITORIAL ADVERTISING.—It has become so common of late for editors to insert among their journalistic squibs the most unblushing commendations of all kinds of proprietary wares, that it is high time ethical rules were concocted to brand the unqualified license. It is to be hoped our "National" will take the lead in this matter, and that its members will not wait for action till the managers of the "American" have exercised their great influence on the question. Old School medical journals are as shameless as any on this kind of questionable advertising. It is stipulated to insert in the advertising department a page of matter for so much, and to give a brief editorial notice at stated intervals. In this way the reading pages of the magazine, which are subscribed and paid for, are prostituted for mercenary purposes.

If we are to punish with expulsion those members of the National who violate its code, let the instrument be made broad and strong enough to restrain the shameful liberties exercised by editors.

It is granting unreasonable latitude to journalism, that all kinds of stuff can be hired into the advertising pages of medical periodicals; but it is a custom of too long standing to be abrogated at once. A noxious novelty is the interleaving of circular matter— thus compelling the reader to gaze upon what he does not like to see. A journalistic manager who can be hired to thus deface and disgrace his issues should be made to feel the ignominy he forces upon his subscribers. He deserves to lose paying patrons.—HOWE, *Eclectic Medical Journal*, 1884

A DYING DECLARATION.

The real worth of a dying declaration is not comprehended alike by all persons. One would be inclined to put all faith in the absolute truth of words uttered by those about to be ushered into eternity. In law such a statement is given a certain value. There are circumstances, however, that the scientific man will weigh long and thoughtfully before he can accept in full the truthfulness of some dying declarations. Some of these are discussed by Professor Howe. This is another fragment of medico-legal study with which he frequently supplied the *Journal*.—**Ed. Gleaner.**

A DYING DECLARATION.—It is well known that a person in a dying condition may make a confession of crime to a physician or other responsible person which shall have the credibility of a statement made under oath. The solemnity of the occasion is thought to be impressive enough to make it an object to tell the truth, there being no earthly inducement to prevaricate. While declarations made in a dying state carry very great weight with them, and are generally accepted as legitimate evidence, eminent jurists have raised valid objections to such kind of testimony. There is no opportunity to cross-question the witness, and otherwise to throw light on obscure features of the case. For instance, a woman about to die of miscarriage might say that a certain physician had used instruments upon her, and thus leave the impression that he has done so to effect abortion, when in fact he had used instruments for an entirely innocent purpose.

It is now ruled that a dying declaration is applicable only to the party directly implicated. For instance, a woman declaring that her approaching demise was occasioned by the act of an abortionist, and naming the party doing the deed, might also say that on other occasions she had miscarried at the instance of another physician, naming him, yet it would be ruled that the latter was not in danger of prosecution

from the utterance.

A man in a dying state might declare that a certain individual assisted him in a murder or burglary, yet lie in the declaration; he might be influenced by an old grudge, or have a desire to bring a reputable person into complicity with his own guilty or criminal acts. He might reason that an intimacy with a person of good character would help his own.

Then again, a person in a dying state at the end of a prolonged sickness, might be laboring under delusion induced by disease or medicine. Opiates create pictures in the imagination that may seem real. Death is often preceded by delirium.

The above is not written to lessen the importance of testimony involved in a dying declaration, but to awaken a caution in the mind of the physician who may take evidence from the lips of his patient presumed to be moribund. He can not offer it in court without subjecting himself to a searching cross-examination.— HOWE, *Eclectic Medical Journal*, 1884.

DO WE LIVE OUT HALF OUR DAYS.

The following article will well repay reproduction, if only to emphasize the last paragraph. Pessimism shortens life, and if we would live out half our days we should take the prescriptions offered by one who knew, but did not always take the needed rest prescribed. Dr. Howe fulfilled, however, the last injunction—to “look upon the bright side of things”—to “try to feel that this world at best is a beautiful place.”—**Ed. Gleaner.**

DO WE LIVE OUT HALF OUR DAYS.—Life tables elaborated to demonstrate the average period of human existence show that pursuits and habits appreciably influence longevity.

The husbandman survives the mechanic, the merchant outlives the professional man, and the “commoner” attains the greatest average age. By the “commoner” is meant the one who leads a comfortable career, and never indulges in excesses. Utter laziness shortens life as much as a condition of hardship. The strong arm is possessed by him who puts forth strength—makes an effort. An unused brain leads to inanity and premature decay; and mental overwork hastens apoplexy and paralysis.

The brain needs recreation, which means variety in kind of intellectual work. A game of billiards will refresh a tired mind—the bookkeeper needs diverting exercises, and so does the overworked professional man. At the age of fifty the weary and worried lawyer, minister, or doctor should have a farm to look after—he should hunt and fish, and row and lide. In the cultivation of choice fruits and fine stock the gentleman farmer wholesomely exercises both mind and body; but to retire from business and do nothing is exceedingly dangerous. It is safer to wear out than to rust out. Ecreation does not mean stupor and idleness.

The average agriculturist has opportunities for diversion and recreation, yet he overworks in seed-time and harvest; he is careless about sitting in draughts of air when sweltering with heat; and he allows his stomach to be gnawed with hunger when he goes to town that he may save the expense of a lunch. In that respect he cheats himself outrageously.

Ponder over the vital depression produced by the indulgence of grief, envy, hate, revenge, jealousy, and needless fear. Think of the deadly effects of intemperance and unchastity! There are those who eat too much nutritious food, and who at the same time exercise too little, yet they are few in comparison with those who are doomed to drudgery and a scanty diet. In large towns and cities -there are numbers of pitiful women and children who are not well clothed and housed, to say nothing of the pangs of hunger that have to be endured.

Well, what is to be the remedy for such evils? Wisdom will cure a multitude of ills. Let the brain taxed take heed and rest; instruct the farmer to take half as good care of himself as he does of his stock; reason with the intemperate and the unchaste; and educate the poverty stricken to take hope and see how they may better their condition in life. Cultivate good cheer when despair holds the gloomy in chains. “The world at best is not a dreary place.” It is simply dreary to those who make it such, by those who hum deplorable songs written by pessimistic poets. Away with “solemncholy” hymns set to long meter , and sung in sepulchral tones. There may be melody in plaintive notes, but the heart grows heavy in listening at too many of them. If we would live out half our days we should look on the bright side of things—we should try to feel that this world at best is a beautiful place.— HOWE, *Eclectic Medical Journal*, 1884.

ANODYNES IN DISGUISE—AND THE HARM THEY DO.

Dr. Howe believed in the open and frank use of anodynes under their original and well-known names. Such deluding names as “soothing syrup,” “chlorodyne,” etc., he viewed as deceptive ways of encouraging tipping in narcotics and alcohol. He took occasion often to warn his readers of the dangers of tipping, through the constant use of medicines containing enslaving ingredients. A plain, occasional full drunk is less reprehensible than continual tipping, even though the quantity taken be small. It is the steady dropping of liquids that wears the stone away.—**Ed. Gleaner.**

ANODYNES IN DISGUISE—AND THE HARM THEY DO.—An advertised lethal drug is sure to be bought and taken. Soothing syrups containing opium put babies to sleep, and become popular with nurses. What is chlorodyne but a substitute for alcohol and opium? Is not intoxication or inebriation sought when the medicine is purchased? Laudanum and chloral are openly bought, and swallowed as soporifics. Tipplers who are desirous of “tapering off,” fly to a noxious remedy that benumbs a sense of “goneness” in the stomach and brain; and simply continue to tipple through a change of agencies.

The better classes, so called, are ashamed to drink openly at a public bar, hence they have at home a well-filled sideboard, if they love to stimulate. Many well-to-do ladies take a glass of wine several times a day; or resort to a few drops of paregoric or laudanum to soothe agitated nerves. Men drink alcoholic mixtures for the enlivening ideas such beverages awaken. They do not intend to get tipsy, but often take a drop too much. They love a social glass, and enjoy a sly drink. They have inherited a hankering for alcoholic stimulants, and indulgence sharpens the appetite.

Common tipping and drunkenness among men is deplorable enough, yet how much worse is it for a wife and mother to indulge in tipsiness, whether the tipple be rum or opium. A woman buys soothing syrup for a crying child, and little dreams of the harmful effects produced upon the impressible creature that swallows the narcotic. If it be a boy baby that takes the somnolent syrup, he will crave whisky when he is twenty, and if it be a girl baby, she will want something to allay nervousness before she is out of her teens.

The signs of the times are that Americans grow more and more stimulant and narcotic consumers every year. Distilled, fermented, and

brewed liquors are imbibed in larger and larger quantities; and the importation of opium is startlingly on the increase. John Chinaman long ago ascertained that opium was the cheapest tippie in the world, and the imitative American is copying the economies of the celestial. We are rapidly acquiring the reputation of being opium eaters. To stay this tide let the profession of medicine set its influential and scientific foot heavily upon the necks of those who are clandestinely poisoning the innocents. Away with opiated soothing syrups—away with genteel opium taking—away with harmful drugging with anodynes, and let us frown meaningly upon excessive indulgence in strong drink.

Medicine will not act as it should upon a patient whose stomach is more foul than an alligator's maw, and whose nerves are all unstrung through the prolonged influence of alcoholic potations. Nobody can cure an opium taker, though a drinker of spirits may be reformed. Let us be on the watch for those apothecaries among us who violate statutes enacted to restrain the sale of opiates and dangerous drugs; and if the laws now existing be not potent to stay the unrestrained sale of poisons, let the profession of medicine take the initiative in instituting more stringent measures. Half the stomach bitters put up in this country are designed to answer the purpose of tippie. And, what is worse, the vilest liquor is the stimulating ingredient of the compound.—HOWE, *Eclectic Medical Journal*, 1884.

IS AN AUTOPSY ILLEGAL?

The physician would often be glad to know whether or not he may legally make a post-mortem examination. This question is briefly and pointedly answered herein by Professor Howe.—**Ed. Gleaner.**

IS AN AUTOPSY ILLEGAL.—A medical friend states that he held a post-mortem examination lately, and carried away a piece of the heart for subsequent and more careful inspection. A son of the deceased, who lived away from home, was angry upon learning that an autopsy had been held upon his parent; and now threatens me with prosecution. Can he fine or imprison me? To the above I replied that in law there is no property in a human body; and cognizance is not taken of injured feelings, hence no legitimate cause for action exists. The threatening prosecutor will learn before he proceeds far that physicians commit no breach of the law when they hold autopsies; and that the appropriation of an insignificant part of a corpse for scientific investigation will not be held as theft. However, if a medical man carry away the uterus and its

appendages for the purpose of concealing crime, he is guilty of misdemeanor, and liable to be punished for the misdeed.—HOWE, *Eclectic Medical Journal*, 1884.

ARE ANGLE WORMS BLIND; AND DO THEY SUBSIST ON A DIET OF EARTH?

Professor Howe, like all teachers, was frequently plied with questions by mail, and often the interrogator forgot to enclose a stamp for reply. This interesting answer reminds us that nothing was too lowly in the scale of life to merit Professor Howe's interest. Short and pithy as the reply is, yet how many physicians could have framed as interesting and instructive an essay upon the earth-worm? Are we forgetting about other creatures than man? The paucity of such material in medical journals inclines us to wish that some one would raise up another Howe for this purpose.—**Ed. Gleaner.**

ARE ANGLE WORMS BLIND; AND DO THEY SUBSIST ON A DIET OF EARTH?—These questions came to me by letter, and in reply I will say that the earth-worm—*lumbricus terrestris*—is blind as a mole; and eats nothing but dirt or soil rich in organic debris. After the nutritious matter is absorbed the residue is deposited in coils or pellets near the surface of the ground. Boys who use earthworms to bait hooks to catch fish always seek lumbrici in the dirt of chip yards or in the damp earth near a sink drainage. Earthworms are rarely found in dry sands or gravelly soil.

In the autumn earth-worms descend to deep recesses in the ground, and return to the vicinity of the surface in the early spring. During a shower of rain in summer they leave their burrows and venture along the surface of the ground. In passing through soft mud they leave a trail which may be easily traced. It is then that birds and frogs gobble them up. They have no weapons of defense —no blind worms sting. They respire through the skin. They are not hermaphrodites, but reproduce in pairs.—HOWE, *Eclectic Medical Journal*, 1884.

"PEACE TO HIS ASHES."

This paper is reproduced to show how fairly Professor Howe estimated men. It was his privilege to have known many of the great surgeons of his day of all schools and to have received instruction from some of them. He knew their strength and their weaknesses, and he accorded to each his meed of praise or censure. Had Dr. Howe

himself been of the dominant school of medicine, his own name would have been written with those of Gross, Warren, Parker, Mott, and Pancoast.—**Ed. Gleaner.**

“PEACE TO His ASHES.”—In accordance with an expressed wish the body of Professor Gross was cremated. The statement is not published as to the disposition made of the “ash.” Possibly a classic urn will be fashioned large enough to preserve for a season the family ashes. At death the physical part of the man may as well be dissipated at once with intense heat as to be years in returning to the original elements while in earth. The fumes of the cremating furnace need not necessarily contaminate the atmosphere, though residences in the vicinity of a crematory would not be likely to command high prices. A tall chimney might carry mephitic gases above breathing levels.

At his death, and for a quarter of a century previous to that event. Professor Gross was one of the most distinguished surgeons in the world. His fame did not spring from a conspicuous amount of inventive genius, but from a long professional life spent in earnest toil, the aim of the man being to become a master in surgery.

As a writer Professor Gross was voluminous, sound, and profound, yet not always elegant and pointed. His experience was large and his judgment good, hence his surgical works, rose to authority. There was not a striking felicity in his style as a writer or speaker, yet his words always commanded respect and attention.

Dr. Gross was a deep diagnostician and an able operator, yet he could hardly be called adroit in any department of surgery. The editor of the New York Medical Record, in an obituary notice, says: “There are epochs in the history of medicine with which famous and undying names are inseparably associated, and there are great names belonging to special departments in medicine. But for Dr. Gross no one great operation is called by his name.”

Professor Gross was never rash nor dashing, but always patient and painstaking—and he had confidence in his powers. He was generous in ascribing just dues to co-laborers in the regular vineyard, but careful to ignore ideas having origin in outside sources. He was not progressive in his professional tendencies—he died in the belief that phlebotomy had fallen into unreasonable neglect.

Death has lately cut down several American surgeons of considerable

distinction. Among the number is Willard Parker, M. D., LL. D., at the ripe age of eighty-four. Thirty years ago, when I was “doing” the hospitals and clinics of Boston, New York, and Philadelphia, it was my pleasure and good fortune to listen to the stirring words of John C. Warren, Willard Parker, Valentine Mott, and Joseph Pancoast, and none impressed me more deeply than those of Professor Parker. He was apt in his illustrations, though almost never elegant. Once, while lecturing upon a clinical patient who seemed to be cold, and pinched in features, the doctor said:

“This man needs to be washed inside and out, and should have his vital flues re-stoked. The crude Thomsonian possesses a few valuable ideas—with pepper tea he kindles recuperative fires; with Lobelia washes and rinses a dirty stomach as he would a soiled garment. We should not be above taking a lesson from an old granny.”

Warren was more dignified, logical, and classical, but not superior as a teacher. His last good deed was to bequeath his body for dissection and anatomical demonstrations. His desiccated remains are still on exhibition in the “Warren Museum.”

Pancoast was a pleasant and animated teacher of surgery; and he was an expert operator. He generally managed a climax: that provoked a round of applause. In his teens he worked as an apprentice to a blacksmith, and said that he always kept his leather apron as a memento of the experiences of earlier years.

Sims, who has been gone but a few weeks, was cast in a finer mold than any of the men just mentioned. He was gentle by nature and polished by culture—he was the right stuff to make an operative gynaecologist, a branch of the surgical art which does not demand the rough diagnostic manipulations that are inseparable from the handling of sprained and dislocated articulations. —HOWE, *Eclectic Medical Journal*. 1884.

LOCAL ANESTHETIC.

The following local anodyne was one of Professor Howe's favorite combinations. It should be remembered in times of need when neuralgic pains are driving the patient to distraction and as little internal anodyne medication as possible is desired.—**Ed. Gleaner.**

LOCAL ANAESTHETIC.—Occasions occur when it is desirable to produce powerful sedation locally. There may be many ways to bring about local lethal action, but the following is best known to me: Rx Camphor, Chloral, 2 drachms each, Sulph. Morphia 5 grains. Chloroform 2 drachms. M. S. Apply with a camel's hair brush to painful spots.

The above clear liquid may be painted upon the skin at an aching point, and it will produce so much sedative action that the sufferer praises its qualities. A female patient liable to attacks of tic doloureux never takes a journey without a vial of the soothing anodyne in her reticule. I order it brushed upon the skin covering inflamed joints. It may be painted upon the mastoid processes to alleviate the pangs of earache. It may be safely rubbed upon the gum of an aching tooth. A few drops on a pledget of lint held to the nose will instantly cure headache. Neuralgic spots are to be wetted with it repeatedly. It is to be employed upon the necks of the croupy and diphtheritic. It has thwarted suicidal intents and purposes and invoked benisons upon the prescriber.—HOWE, *Eclectic Medical Journal*, 1884.

A WAY TO PREPARE PAPERS FOR THE NATIONAL.

The following advice, though seemingly unnecessary, is exactly what some physicians need to assist them to prepare for society meetings. Facts are what are wanted in papers, and by recording them early and then putting them into simple and direct form, the writer has the best kind of a society paper. At the most interesting scientific meeting the writer ever attended, the essayists limited their papers to three minutes, giving in concise language the conclusions arrived at by their studies of the subject in question. The reading of some of the papers did not consume over one minute, yet the papers were pregnant with valuable suggestions and entirely satisfactory as society papers.—**Ed. Gleaner**.

A WAY TO PREPARE PAPERS FOR THE NATIONAL.—It will be observed by looking at President Stratford's circular that many members are named to prepare papers for the use of the National at its coming convention. The list is so large that I thought at first little would be done, for usually where many are called few are chosen. But it occurred to me that a few hints might hit and help those who excuse themselves from literary work on the most trivial provocation. They put off and delay till everlastingly too late. They don't feel well to-day—had an obstetric case last night, or expect one to-morrow—have a “cold” too,

and the weather is bad. Besides, the topic assigned me is not interesting—not easy to write upon.

To such as make excuses I presume politely to suggest that they go to work at once—not to-morrow, but to-day. Make note of a thought, expand and modify it to-morrow, look up the topic in medical literature at command. Think over illustrative material in the volume of experience. Arrange material in a way to make ideas carry force with them; re-write several times, generally improving each revision. Erase now and then, boil down, simmer, skim, filter, and set aside to cool. Steam up again, stir, add a little sweetening, then a little vinegar to make the mess tart and palatable. Don't repeat the same idea, but hunt for a new one. Avoid having the same word occur too often—seek a synonym. It requires downright labor to write a readable piece of composition. It is well enough to pray for inspiration, but better to knuckle down and engage in honest labor. Labor omnia vincit. Genius is a pauper, a beggar. Industry is the purest gem in the crown of Fortune. At the close of the late International Medical Convention, held at Copenhagen, a distinguished scientist was cordially invited to visit friends on his way home. The reply was that he must hurry back to engage in preparing a paper for the meeting to be held in Washington two years hence.—HOWE, *Eclectic Medical Journal*, 1885.

SEPARATION OF THE SUPERIOR EPIPHYSIS OF THE HUMERUS.

This paper is a sample of the numerous surgical articles by Dr. Howe printed in the *Eclectic Medical Journal* as a leader. It discusses clearly this interesting and often undetected form of injury. Professor Howe excelled in bone surgery, and wrote "Fractures and Dislocations," one of the best treatises of its day. This book is not often seen nowadays except in the libraries of the older Eclectic physicians. The wonderful advances made in the surgery of bones necessitates the frequent purchase of up-to-date works, and of necessity this book is valued only relatively at the present day.—**Ed. Gleaner.**

SEPARATION OF THE SUPERIOR EPIPHYSIS OF THE HUMERUS.—Between the anatomical and surgical necks of the humerus there exists in young subjects a lamina of cartilage that divides the head of the bone and a part of the tuberosities from the shaft. In an adult subject there may be fracture at either of the two necks, i. e., above or below the tuberosities, but in juveniles the separation is along the plane of the cartilaginous septum which is

through the tuberosities, and not above nor below them. *The age of the patient is to aid in the diagnosis*—an adult sustains a fracture at one of the cervices of the humerus—a young person sustains *diastasis* or separation of the epiphysis from the shaft along the line or plane of the cartilaginous interlayer.

The deformity appears somewhat like a sub-coracoid dislocation of the humerus, yet the displacement inwards is not so pronounced as in luxation. The glenoid cavity is not made empty as in dislocation, but presents some depression in the outer portion of the space. The epiphysis (head of the humerus and part of the tuberosities) stays in place, while the upper end of the shaft takes a position an inch or so inwards. The arm is neither lengthened nor shortened, for parts of the fractured surfaces rest in contact with each other. A portion of the broken surface of the lower and long fragment extends under the coracoid process. The displaced shaft is near the skin on the inner aspect of the arm. A fullness is apparent on the inner aspect of the scapulo-humeral articulation. Crepitation on imparted motion is not readily obtained in all cases, but an abnormal sound can be obtained. It may be that of rubbing or rocking. The injury is likely to deceive the inexperienced and the unwary—it is oftenest produced by direct violence, the shoulder receiving the force of a fall of several feet, as when a young person is thrown from a horse or carriage.

The diastasis is to be treated as if it were a fracture, and, as follows: A strip of rubber adhesive plaster four inches wide and a yard long is to be split in the middle a few inches from one end, and a loop made by passing the end through the slit and sticking it to the strip, *adhesive surfaces coming in contact*. The hand and forearm are sent through the loop, and also the upper arm to a point a little below the fracture. Then the long end of the adhesive strip is carried across the back and made to adhere to the skin at a time when the upper end of the long fragment is pressed outward. The loop and adhesive strip are to act as a fulcrum, while the humerus is converted into a lever as the elbow is pulled inward so the open hand shall cover the opposite axilla. It is well to hold the elbow in the inwardly pulled position by using another strip of rubber plaster to cover the olecranon and the outer aspect of the forearm, and then reach the opposite shoulder. This dressing will prevent deformity, and secure osseous union of the broken cartilaginous surfaces. No other dressing will secure a satisfactory result. It is to be borne in mind, too, that this is the best dressing for treating fracture of the clavicle.—HOWE, *Eclectic Medical Journal*, 1885.

FISSURE OF THE ANUS.

Though a surgeon and surgically inclined. Professor Howe favored the application of salicylic acid ointment in many rectal troubles, rather than a resort to operative measures. It was the belief of Dr. Howe that fistula in ano and related rectal lesions occurred oftenest in those of a tubercular diathesis, even though the latter was not detectable at the time. Hence the frequent injunction in such cases to give Fowler's solution of arsenic as an adjunct to treatment— for this was one of his favorite medicines for tuberculous subjects. The flight of time is made apparent in this paper by the reference to the application of Coca as a local anesthetic. Only the previous year had a medical student—Karl Roller—demonstrated the practical value of the alkaloid of coca, which Gardeke had discovered in 1855 and named “erythroxyline,” but which was later named by Albert Niemann “cocaine.” That it was distinctly a local anesthetic had been noted in 1862 by Moreno y Maiz, and in 1880 by Von Anrep, yet the feasibility of using it generally for local anesthesia was left for Roller to impress upon the astonished but almost unbelieving medical world. Hence the careful and tentative use of coca, as advised in this article, though it possesses but the feeblest of anesthetic powers. Now we rely upon cocaine as the best local anesthetic and one which has proved a blessing to the afflicted and a curse to those who abuse it.— **Ed. Gleaner.**

FISSURE OF THE ANUS.—At the posterior commissure of the anus, by the side of a pile tumor, a fissure forms, and the defect renders the sufferer utterly miserable.

The difficulty is encountered in middle life, and in both sexes. Possibly it comes from constitutional syphilis and eczema. Constipation favors a localization of the systemic taint. The greatest distress is experienced when an effort is made to evacuate the bowels. As soon as the anal sphincter is pressed upon and forced to dilate, the elongated, irritable, and indurated ulcer causes a reflex action which takes away the ability to strain, and sends a sickening sensation through the entire body. The patient may have no rational idea of what the disease should be called. He may think he has piles, and be treated for hemorrhoids, yet no benefit will be obtained. If a surgeon be consulted he will place the patient on the abdomen and expose the anus in a good light. He will then part the nates with his hands and ask the afflicted individual to strain as if to expel flatus. The pressure will protude the anus to the extent that the lower end of the fissure can be seen. The other extremity of the morbid furrow reaches to a point just within the sphincters. It

appears like a raw sulcus with hard borders. A small quantity of blood and pus may be seen, though the fissure is often dry or free from pumplency. A thorough exploration of the difficulty can not be executed unless the patient be under the influence of an anaesthetic. The application of a solution of Coca might deaden sensation to the extent that the anus could be turned outward or manipulated without pain. But, as I am about to advise a course of treatment that does away with a surgical operation, an anaesthetic need not be mentioned.

Indeed, a painful exploration need not be executed. As soon as it be ascertained that anal fissure exists, the topical use of salicylic acid and vaseline is to be commended, thirty grains of the salt to an ounce of the unguent. This is to be pressed into the depths of the anus once a day, and after an alvine discharge. The agent—salicylic acid—produces little pain, but utterly destroys the hard ridges that flank the fissure and obliterates the pile tumor at whose base the sensitive crack is located. In a word the supersensitiveness will soon subside, and all the accompanying aches in hips and back. However, to effect a cure *tute et jucunde* the internal use of arsenic should be prescribed. Fowler's solution in drop doses, repeated every four hours, is next to necessary in accomplishing the happiest results.

Women suffering from anal fissure will divert attention from the location of the disease and demand remedies for urinary and uterine difficulties. In times past it was customary to cauterize the os tinea under the theory that ulcer of the cervix existed. It may be remarked *en passant* that dyspareunia and vaginismus are occasional sequences of fissure of the anus. A practitioner of medicine has to be wary in the diagnosis of morbid phenomena of a reflex character.

Formerly I excised *fissura ani* with curved scissors; and the difficulty of executing the operation well has rendered me all the more pleased with a method that requires no cutting. My experience with salicylic acid in the treatment of malignant ulceration led me to try the agent in fissure of the anus.—HOWE, *Eclectic Medical Journal*, 1885.

CHOREA.

Frequent educational squibs, such as too many neglect, often appeared in the Journal from Dr. Howe's pen. This is a fair sample of such briefs, in which he sought to stimulate a desire for broader knowledge than merely that required in the actual treatment of disease. The better read the physician, the better his social standing and

his chances of greater success in practice. Moreover, there is a satisfaction in knowing why diseases are named as they are that can not come to the physician who neglects this cultural side of medical studies.—**Ed. Gleaner.**

CHOREA.—“Scientific medicine” took form in Egypt, and was practiced by priests who were as numerous as diseases; and each specific disorder was an evil spirit, to be influenced by a particular priest. A sick person could be cured by going to the right priest; and the only trouble was to be wise enough to select the one controlling the special ailment. The Latins borrowed medical arts from the Egyptians and inaugurated their own priesthood, who took the name of Saints. St. Clara cured sore eyes; St. Hubert influenced hydrophobia; St. Pernel charmed ague; St. Genevieve controlled fevers; St. Anthony presided over erysipelas; St. Vitus removed nervous disorders, one of which we now denominate chorea, a term coming from the Greek choreia, which signifies a dance. A patient having saltatio sancti viti, being affected with rhythmical and involuntary motions of one or more limbs and of the entire body—the affection disappearing during sleep. The disease is a neurosis of the juvenescent, and of females after puberty. Its pathological essence has never been discovered, but is presumed to be a lesion of the nerve centers. However, it has been known to spring from a neuralgia provoked by a splinter in a finger. Especially does the twitching commence in facial neuralgia—*tic douloureux*—and then extend to the limbs and body. Feeble persons are oftenest victims to spasmodic activities of the nature of chorea. Epilepsy is presumed to be more or less nearly related to the jumping disorder.—**HOWE, *Eclectic Medical Journal*, 1885.**

VERATRUM VIRIDE.

Professor Howe did not carry a pocket medicine case, but he had always a few remedies in his pocket. With a merry twinkle in his eye he would frequently display before the class a little ivory box of morphine tablets and a half-ounce vial of specific veratrum. The lesson intended was that to know a few medicines well was vastly better than to be less familiar with many. Dr. Howe knew veratrum and used it to effect. His reference to Dr. Palmer is interesting, as it compliments one who, many years ago, dared to investigate and use remedies not popular in his own school. Only recently Dr. Palmer, well along in years and experience, and still an highly honored member of the dominant school in this city, gave expression to his belief in the virtues of several well-known Eclectic medicines and recounted his successful experience with them in his specialty— that of diseases of women.—**Ed. Gleaner.**

VERATRUM VIRIDE.—At a recent meeting of the Academy of Medicine, in this city, the subject of Antipyresis was up for discussion, and Dr. Palmer is reported as having made the following observations: “A remedy in which the speaker has faith as a febrifuge is tincture Veratrum viride. He considers it superior to Digitalis. It not only reduces the pulse but also the temperature, though not to the same degree. Its effect is well marked if employed in the treatment of pneumonia, and particularly in pelvic inflammations. It need not be, it ought never to be, given in large doses, so large as to provoke vomiting. Small doses frequently repeated act best.”

The above quotation is made from the fact that I have been a champion of the remedy for twenty-five years, and now find an able and liberal observer to advocate the same views. My estimate of the worth of Veratrum as a medicine may be too high, but continued experience increases its value as I learn to appreciate therapeutic action. I respectfully request those who entertain prejudice against Veratrum, or who hold Aconite in too high esteem, to employ the agent in pulmonic and uterine troubles.

Another speaker in the discussion referred to above adds to the testimony. He says: “I am glad to hear Dr. Palmer allude to Veratrum viride. I remember distinctly with what derision his former distinguished teacher in theory and practice always spoke of this remedy. For a time I was skeptical as to its utility, but how the medicine was given with confidence in pneumonia, and cases where it was indicated.”—HOWE, *Eclectic Medical Journal*, 1885.

SHORT OBSTETRIC FORCEPS.

This is a kindly word to the physician, who would exaggerate the trite old saying, “Meddlesome midwifery is bad,” and then let the woman in parturient throes suffer excruciatingly when careful operative manipulations could quickly give relief. We frequently hear physicians say, “I never use forceps!” When we hear this we make a mental reservation that such a man will never attend a woman for us if we can legitimately prevent it. Forceps are a blessing. The long Hodge has saved countless lives, and the short forceps has made blessed many an accouchement that might have been endured only in torture. Badly and unskillfully used, or by one who is drunk, of course forceps are dangerous; but rightly employed by one who knows his anatomy and obstetrics—forceps both long and short—should be classed among the

benefactions to the suffering parturient.—**Ed. Gleaner.**

SHORT OBSTETRIC FORCEPS.—Although a staunch advocate of the long and strong forceps of Hodge, I occasionally encounter a case of delivery in which a pair of short and light forceps is desirable. I refer to a primipara in prolonged and exhaustive labor, where the head of the child, during a uterine throe, is forced to the vulvar aperture, yet recedes an inch or more as soon as the energy subsides. The accoucheur tries, by applying pressure with his finger against the side of the foetal head, to prevent recession, but his efforts seldom succeed. The parturient woman becomes tired and discouraged, and the throes of the womb less energetic, so that failure is possible, if not probable. The child's head is almost within the grasp of the hand or fingers when a pain is on, but by receding gets quite out of reach. As time passes patience and energy are wasted, and dangers increase. If the worried woman be given cups of tea and encouraged she may weather the storm, and think the medical attendant has exhibited great skill; but what are the facts in the case? The obstetrician has done little or nothing, and the poor sufferer has done all. She triumphed because she possessed an enduring physique; the doctor is thanked because no one present is competent to criticise. Instead of wasting time and strength in stupidly waiting the obstetrician should be prepared to deliver the woman with forceps as soon as her energies begin to nag, and progress of the labor has virtually ceased. He should have at command a pair of light, short forceps and be prompt to use them. He can deliver the patient in five minutes and guard the perineum against rupture. He does all in a skillful and timely manner, and deserves praise and pay whether he gets either or not. He could have delivered the parturient woman with the heavy forceps of Hodge, but the implements are awkward and clumsy for a gentle piece of work. It is using a claw hammer to draw a carpet tack. An instinctive admiration for “the eternal fitness of things” will move the obstetrician to keep in store a light and short pair of delivery forceps.—**HOWE, *Eclectic Medical Journal*, 1886.**

SEXUAL EDUCATION.

It will be gratifying to the advocates of sexual education and social purity to know that Professor Howe tackled this subject over a quarter century ago—when people were prudish about giving sexual enlightenment to the young. To-day it is one of the foremost of social movements, and many ways—some of them excellent—are advocated for imparting such instruction. The remedy here given is, in our opinion, the

best solution of the problem ever offered—that is, of letting the young have access to a recent standard physiology published for physicians, and which is necessarily free from everything but the scientific aspect of the subject. It speaks well for Dr. Howe's courage, judgment, and balance in viewing and providing for such a needed reform.—**Ed. Gleaner.**

SEXUAL EDUCATION.—Parents would have their children know something about sexual physiology as the period of pubescence arrives, but they do not understand how such instruction can be safely imparted. School books and popular works on anatomy, physiology, and hygiene contain nothing in regard to reproduction or the functions of the sexual organs, or so little that the desire is kindled to obtain knowledge. Curiosity is awakened by the command not to touch “forbidden fruit.” Half grown boys often have a circulating library of obscene literature; and the lad passes as “smart” who is the possessor of a vulgar volume. Girls have few opportunities to learn anything about the parts they are to play in the peopled world. They march on to destiny with the thoughtlessness of so many female bovines.

Now, to better this state of sexual ignorance—or of something worse than ignorance, a pruriently perverted imagination—let the heads of families place among their reading books a copy of some standard work on physiology, such a production as is found in a physician's library. Let the work be of recent publication and well illustrated. In that the young man or woman can find all about reproduction, yet obtain no information he or she ought not to have. It has seemed strange that this method of imparting knowledge to youth has not been generally adopted. In the standard work on physiology may be found the solemn facts of physical procreation, and nothing is said about lust and the base impulses of passion. Sexual appetite secures perpetuation of the race, and matrimony is the normal and legitimate method for indulgence. Abnormal and illegitimate contacts are attended with penalties.—**HOWE, *Eclectic Medical Journal*, 1886.**

THE TOWER OF LONDON.

The Tower of London! What monstrous horrors have been endured within this citadel of royalty! For over eight hundred years a legion of famous prisoners have passed its gates, many of them never to emerge again. It has been used alternately as a royal residence, a prison, and a museum. In its precincts kings have resided, royal heirs have been born, royalty has kept court, and kings have received their royal

brides—and some of these here saw the light for the last time. In its confines Chaucer, an officer of the court, composed “The Testament of Love,” and the lamented but unreliable Raleigh wrote his “History of the World” and then lost his head. What an array of crimes has the moldering walls of London Tower encompassed: a poor, weak monarch seared to his death; the Duke of Clarence drowned in a butt of Malmsey wine; the two young royal princes smothered, and the heads of Anne Boleyn, Catherine Howard, Protector Lord Somerset, and Lady Jane Grey lost to appease the hateful whims of royal brutes! Through its noted Traitor’s Gate have passed to their death some of the most loyal and worthy subjects of unworthy monarchs—”an array of victims of tyranny—heroes who have passed”

"On through that gate, through which before
Went Sydney, Russell, Raleigh, Cranmer, More."

Dr. Howe visited this famous prison in 1886, and the following sketch is a part of his London Letter to the Journal at that time.—**Ed. Gleaner.**

THE TOWER OF LONDON.—I have read so much of cruelties practiced in the Tower of London that I could not forego a visit to that famous or infamous fort and prison. It stands on the banks of the Thames, a little to the east of the city of London. The citadel is in a plat of twelve acres of ground; and there is a moat surrounding all. In feudal times when dissatisfied barons felt the encroachments of royalty they would drive the king into this stronghold and there exact redress. And here, too, kings imprisoned rivals, inflicting upon them the most horrible tortures, sometimes putting out their eyes, and then confining them to underground dungeons for years and years. If a body was to be turned over for burial by friends it would sound better if no marks of violence were visible on it. To bring such a death about a red hot rod was forced into the bowels per anum. To think of such a cruelty is enough to make one's blood cry out “shame!” even at this remote day when there is a humane queen and all is Christian and serene. On what monstrous wrongs is the Government of Great Britain founded! The history of the nation is simply astounding. In the manifestation of violence the story of blood challenges any that can be told of the worst barbarians. Call up the strangling of the child princess in the Tower. When I read that crime in my boyhood I vowed to raze the prison to the ground! Now, I am here—why do I not keep the youthful promise? Well, there are great burly soldiers, nicknamed “beefeaters,” standing round, and those crimes were committed centuries ago. The present generation is not to blame for what was done so long ago. The present rulers have no share

in the audacious crimes of Richard III. But I hate the sight of that old tower. It calls up a calendar of wrongs that move the spirit to vengeance. For a small sum I was permitted to enter parts of the armory, for that is what it chiefly is at present. Here are suits of armor worn by kings in feudal times; also helmets, halberds, spears, and battle-axes—big and heavy—regular head splitters. To be the king of England in those times meant business. No toying with pretty actresses, but hard work on bloody fields. There is a robust chivalry in such reigning that moves a remnant of heroic spirit within, and makes one admit there is a captivating grandeur in the sound and circumstance of war. But the methods of carrying on war have changed. How long would that once impregnable castle stand under a fire of modern artillery? Why, it would tumble like a cob-house at the first onset. The Tower is a fortress no longer, but a memento of what a fort once was. As such it is an object of curiosity. The armor within is as much a relic of the past as the ditch which enclosed the grounds. It is said that the walls of subterranean dungeons contain touching inscriptions cut by hopeless State prisoners who spent their lives hoping against hope. What plots were concocted to release unfortunate victims of hate and jealousy; and how many sacrificed their lives in vain attempts to rescue a friend or relative. All is quiet now, and the grass grows on turf that has a thousand times been irrigated with human blood. May this monument of State crimes remind the powers that be that later experiences have taught a better way of governing men than was once practiced in Merrie England! But war is not over. At Woolwich are cunning devices for killing men; and there is no evidence that right is usurping might. The surplus wealth of England is to be consumed in strengthening her batteries. And how is this going to end? Is not the time coming, a few centuries hence, when these now formidable batteries will be preserved in some old fortress as mementos of the feebleness of the preceding generations? If this be not probable it is certainly possible. Perhaps the art of peace will be so aesthetically cultivated that an Arcadian state of quiet and love-feasting will be attained. Rather, may not commercial interests ensure perpetual peace? I begin to believe there is a hope for peace on the ground that wars don't pay—that they are bankrupting.—HOWE, *Eclectic Medical Journal*, 1886.

BIOLOGICAL STUDIES.

“Wherefore by their fruits ye shall know them.” Opposed always to advertising by illegitimate means. Professor Howe herein shows how a doctor can make himself felt

in a community in a legitimate and helpful way—a perfectly proper way of letting his work bring him into conspicuity and practice. Rightly managed, such a course can be condemned by no one.—**Ed. Gleaner.**

BIOLOGICAL STUDIES.—I have often heard the rural practitioner complain that he had no opportunities to *advertise* himself in his community or professional field of labor. To such I would say, “You have an excellent opportunity, but you do not know how to utilize it.” I have in mind the outcome of what I told a young practitioner some years ago who was about to open an office in a county seat—a city of twelve thousand inhabitants. My young friend had acquired a good English education, and knew something of Latin. He was to advertise himself by a card in the local newspapers, giving references, etc. Then in due time he was to obtain an introduction to the School Board, asking the privilege of explaining the nervous system to the pupils some afternoon or evening. He prepared the brain and cerebral nerves of a calf, and also those of a turkey and turtle. With these specimens preserved in jars of alcohol, he entertained his hearers so well that he was soon invited to deliver a series of lectures in the City Hall upon the “Brain and Nervous System.” To fulfill this great engagement he had to take time to get up material for display and illustrations, and in so doing he found himself quite advanced as a *biologist*, for he could not study the brains of the different animals without learning much of their habits and peculiarities— of environment and the influences modifying outline and function. He forced his pencil into service, and became able to represent on large cards such diagrammatic figures as might be useful to explain otherwise obscure points. He bought a blackboard, and compelled his hand to make rapid sketches in skeleton figures. At length he was so thoroughly prepared for popular teaching that the High School in the place engaged him to deliver a course of instructions in Biology at every term, even offering some pay for the work done. The result turned out to be that he was soon on speaking terms with all the best people in the county; and from this source of extended acquaintance he commanded a lucrative share of professional patronage. The old doctors turned up their professional noses at the method of arresting and engaging public attention, yet they all ceased to cavil as soon as they were forcibly convinced that the young man was well up in biological subjects.

Within a period of ten years the “young doctor” had founded a Society of Natural History; and for five years he had been President of it. To keep at the front in biological studies he had been obliged to buy books, and to spend time in making dissections; but by working diligently he had

accomplished quite wonderful results—he had astonished himself. Little by little his private cabinet of skeletal preparations grew until it embraced every vertebrate animal in his vicinity, and duplicates enough for valuable exchanges.

“For all this. Prof. Howe, I am indebted to encouragement lent by you,” he wrote some months ago; and he added, “Please publish this in the JOURNAL that others may be benefited thereby.”

I will add that the average graduate from a medical college, if he possesses a fair education in English, may accomplish as much as the above doctor did, and a brighter, more ambitious man could even outdo him. There is scarcely a limit to what a young man may accomplish in this world of mediocrity. Then, the pleasure of acquiring knowledge compensates for the labor and expense of the scheme.—HOWE, *Eclectic Medical Journal*, 1886.

ABBOTSFORD AND MELROSE ABBEY.

In 1886, Professor Howe consummated a long-cherished desire to visit Europe. His chief purpose was to visit the hospitals of the Old World, but, scholar that he was, he did not neglect the cultural and historical opportunities of travel. Upon the places visited he wrote many delightful articles pregnant with descriptions and historic allusions. These possess a charm rare in letters of travel, and the article selected will please the majority of readers who incline to literary topics. Others on “Michael Angelo” “When the Art of Ancient and Mediaeval Rome,” etc., were admirable productions, but too long to reproduce in our pages. This pleasing appreciation of Scott and Abbotsford and Melrose Abbey—literary shrines most loved—shows Dr. Howe in one of his happiest recreative moods.—**Ed. Gleaner.**

ABBOTSFORD AND MELROSE ABBEY.—The American, whether he visits England or not, always feels as if he inherited certain rights there; and that he should, if the occasion present itself, look after ancestral interests. He speaks the mother tongue, and revels in the literature of a language which in time will be universally spoken.

Although our fathers, as colonists, had a quarrel with the petulant “Home Government,” and we succeeded in setting up housekeeping for ourselves, we no longer entertain a grudge against the descendants of those who thought we were wrong! We have a country of our own, and quite naturally glory in its marvelous growth, but we do not forget that

our laws and customs have been largely copied from English samples; and we love to read in prose and verse the stirring words of the best English authors. Indeed, we claim partial ownership in the literary productions of the mother country. We purchase her publications, and trust that our patronage has been appreciated. If we have appropriated anything without giving due credit, we have done it much as a boy takes a cake from his mother's pantry.

The most thrilling tales read in our boyhood are from Border Minstrelsy; and the general reader can not help admiring the witching poesy of Sir Walter Scott. The knighted bard was born in Edinburgh, but spent much of his boyhood in a region of country often fought over in strife for territory, in struggles for prestige, and in making reprisals. Then there were the endless disputes about succession to the Scottish crown on the part of kings and chieftains; and bloody bickerings between Scot and Britain in regard to the Anglo-Norman frontier. The results of a battle reconstructed boundaries, and provoked animosities which became chronic. The land was full of song and story; the valiant deeds of chieftains were rehearsed at every fireside on the border, and the youthful maker of rhymes wove these tales into captivating prose and verse. Walter Scott was naturally a genius, but the surroundings of the man helped to develop his talents, and to give them a turn in a given direction. He was a patriotic son of Scotia, and warmly sympathized with the gallant heroes who triumphed well at Bannockburn, but lost at Flodden Field. In these decisive battles, fought mostly in hand-to-hand encounters, were ample opportunities to display

“That stern joy which warriors feel
In foeman worthy of their steel.”

The Lay of the Last Minstrel and Marmion are faithful representations of contests in armor, the weapons of the cavaliers being swords, spears, and halberds. Individual tilts took place on horseback as well as on foot. Sometimes heads were severed by the stalwart blow of a battle-ax. The issue of a fight depended more upon the display of personal bravery on the part of leaders than upon the discipline and skillful handling of troops.

The famous “Border Wars” were over before Scott was born, therefore he became a subject to the English Crown. However, his heart was ever loyal to the land of his birth and that of his ancestry. He could not help bestowing glory upon Scotland and championing her causes. His

burning patriotism bursts forth in the lines—

“Breathes there a man with soul so dead,
Who never to himself hath said,
This is my own, my native land?”

In early life Walter Scott was physically feeble, and a sickness resulted in a lameness which always continued. In manhood he was robust and jolly, but in the last years of his life he became a paralytic, and died at the age of sixty-one, at Abbotsford. His remains were buried beside those of his wife in Dryburg Abbey. As a student the youthful Scott was easy to learn, and possessed a remarkably good memory. He took to modern languages, “and knew little of Latin and less of Greek.”

Through the influence of distinguished friends young Scott obtained a lucrative office at Selkirk. Having much leisure he read much, and began to try his talent at ballad writing. At twenty-five he was established on a liberal salary in Edinburgh, and there wrote *Border Minstrelsy*. At thirty-two he gave to the world *The Lay of the Last Minstrel*, and stepped to the front as a popular writer. Then in rapid succession came *Marmion* and *The Lady of the Lake*.

At twenty-six he married, and lived happily with his wife during her lifetime. Sometimes they dwelt in Edinburgh, and sometimes in the country. As Scott's fortune grew a desire developed to have a home in a rustic neighborhood. After consulting the wishes of his consort, the admirer of rural scenes bought a farmhouse on the “Border,” and converted the estate into “Abbotsford,” as he christened his growing mansion. On some broad acres of alluvial soil, in a bend of the Tweed, still stands the “Romance in Stone;” and the renown of its founder draws thousands of pilgrims to the place every year. The location for a home was carefully selected, and the erection of the buildings and the ornamentation of the estate were conducted at intervals as leisure and income permitted. The surrounding at best is attractive only to a moderate degree. The land is not fertile, except in occasional spots near the bank of the river; and the pastoral inhabitants are plain as they are honest. The hills are not covered with timber, but with heather and brushwood—covers for rabbits and pheasants. The Duke of Buccleuch owns large estates hereabouts, and maintains a hunter's lodge in the vicinity. Occasionally he entertains members of the Royal Family, and takes his visitors on a fox hunt. Then the musical bay of the hounds calls to the fields the entire population of the vicinage. “It is then that

his lordship shows himself the gentleman he is," and the ruralists flatter themselves the princely display is gotten up, in part at least, on their account.

When Washington Irving paid Abbotsford a visit, he remarked to his distinguished host that the scenery of "Borderland" had been a disappointment—that "the hills were too bare to be beautiful, and too low to be impressive." Scott hummed a moment as if at loss for a proper reply, and then bravely said: "It may be pertinacity in me, but to my eye these gray hills and all this Border country have beauties peculiar to themselves. I like the very nakedness of the land; it has something bold, stern, and solitary about it. When I have been for some time in the rich scenery about Edinburgh, which is like ornamented garden land, I begin to wish myself back again among my own honest gray hills; and if I did not see the heather at least once a year, *I think I should die.*"

A business transaction of an unfortunate character called Sir Walter Scott to Edinburgh and kept him there during a period of life he had planned to pass in retirement among the crags and glens of the "Border," and there in the great mart of trade he delved like a galley slave, with an unwavering purpose to free himself from every pecuniary obligation. And his prolific pen and his popularity as a writer soon wiped out the larger part of a debt which at first seemed a mountain. But the incessant toil sapped the foundation of a vigorous constitution, so that the recreative influence of foreign travel failed to restore vigor to the impaired body and mind. Death did not too soon close a life which at length became a burden.

A lineal descendant of Sir Walter now resides at the old homestead, and shows tourists the most interesting features of the somewhat extensive demense. From the large windows of the breakfast-room is a view of rare loveliness. Cattle and sheep graze on the grassy mead which stretches a few hundred yards to the gurgling Tweed, which is here shallow—Abbot's *ford*. A large hall is filled with old armor, and other curiosities of a multitudinous character. A drawing room is hung with valuable paintings, and embraces carved furniture, with images in ebony and ivory. The library is the largest room in the house, and contains seventy thousand volumes. The grounds within the domain are kept in fine order; and the visitor feels quite well paid for the time and money spent in a pilgrimage to the villa.

The railway which takes the traveler to the vicinity of Abbots-ford runs

from Edinburgh to Carlisle, passing through Hawick (where is the manufactory of "tweeds") and having a station at Melrose, a village three miles from the Scott estate. Before arranging for the drive to Abbotsford, the tourist takes a survey of Melrose Abbey, a cloistered ruin of beauty and renown. The dilapidated monastery was built in 1136, under the liberal patronage of St. David, or David I, of Scotland; and a colony of Benedictine monks was invited to conduct the ceremonies of the conventicle. The English, in a foray over the border, destroyed the structure in 1328, and scattered the pious band. However, this hardship made the members all the more influential. They were a highly educated class, and skilled in the arts of an advanced civilization, therefore they naturally became schoolmasters for the rising generations; and cultivated the arts of peace among the warlike dwellers on the Border. They shed a refining influence on every hand, and earned the protection and patronage of those in authority. At length Robert Bruce was moved to rebuild the Abbey, and through the scattered monks to re-establish the ceremonials and hospitalities of the place. In the restored condition the monastery continued to flourish until the throes of the Eeformation despoiled the sacred vestments and art treasures, and defaced the venerated structure.

While tenanted by monks of the Cistercian order, the Abbey was often a place given to wine and wassail; and the following verse was perpetrated to satirize the doings of the cloister:

"The monks of Melrose made gude kail
On Fridays when they fasted ;
Nor wanted they gude beef and ale
As long 's their neighbor's lasted."

The enclosing walls of the Abbey are nearly entire, and a part of the roof, supported on the arches of Gothic columns, still shelters the foot of the crucial nave. The body of St. David was buried near the head of the auditorium. To the left of the King's grave was placed the embalmed heart of Robert Bruce.

Adjoining the ruin on two sides is a burying ground, whose moss-covered headstones can scarcely be seen, and whose graves are level with the intervening ground. The most ancient of English lettering is on the more pretentious monuments; and the curious among tourists spend days and days in attempting to decipher the epitaphs. Nearly all the interments are centuries old. A few families of the neighborhood possess

rights in the grounds, and there are some recent burials made by them. Fragments of sculpture, half overgrown with grass, are to be seen here and there, but whether wrecked by time or iconoclastic hands is left to conjecture. A few statues still hold their places on the cornices of the Abbey, and serve as samples of what might have been the original ornamentation of the architects. The first stanza in Canto Second of *The Lay of the Minstrel* is a metrical and rhymed description of the famous ruin:

“If thou wouldst view fair Melrose aright,
Go visit it by the pale moonlight;
For the gay beams of lightsome day
Gild, but do not flout, the ruins gray.
When the broken arches are black in night,
And each shafted oriel glimmers white ;
When the cold lights uncertain shower
Streams on the ruined central tower;
When buttress and buttress, alternately,
Seem framed of ebon and ivory;
When silver edges the imagery,
And the scrolls that teach thee to live and die;
When distant Tweed is heard to rave,
And the owlet to hoot o'er the dead man's grave.
Then go—but go alone the while—
There view St. David's ruined pile,
And home returning, soothly swear,
Was never scene so sad and fair.”

The good people of Melrose are timid about following Scott's formula; they are not given to viewing the Abbey at night. In fact, they declare the night air in the vicinity of the ruin to be unwholesome, and hint that on certain crispy nights in autumn the narrow galleries are visited by phantom monks who chant weird music to the accompaniment of lute and harp. The belief is that specters and goblins haunt the place, and do not relish having their nocturnal orgies viewed by mortal eyes. The testimony is that spirits have been seen flitting in dark corners of the crumbling pile; and the suggestion that the mysterious movements may have been produced by the wings of bat or owl is treated with derision. Scott's advice to “go alone” to the ruined pile, and at night, is treated with contempt, the idea being that we have no right to trifle with the powers of darkness! A brave citizen stated that he should not be afraid to visit every part of the dilapidated building at midnight, if there was

any good reason for so doing, but he should not go unbid. Why should he disturb the repose of the dead at night? Scott might do it, but he would not. He believed the low musical notes, like the subdued chants of a choir, were produced by the wind while forced through the fluted corbels. He did not think that the spirits of departed monks revisited the consecrated place.

At the inn adjoining the Abbey are apartments looking upon the ruin and adjacent burying ground, and guests aim to secure lodgings in these rooms. There is so much fascination in connection with the old monastery that occupants of these favored quarters spend much time in gazing upon the “scene so sad and fair,” and in musing upon events connected with the history of the “ruined pile.” The desolate and dismantled Abbey was constructed of such durable material, and the foundations were so well placed, that the sanctified and despoiled structure is liable to last a thousand years. The ravages of time alone are likely to disturb the interesting ruin. A pious reverence for the founders of the notable Abbey, and a cherished hate for its destroyers, tend to perpetuate a profound interest in the hallowed shrine.—HOWE, *Eclectic Medical Journal*, 1887.

“PROCUL, O PROCUL ESTE, PROFANI.”

Dr. Howe had many friends and admirers in the dominant school and was perhaps more tolerant of it than the other leaders of Eclecticism. This did not deter him from throwing an occasional dart at the exclusiveness and Pharisaical attitude of some of the old school leaders. The thinly veiled sarcasm of this brief selection is akin to ridicule, and ridicule is declared by Bishop Quayle to be the most effective weapon in bringing people to ways of righteousness. It is safe to say that conversion that “worketh righteousness” is not yet completed in the regular school of medicine.—**Ed. Gleaner.**

“PROCUL, O PROCUL ESTE, PROFANI.”—On the door-plate of a certain church edifice I lately saw the Latin quotation placed at the head of this squib. The famous protocol constitutes the 257th line of Book VI of Virgil's *Æneid*, and may be rendered as follows:

“Stand aside, ye unsanctified.” Literally the words mean, “Be off, O be gone, ye uninitiated.” Upon inquiry I found the church was a “close communion Baptist.”—the application of the phrase being that the profane and unregenerate were not wanted inside, or until they became

fit to be seated in the sanctuary.

An allopathic college has recently adopted the same motto for a heading to its diplomas. A recipient of one of these emblazoned sheepskins asked me in all seriousness what the quotation signified. I assured him that the figure-head was both classical and ornamental; that when Æneus entered the Infernal Regions he, being by birth part celestial, could visit the realms of departed spirits, but his companions, being simply mortals, were (“*este procul profani*”) commanded to stand aside. Now, as “regular physicians are lineal descendants of Æsculapius—an unquestioned semi-celestial—I do not see why the graduates of allopathic colleges should not warn the profane against entering their heathen temples. It is highly proper that they should place over the entrances to their mysterious abodes, *Procul, O procul este, profani*; and then, on the gateway leading out, have lettered the following: “*Descensus Averni facile est.*” To enter sheol is easy, but to get out again is hellish hard. Every callow alumnus would be proud of the learning displayed.—HOWE, *Eclectic Medical Journal*, 1887.

WITCH-HAZEL.

This charming bit of folk-lore shows the same careful attention to completeness of detail that the author would have bestowed upon a surgical topic—The romance of the witch hazel—its myths and legends—is one that comes near to people of this country, for the “water wizard” and the “diviner” of mineral wealth is not a stranger to the American public. Dr. Howe explains the workings of the divining rod and exposes the gullibility of persons who blindly allow themselves to be deluded by the peripatetic wielder of the magic wand.—**Ed. Gleaner.**

WITCH-HAZEL.—The folklore of Europe has reference on multiple occasions to the mythical properties and virtues of witch-hazel. In most instances pronounced magical powers are ascribed to the shrub, bush, twig, or tree. A forked staff of hazel-wood is employed by witches as a wand to wave over a road, path, or way, or over a stream or pond of water, to influence the presiding deities or sprites of the locality, for good or evil to those passing. Sometimes a wand of ash was selected to execute a potent purpose; and the leaves of the ash tree were presumed to antidote the venom of serpents. A Swedish peasant will assure you that the touch of a hazel twig will extract the virus of a snake's bite; and that after a battle between serpents the wounded reptile will repair to a hazel bush, and there remain until the venom has been antidoted.

In the "*Mythology of the Aryan Nations*" we read that amulets to cure and keep off epilepsy are made of mistletoe, and that children are relieved of hernia by wearing a girdle of ash and hazel twigs or leaves. Fiske, in his "*Myth and Myth-Makers*" says: "The notion that snakes are afraid of an ash tree is not extinct even in the United States. The other day I was told, not by an old granny, but by a man fairly educated and endowed with a very unusual amount of good, common sense, that a rattlesnake will sooner go through fire than creep over ash leaves or into the shadow of an ash tree." I can assure the writer that I heard the same or similar statements in New England when I was a boy. Not many years ago I was visiting an uncle in Massachusetts, and while there I saw three or four men slowly pacing a piece of ground on a side hill a short distance away. I asked what the solemn appearing individuals were about. After being told that the elder of the group, who held a crooked stick in his two hands and watched the wand very closely, was a "locator of wells" and "finder of hidden treasure," I hastened to the scene with a view of learning the secret, or what I could in regard to it. I had heard of the mystery before, but had never seen the practical working of it. The wand was forked and of green hazel; the diviner's hands grasped the two branches of the stick, and the body of the little tree—the thickness of the thumb—stood upwards, when the implement had been properly manipulated and was in condition for the subtle action. The forked hazel stick was called a "divining rod" or "the witch's puzzle." When the bifurcate hazel stick had been grasped and held for manifestations and demonstrations, the front aspects of the hands did not face each other, but the backs were turned to one another, the little fingers being uppermost. Now, if anybody will thus grasp the folks of a "divining rod" made of apple tree, alder, or birch, and have the central stub or stump a foot long, the weight of it will incline the stalk to tip one way or the other; and if the wood be freshly cut, and the hands clutch the forks with firmness, the twisting force will wrench the green bark from its foundations. This part of the trick ends the experiment, and demonstrates the fact that a good spring of water is not far under ground. And what is a clincher of the feat, the sinkers of a well are about sure to find an abundance of pure water if they go deep enough into the earth! In the case referred to, the manipulator of the divining rod received a fee of three dollars. He had been summoned a distance of a few miles, and the owners of the land, who desired a good well for watering grazing cattle, were among the most intelligent and carefully educated in New England. To question the propriety of thus having a spring scientifically located would be to risk the reception of a

severe rebuke! In Nebraska I saw a split piece of whalebone employed as a divining rod to locate a spot to be bored for water. The user of the implement received five dollars for his services. A doubting Thomas had the hardihood to say that a bore a hundred feet deep, more or less, the variation depending upon the surface, whether on a ridge or in a hollow, would surely strike a bed of gravel in that part of the country, where water existed in the greatest abundance. The bore was made with what are called "drive-wells," sections of iron tubing were driven into the earth till water flowed from the top segment. The "diviner" was engaged mostly in locating the presence of valuable minerals; and if his word could be credited, he never failed to find gold, silver, or lead in soil where the rod "worked" in his hands. The "rod" was made from a piece of whalebone about fifteen inches in length, and split from one end to within five or six inches of the other. A copper ferule enclosed the wand at the point where the split terminated. I believe the ring of metal was to prevent the whalebone from splitting into two parts. The diviner remarked that he had to employ a leaden ring when testing for copper! Thus it is ever with diviners, they know the worth of mystification and how to practice deceit. They understand the gullibility of human nature. It seemed to me that the Nebraska *diviner* employed forked whalebone because green witch-hazel did not flourish thereabouts. A fakir has to conform to the necessity of circumstances. If a witch can not find a hazel bush with which to make a wand, she can impart potency to a forked stick of any other tree or shrub. But the hazel sprout is the one fancied by writers upon witchcraft.

In Scandinavia two dry sticks of hazel-wood will develop fire when vigorously rubbed together; and the revealer of the secret of fire striking does not mention that primitive people the world over have always developed fire by rubbing dry sticks together— by friction.

The tale of William Tell, the Swiss archer, whom the tyrant Gessler meant to slay, but who saved his life by the extraordinary feat of shooting an apple from his son's head. was enabled so to do by fashioning an arrow from a twig of hazel, as a mediaeval chronicler relates. The weapon was then like the charmed gun which exercised such discrimination that it would miss a calf but hit a deer. I have quite shed tears over the exploits of the patriot Tell, and have seen the name of the famous Swiss coupled with that of Washington, therefore when I learned that there never was such a man as William Tell, no tyrant Gessler, no son to unflinchingly endure the sight of the fling arrow, I felt like distrusting the story of Achilles and his heel rendered

vulnerable by escaping baptism in the river Styx:, and like questioning the very existence of the little hatchet which mutilated the cherry tree! The earliest account of the Tell-myth is the following, taken from "*Historical Difficulties*;" it is of Danish origin. "A certain Palnatoki, for some time among King Harold's bodyguard, had made his bravery odious to very many of his fellow soldiers by the zeal with which he surpassed them in the discharge of his duty. This man once, while talking tipsily over his cups, had boasted that he was so skilled as an archer that he could hit the smallest apple placed at a distance of fifty paces on a wand, and at the first shot. This boastful language soon reached the ears of his majesty, who had long sought an opportunity to involve the braggart in difficulty. The king ordered that a test of the archer's skill should be made by placing the apple on the son's head instead of the suggested wand, and with the threat that, unless the author of the promise could strike the mark at the first flight of the arrow, he should pay the penalty of his empty boasting by the loss of his own head. The king's command struck the soldier with dismay, for he was exceedingly fond of his darling boy—a lad six years of age. After the lad had been stationed at the given distance and the apple placed on his head, the father asked the privilege of speaking to his child before he discharged the perilous missile; and while whispering in the lad's ear and arranging his arms behind him, Palnatoki slipped a hazel stick into the boy's hands and stuck an apple on the upper end of it. The stick was not discovered and the first arrow in its flight split the apple and left the youth unharmed. The king then asked the archer why he had taken other arrows in his quiver when the terms were that he should try but once? The answer corresponded to the one ascribed to Tell: "To kill thee, tyrant, had I slain my son." This story being centuries older than the Swiss production, the inference is that the latter is a borrowed affair; and what assurance have we that the Danish tale was not taken from an Aryan fable? In fact, a kindred tale is in the folklore of Norway, Sweden, and Persia, and in each country the leading features of the legend are almost identical.

The Persian archer is armed with an ashen bow and a hazel arrow, therefore his weapon embraces a double charm. In regions where hamamelis does not abound the divining staff or wand is a "wish-rod," the virtues of the implement depending more upon its shape than upon the nature of the wood. The shepherd's crook was a favorite shape for the sorcerers of Greece and Rome. In Egypt a species of reed or palm was used to prognosticate events; and a soothsayer could not practice his arts till fifty years of age. And, like hags, the older they were and

the more repulsive in looks, the deeper were they endowed with mystic wisdom.

" 'T is the sunset of life gives me mystical lore,
And coming events cast their shadows before."

The more profound the ignorance of a people, the stronger is the belief in supernatural influences. In the jungles of Africa and Australia the devil is presumed to have more power than the Almighty, hence there is more attention given to the former majesty in worship. Among semi-barbarians religious devotion is about equally divided between the two "rulers of the affairs of men," and among the highly civilized and enlightened "his satanic majesty" is almost the subject of ridicule. In Job's time the devil divided honors with Jehovah, and wore a crown; now he is treated with scorn and contempt. The devil is the personification of evil, and has always ascribed to him a human form, though his pictures resemble mythological Pan—one foot is like that of a goat, and budding horns are seen on the forehead. It is a question what the cornua signify or typify. Pan has them, and they are thought to be a remnant of goat-like character; but horns are also symbols of strength and power. Jupiter sometimes is depicted with ram's coils on the sides of his head; the horns of the crescent have been placed upon the crown of Christ; and the Moses of Angelo has budding horns upon his head. The devil usually has a wand or trident, which is a compromise between that of Neptune and Mercury. This is vulgarly called his "pitch-fork," though it be trifurcate and has parallel prongs. In "The Last Judgment" the tail of the devil is barbed at the end, like that of the mythological dragon. In Scandinavia the "evil one" carries a caduceus made of hazel-wood, and the implement is bifurcate. Witch-hazel is a product of northern or cold climates, hence it is so often mentioned in the folklore of Norsemen.—HOWE, *Eclectic Medical Journal*, 1887.

ANESTHETICS.

Dr. Howe was an advocate of the use of chloroform as an anaesthetic, and it is perhaps to his teachings and experience most largely that Eclectic surgeons and physicians prefer it to ether or to combination anaesthetics. The profession is still divided—the majority regarding ether as the safer but less pleasant agent. Personally, we believe that as much depends upon the skill and care with which the anaesthetic is given as upon the choice of anaesthetic. The very danger of chloroform makes one watchful and careful so that it may have less fatalities in competent

hands Dr Howe's views are expressed in the following paper—**Ed. Gleaner.**

ANESTHETICS—The introduction of the A C E mixture, alcohol, chloroform, and ether, in the ratio of one, two, three, as an anæsthetic has been somewhat favorably received by the medical profession—the idea being that the combination is safer than chloroform has proven itself to be. Now, if a pleasant and efficient anaesthetic be safer than chloroform it is our bounden duty to adopt it in lieu of the more deadly lethal agent. But let us canvass the merits and demerits of the several anaesthetics in common use. Sulphuric ether is offensive to inhale, and quite inefficient—so much so that some patients can not be subdued by the agent; and in the majority of instances the time required to bring about anaesthesia is a serious objection in most surgical procedures. After an operator has fixed an hour for executing laparotomy, exsection, or for removing a cervical tumor, he does not feel like wasting forty or fifty minute? in getting the patient ready for his manipulations. The same objection can be raised against the triple combination already mentioned, only the latter is more potent and efficient than ether by itself. After waiting twenty minutes for A. C. E. to get a patient into a state of garrulous inebriation, I have pressed into service a drachm or two of chloroform, and thereby produced profound anaesthesia in a very few minutes, demonstrating the superiority of the latter over the former.

I have “aid on other occasions thait when ether or any of its associates is employed as frequently as chloroform, nearly or quite as many fatal issues will follow the employment of the so-called “safe” agent. Then, an argument unto myself is that I have administered chloroform several thousand times and have never had a fatal result. If I had given ether with the assurance that no harm could come from it, I might have lost a case. While administering chloroform I know there is danger, and watch my patient with the expectation that something unfortunate may happen. As soon as the patient ceases to breathe in pronounced respirations I slap the posterior aspect of the thorax, the blow with the open hand being no trifling hit. It springs the ribs inward, so that m the lebound air is sucked into the lungs, the heart is jostled into motion, and the vital machine, which has come almost to a stand-still, is made to move rhythmically. I have taken so many patients safely through the Scylla and Charybdis of anaesthesia that I think none—or almost none—need be lost. To hunt for a galvanic battery, to rely on dashes of cold water, and to try inefficient means is to court death. A heavy blow administered on the side of the chest with the open hand is the ready and sure way to resuscitate the over-anaesthetized patient.

Chloroform is the pleasantest and the most efficient anaesthetic;

but its effects need watching—the respiration is to be observed, and little attention is to be paid to the pulse. In efforts at resuscitation a word, a grunt, or a groan is all the assurance needed. The operator may then go on with his surgical procedure without losing more time; there is no longer a feature of danger.

The head should be lowered and the face turned over a basin if signs of vomiting intervene. The contents of the stomach must not be left in the pharynx: to clog the larynx. A sweep of the finger through the throat will determine whether the respiratory passages be free or not.

I have reiterated the foregoing rules and precautions so many times that I feel some like apologizing for introducing them again. My only excuse is that the rules and precautions are vitally important, and that well enforced repetitions awaken interests and carry convictions.—*HOWE, Eclectic Medical Journal, 1887.*

EXCESS OF TIMIDITY.

Courage was one of the marked traits of Howe's personality. He believed in the free and unequivocal expression of opinions. He recognized that intellectuality and originality of thought were as likely to be possessed by the quiet and unassuming practitioner as by the so-called leaders of men. Timidity prevents such people from giving written expression to much valuable experience, and Professor Howe holds out the welcoming hand to such, that their ability and valued suggestions may enter the printed page of record.—**Ed. Gleaner.**

EXCESS OF TIMIDITY.—Every few days we meet with physicians who in conversation disclose the fact that they are intellectually above the average of their professional brethren—they possess originality of thought, and they generalize upon observations with the ability of a logician—they have noticed some new and unrecorded phase of disease, or have detected a peculiar action in a well known remedy, yet through excess of modesty they can not be induced to write a line for a medical journal. The excuse rendered is that they are not used to putting their thoughts on paper, or they are afraid some bushwhacking “critic” will select their productions as targets for the display of villainous comments. Now, my advice to the excessively modest is that they daily jot down

their observations and ratiocinations, and when a leisure hour comes an abstract of something readable can be licked into form. Besides, the editor of a journal can correct glaring imperfections, trimming the verbose and expanding what is evidently cramped. It is to be regretted that good things in medicine are lost to the world because the devisers and inventors of excellencies have not the courage to put their discoveries in print.

Proprietors of feebly supported journals are in the habit of calling for "short, pithy articles," and in the pleading they affect to despise lengthy contributions, when the fact is well known that only bob-tailed contributions can possibly be obtained. The enterprising proprietors evidently aim to elaborate virtue from necessity—to reflect on long articles because they can not command them, and praise only such as they can obtain—the sour grape argument. —HOWE, *Eclectic Medical Journal*, 1888.

CINCHOMANIA.

This article should be read and pondered over by those who recklessly use quinine and other powerful agents without specific reasons for their exhibition. Without question, much harm has resulted from the excessive and unjustifiable use of quinine, and the penalty has been severe. People can tittle with drugs as well as with alcoholics, and Professor Howe strikes a common evil—cincho-mania—in such a manner as to carry conviction of its pernicious and baleful effects.—**Ed. Gleaner.**

CINCHOMANIA.—A potent remedy is liable to be taken in overdoses, or during too prolonged periods, and quinine is such an agent. Since it has become fashionable to be malarious, society people must cinchonize—they must have an innocent tittle. Everybody feels bad by times—feels chilly, nervous, and vitally depressed; and instead of waiting till the ill-turn passes off—till the stomach resumes its wonted activity—the sufferer takes a few grains of encapsuled quinia. In the course of time a cinchonous habit is established. The partaker doesn't feel quite well till quinia influences the nervous system, and at length cinchomania is acquired. The minister can not do himself justice in the pulpit unless he takes ten grains of quinia before going to church. And so it goes through all grades of the "better classes"—all must indulge in the bitter drug. If a faltering fidgetiness be initiated, and harm be acknowledged, the doctor is blamed—he prescribed quinine at first, and the patient kept on taking the medicine till a necessity for its

continuance was felt. The cinchomaniac may be a good citizen, may even be a Christian gentleman and be noted for kindness of heart, yet he is not what he should and could be—he is mentally and physically impaired. Now, if the morbid disposition to fuddle on quinine be due to the advice of physicians, it is high time a halt was called in such kinds of professional abuse. Medical men have become cautious about making inebriates with alcohol and opium, but have lapsed into the fault of prescribing quinine in most every ill. As a general rule a remedy which does marked good in certain forms of disease will do harm in states of health. —HOWE, *Eclectic Medical Journal*, 1888.

DIVINELY INCLINED.

Evidently believing that the humor of the situation, if not the biographic facts, will be remembered. Dr. Howe occasionally contributed short historic paragraphs of this type. As the anatomical balance is heavy in this production, it ought to serve to fix indelibly in the reader's mind the anatomical points involved.—**Ed. Gleaner.**

DIVINELY INCLINED.—Adrian Spigel, whose name has been rendered “immortal” among anatomists through its attachment to a small lobe of the liver—*lobus spigellii*—was a Belgian physician, and made professor at Padua in 1616, succeeding Casserius. The hepatic lump, accidentally found, was first described by Sylvius, and sixty years in advance of Spigel's studies. A peculiarity of Spigel was that he manifested great religious zeal, ascribing peculiar features of the human body to the Almighty's great love for mankind. He thought that the gluteal muscles were made large that man might have a comforting cushion while, in a sitting posture, he was contemplating the wisdom of his Creator.—HOWE, *Eclectic Medical Journal*, 1888.

“BLACK DEATH.”

This historic article was a timely production at a date when bubonic plague was not so familiar to physicians as it is now. Volumes are now written upon tropical diseases, and the wars of expansion have made necessary redoubled energy lest plagues be brought into this country by returning soldiers from tropical campaigns. Very little of importance that was going on in the world that had a medical or surgical bearing escaped the notice of Dr. Howe; and when an important menace like the plague threatened this country, he came out with this article. His words were prophetic—“We may yet pay a fearful price for the dirt imported from the eastern shores of Asia— a sin has been committed which commands atonement.” The vigilance of the

army medical department alone prevented such an invasion but a few years since on our Pacific Coast.—**Ed. Gleaner.**

“BLACK DEATH.”—In 1347 some caravans from Central Asia arrived at Constantinople, and soon spread an infectious disease which proved exceedingly fatal. A patient came down with the morbid action very suddenly, the first symptoms being a “chill,” followed by exalted heat and profuse sweating. Soreness attacked the muscles, and the sufferer had lumps appear in the arm-pits and groins—buboes. In three days the afflicted were moribund, and not one in ten survived an attack. Physicians did not make much effort to cure the disease, for at that date in history medicine was a black art. Away on the banks of the Volga and the shores of the Caspian “the plague”—bubo disease—breaks out every few years among the filthy fishermen of those regions, and spreads in every direction unless quarantined—unless shotgun cordons be drawn around the infected district.

A ukase of the Czar makes it death to cross the line marking the infected villages. The disease, as described by army surgeons in the Russian service, is declared to be identical with the “Black Death” which visited Constantinople over six centuries ago. “Plagues” having thinned out mankind ever since histories of the race can be traced or traditionally followed, it is highly probable that the bubo disease came into existence thousands of years ago. The authentic records of China describe a disease of the kind which nearly depopulated the “Flowery Kingdom” on repeated occasions. If Central Asia be the region where “Black Death” always exists, the disease may have spread eastward to China before traveling westward to Europe.

Cholera has its home in the jungles of the Ganges and Brahmaputra, so the bubo-plague may have its abode in the table lands north of the Himalaya range among people who dress in untanned sheepskins—the vilest dress ever worn by human beings. It is no stretch of the fancy to suppose a zymotic disease might spring from the combination of filth accumulating in such a raiment.

The smitten people of Europe looked upon the disease as a visitation of Providence—a chastisement for violated vows; and never once thought the infection sprang directly from neglect of the law of cleanliness. What a horrible disease to contemplate! The fevered and delirious patient begs for water to moisten a parched and blackened tongue; and there being more sick than well, the needed and craved cup of water can not be

obtained!

What passes in history as the Great Plague, and which visited London in 1664, was nothing more nor less than the Black Tongue, or “Black Death” that has its breeding among the wearers of un-tanned pelts. Zymosis is only a technical expression for putrefaction;—the “Black Tongue” may yet reach America via China. What is the condition of a ship which has just landed three thousand Chinese laborers at Vancouver's Island or on the banks of Frazer River? The filth and stench of such a vessel are too revolting for contemplation. We may yet pay a fearful price for the dirt imported from the eastern shores of Asia—a sin has been committed which commands atonement.—HOWE, *Eclectic Medical Journal*, 1888.

SHOULD THE PHYSICIAN HAVE A LIBERAL EDUCATION?

Professor Howe's own experience in his preparation for medicine gives the positive answer to this question. Professor Howe was—as were Professors Scudder and King—a lifelong advocate of higher education—the education which enables one to know and to do. Professor Howe knew the value of a classical training, and would have all physicians so prepared.—**Ed. Gleaner**.

SHOULD THE PHYSICIAN HAVE A LIBERAL EDUCATION?—The question embraced in the heading was the subject assigned to be written upon and read at Detroit, before the National. The fair M. D. who tackled the topic did not crack a smile while reading a rather graceful paper. She seemed in a serious mood, and disposed to dispense the best of advice. As she made out the case, a medical man should possess a “liberal education,” whatever that term may mean. When the essay gets into the *Transactions* it will be a credit to the publication.

The utterly utter simplicity of the query is what captivates me. There should have been one other of the kind, which might read as follows: “Should a physician possess common sense?” A great many do not, therefore as a topic for the essayist it presents significance. If the President who assigned the topic had been a Thomsonian, it would be plain to comprehend the point to be discussed, for Samuel Thomson ignored a “liberal education,” and considered natural common sense better than learning. In this he was correct—but he failed to state what he might think of common sense and learning *combined*. It is possible for the two qualities to go together.

“A liberal education” has not as yet been cleverly defined, but is presumably at variance with a stinted or cramped education. A “liberal education” once embraced the classics and higher mathematics, but at present the former may be omitted, and physics substituted. A London University matriculant must have something more than a smattering of “Mechanics and Experimental Science,” the latter embracing kinematics, dynamics, and statics—all preparatory studies essential to matriculation. Now, to acquire what might pass as a “smattering” of knowledge in the various branches of the science named, how could the learner get along without some classical training? In fact, definitions can not be mastered without a familiarity with Latin and Greek. It will be seen then that what passes as a liberal education logically presupposes a knowledge of the classics. And here I should not be understood as demanding that a medical student must have an acquaintance with Latin and Greek before he enters the medical college—I simply mean that the more liberal his education the easier it will be for him to go to the front.

In a criticism I expressed on the topic—not on the essay—at Detroit, I made the humiliating confession that I knew nothing of “the classics” when I entered a medical college; but finding myself at once in a quagmire of technicals, I resolved to take the shortest way out of the jungle—I bought a “First Lessons” in Latin and Greek Grammar; and when I found I needed a teacher to give me an understanding of these I dropped medicine for six years that I might “fit for college,” and take a regular four years' course at Harvard. A less expensive career might have been adopted—a private tutor might have answered quite well. But there is no such leveling course as that to be encountered in a popular university, where individual conceits are knocked higher than a kite—where lofty notions of one's qualities are ruthlessly trampled in the dust—where combatants in physical and mental arenas learn to give and take, and not whimper when beaten.

Yet, when the University curriculum is over, the Bachelor of Arts is not able to earn a living—he is not wanted in the scientific laboratory—he is not fitted to conduct a piece of engineering—he can not determine how many solid and square feet or yards there may be in a piece of architecture—he can not preach in the pulpit nor practice at the bar—and he is totally unfit to set up as a doctor. What, then, is he? Simply prepared to study in a course which leads to the higher walks of a learned vocation.

The man who passes as possessing a liberal education—whether a

farmer, mechanic, a chemist, a preacher, or a doctor, is a “hard student” —he studies every day, and never goes to bed till he has learned something he did not know before. If he be a successful practitioner of medicine—have all the patronage he can care for, and more too—he reads understandingly, or inquiringly, some new book or periodical before the day ends. The doctor who has not read *Watson's Practice* can not appreciate style in the literature of medicine; and the surgeon who has not the *Operative Surgery of Velpeau* can poorly appreciate what constitutes surgical scholarship.

How often the ingenious writer complains that he can not find some rare case described in “the books”—and he flatters himself, perhaps, that he has discovered something! What books has he consulted? Why, the text-books he carried home from college! How many of them? Possibly ten or twelve—and he is content with the consultation of these? Is he out of patience with the authors or compilers of these “text-books” because everything in the literature of medicine was not embraced in the moderate sized volumes? He is, for it costs money to buy a library, and time to read what may be in the books—to glean a little of value here and there, and to be forced to cast aside stacks of chaff! And the good is to be marked or indexed, that it may be available when needed, though years have escaped since the annotation.

Is the literary road hard to travel? Is it beset with flinty shards and jagging thorns? Is it uninviting in length and weariness? Is it profitless and unsatisfactory? Only those who enter upon its ways appreciate the charms of the journey—at every turn in the road there is a captivating surprise—an allurements to go on and on, till the idea of stopping would be entertained with distress. The acquisition of knowledge is attended with more pleasure than the accumulation of wealth. Besides, scholarly attainments rank higher than riches in the social scale.—HOWE, *Eclectic Medical Journal*, 1888.

NATURAL BONE-SETTERS.

Dr. Howe recognized the fact that some individuals, wholly uneducated in other respects, may acquire wonderful dexterity in reducing luxations. It is customary for educated physicians to ridicule “natural bone setters,” but Dr. Howe was willing “to give the devil his due.” The advantages of a thorough knowledge of anatomy and the mechanism and action of joints makes the surgeon more than the equal of such rare bone-setters, while the latter may often succeed where the ill-prepared operator,

though possessed of a diploma, may fail. In this article Dr. Howe shows the intricacies involved in the management of such injuries, a knowledge of which makes the physician master of the situation. Among the famous bone-setters of history are several members of the Sweet family, of Rhode Island. and Dr. Kittredge, of New York, all of whom reduced luxated bones by manipulation processes alone when physicians and surgeons were clinging to cumbersome methods and apparatus.—**Ed. Gleaner.**

NATURAL BONE-SETTERS.—At the November meeting of the Cincinnati Society of Eclectic Medicine, I took occasion to make some off-hand remarks on the alleged gift of adjusting luxated bones, saying, among other things, that I had seen the Christian healer, the Rev. Newton, manipulate the lame and make them walk away without canes or crutches; that the seeming cure came from the mobility imparted to stiffened joints, and to confidence impressed upon the feeble and the tottering. A wonderful degree of energy can be infused into a despairing wretch by a man of physical and mental vigor. I have been surprised at my own power to dissipate distrust and to impart confidence to the sick and lame.

Natural bone-setters are not without ability; they have not practiced their arts for years and learned nothing. But, to say that they can rival an experienced surgeon in the successful manipulation of dislocated, sprained, or ankylosed articulations, is to be ready to champion the marvelous upon a slight provocation. A regular practitioner of little experience in bone-setting, though he be a fair anatomist, can not handle a luxated limb as expertly or adroitly as a bone-setter of large experience; and here comes the opportunity for a contrast which exalts the specialist, and reflects upon the educated physician. The latter fails to reduce a luxation through lack of experience, and the bone-setter comes in and succeeds! *Mirabile dictu!*—the quack has beaten the skillful surgeon! Not so; the confident bone-setter has been victorious over an inexperienced practitioner. In ordinary life a graduate in medicine, obstetrics, and surgery passes as an *expert* in all these branches, yet may be a poor representative of either.

Once we did not know much about the manipulating plan of reducing dislocations, and hence there was an excellent opportunity for bone-setters to ply their arts. At present every practical surgeon knows all about a joint, and rarely, if ever, fails to reduce a luxated bone in a few minutes. The kinds of dislocations are now compared one with another,

and each is known to yield to a definite manipulative effort. With a patient insensible from the effects of an anaesthetic, the average practitioner may, by varied trials, reduce a dislocation of the shoulder; but if the injury be displacement of the long heads of the biceps from the bicipital groove, the random pulling and hauling will fail, and the bone-setter will also fail; he is not up to the specialties of the case; he lacks diagnostic skill. The experienced surgeon, however, sees by the peculiar outline of the limb what must be the matter; he recognizes the supine and flexed state of the forearm, the tense condition of the biceps, and the fact that the head of the humerus is not out of the socket, though the scapulohumeral articulation be somewhat restricted in its range of motion. By utilizing the method of exclusion the surgeon arrives at a conclusion—there is no fracture, no dislocation, and more than a sprain—what, then, is the trouble? Is the long head of the biceps displaced? It is possible; evidence of the lesion can not be excluded, and may be speculated upon—may be subjected to a test. While the forearm is flexed and the arm is forcibly revolved *inwards* and then *outwards*, the displaced tendon will be forced out of its new position, to fall into the groove it has left. But can not the surgeon determine whether he is to rotate the arm—the humerus—inwards or outwards? Not always; in a fleshy limb the point can not be determined by outward palpation, though the attitude of the limb may help in the differential diagnosis; yet if only two ways are to be tried, the second method will succeed, if the first fail.

The practitioner who talks about *partial* dislocations of the shoulder, as if the lesion were common, does not know what he is about; he is a man whom the "one-setter" will beat. The discoverer of partial dislocations has little confidence in his diagnostic powers, manipulates at random in a purposeless manner, and "hopes for the best." He uses a liniment, and advises rest—possibly with the injunction that the patient be careful not to undo the good work already accomplished!

Ilio-femoral arthritis is so common, and so difficult to cure, that cases treated well by regular physicians not infrequently drift into the hands of "natural bone-setters." But these alleged possessors of supernatural powers rarely do any substantial good. Occasionally a case is benefited by a thorough overhauling, yet damage is often done. Some years ago a little girl on East Fourth Street was thoroughly manipulated by a peripatetic bone-setter, and the patient died in a week. She died of the wasting disease, but the end was hurried by the untimely attempt to reduce a bone which was not out of joint—was not luxated.

In cases of partial ankylosis, say of the elbow, following fracture of a humeral condyle, the itinerant possessor of inborn skill will sometimes break the fortuitous bands which constitute the "false ankylosis" and give mobility to the restricted articulation. —HOWE, *Eclectic Medical Journal*, 1888.

"DE SENECTUTE."

Such thoughts as are embodied in this essay on old age come to those who are far along in the journey of life. To most of such— those at least whose lives have been well-spent—it is the period of restful satisfaction and thanksgiving. Perhaps it is true that there is no old age, as Dr. Howe declares—that old age is measured by "term of life expired." We have all seen old young people and young old people. Those who have grown old gracefully and realize that the best of life is theirs even in their advanced years are thrice blessed and are an inspiration to others to work for the days to come that are declared by the poet as the best that are yet to be.—**Ed. Gleaner.**

"Grow old along with me !
The best is yet to be ;—
The last of life, for which the first was made."

"DE SENECTUTE."—Robert Browning, in *Rabbi Ben Ezra*, begins a philosophic poem as above. But the young will say that the writer is making virtue of necessity. The man at sixty, looking backward, sees what has gone, and never to be regained; and therefore tries to make the best of the situation, praising the remnant of existence, calling it the test. But is not there a verity in the assertion that the first of life is necessary for the attainment of the last? If it were not for the fitful blaze of youthful coruscations the embers of age would be the less enjoyable. While youth, in the acme of its ambition, is struggling to reach the zenith of blissful existence, age serenely views the contest, believing the attainment not worth the effort were it not for that which is to come!

Cicero's essay on "Old age"—*de senectute*—is the most philosophic and satisfactory of any of the great orator's productions. In an address to a friend he says: "This work is so delightful that it has not only obliterated the annoyance of age, but has rendered existence more charming than it is possible for life to be in youth." Further along he says: "Those who have no resources within themselves for living happily, every age is

burdensome.”

Johnson, in *Rambler*, writes: “He that would pass the latter part of his life with honor and decency must, when he is young, consider that he shall one day be old; and remember, when he is old, that he has once been young. In youth he must lay up knowledge for his support, when his power of action shall forsake him; and in age forbear to animadvert with rigor on faults which experience only can correct.” *Spectator* contains the following words on the topic under consideration: “As to all the rational and worthy pleasures of our being, the conscience of a good fame, the contemplation of another life, the respect and commerce of honest men—our capacities for such enjoyments are enlarged by years. While health endures the latter part of life, in the eye of reason, is certainly the more eligible. The memory of a well spent youth gives a peaceable, unmixed, and elegant pleasure to the mind; and to such who are so unfortunate as not to be able to look back on youth with satisfaction, they may give themselves no little consolation that they are under no temptation to repeat their follies, and that they at present despise them. The consciousness of a life well spent, and the recollection of charitable and noble deeds, render existence more than tolerable—they make it delightful! All men can not be Scipios nor Alexanders; and few such are long happy. A life passed in peace and comfort is more desirable than one in-named by the storming of cities by land and sea, and in the ephemeral display of conducting triumphs. Plato in his eighty-first year died with pen in hand while expressing the beauties of philosophy. Isocrates wrote brilliantly in his ninety-fourth year, declaring that he had no reason to whine over the infirmities of age.

It is not becoming to regret the departure of what may be supplanted by something better. Does the boy lament the loss of his infancy, or does the young man regret that he is no longer a youth? And it might be asked with equal propriety if the well settled adult longs for the uncertainties of young manhood? And, finally, is there need for repine on the part of the elderly who enjoy intellectual repasts, as well as a satiety of physical feasts?

“Maturer life with smiling eye will view
The imperfect scenes which youthful fancy drew.”

When Sophocles was asked if he had enjoyed carnal pleasures, he calmly replied: “The gods have given me something better; nay, I have

run away from them with gladness, as from a wild and furious tyrant.”

There is such a large proportion of suicides among adults that the circumstance is taken as an argument favoring the idea that existence beyond youth is hardly worth continuance. But in this we are not to be misled. An ambitious man may become despondent as soon as his schemes fail, and his future appears dark and uncertain. He has not wisely estimated the world, but has entertained a more hopeful outcome to it than facts warrant. The husbandman who mortgages his crop in seed-time is not sure of a harvest—he would be wiser to wait till the danger of frost and midge are over and the golden grain is ready for the sickle. Impatience and unreasonable expectations are among the faults of youth, and lead to untimely unhappiness.

Age does not alone ensure comfort and repose, nor is advanced life a surety; yet once attained, and the environment be fortunate, who would exchange its substantial worth for the uncertainties of youth? The young are chasing a phantom, the substance ever evading their clutch; the elderly, with the assurance of support, and the possession of mental wealth, are better off than the frivolous young, and infinitely happier. This the young can not appreciate till they pass the meridian of life, and begin to descend the gentle slope, going slow that there may be opportunity to admire the ever lengthening shadow—till the twilight tints the horizon— till it would be hard to tell when the day doth end and the night begins.

A mind schooled in cultured ways never has time hanging heavy, as if it were a burden; but the wit, wisdom, and worth of the great masters in art and literature become enchanting studies, widening comprehension and enriching appreciation. To grow old under such influences is not a burden or yoke hard to bear, but to glide along an eddying pool after cascades have been shot, and turbulent waters are calming to mingle with the sea.

Let noisy youth enjoy its huzzas, and the adolescent dream of bliss, almost within reach, and the stalwart adult just entering the race of real life strive for prizes with an eagerness that challenges admiration, yet only the elderly live to enjoy the best of life's struggle. Then “grow old,” the better is to come! The first enjoyed was only good that the last might be the best!

Old age is a misnomer—there is no end of time. The babe that died to-

day was comparatively old—its term of life expired; the lad is young in years, yet may be sporting on the brink of the grave. The smiling, winsome, waltzing maiden is shocked at the wrinkled image of age, yet may be nearer the tomb than her grandparents. The man of sturdy form and iron will may hurl defiance at any foe but death standing near; the aged alone are calm and not afraid—they have seen all except the unseen and cheerfully await the inevitable.—HOWE, *Eclectic Medical Journal*, 1890.

IS THE PRACTICE OF MEDICINE A PROFESSION OR TRADE?

Unfortunately it is too true that the practice of medicine is both a profession and a trade. One will make the professional aspect predominate, while others prefer to commercialize. Yet in it all the necessary means of existence must be obtained and the complete divorcement of profession and trade is rare. The physician who keeps out the element of trade as far as possible comes nearer the ideal which has been established for the professions. Taking it all in all, we believe the better class of physicians prefer the higher plane and strive to make of medicine a profession. And what are the actual differences between trade and profession? Let Professor Faunce, of Brown University, set the standard. He says: "Trade is occupation for livelihood; profession is occupation for service of the world. Trade is occupation for joy in the result; profession is occupation for joy in the process. Trade is occupation where anybody may enter; profession is occupation where only those who are prepared may enter. Trade is occupation often taken up temporarily, until something better offers; profession is occupation with which one is identified for life. Trade makes one the rival of every other trader; profession makes one the co-operator with all his colleagues. Trade knows only the ethics of success; profession is bound by lasting ties of sacred honor." —**Ed. Gleaner.**

IS THE PRACTICE OF MEDICINE A PROFESSION OR TRADE?—The senior of a literary college asks himself whether, upon graduation, he is to adopt a trade or a profession—he queries whether he is to study law, theology, or medicine, with a view of becoming a *professional* man, or is he to learn a mercantile pursuit with the purpose of engaging successfully in *trade*? He feels that it would be a fearful risk to embark in a commercial venture without serving for a season as apprentice in the kind of business selected as a vocation. To put money into drygoods, groceries, lumber, coal, iron, cordage, or into any branch of traffic without having some practical knowledge of profits and losses incurred in each specific transaction would bankrupt anybody. Novices in the jobbing of peanuts generally fail. The crop turns out larger than was

expected and the price declines correspondingly; or, if the crop proves to be a short one, he sells before the price has attained a profitable figure. Such is trade!

The perils of a profession are such that he who enters upon the peculiar career must rely for success upon his education, aesthetic taste, tact, and discretion—he must utilize subtle ways to carry his points—he must become master of arts that both please and persuade; at the same time he should, to secure a lasting and profitable reputation, avoid deceit in his dealings with mankind. To be professional is not to be an adroit trickster. Honesty and honor adorn each of the professions. A lawyer who cheats is a shyster; a preacher who degrades his high office to the gratification of selfish ends is a hypocrite; and the physician who lowers his professional standing by indulging in questionable arts is passed upon for what he may be—his title will not shield him from fairly just criticism. If the recent graduate in medicine indulge the thought that the world is not sharp enough to discover shams, he is a victim of self-deception.

It is presumed that many medical men pursue their vocation for what money they can make out of it—they never rise above the idea of pelf, barter, and trade—they care little for the literature and philosophies of medical science—they affect to despise its grand theories—they never stop to inquire into causes—they can name a few diseases, and may believe that a set of drugs in their portable pill-sacks will cure anything curable. Such practitioners are traffickers in medicine—mere traders in a stock of drugs, dispensing them for what they will fetch. They can lay no just claim to enter the higher walks of the profession and revel in the grandeur of medical dynamics, ethics, and aesthetics. To banter and barter may be reasonably profitable, considering the capital invested, whether in money or brains, yet there is a higher, a more exalted work in the profession of medicine; and the ambitious and laudable career is keenly enjoyed by the student of the history of medicine, by the investigator of its principles, and by the speculator in its possibilities. Medicine is so comprehensive in its ranges that parts of it may be carried on as a trade, and other parts may become a source of intellectual ratiocination and scientific indulgence, profit having no lot nor share in the matter. But, as pecuniary recompense is so often a necessity in life, the majority of medical men can not avoid being amphibious—practicing both a trade and a profession. The safest and most successful practitioners are they who aim to be pecuniarily recompensed. —HOWE, *Eclectic Medical Journal*, 1890.

SEPULTURE

The insecurity of burial grounds against the encroachments of municipal growth and interurban convenience makes the subject of sepulture one of the problems of the future. Ground contamination, giving rise to pestilence, has by no means been proved, and the growth of cremation, though steady, has been slow. So often has this subject come up for discussion in medical convocations that Professor Howe was prompted to write this interesting editorial. The subject recalls that delightful essay by Sir Thomas Browne, M. D., on "Hydriotaphia or Urn Burial," one of the treasures of English prose. In it the distinguished author of "Religio Medici" quaintly refers to the priority and antiquity of ground burial in these words, written in 1658:

"Many have taken voluminous pains to determine the state of the soul upon disunion; but men have been most phantasticall in the singular contrivances of their corporall dissolution; whilst the sobrst Nations have rested in two wayes, of simple inhumation and burning."

"That carnall interment or burying was of the elder date, the old examples of Abraham and the Patriarchs are sufficient to illustrate; And were without competition, if it could be made out, that Adam was buried near Damascus, or Mount Calvary, according to some Tradition. God himself, that buried but one, was pleased to make choice of this way, collectible from Scripture-expression, and the hot contest between Satan and the Arch-Angel, about discovering the body of Moses."—**Ed. Gleaner.**

SEPULTURE.—American cities have grown so rapidly that within the memory of the living graveyards have been filled, overgrown, forgotten, and made into parks, or platted and sold as building lots. I have witnessed changes of this kind in several instances.

When a town site is located, and some progress made towards its growth, a burial ground is established just outside the corporation line, or beyond any contemplated building encroachment. But in the course of years the sacred and revered "God's acre" is trenched upon by the ambition and avarice of men. At first, in the growth of the town, the cemetery is merely flanked, and a high board fence protects the hallowed spot from the vulgar invasion manifested in the immediate vicinity; but at length the exigencies of the times demand a passage way for railroads or streets through the once rural cemetery. The

authorities order a removal of the dead, yet only a few “remains” have living representatives to care for them. In the ever fluctuating tide of migration in a new country old sites are abandoned and new ones sought. The living move on—the dead remain and are soon forgotten. Consecrated ground is sold for silver, and hallowed monuments pass out of sight. Truly man, in the language of a rural preacher, “springs up like a sparrow-grass and dies like a hopper-grass!”

But it is not the memory of the dead and the mementos thereof that I am writing, but of the effect of festering corpses upon the living when graveyards yawn. I have observed “sacred soil” when “removals” were going on, and marked the odor emanating from the humus, as the earth, mingled with the bones, was carted away. The stench is not so pronounced as that of a decomposing carcass— of a dead horse, or of a well gone subject on a dissecting table, but a “ground smell” is present with a smothered animal scent. The earth surrounding the skeleton is black and rich in “residues”—is loaded with fertilizing stuffs. Only an organic chemist could determine the nature of the leading qualities. The effluvia arising does not seem to be specially poisonous. The workmen do not become stifled or sickened—they are more alarmed at a grinning skull than afraid of a deadly miasm. Hair occasionally clings to an unearthed cranium, and a lump of earthly matter may be discovered in the thorax if the ribs maintain an arched shield over the heart; but if the burial took place thirty years ago in common soil the cavity of the chest has been filled with crumbling clay. While watching for distorted bones in a Covington cemetery when “removal” was going on, the last burial having occurred thirty years previously, I saw no thoraces that maintained their arches— all had tumbled into shapelessness. The bones were all browned as if the clay contained iron, yet I think the coloration was that of the diluvial soil in which they were buried. The general appearance was that of the bones of the “Mound builders.” If the skeletons were those of diphtheritic patients I seriously question whether a “specific microbe” of that dread disease were still alive. I am persuaded that no typhoid germ or “comma bacillus” still tenanted the moldering clay—not even the ghosts of morbid bacteria remained. By this I mean that the decomposed remains were free from living germs. There was present no putrescence, and by this I mean that too much importance is placed on the fact that waters permeating an old graveyard need necessarily contaminate a pool, a well, or a fountain. If a growing vegetable absorbs nutriment from filth, yet the vital processes keep the pulpy stalk free from contaminating principles, so may the living body of man purify brackish water taken as drink. The gastric

juice of the human stomach kills most cocci at once, and cleanses food or incidental poisons. A bit of savory cheese is filled with “mites” of many varieties, yet the stomach, like the jawbone of Samson's ass, slays its multitudes.

I do not think we yet know how much contamination of water comes from burial grounds—but the topic is one which is creating a vast deal of discussion. The subject is one on which the average blatherskite bores State and National conventions. If a member knows little or nothing about therapeutics, he bores the assembly with a lot of stuff and nonsense on “State Medicine,” quoting from cyclopoedias till the sad listener sleeps and snores. The American Medical Association is given to verbiage on the prolific topic. At the New Orleans meeting a committee was chosen to report the next year on the propriety of commending cremation. Dr. Kellar, of Arkansas, was made chairman of the committee, and in his report at St. Louis he said: “We believe that the horrid practice of earth-burial does more to propagate the germs of disease and death, and to spread desolation and pestilence over the human race than does all man's ingenuity and ignorance in every other custom or habit. The graveyard must be abandoned,” etc, the writer running off into a paroxysm of twaddle, all calculated to make the timid more timorous than they now are.

Cremation is to be commended, yet the chimneys of such desiccatories should be built high, or the poison of the outpouring gases will contaminate the air we breathe and become more damaging than the filtered water we drink. Let it be considered that cremation is not a cure for a large proportion of human ills.

There is yet room for interments in America, and the idea of cremation is not popular. The ground is the great purifier of animal matter. After a buried body has reached a certain grade of decomposition it loses its contaminating properties—it is no longer flesh and blood, but an ever changing combination of chemicals, all hastening to ultimate elements.

Dr. Gross is quoted as saying that “it takes a human body fifty, sixty, eighty years or longer to decay.” This is not complimentary to the “Nestor of American Surgery,” if he ever said it. The “Early Christians,” to avoid deadly persecution, hid themselves in the catacombs of Rome, where festering bodies were in abundance, yet we have no record that the hiding place was especially pestilential.

The first account of a purchased burial place is that in Genesis, where Abraham bought from the Heth people the cave of Machpelah and adjacent land for the sepulture of Sarah, his wife, who died in a strange country. The price was four hundred shekels of silver, current money. Cave burial led to catacombs, and graves in burying grounds followed as a custom of the people. Now cremation is agitated; and if the custom becomes universal the medical colleges will be shorter of "subjects" than they now are; burking and other crimes will be encouraged.

I would advise the passage of no law on the question, but let all be cremated who can afford the expense of firewood. In our day and generation incineration of the dead body is not likely to prevail.

The Hindoo method of burial is to expose bodies on pole scaffoldings that vultures may strip the bones of flesh. This is a gruesome practice, yet not costly—it saves fuel or the digging of a grave; but would not the feculence of the carrion bird be contaminative? I fear it would. I admit that it is no worse to have the dead body consumed by worms than to have it devoured by buzzards, yet the grave hides the revolting disintegration.

Inasmuch as we are accustomed to interments in burial grounds or cemeteries, and there be no serious objection to the custom, I am opposed to a change. However, I would grant to individual tastes the privilege of cremation or of a chemically desiccating process. The right to do as we please, so we do not interfere with another's rights, is American.—HOWE, *Eclectic Medical Journal*, 1890.

HOSPITAL NURSES.

Twenty-five years ago the trained nurse was not such a factor in medical and surgical practice as she is to-day. Educated nurses were scarce then as compared to the present, and much prejudice was felt against their employment. Professor Howe speaks a word for the hospital nurse—who then needed a word of cheer and commendation to lift her above the prejudices that surrounded her and to help her become the indispensable aid she is to-day.—**Ed. Gleaner.**

HOSPITAL NURSES.—In a late address by Lawson Tait, the renowned abdominotomist said: "I train my own nurses. The hospital trained nurses are a nuisance—they have ideas of their own which obtrude themselves when least wanted."

At present in Cincinnati there is an aggressive effort made to educate female nurses in the city hospitals, and considerable success in that direction has been attained. The remarks of Mr. Tait would seem to be a wet blanket for the enterprise, but it is not. If the great abdominal surgeon could not have specially educated nurse's he would be only too glad to engage hospital-trained nurses.

Educated nurses are scarce in America, hence hospital-nurses are an advance upon the untrained trash of "ye olden time." It will take time to overcome prejudice—to induce a male patient to accept the attention of a female nurse in the pay department of a hospital, but as soon as he finds that a female nurse is skilled and attentive his prejudices will disappear.

The Catholic Sisters make good nurses, for the discipline of their order is such that they have first learned to mind their own business. The average American woman who nurses for a living is high tempered, strong-minded, and "as good as you are or anybody else,"—she can not be content with carrying out a physician's directions—she will be curious to modify them a little—she would make reputation of her own for skill and originality of execution.

But, let us have hospital-trained nurses rather than none— let the novice in the art of nursing learn to make a bean soup which is so creamy in consistence and delicious in flavor that a languid palate will just hanker for a sip of it. Let her study the caprices of sick-nature, and how best to cater to a particular fancy. The sight of some nurses is enough to make a fastidious mortal sick.

The rural nurse who takes care of country women in confinement is a *rara avis*—she is usually old, fat, lazy, and clumsy. and if she don't take snuff and drink whisky she is a jewel. She is looked upon as a necessity if she be a nuisance; and her gossip is palpably pernicious. She knows a year in advance when a baby is to be born—and is rarely too previous in her prognostications. —HOWE, *Eclectic Medical Journal*, 1890.

ABDOMINOTOMY.

Feeling that no term used in connection with opening the abdomen correctly expressed the procedure. Dr. Howe coined the term abdom-inotomy. Though more expressive, it has not superseded the older and better-known term, laparotomy.—Ed.

Gleaner.

ABDOMINOTOMY.—At the risk of being blamed or censured for the invention or introduction of a new term, I offer abdominotomy as the proper one to signify cutting into the abdominal cavity. Laparotomy signifies cutting into the side or flank, hence is not a significant term. Gastrotomy would do, were it not for the fact that it really means cutting into the stomach. The opener of bellies becomes an abdominotomist, and although the word be long, it is rather easily spoken. As soon as we are used to it we shall like it. Not one medical man in a hundred knows what laparotomy really means, and that one don't like the term on account of its want of direct significance.—HOWE, *Eclectic Medical Journal*, 1890.

THUJA FOR ANAL PROLAPSION.

The use of thuja in anal prolapsion was original with Dr. Howe. See also papers on the use of thuja in the "Treatment of Nævus," and on "Thuja Again."—**Ed. Gleaner.**

THUJA FOR ANAL PROLAPSION.—Children and elderly persons are somewhat liable to profusion of the anal folds during defecation. The defect hinges upon paresis of the fundament—partial paralysis of the defecatory apparatus. The treatment should be both local and systemic. "Sulphur on Sunday" is needed, if not on more frequent occasions. Pepper with food is generally helpful. Cayenne will leave a burning sensation after it has traveled the entire length of the alimentary canal. The bowels are to be kept free from constipation and looseness—the middle course is safest.

Locally stramonium may be employed to advantage, and so may hamamelis, but *thuja* is specifically a topical restorative. It may be injected hypodermically, or applied as a lotion, reduced or diluted with water. It may be compounded with stramonium, hamamelis, and glycerine, the combination proving curative or restorative. A small quantity of the mixture may be injected within the anal apparatus or utilized as a suppository. Thuja is an excellent remedy to be applied in "orificial surgery;" it stimulates the sphincters and favorably impresses "post-rectal ulcers." Thuja blows both hot and cold; it will impart tone to relaxed sphincters and relax a rigid grip. The agent operates salutarily upon hemorrhoids, and restrains the dribbling of vesical incontinence. No "orificial surgeon" should be without the information here imparted. It will contribute pucker to the lips of a whistler, and prevent the

involuntary discharge of flatus.—HOWE, *Eclectic Medical Journal*, 1890.

THE HALF CONSCIOUS STATE.

This exquisite meditation we regard as one of the finest and noblest productions of Professor Howe's pen. It reveals true feeling and is a prose poem well worthy of reproduction. The more one reads and rereads this delicately wrought composition the more he becomes impressed with the wealth of meaning it holds. It uncovers the very soul of the author and gives one a clear insight into the character of the man. After a long and fruitful life, the great surgeon, as the twilight of life approaches, lends himself to reverie and meditation. When the night finally came, as it did to Dr. Howe two short years later, it could well be said of him that he had fulfilled the injunction of the Arabic singer (once quoted by him) to

“So live that, sinking in thy last long sleep,
Thou alone may'st smile while all around thee weep.”

—**Ed. Gleaner.**

THE HALF CONSCIOUS STATE.—As we gaze upon the twilight as if to decide just when the waning day ends and the waxing night begins, a state of semi-somnolence creeps upon us—a forgetfulness or unguided thoughtfulness, which resembles a reverie. There is a disinclination to move as there is an aversion to think, both body and soul sinking into a sleepy, dreamy mood, as if in accord with changes going on in the physical world. The transition from day to night is bewildering; we are only half conscious of passing events.

In Longfellow's *Voices of the Night* the "illusion" is happily displayed :

“Ere the evening lamps are lighted,
And like phantoms grim and tall,
Shadows from the fitful firelight
Dance upon the parlor wall.”

The evening glow is steady and not fitful like a twilight, yet the blaze is a kind of phantom to be swallowed by gloom slowly moving from the depths of night. The twilight goes, but is soon succeeded by twinkling stars—the “evening” lamps which light the canopy above, as if to prove that they are faithfully watching over us—twinkling as we sleep.

“Then the forms of the departed

Enter at the open door;
The beloved, the true-hearted,
Come to visit us once more."

Children alone represent the best of life; they are filled with the consciousness of existence; they have confidence in their environment; they look to their parents for protection, and find in them what they most desire. They, at the close of a busy day, sink to sleep as thoughtless of impending harm as birdlings in their nests. It seems a pity that adults can enjoy no such security.—HOWE, *Eclectic Medical Journal*, 3890.

USEFUL ESCHAROTIC.

This is one of the earliest contributions by Professor Howe concerning the escharotic he devised under the name "Escatol." It should be read in connection with the remarks on "Howe's Caustic" in the next article, "Comments on the Action of Juniper Pomade," etc.—**Ed. Gleaner**.

USEFUL ESCHAROTIC.—For a year or two I have been using an escharotic which serves so many purposes that I lately had Prof. Lloyd put it up in quantities to meet the demands made by physicians who have not time to concoct and compound every drug needed in an extended practice. The escharotic agents are salicylic acid and chloride of zinc, two parts of the former to one of the latter. The agents are rubbed in albolene as a vehicle to display the caustic agents to good advantage. The mild caustic may be applied with a camel's hair brush. There should be 30 grains of salicylic acid and 15 grains of chloride of zinc to an ounce of albolene. This will do for a general rule, but it may be made milder or stronger to meet special conditions. Where the skin is delicate a weaker form is needed; where the skin is thick the escharotic should be strengthened.

I learned by accident that the two escharotics in combination produced less pain than either when used alone. It may be applied to an ulcer in the nose successfully, and the agent will not attack the sound mucous membrane. I will mention a few morbid states where the escharotic exerts a curative power. I have not developed the medicine in wide ranges. A few daily applications cured a bleeding wart in a man's beard, and seed-warts on the hands. It destroyed moles on a woman's chin after two weeks' use. It removed scaly ulcers of a lupoid nature on an old man's face. It caused an obstinate eczema on a lady's neck to get well. It cured a rodent ulcer of the nipple. It destroyed a patch of "ring

worm” on a man's thorax, and a sluggish ulceration of the leg which may have been epitheliomatous.

It will destroy polypus of the nose without any other agency, whether operative or therapeutic. I employ the escharotic upon fistulous surfaces after they have been incised, and on all sluggish traumatisms to arouse a healing action. It is one of a few things I have learned tentatively. I keep a jar of the escharotic in stock, and deal it out in small boxes to patients. I apply it to fissures of the anus, and to wounds made in the excision of cancerous growths.

Syphilitic ulcerations of the mouth, fauces and pharynx, and of the velum yield to daily dressings with the escharotic unguent.

My object in writing this has been to suggest just what every practitioner needs, and is thankful to have at hand in time of pressing need.—HOWE, Eclectic Medical Journal, 1891.

COMMENTS ON THE ACTION OF “JUNIPER POMADE,” “ACID SOLUTION OF IRON,” “VIBURNUM CORDIAL,” AND “HOWE'S CAUSTIC.”

Here, in short compass, we have the therapy of the special preparations devised by Dr. Howe. This article should be read in connection with the papers on “Viburnum Cordial,” “Acid Solution of Iron,” and “Useful Escharotic.”—**Ed. Gleaner.**

COMMENTS ON THE ACTION OF “JUNIPER POMADE,” “ACID SOLUTION OF IRON,” “VIBURNUM CORDIAL,” AND “HOWE'S CAUSTIC.”—Having been requested repeatedly to write a succinct account of what the above remedies will do, I respectfully submit the following statement, fully believing that other medical practitioners will come to conclusions similar to those I express in words:—Juniper Pomade is a pretty sure cure for all forms of eczema or tetter. It allays the itching and destroys the vesicles and scales. The unguent may be used upon all parts of the body, though sparingly on mucous surfaces. It is employed in the nasal cavities with a camel's hair brush to mitigate the symptoms of catarrh, to arrest nay-fever, to heal nasal ulcers, to arrest ringing in the ears, and to improve states of deafness depending upon thickening of the linings of the Eustachian tubes. Juniper Pomade softens the scaly patches on the face which are often epitheliomatous. It has proven an excellent dressing for tetter of the edges of the eyelids, which leads to “wild hairs,” and induration of the tarsal borders. The

pomade is reliable in the treatment of sore nipples in nursing women; and it will cure chapped hands.

Acid solution of iron is an “alterative,” and may be administered to scrofulous, syphilitic, and cancerous subjects. In alternation with Fowler's solution of arsenic it is given in the early stages of phthisis, in constitutional syphilis, and in ordinary dyspepsia. It is the only preparation of iron that does not produce fever and dryness of the fauces. The ordinary muriated tincture of iron is not its substitute in any form of disease. It may be prescribed with safety in any grade of febrile action, with the effect of lessening it. In states of anaemia acid solution of iron will increase the corpuscles of the blood, both of the white and the red; and it will produce an increase of flesh in wasting diseases. It increases the appetite very decidedly, and assists digestion, absorption, and assimilation.

Viburnum cordial was compounded to meet the wants of the inebriate when he aims to get over a spree; it alleviates the gnawing sensations of the stomach, relieves the discomfort of the fauces, and helps to steady the disturbed brain.

The medicine proved to be so useful in allaying the pangs of dysmenorrhoea that it has become a favorite remedy with gynaecologists. It is a “female tonic,” arresting leucorrhoea, and alleviating pelvic discomfort. It is too highly spiced for urinary difficulties and bladder troubles. It is a valuable remedy to take in chlorosis, and in the debility common at the second climacteric.

My escharotic I employ to nasal polypi, to ulcerations generally, to the destruction of epitheliomata, and to syphilitic condylomata, anal fissures, and to obdurate ulcers. The indurations and fissures of eczema, warts, moles, and nodules disappear upon a judicious application of the caustic. For cancers the caustic power is increased by adding more salicylic acid and chloride of zinc. The caustic does not provoke much pain—not so much as chloride of zinc alone will provoke. The salicylic acid is perfectly dissolved in the combination; and the caustic is the consistency of firm cream in all weathers.

The formula for these medicines have been published in the JOURNAL, and can be elaborated by any druggist, but the untrained pharmacist may have some difficulty in making the very best preparations.—*HOWE, Eclectic Medical Journal, 1891.*

DYNAMYNE.

Dynamyne, which is a one per cent solution of nicotine, the chief alkaloid of tobacco, was devised by Professor Howe as a local anodyne. It was one of the few medicaments which he prized and is among the therapeutic legacies he has left to Eclectic therapy. Dynamyne is used alone full strength or diluted, and is an ingredient of Libradol, the successor of the compound emetic powder of the olden therapy. See also paper on "Dynamyne in Orchitis."—**Ed. Gleaner.**

DYNAMYNE.—Having in view a local anodyne which should embrace nicotia or nicotine, I consulted Prof. Lloyd in regard to the elaboration of such a substance. After some experimenting he presented me with a greenish liquor which I have been testing therapeutically. The results thus far obtained I will give in detail, though I have not given experiments a very wide range. I find the narcotic, which I named dynamyne for the sake of having a convenient term for its designation; and have employed only as an external application. Administered internally it will kill dogs and cats in a few minutes. Ten drops killed a puppy in four or five minutes, the muscles of respiration being paralyzed. The large proportion of tobacco employed in the manufacture of the drug may have contributed to its deadly nature.

Applied to the sound skin dynamyne neither irritates nor produces unpleasant sensations. If the pain calling for its use be localized within a small area the medicine may be used at full strength, but should the range of suffering be extended the drug should be diluted with water, say one to ten—a teaspoonful of dynamyne to ten teaspoonfuls of water. At that strength the mixture may be rubbed on a painful shoulder, back, hip, or knee. If an inward impression be felt it will be exhibited in temporary dizziness. This impression soon wears off, and no permanent disability remains.

My experiments thus far extend to the allaying of a toothache which had resisted the local action of chloroform. A pledget of cotton spun on the end of a toothpick was the carrier—a drop or two of the undiluted medicine was pressed against the exposed surface of a broken fang; in a minute or two all pain subsided.

I have had favorable reports from patients who have been directed to rub the medicine over the hypogastrium to allay tender ovaries and

painful menstruation.

Dynamyne has relieved pleurisy pains when rubbed on the integument of the chest; and localized pain of the pylorus has been thus relieved, as well as the colic of appendicitis.

The systemic effect of the drug, through absorption, has overcome constipation, and increased the flow of urine.

In two instances the drug aborted felons which had not attained the suppurative stage. A piece of muslin was wrapped around the ailing digit, and then dipped often in the diluted mixture.

The remedy cured an obstinate roseola of the face—a dilute form of the drug was used on the minute phlegmons several times a day.

It has relieved distressing headache when the scalp near the top of the cranium was wetted with the medicine. It has cured angina pectoris, and relieved tetanic spasms—probably through absorption of a moiety of the drug.

Even in dilute forms the agent will destroy vermin, and the lower forms of both animal and vegetable life. It may be sprayed upon septic ulcers, if the strength of the medicine be tempered to the area of the sore; and the spray may be employed in the throat and nasal passages of the diphtheritic.

I expect to add other uses for the potent remedial agency from month to month. I believe it would destroy the germs of cancer if it could safely be brought in contact with them. I propose to employ a weak form hypodermically.

The medicine is too strong to employ in the rectum and vagina.

Brushed upon a forming carbuncle the inflammation subsided before a “core” formed—the force of the disease was aborted. In the suppurative stage of a furuncle I think the medicine should not be employed, lest too much of the nicotine be absorbed.—HOWE, *Eclectic Medical Journal*, 1891.

DABBLING IN DIPHTHONGS.

The Rooseveltian method of reform spelling had been attempted several times before the illustrious ex-President undertook to make it popular and failed. There are some reasons why reform spelling is not wholly feasible, and Dr. Howe notes some of them in this article, written a year before his death.—**Ed. Gleaner.**

DABBLING IN DIPHTHONGS.—There is a disposition in restricted circles to tamper with the orthography of certain medical terms which embrace double vowels, the alleged object being to simplify the spelling of words containing *æ*, *œ*, *ai*, and *oi*, the diphthongs to be represented by the single vowel *e*. While this is seemingly an improvement, it is not so much of a gain as might be supposed. To illustrate: Hæmorrhage comes from *aima*, the Greek for blood, *æ*, with the aspirate is rendered by *hæ*, which is to be transformed into *he*. Now, why not go on with the simplifying process and eliminate an *r*, making “hemorrhage?” Why retain a superfluous consonant? To enter upon modifications in orthography is to depart from rules which hitherto have enforced restraint. We may as well change consonants as vowels. Take the word phthisis, for instance, which the illiterate physician spells “tisis” when he makes out the certificate of death for the burial of a consumptive patient. How markedly more simple is the orthography of the ignoramus!

The vulgar belief is that the author or compiler of a dictionary has an unquestioned right to introduce such modifications in orthography as he pleases, when, in fact, he is restricted to what is denominated “reputable use.” What editors, journalists, authors, and scholars in general adopt and approve becomes reputable in language, and the lexicographer may copy, borrowing or utilizing the stamp of authority. But he has no business to make a change in our language; he can merely note a change which has occurred by literary consent or approval. If every scribbler could modify words his fancy might suggest, we should soon be in a jungle of confusion.

Let it not be understood that I am opposed to making rational modifications in orthography, for I am really in favor of reasonable changes; but would warn the unthinking against the adoption of novelties—there is danger in the scheme.

If *æ* could be changed to *e* in all cases, the argument in favor of eliminating the diphthong would have more strength. As it is, and ever

will be, *ardor urinæ* will remain as it ever has been; so with *os tinæ*, *cervix scapulæ*, and in all cases where the terminal diphthong indicates the genitive singular—as neck of the scapula. But we may cease to use the Latin expressions and employ only English. Well, why not? Simply because we have no English words to represent all anatomical parts. Then again we have *æ* and *œ* entering words similarly constructed, yet of variable meanings. We have *cæcum*, *ilio-cæcal valve*, etc., and *cæliac axis*, etc., *cælia* signifying a hollow or cavity, and not a blind pouch as does *cæcum*. Now to make the single vowel *e* represent both diphthongs is not admissible. *Edema* is perhaps as significant as *œdema*, but not so classical. However, I have known a scholarly pathologist to pronounce a limb *edematous*. *Anemia* and *edema* will do, yet we may need a modified esophagus to swallow the terms. Such distortions expand the *alæ nasi*, and make twinge the *columnæ camæ* as well as the *chordæ tendinæ* of sensitive hearts.

In conclusion I would say that orthoepy depends somewhat on orthography. For instance, *perinæum* spelled with a diphthong must have the accent placed on the penult, but with the double vowel reduced, to *e* the accent is apt to fall on the antepenult.— HOWE *Eclectic Medical Journal*, 1891.

SPECIFIC MEDICATION.

Dr. Howe answers the often plied question as to whether he believed in specific medication. This article comes as near an expression on the subject by Dr. Howe as any we have ever seen from his pen.— **Ed. Gleaner.**

SPECIFIC MEDICATION.—I am frequently asked if I believe in “specific medication,” and my answer is, that I have always advocated the application of remedies specifically. I prescribe for symptoms when causes of disease are not understood. I believe in a well devised system of nosology for the convenience of the thing, when the ensemble of a series of morbid activities can be comprehended as designated, as it can be in pneumonia, measles, scarlet fever, small pox, and numerous other well known diseases. Then why quibble over a silly symptomatology? I am something of a utilitarian, and have no time to haggle over non-essentials. If bacteriology means anything, it leans towards specific pathology. Here is the bacillus tuberculosis as the *materies morbi* of phthisis—no, as the *contagium vivum* of consumption. Now what is to be done with the specific cause of the particular disease? Why, kill it with the Koch tuberculin, or some other parasiticide! The drift of

pathology throughout the scientific world is in the direction of specific medication. The introduction of antipyrine and kindred drugs is in the line of employing specifics. All practitioners of medicine are in search of a remedial hammer which will hit the morbid nail on the head, and all sensible and progressive doctors take less and less stock in "glittering generalities and general principle." There is less and less shot gun practice, less firing in the brushes, less and less mixing and compounding, and more and more rifle practice—aiming at the bull's eye

Yes, as ever, I am in favor of specific medication as I understand it
—HOWE, *Eclectic Medical Journal*, 1892

SPECIALTIES IN MEDICAL PRACTICE

"Man proposes and God disposes." In the midst of life we are near to death. The last sentence of this selection shows how little one can bank upon heredity and how unexpectedly the fell destroyer may come upon us. "The lion in the path of the ambitious is that I am in the enjoyment of robust health and my ancestors have been afflicted with longevity" writes Professor Howe. He could not foresee, nor little did his readers expect, that before this paragraph would be read Professor Howe would have passed the portals of life unto death. Even as his great heart was stilled his teachings went on, and to this day their influence is widely felt in Eclecticism. Professor Howe believed in specialties in medicine, but not to the extent that they are carried at the present time. To those whose mad desire is to rush at once into a specialty his words concerning fitness and preparation should prove profitable. Much that is now claimed by the specialist can be successfully and legitimately done by the general practitioner, and much that some general practitioners attempt should be referred to the competent specialist. The latter is especially true of surgery, which ought to be done chiefly by surgeons, and in places of surgical safety and not in the dangerously unsafe offices of most general practitioners nor in the surgically unprepared homes of the sufferers. The specialist should also have several years of general practice to fit him for special work—**Ed Gleaner**.

SPECIALTIES IN MEDICAL PRACTICE —Although much fault has been found with specialties in medicine they seem to go on and flourish. The alienist gives his time and attention to mental disorders; the oculist attends to defects of vision; the aurist confines his studies to the ear; the rhinologist restricts his professional labors to the nose; the pulmonist treats consumption and cardiac troubles; the gynecologist spends his energies upon diseases of women; and the obstetrician engages in

parturition; while the surgeon gives most of his time and attention to operative measures—to cutting disease from the human organism. But the most busy of all is the family physician. He works night and day in taking care of the little things as well as the great. He medicates febrile disorders; he manages “colds” and coughs; he prescribes for unaccountable aches and pains; he has to prescribe for senile asthma, paralysis, cystitis, insomnia, boils, corns, chilblains, and every sort and kind of ailment. And to do this successfully and satisfactorily he must be at home (or about home) all the time. He can not recreate in summer, nor deer hunt in winter—he is a fixture, or his practice will decline and eventually vanish.

The same necessity governs the obstetrician. If he would take engagements and keep them; if he would attain eminence in the art and science of obstetrics, he can not be away from home when the parturient women call for professional help. If the obstetrician would be an operative gynecologist, responding to calls from a distance, he can not sustain a large obstetrical practice. While he is executing hysterectomy away from home his lying-in patients will have to seek professional aid elsewhere. Once I attended twenty or thirty obstetrical cases in a year, but now I have only accidental or consultation cases. The word is that “the doctor may be away from home, on some surgical tour, just when I may want him.”

The ambitious practitioner may cater for all kinds of practice—aim to be oculist, dermatologist, surgeon, obstetrician, gynecologist, and to do the duties of a general practitioner; but trying to cover everything he will fail in many ways—will prove a failure in all of the specialties. One specialty is enough for any practitioner to pursue. Besides, the nature of the doctor's education and general make-up will have much to do with success in any branch of practice. All are not fitted to be oculists, obstetricians, and surgeons. A good knowledge of anatomy is essential to surgical success; and the contingencies of abdominal surgery are such that only the coolest and most courageous can overcome a set of unexpected contingencies. The timid will close the “exploratory” incision, and lose an opportunity to gain experience and reputation. To fight out of a complex abdominal difficulty requires the highest order of heroism. Furthermore, it requires many years of professional life to acquire a reputation which shall command a paying patronage. Unless a physician be well fitted physically, mentally, educationally, and ethically for a surgical career, to enter upon the course leading in that direction will prove unprofitable. I am led to make these remarks by several physicians, who,

under the impression that I might be on the point of retiring from active practice, were desirous of entering upon a course that might lead to successorship. The lion in the path of the ambitious is that I am in the enjoyment of robust health, and my ancestors have been afflicted with longevity.—HOWE, *Eclectic Medical Journal*, 1892.

VIBURNUM CORDIAL.

Viburnum Cordial represents the results of Professor Howe's studies in pharmaceutic combinations, and was originally devised by him for the relief of the stomach-pangs of the alcoholic tippler when suffering from the withdrawal of his favorite but damaging beverage. It was largely employed by him, as it is by others who follow his teachings, as an exceedingly efficient uterine sedative and tonic. The combination is ideal and shows the type of medicinal preparation to which Professor Howe was partial. Its popularity years after the death of the author attests to the worth of the preparation and the pharmacal and therapeutic skill of Professor Howe. See also paper on "Comments on the Action of Virburnum Cordial," etc.—**Ed. Gleaner**.

VIBURNUM CORDIAL.—Good words continue to come in regard to the results of the "black haw compound." Those who occasionally tipple too much find in the remedy relief from the cravings which attend inebriation.

Men who through age or over-indulgence begin to feel the approach of premature impotence, are finding the virtues of the remedy. Inasmuch as dyspepsia is a concomitant of such letting down, I write the following prescription:

Rx Viburnum Cordial, 4 ounces.

Fowler's Solution, 2 ounces. M.

Sig.—Dose, half teaspoonful every three hours.

This course of medication has relieved the dyspepsia and given confidence where it was needed. The drug never does harm, and often acts like a charm.

As a female tonic viburnum has no rival. It should generally have the arsenical admixture, or be taken in alteration with acid solution of iron. It is important to know when to apply a remedy. When there is febrile action present the average tonic is out of place. When the solar plexus is alienating the visceral functions, veratrum is the remedy which corrects splanchnic derangements. More than half of human ailments hinge

upon visceral derangements, yet the average practitioner never thinks of the splanchnic system of nerves. Digestion and assimilation are influenced by mental shock—by violent impressions made upon the cerebro-spinal centers—yet a disordered splanchnic system of nerves is rarely considered. Think of the multiple plexuses of nerves along the front aspect of the vertebral column, and consider the functions of each. Treat the pectoral plexuses for an asthmatic cough. Arsenic and veratrum have relieved coughs no lung balsam will touch. What remedy will impress the semilunar and other vicinal ganglia? The ganglia and plexuses of the splanchnic system of nerves are neural centers where mandates go out to the viscera. Ergot is one of the agencies which influence splanchnic plexuses, especially the pelvic viscera. Ergot adds clonic action to parturient throes. The heart's action is impressed by the influence of digitalis; and the kidneys respond to viburnum.—HOWE, *Eclectic Medical Journal*, 1892.

DYNAMYNE IN ORCHITIS.

This paper should be read in connection with the article on “Dy-namyne.”—**Ed. Gleaner.**

DYNAMYNE IN ORCHITIS.—Wider ranges of experience have led me to try dynamyne at full strength, locally, in the treatment of orchitis; and the results have been eminently satisfactory. Dr. Berry has cured three cases with the drug, and I have done the same in two instances. The patients did not complain of smarting, nor of other annoyances. I ordered my patients to go to bed, take a dose of Epsom salts, and apply the dynamyne to the inflamed testis and sensitive cord every hour or two. In two days they were well, yet were advised to wear suspensory bandages for awhile.

For years I have been seeking a local agent that would not irritate the thin and sensitive scrotal tissue; and now I have found the desideratum.

At present I am using dynamyne upon an acutely inflamed knee—arthritis—and with more satisfaction in the way of relief than when other agents have been applied. Internally I gave salicylate of soda.

I use a dash of dynamyne in the pan of water I display surgical instruments and implements. It renders the fluid aseptic.—HOWE, *Eclectic Medical Journal*, 1892.

LA GRIPPE.

Not often did Professor Howe step over into the field of the general practitioner of medicine in his editorials. The article selected is a fair sample of the way he noted diagnoses and the manner of treatment employed by him. His criticisms on the use of quinine are in accord with the views of most Eclectics since his day. In fact, quinine has oftener proved damaging than beneficial in la grippe, and particularly where head-pains were among the most prominent symptoms. Only when specifically indicated should quinine or any other remedy find a place in the treatment of this treacherous malady. Periodicity, soft pulse, moist skin and tongue, and lack of nervous irritation are the direct indications for quinine.—**Ed. Gleaner.**

LA GRIPPE.—Two years ago this country was the victim of a specific respiratory catarrh, which, having no nosological name, was known by the French term *La Grippe*. The epidemic spores impressed the respiratory organs of almost everybody. The morbid onset was sudden, and generally profound. There would be sneezing, headache, chilliness, coughing, and great mental depression. After about ten days' duration the symptoms became milder in type, and a state of convalescence was observable. The average case produced great discomfort, but did not seem to be dangerous to life. The aged and the feeble succumbed to severe attacks, or became the victims of albuminuria. While very few died of the disease, the death-rate was decidedly increased by the presence of the specific influenza. The morbid action aggravated other diseased conditions.

Without warning the same morbid influence returned, and in as intense a form as at the first visitation. The second invasion as often hit those who suffered before as the then exempt. The disease spread rapidly over the country, manifesting its presence over wide expanses of country on the same day. Watery eyes were to be seen everywhere, and coughs and sneezes were everywhere heard. The fever was hard to bear, as well as muscular pains. The pituitary discharge was profuse, compelling the victim to use a handkerchief almost constantly. Frontal headache was a sure complication. The function of olfaction was totally suppressed for several days, and the appetite was poor. The temperature of the body sometimes reached 103 or 104°, yet only at times. The usual temperature was from 100 to 103°. Not infrequently pneumonia was a sequence or complication, and the heat attained 104 or 105°. Such a high range was dangerous; and the patient was restless. In some

instances the bowels were disturbed, nausea and diarrhoea supervening. Paroxysms of coughing were attended with distress, the tough mucus refusing to leave the air-passages. The cough was largely bronchial. In the feeble there would be sweating turns, which seemed to exhaust the patient.

The treatment varied according to the prescribed fancy. No two physicians treated cases alike. In fact each practitioner experimented largely. Quinine was the sheet-anchor of the non-professional. Women shopping would stop at the drugstore and swallow quinine in capsules. But, so far as my observations extended, quinine proved no more of a specific than antipyrine, or any other of the antithermics. I thought that cold sage-tea benefited more than any other drug. I pushed pilocarpine for several days, yet could not say with any better success than when I prescribed phe-nacetine. Veratrum behaved well, and I gave it to more patients than I did any other remedy. I put dynamyne upon the head when it ached, and upon the chest when pleuritic pains existed. I prescribed chloralamide to those who could not sleep; and found that the agent produced its usual effects. Lemon juice was agreeable;

and hot lemonade became popular among the unprofessional. In la grippe there was an excellent chance to prescribe for symptoms to the neglect of nosological names. The Homceopathist found indications for aconite, as he does in most febrile states; but as the disease was largely of the respiratory organs, veratrum better filled the indications.—*HOWE, Eclectic Medical Journal, 1893.*

THUJA AGAIN.

Perhaps the question, "What was Dr. Howe's method of treating hydrocele with Thuja?" is oftener asked of us than any other concerning Professor Howe's surgical procedures. In this selection is the answer. No simple surgical method of cure by injection ever aroused more interest than this one. It is still used by many surgeons in the same manner and for the same purposes as are here advised by Dr. Howe. See also "Thuja for Anal Prolapsion" and the "Treatment of Nævus."— **Ed. Gleaner.**

THUJA AGAIN.—Although I have published the method of employing Thuja in the treatment of hydrocele, I am still requested almost every day to tell a correspondent just how to execute the plan, what strength to employ, etc. Well, I presume the circumstances are as follows: The doctor who has no case of hydrocele to treat pays little attention to the

matter till a patient presents himself for treatment; then, instead of looking up the published account in the JOURNAL, he writes for information, and sometimes forgets to inclose a postage stamp.

Well, here it is again: In an ounce of warm water pour a drachm of Lloyd's Thuja. Mix by drawing up a quantity in a syringe, and forcing it back with the descent of the piston. Then draw up about two drachms of the dilute mixture in the barrel of the syringe, to be ready for use. Send a large exploring needle into the sac of the tunica vaginalis testis, and let the fluid escape. Now, before withdrawing the needle, place the nozzle of the loaded syringe into the needle's open mouth, and with a plunge of the syringe's piston send the diluted Thuja into the cavity recently distended with serum. Then, to make the liquid enter every crevice in the sac of the hydrocele, the fingers pinch and knead the scrotum quite vigorously. The hollow needle is then withdrawn, and the provoked pain is considerable for a half hour or so. The patient then goes about his business, and no additional treatment is required. For a day or two there is some swelling of the scrotum, making it appear that there has been a re-accumulation of serum, yet this passes off in a week, and the disease is radically cured.—HOWE, *Eclectic Medical Journal*, 1892.

ACID SOLUTION OF IRON.

The following is the original formula for acid solution of iron as devised by Professor Howe. Exceedingly efficient therapeutically, pharmaceutically it is difficult to prepare uniformly. At times a turbid preparation results when apparently the exact methods have been used which yield a clear and elegant product. This is another of Professor Howe's legacies to Eclectic medicine, and in our opinion one of the most important. Dispensed in syrup of orange, it provides one of the pleasantest of iron preparations. See also "Comments on Acid Solution of Iron," etc.—**Ed. Gleaner**.

ACID SOLUTION OF IRON.—Rx Water, 2 ounces.; nitric acid, 1¹/₂ ounces. M., and then add sulphate of iron (that has been rubbed) 2 ounces. Stir occasionally for forty-eight hours, then filter through paper. Of this a half ounce is enough to prescribe at any one time. Dose, two drops in a half wine glass of water every three hours. The medicine is an alterative peptic and general tonic. It is useful in anemia, dyspepsia, tuberculosis, syphilis, and cancer. I generally prescribe it in alternation with Fowler's solution of arsenic, giving each on alternate days, or each every four hours in alternation, a dose of one or the other coming every

two hours.

I have been told by druggists who put up prescriptions, that no medicine meets with so many favorable comments as "acid solution of iron." Invariably the prescription calls for repetitions.— HOWE, *Eclectic Medical Journal*, 1892.

"LOOSE CARTILAGES" IN JOINTS.

The following abstract is from Dr. Howe's surgery, showing the manner in which he treated even small surgical items, and the freedom from technical involvement in his directions for treatment. The whole work is equally clear; he never obscured his meaning by a display of technicalities not necessary to the purpose. This made his book extremely popular with both physicians and surgeons, and readily comprehended by the medical student.—Ed. Gleaner.

"LOOSE CARTILAGES" IN JOINTS.—The knee-joint, more frequently than other articulations, is liable to have developed in it one or more movable bodies of cartilaginous consistence, which, although quite free in the articulation, are attached to the walls of the joint by narrow pedicles; and when they get between the articular surfaces, may act like a nail in a hinge, abruptly arresting motion, and causing the most excruciating pain. These bodies pop about so quickly from one part of a joint to another that they have received the vulgar name of "joint mouse." They do very little mischief unless caught between the articular surfaces, as just described.

"Loose cartilages" vary in size, from that of a barley corn to the magnitude of a small patella. Those the size and shape of an almond kernel are the most troublesome. In rare instances these bodies lose their connection with any tissue in the joint, yet by absorption are able to maintain an independent existence, darting about from one pocket to another in the articulation. From the fact that these loose bodies are sometimes osseous it has been supposed that they were originally pieces of bone broken from the ends of the bones entering the articulation. It has also been presumed that these strange products were nothing more than solidified precipitates from the synovia.

The treatment alone which can be relied upon is radical; and consists in removing these bodies from the joint through an incision made for that purpose. It may be of service, as a palliative measure, to wear an elastic

knee cap, but this will not prevent occasional trouble; and when the loose body slips between the articular surfaces of the bones constituting the joint the patient falls, and is unable to rise or move until the agonizing pain subsides, and then the accident may recur again at any instant. Therefore, to escape the impending evil, removal of the cause is the only hope. But, before cutting for the body the patient must be able with his fingers to fix it in some accessible part of the joint. The outer and lower part of the joint is the best place to arrest the loose cartilage, as there the coverings are thinnest. It is well to grasp the moving body with vulsellum forceps, the long teeth going through the soft structures, or doubling them in behind the loose cartilage so it can not escape the grip while being cut upon. When once reached it is to be seized with toothed forceps and removed, the fingers of the operator closing the wound and pressing upon the parts to prevent blood from entering the joint. The knee is then to be bandaged, and the patient put under the influence of chloral. The danger is from shock and tetanus. No risks in the way of exercise are to be taken for several days; and local irritation is to be kept down by the topical use of anodynes and evaporating lotions.

Another method for extracting a loose cartilage from the joint is to make an incision in the synovial bag with a tenotome, and then force or drag the loose body through the opening and into the soft tissues between the synovial membrane and the integument. It is to rest in that place until the synovial capsule has healed, and then it may be safely removed through an incision made in the skin.

According to M. Larry, who refers to 167 published cases of removal of loose cartilages by operation, out of 121 cases in which the old or direct method was employed, 98 were successful, 5 doubtful, and 28 died; whilst of 39 indirect operations, 19 were successful, 15 failed, and 5 died. From this it would appear, as M. Larry states, that extraction by either method is attended with decided danger. I have removed false or moving cartilages from the knee joint, and always by the direct method (fixing the body, then cutting upon and removing it at once), and never had worse symptoms to deal with than a severe "chill" and threatened tetanus. I think the danger of the operation come chiefly from the presence of blood in the synovial cavity. In the event of tetanus the life of the patient would not be safe without amputation.—HOWE, *Art and Science of Surgery*.

ARTICULATA.

The following reproduction is a chapter from Professor Howe's book for the young, entitled "Conversations on Animal Life." Throughout this book, which starts with the simplest forms of animate life and ends with the quadrupeds, the whole insect, bird, and animal creation is discussed colloquially in such a manner as to bring out only the distinctive truths concerning the creatures under discussion. It represents just such a conversation as Professor Howe would enjoy having with children, whom he dearly loved and whom he would take with him over the pleasant pathways of childhood such as he enjoyed with the animal and bird denizens of the New England fields, streams, and forests.—**Ed. Gleaner.**

ARTICULATA.—Lucy brought to the table at the hour for the meeting the jar containing some of the animals caught the previous day. To her surprise she found that of six "minnies" which had been placed in the little aquarium after the return from the excursion, only two remained.

What had become of the four tiny fishes? The water beetle could not have eaten so many, and the crawfish had been bountifully fed on bits of meat dropped into the water. Perplexed, she asked her uncle to express his opinion on the cause of the loss. He intimated that the crustacean was so voracious that he would believe almost anything concerning its appetite. The minnows could keep out of its way in the daytime; but in the night the crawfish would have the advantage of seeing the best. If the "minnies" were near the surface the crawfish could not rise to their level, but the water beetle might seize and drag them to the bottom, where they would be exposed to the other and worse enemy.

"Only the plants" he added, "are safe in an aquarium where there are crawfish and water beetles."

"I believe the water beetle can fly in the air." said Tom.

"It has good wings and can fly wherever it wishes to go. In the water it uses its hind legs as paddles, and propels itself at a lively rate of speed. The water beetle is an air breather, and has to rise to the surface for breath. When it dives it takes a quantity of air under its wing-covers, which can be respired at will.

"There are other beetles which live in water. The gyrinus or whirligig

beetles move in circles as if skating on the surface of the pool. They swim rapidly, and can not be captured by the trout or any other fish.”

“I have seen them swimming in groups, several sets “skating” within a few feet of each other,” said Tom.

“If struck at with a stick,” responded his uncle, “the merry swimmers suddenly dive, taking with them a supply of air for breathing purposes. The air carried down looks like a globule of quicksilver attached to the body. When all is quiet, the divers reappear on the surface of the water and resume their gambols in sweeping curves. The gyrinus or water flea, as the little skating beetle is sometimes called, can not be kept in an uncovered aquarium, for at the approach of evening it may fly to more desirable haunts. When held in the fingers it gives off the odor of ripe apples.”

“A whirligig beetle is about as large as a grain of coffee,” said Tom, “and it has very beautiful wing-covers.”

“It is peculiar in having two pairs of eyes,” said the uncle, “one just above the other. The upper set is used to see objects in the air, and the lower to behold things in the water. It has short antennae and long, slender legs in front; the other legs are broad and fringed, serving as propellers. It feeds on minute animals that live in water. In the larval state it is wholly aquatic, and passes the winter in the mud at the bottom of ponds and streams.

“All beetles and kindred flying insects possess four wings and six legs. The two pairs of wings are sometimes needed to give greater expansion than could be attained by a single pair; and often the membranous or under wings, which are frail structures, are overlaid by horny shields or wing-covers.

“The chests of insects do not have true lungs, but spiral tubes, that convey air to the interior of the body, even to the abdomen. The mandibles of beetles are commonly strong, arched, or branched.”

There was what Sam called a “horned bug” in the case, and he was curious to know where it was found and what were the uses of its branching horns.

“Its name is stag beetle,” said his uncle, “and it is oftenest found on

locust trees. The horns are modified antennae, and may be regarded as ornamental weapons. It is the male of a common leaf-eating beetle. The stag beetle has a fighting spirit. If teased, it can be made to nip a green stick, and not relax its grip for several minutes."

"It seems strange," said Tom, "that antennae should be converted into horns."

"We see much of a similar variation in nature," said his uncle. "Soft down is transformed into thorns, feathers into quills, hair into bristles, and legs into biting mandibles, as in the lobster."

"The largest beetle in the world is the Hercules beetle of South America. It is more than four inches long, and one mandible is longer than the other. Its nip will crush a finger."

"In tropical countries, especially in timbered districts, are thousands of varieties of beetles. Many of them have beautiful wing-covers. Sometimes one will present brilliant markings that resemble a display of jewels."

"I think tumble bugs are beetles," said Tom. "I have seen a pair build a globe or ball."

"They are the pellet beetles common in our pastures," said the uncle. "The beetles will roll the ball away to some place where the earth is soft or sandy. They bury it after an egg has been laid in the center. A larval worm hatches from the egg, and feeds upon the substance of the pellet, and is afterwards transformed into a beetle. While a pair of beetles are rolling a pellet to its place of burial, they work in a hurried manner, the one pushing and the other pulling, appearing at first sight antagonistic to each other. But a moments watching will reveal that the ball keeps rolling in one direction."

"As soon as they have disposed of one pellet they hurry off to mold another, and do not cease working till night. If, in the haste, the round mass tumble down a declivity, and the beetles fall after it, they soon find the object of solicitude and force it where it may be properly buried."

"The sacred beetle of Egypt constructs a round ball and buries it after an egg has been deposited in the mass. Perhaps the coming of a larval beetle from the buried egg was thought to be emblematic of a new life."

Possibly the beetle was venerated on account of its benefits as a scavenger, hiding what might otherwise make the air unwholesome.”

“Where should we search for beetles?” asked Lucy.

“In dark, damp, and shaded places. Under the bark of decaying trees several species may be found. Others are to be discovered in dead animal structures. The tiny moth beetle is, in the larval state, a pest of woolen goods in summer, and to fabrics woven from animal products. It will destroy all taxidermic work unless made proof against its ravages by arsenic or other poisonous substances. As soon as the naturalist perceives a sprinkling of fine dust beneath his mounted specimens he may be sure the invisible larval beetle is at its destructive work.”

“I have reason to call them pests,” said Lucy, “for they ruined my muff last summer and injured my cloak. They must be very small, for I never saw one, dead or alive.”

“The tiny beetle,” said her uncle, “lays its eggs in fur, feathers, and animal products, and the small larval worms, when hatched, gnaw the goods.

“The little moth miller, another pest, lays its eggs in dead animal structures, and the larval worms, after hatching, cause great havoc. The odor of camphor, cedar, and other pungent agents will help to keep them out of boxes and trunks. There is a larval beetle with teeth so sharp that it will channel dead buffalo horns and the hoofs of different animals.”

The party went into the garden and lane to look for specimens of beetles. A couple of pellet beetles were watched while they were burying the ball in a bed of sand under the protection of a bush. A fragment of bark was stripped from a decayed log to expose larval beetles concealed there and the channels they had bored into the wood. A stalk of dead quince wood was broken in pieces to disclose the borings of the curculio beetle, which injures fruit trees. Lucy discovered a bug in the petals of a rose she had plucked. The little creature was a beetle, though it went by the name of “rose bug.”

On the cucumber vines were multitudes of striped bugs—beetles—that would ruin the young plants, if they were not covered with screens. On the pumpkin vine was another and larger beetle. If touched it would

give out an offensive odor. On the squash vine was still another variety of the beetle family. Yonder on the pea vines was a spotted beetle whose wing-covers when closed resembled the shell of a turtle. This beetle is sometimes called "lady bird." It is not destructive to garden vegetables, but feeds on various plant vermin. There was the hole of a beetle that is so fierce and voracious, and bounds upon its prey so suddenly, that it has been called the tiger beetle. It springs upon flies, worms, and other beetles.

Lucy, at this juncture, was moved to ask why God made creatures that would destroy not only garden delicacies, but more substantial crops. The question was puzzling, yet her uncle said, "All created things have a place and purpose in the world; and every animal strives to make the best of its conditions and surroundings. Our garden plants were once wild, stunted, and bitter, but by cultivation they have been rendered savory, tender, and succulent. The bugs that feed upon them now may have fed upon other plants originally. When they found luscious and nutritious vegetables they naturally would abandon tougher food. They would not take up with an inferior diet when a more desirable one was at hand. Bugs and beetles appropriate whatever they find to be agreeable to them. In some instances the original tastes of insects have been changed by feeding upon a rare exotic or successfully cultivated hybrid. Our own tastes become modified by being educated to enjoy certain things which were at first unpleasant to the taste.

"The Colorado beetle, so called, attacked the potato plant, and proved so destructive that the price of the familiar tuber largely advanced. Probably this was not a new beetle, but one that formerly fed upon something else, some other plant. It may have been in the wilderness thousands of years ago and fed upon a variety of the potato plant. It is not many years since the potato was unknown as an edible root, therefore we know little of its enemies. If the beetle of some wilderness country chanced to alight upon a cultivated variety and found it delicious, it would certainly abandon inferior food, and appear among growing crops, and thus become known to agriculturists.

"A 'fly' or beetle stings our plums and apricots; another variety deposits an egg in the blossom end of a chestnut, which, as a larval worm, after hatching, feeds upon the sweet contents of the shell. Most fruits have their special enemies, and a large proportion of these, when closely examined, are found to be members of the beetle family.

“The weevil, that destroys our wheat and other small grain, is a little beetle. It bores into the soft end of the kernel and there deposits an egg, which, when hatched, produces a tiny larval worm that feeds on the flour or starch of the seed. The flinty outside is left untouched, and resembles sound grain, yet is light and worthless. Southern grown corn is likely to be weevil eaten.”

Sam asked the privilege of showing in a vial some “bugs” that he had caught the previous evening. He said they made a quick flash of light while flying, and then waited a few seconds before flashing again.

“The specimens are beetles,” said Uncle Dan. “From May to August the meadows are illuminated by myriads of these light-producing beetles. On their bodies is a tuft which at night is made to give forth a flash of light. Heat is not developed in the process, but the shining light—phosphorescent glow—is strongly marked. The ‘lightning bug’ of the North and the ‘fire fly’ of the South are identical.”

“Is the ‘glow worm’ the same as the ‘fire fly?’ ” inquired Lucy.

“The ‘glow worm’ is quite distinct from the ‘fire fly,’ ” answered her uncle. “It belongs to the beetle family, and sends forth light during autumn nights. The female is wingless, and crawls on the ground or among plants like a worm. Possibly she is in a state of arrested development on the way from the larval condition. Her glow begins feebly and grows brighter for a minute or two, and then gradually fades. The light has a beautiful green tinge, and lasts much longer than the flash of the ‘fire fly.’ The male has wings, yet little luminous capacity. When the poet said, “The glow worm is lighting her lamp,” he must have been aware that the male is unable to ‘glow.’ ”—HOWE, *Conversations on Animal Life*.

REPTILES

The following interesting excerpt is gleaned from Dr. Howe's “Conversations on Animal Life.” It is but a small portion of the chapter on the reptilian family. The method of the teacher is plainly evident, and it is to be regretted that the bulk of the issue of this valuable work was destroyed by fire when only a few copies had been distributed. No better book could have been placed in the hands of the young as a spur to arouse their interest in the things which are natural.—**Ed. Gleaner**.

REPTILES.—As it happened, the first specimen taken when the students went to get representatives of the reptilian family was a small green snake. Lucy and Sam pronounced the reptile hideous, and professed to be afraid of it, but Uncle Dan assured them it was harmless. He placed the little ophidian in a covered jar for future reference

At the brink of a pond, with the aid of a sieve-like net, they captured a fresh water turtle—sharp-nosed and thin-shelled. It would do to typify the order of reptiles—chelonians, if no other variety was found. A spotted frog and a common green frog were seized and tumbled into a receptacle for short-tailed batrachians. A small toad was discovered with its nose projecting from the soft loam, where the warty creature had nearly buried itself by backing into the earth. This was put in the vase assigned to frogs.

“I should think toads ought to be arranged by themselves,” said Tom.

“Toads are not so aquatic as frogs,” said his uncle, “but they deposit their eggs in water, and the young are there hatched. The tadpole state is brief. While very small the little creatures abandon gills, and hop forth on land as tailless toads, and do not revisit the water except for a season in spring. Adult toads are seen generally at night, and frequent damp and shady places. Sometimes during a heavy shower, when the water overflows the weeds, so many toads are driven from their hiding places that the saying has arisen, ‘they rain down.’ ”

“I have been told that toads were poisonous,” said Lucy.

“An acrid fluid is said to be given out from the warts on their backs, but in other respects they are harmless,” replied the uncle.

“Please tell us about the spotted and striped frog we have just caught,” besought Sam.

“It is called leopard frog, on account of its markings. It lives in grass and weeds, and often is seen long distances from ponds and streams. It will span several yards at a leap.”

The clatter of a tree toad in an apple tree near at hand was heard.

“That is the voice of a batrachian that would make an interesting addition to our specimens,” said the uncle. “It is not a toad, but a frog,

and spends most of its time in trees, resting on the larger branches.”

Tom climbed the tree, where he could see the bright-eyed clucker half buried in the lichens that grew on the balk of an old bough. It was among colors which resembled the hues of its skin, and remained silent. He threw a net over the timid frog, and placed the captive in a wide-mouthed vial. In its attempts to crawl up the sides of the vase there was an opportunity to see The discs at the ends of the toes. These suckers enable the animal to suspend itself on the under surfaces of the branches of trees.

“Can the tree frog change the color of its skin like the chameleon?” asked Tom.

“I think this kind of mimicry may be practiced to a limited extent,” said his uncle, “but, as I suggested on another occasion, creatures may select such resting places as correspond quite closely in color with that of their bodies.

“Now we have at least three varieties of tailless batrachians; if we can find a tailed species, our collection will be somewhat extended in range.”

The hunters had been looking for this object of interest when Tom's eyes lighted upon a salamandrine newt. It was a female, having spots on the back and no fringe.

“A toe of this animal may be cut off,” said Uncle Dan, after it had been assigned to a place among the other specimens, “and another will grow in its place in a surprisingly short time. Possibly the four limbs would be reproduced if they were amputated. Spotted salamanders, usually found on land, have similar characteristics. They seek fens and ponds in spring to deposit their eggs in water. A red variety with black spots is apt to hide under the bark of decayed logs.

“Although newts and kindred creatures move slowly, they can use their tongues so quickly in capturing insects that the motion can not be seen. Salamanders swim in the water with ease. In summer, when the blood circulates actively, they have to come to the surface every few minutes to breathe. During cold weather they can bury themselves in mud, and maintain restricted aeration through the agency of the skin.”

Tom caught a tadpole and also a young frog with a fin-like tail. “How is

this?" inquired he. "Do some little frogs have tails?"

"This tailed frog is not completely transformed from its immature tadpole state," replied Uncle Dan "The eggs of all batrachians are laid in water. The eggs of frogs may be known by the jelly-like substance that encompasses them; the ova of toads are held in beaded chains. Newly-hatched tadpoles swim like fish, and feed on vegetable food. They swim in groups, but move independently when approaching the period of transition, after which they are frogs. While undergoing this change the head, body, and legs of the frogs may be reached before the tail is lost. The specimen taken is one that still retains the tail, though otherwise a mature frog."

"I have often wondered where frogs lived in winter," said Lucy. "All batrachians bury themselves in the mud at the bottom of ponds and streams when cold weather comes," said her uncle, "and they stay in a state of hibernation till the warmth of spring arouses them from their long sleep, and stimulates them to come to the surface and the light of day again. During the winter's torpor their blood hardly moves, and what little aeration is needed is carried on through their skin. Turtles go into the mud in the same way, and continue there for months without eating or breathing."—HOWE, *Conversations on Animal Life*.

SOLAR HEAT.

Professor Howe was equally at home in any of the branches of the natural sciences. He prepared and read many papers before the Cincinnati Society of Natural History on anatomical, physical, astronomical, and geographical subjects—papers which were interesting and instructive because of their richness in facts and clearness of expression. The average listener, whether or not versed in the subject discussed, could fully comprehend the topics presented by Professor Howe in these papers. Aside from their literary value, there is a wealth of material in these articles that makes one regret that they are not all published in a single volume that they may be accessible to the general reader who has not access to the large number of journals in which they originally appeared. This article is a portion only of a paper on "Matter and Energy," read before the Natural History Society, and republished in Howe's "Miscellaneous Papers."— **Ed. Gleaner**.

SOLAR HEAT.—The internal heat of the earth is no longer competent to warm its crust sufficiently for biogenic purposes. While in a nebulous state there was heat in abundance, but as the gaseous substance

became condensed the heat in its molecules was driven out and radiated into space. To counterbalance the loss, an atmosphere was evolved from the environment of ethereal matter. Oxygen and nitrogen held such affinities for one another that air became an envelope for the new-born earth. This had so many intermixtures that it was not "pure" and respirable, but time acted as a clarifier. It was thin and tenuous at its outer boundaries, but denser near the earth. This atmospherical envelope renders organic life possible, and serves as a medium for floating clouds. Birds sustain themselves in flight through the density of the agent. Its pressure upon the earth is fifteen pounds to the square inch at the sea level, but much more rarified at the altitude of the highest mountains. The air is an important agency in the evolution of mundane affairs. While the elastic and vibratile body transmits sound and light with seeming facility, yet it offers more or less resistance to the passage of solar rays. Fortunately this friction becomes a source of heat, as in a revolving axle or in any other familiar example of the kind. In elevated places where the atmosphere is diffuse, the resistance offered to the passage of solar rays is inconsiderable, but in valleys where the air is condensed through pressure of the mass above, the friction is great, and the resultant heat is intense.

The old theory of solar combustion as a source of heat is untenable for several reasons, the most prominent of which is that the great luminary would have burnt itself out long ago; and another is that as only its planetary bodies and their satellites are recipients of the benefit, stellar space would consume much the larger amount.

In the summer, when the sun is overhead, the impact of solar rays is greater than in winter, when the sun shines slantingly. A sun-glass converges solar rays into a focus, and thus multiplies the friction—intensifies the heat at a given spot. The moon has no atmosphere, hence solar rays falling upon it meet with no resistance—evolve no heat.

The suggestion of Proctor that the sun's fires are fed by inflowing meteors as fuel, is also a gratuity. As meteorites become scarce, the heat would decrease—a lack of supplies would have been felt long ago. Besides, in the combustion of so much coarse material what would become of the ashes or debris?

There seems to be but one rational account of the origin of solar heat, and that is through friction. If that be the source of the sun's heating

energy, it is to last as long as our atmosphere does, hence may be regarded as abundant and eternal.—HOWE, *Matter and Energy*.

LIGHT.

This is another section from the article on "Matter and Energy." Such papers as this were frequently published in the Eclectic Medical Journal, for Dr. Howe contended that physicians should read widely outside of the direct subjects of medicine and surgery. The pages of this journal are rich repositories of many such brief dissertations on natural phenomena that Dr. Howe insisted should be a part of the general education of the well-rounded physician. It is to be regretted that fewer articles on such subjects now appear in medical periodicals.—**Ed. Gleaner**.

LIGHT.—Heat is the manifestation of an energy, and so is light. The glow worm and the fire fly flash phosphorescence on summer nights, and the "will o' the wisp," or swamp gas, is a torch lighted through the agency of decompositions. The farthing dip feebly illumines the humble cottage, and electric incandescence makes brilliant the halls of palaces. When brakes of a swiftly moving train are applied the friction evolves heat enough to kindle a flame, and a spark is elicited by a stroke of flint and steel. Light is emitted in rays from a center of illumination, as the flame of a burning lamp, a blazing meteor, from stars and from the sun. The "fixed stars," so called, issue luminous rays as the sun does, but they are so far away that we see only a stellar twinkle. Light from the moon is wholly reflected, solar rays glancing from the face of the lunar orb to the earth. Sunbeams differ somewhat from other luminous rays. A pencil of sunlight thrown upon a spectrum or glass prism will exhibit plainly the primitive colors, and rays from the electric arc display such hues, but not so prominently. Plants do not thrive as well under artificial heat and light as they do under the sun's energies. Solar rays decompose carbonic acid in the leaves of plants through the agency of chlorophyll, the carbon forming woody fiber, while the oxygen disengaged passes into air. All the colored rays of the sun will not decompose the carbonic acid of plants, but the actinic or chemically active blue and violet rays. Plants may develop in substance without the aid of sunbeams, but the stalks and leaves are colorless, and the acme of maturity can hardly be attained.

Light has been denominated an energy, and not an ethereal substance. It may be transformed into heat and electrical units— it may assume two or three kinds of energy. The sun is the great source of light in its

own system, but looked at from Sirius its twinkle becomes a star of the fourth or fifth magnitude. The vivifying powers of solar energy are all important to our planet. Without the influence of light and heat the earth would have no seasons, no plants, no animals, no rains, no atmosphere, no condition contributing to the support of life. In shaded places poisonous fungi may vegetate, and in the deeper parts of the sea where heat does not reach, nor solar rays penetrate, there may be encountered organic forms, both floral and faunal, but their support is borrowed from material that has been under the sun's influence. Near the poles the water swarms with marine life, but the water is rich in protoplasm that has been developed under the energies of a tropical sun. The energizing influences of solar rays are stored in trees, and eventually laid away in coal banks, hence their character should be considered in the economics of our planet.—HOWE, *Matter and Energy*.

THE PENTADACTYL TYPE.

The grasp of comparative anatomy is splendidly portrayed in this selection from Professor Howe's writings. Dr. Howe visited museums and zoological gardens, dissected dead animals from the circuses, and made frequent visits to the dissecting room long after his preparatory education was supposed to have been attained. The true student and scholar is never through with even the fundamentals so long as there is an opportunity to add to them. When the writer was Demonstrator of Anatomy a student found a bony anomaly in a human subject, and Dr. Howe, hearing of it, came to the dissecting room and examined it. Mounting a stool, he then delivered an impromptu lecture on the hook-like bony spur and discussed the comparative anatomy of human and animal bones and showed the spur to be a point in evidence of the theory of evolution—that the bony anomaly was but the vestige of a normal conformation in some animals that had persisted in incomplete form in the descent of man.—**Ed. Gleaner**.

THE PENTADACTYL TYPE.—Medicine is a branch of natural science; in its range it dips deeply into zoology. The anatomy of man does not differ essentially from that of other mammals. The philosophic anatomist finds interesting and instructive material for reflection in the structures of what are called the “inferior” animals. Indeed, it has been asserted by the most distinguished scientists that the human body is best understood by those who compared each part of it, so far as comparisons can be made, with homologous parts in the lower animal forms. And those who are just entering upon such studies will be astonished to find how closely nature sticks to a primitive *type* or form. If she departs from

the typical formula for special or adaptive purposes, there seems to be a disposition to return, fully or in part, to the original and favorite model. This tendency to adhere to a fundamental rule is exemplified in the number of cervical vertebrae in mammals. Man in his comparatively short neck has seven bones, and so has the bat, the porpoise, and other almost neckless creatures; and in the long-necked giraffe, camel, horse, deer, and weasel, there are but seven vertebrae—a typical number which prevails with wonderful pertinacity, considering the scope for adaptive variety in the length and functions of the mammal's neck. The only exceptions are in a species of sloth and the tropical manati.

Five is a common number for digital division among vertebrates; and our own hands and feet present these digits in a high degree of perfection. Our fingers, with the opposable thumb, are not equaled in function by the digital development reached by any other animal. Man has been classed alone as bimanous, on account of his possessing two hands. A unity of method in the construction of the carpal and tarsal terminations is strikingly apparent not only in the higher, but in the lower vertebrates, fishes alone forming exceptions. The pentadactyl has a wide range of application—it reaches reptiles as well as walking, swimming, and flying mammals. Divergencies are common, for the necessities of modified organizations enforced variety. The herbivora must have feet and legs suited to their manner of living; and the carnivora need digital terminations which shall enable them to capture and tear in pieces their prey. If the claw be sharp its point is protected by a sheath and by being raised from the ground. Amphibious animals adhere quite closely to the pentadactyl type, though their digits may be concealed by a web. Birds apparently depart considerably from the prevailing order of digital division, yet in their legs and wings may be found the evidence that they are constructed in accordance with the somewhat rigid formula.

Variations of digital termination can not be fully comprehended without considering, anatomically and functionally, all the bones which constitute what are denominated the shoulder and pelvic girdles. In an anterior limb may be found a scapula, humerus, radius and ulna, and carpal and metacarpal bones, to which the phalanges are attached; and the greater the number of digits, the nearer certain it is that a distinct ulna and the usual complement of metacarpal bones will be present. A posterior extremity embraces a haunch bone, a femur, tibia and fibula, tarsal and metatarsal bones, and phalanges; and when five toes are fully developed, as many metatarsal bones exist, and the fibula is

present. But if two digits disappear, there is a corresponding shrinkage in the metatarsus, and a dwindling effect manifested in the fibula.

The Simian thumb is not opposable to all the fingers—it is dwarfed and imperfect; and in the inferior animals this digit is the first to shrink and disappear. The fifth or “little finger” is occasionally rudimentary, yet it puts in an appearance oftener than the pollex, or first digit. The third and fourth digits not unfrequently attain gigantic proportions, and usually at the expense of the other digits. The hallux, or “great toe,” is functionally important in the monkey, but it is apt to shrink and vanish in the lower animals. The raccoon, which is anatomically allied to the monkey, and exhibits many Simian freaks of character, possesses five digits upon each pedal extremity. The opossum is also pentadactyl, and the hallux is placed at right angles with, and is opposable to, the other four digits; it has a short and thick terminal phalanx that bears no nail. Foxes, dogs, wolves, and hyenas possess four functional toes which reach the ground, and a rudimentary digit of greater or less development which bears a nail, but does not come to the ground, nor have any functional importance; and this dwarfed toe is on the inside of the carpus or tarsus, where the most important digit exists in man.

All the feline race are pentadactyl, yet the first digit in each foot is rudimentary and mostly devoid of function. Minks, otters, and beavers exhibit five digits on each foot; and so do many of the great aquatic mammals. Frogs have five toes behind and four in front, with a knob on the carpus to represent the fifth. The alligator has five digits in front and four behind, with a mark for the fifth. Animals with a lizard-like conformation have from three to five toes; and in some lacertian swimmers the shoulder and pelvic girdles are rudimentary all the way through, the legs being too feeble and undeveloped to sustain the weight of the body.

Herbivorous animals have mostly, for each foot, two strong toes that come to the ground, and two rudimentary digits which are called “dew claws,” and have no functional importance. The latter bear diminutive hoofs, embrace phalanges, and have meta-carpal and metatarsal splint bones. The fifth digit in these cud-chewers, or ruminants, is rarely or barely represented by a mark or sign, hence such animals are denominated artiodactyl, or even-toed. Most of them present no upper incisor teeth; and they grind their food imperfectly while it is being cropped and swallowed. Their intestinal canal is long and complicated, for the purpose of extracting nutriment from herbage not always rich in

nutritious supplies.

Man possesses a distinct radius and ulna, and a tibia and fibula; and so do most of the perissodactyl or odd-toed animals—those having one, three, or five digits. The pig has upper and lower incisor teeth, ankylosed radius and ulna, and a distinct tibia and fibula. Its toes are like those of ruminants, two functional and two rudimental on each foot.

The sheep, the goat, the ox, the buffalo, the moose, the deer, and the antelope have an ulna with a well developed olecranon process, but the lower extremity blends with the radius; the fibula of these animals is wholly wanting, or is represented by a mere knob on the upper extremity of the tibia. The limbs of turtles and alligators possess a radius and an ulna, and a tibia and fibula, all being distinct and evenly divided as corresponding bones in the limbs of the human race.

The horse is a one-toed creature; but the fossil remains of its extinct predecessors show that the original *hippus*, or the earliest of the equine family, possessed five toes, and was not larger than the smallest ponies now in existence. The fossil bones of a horse with three toes, the central digit being the largest, are found in the Eocene and Miocene beds of the Upper Missouri River—in the “bad lands” of Wyoming. In the Pliocene strata are found the fossil bones of a bigger horse, which had a large toe that reached the ground, and two lateral toes that were rudimentary, as are the “dew-claws” of an ox or other even-toed animal.

The horse of our time is one of the most beautiful and highly developed of the great animals. He is fleet of foot and strong of limb. Each pedal extremity possesses a series of toggle-joints, as the articulations of the limbs may be called, consequently in him is made the best provision for an outlay of muscular and mechanical power. The legs are long and slender, and moved by muscles which are admirably arranged for the development of strength and speed. The spinous processes of the anterior dorsal vertebrae are long and high, to give an elevated attachment to muscles which indirectly lift the feet from the ground. A horse “high in the withers” is not likely to stumble when he trots. The moose is a trotting animal, and has few smooth roads to travel upon, consequently it is very high in the withers, even higher than the horse. The deer runs by leaps, and rarely trots, therefore it need not be high in the withers, and is not relatively so high in that region as the moose. The humerus of the horse is buried in the flesh of the shoulder, and the femur in the tissues of the hip, so that neither can be traced in the

outline of the limb; yet these bones are very large and compact, and so obliquely placed as regards adjacent bones that they afford admirable angles for dissipating jars and shocks. What is ordinarily regarded as the knee in the front and hind limbs is really what in man are the wrist and the ankle. The ulna is prominently developed in the olecranon process, but becomes a splint below, and blends with the radius; the fibula is represented only by a process of bone projecting from the upper extremity of the tibia. The carpus and tarsus of the horse consist of two chains of comparatively small bones, as representative parts do in man; but the metacarpus and metatarsus are wonderfully transformed or differentiated. The central metacarpal and meta-tarsal bones—called cannon bones—are large, long, and strong; and the lateral metacarpals and metatarsals are represented by splints, which can be barely outlined from the upper end of the cannon bones to a point a little below the middle of the great central shaft, which represents about all there is of the metacarpus and metatarsus. And below this is a central continuation of a single row of phalanges, without even splints to represent lateral digits. Five sets of phalanges are consolidated in one row. This consists of the upper pastern, the lower pastern, and the coffin bone, which represents the terminal or unguinal phalanx, and supports a hoof instead of a nail, as in man and many other animals.

The horse has long lips to gather in its food, and six good incisors in each jaw to crop grass; behind these are short tusks in the male, then comes a toothless space for the “bit,” and still further back are the immense grinders which do such excellent service in mashing and pulpifying the food, whether it be grass, hay, or grain. And the grinding is so well done that the food does not have to be regurgitated and chewed over as a cud.

The elephants foot conforms pretty nearly to the pentadactyl standard, for it terminates in five toes; yet the inner toe (hallux and pollex) is somewhat imperfect, or rudimentary in its fundamental character. The hippopotamus treads upon four toes, and has the rudiment of a fifth, which is on the inside of the carpus and tarsus. The rhinoceros goes upon three toes, the “little toe” vanishing entirely, and the “great toe” existing in a rudimentary state, or it is not developed sufficiently to reach the ground.

The kangaroo has five digits in each of its forepaws, and apparently three, though really four, in each of the hind feet. The failure is on the inside of the foot, the Lallux is wanting, and the next two are so

dwarfed that in the seemingly combined state they are not equal to the outside digit, which again is smaller than the immensely developed fourth toe, reckoned in the order from “great” to “little.” The two dwarfed toes which appear in the living animal as single, have but one metatarsal bone that reaches back to the tarsus; and this is very slender. When the animal sits at rest the os calcis reaches the ground, but in hopping about the two outside toes in each hind foot receive the weight of the body, and break the shock by means of a well developed plantar arch and elastic plantar ligaments which stretch from heel to toe as a cord subtends a bow. The tracks of the kangaroo are much like those of a hopping bird. The bandicoot has a hind foot similar to that of the kangaroo, yet the “little” or outside toe is comparatively dwarfed, and the one next to it is as much more enlarged and elongated—it becomes the greater part of the foot, while the others dwindle to insignificance.

In the fore foot of the mole there is seemingly a violation of the pentadaetyl type, for *six* terminal claws are found. But upon dissecting a limb it is shown that the supernumerary claw is a falciform hook that springs from the radius, and is not therefore carpal except in function—a splint to give width and strength to the spade-like hand.

The sloth has but two toes functionally developed in front; and two rudimentary digits exist, yet the animal is called two-toed. The nails on the developed digits are long, strong, and so curved that when hooked upon the branch of a tree they will not let go, though the animal be asleep or even dead. A species of the sloth has three toes in the fore foot, and a rudimentary fourth. The jerboa has three toes to each hind foot, and three ankylosed metatarsal bones. The conformation of the entire limb is much like that of a bird.

The anterior extremity of the bat has four enormously extended phalanges to give expanse to skinny wings; the fifth digit is only a hook or undeveloped claw. The posterior extremities present five digits to each foot; thus, in the anterior and posterior extremities the pentadaetyl type is followed.—HOWE, *Miscellaneous Papers*.

“THAT SAME SWEET FACE”

The indelible portraiture of virtue, happiness, and peace; of education and training, or of sorrow, vice, toil, and degradation upon the human features is one of the certainties of life. In this essay Dr. Howe shows himself the skillful physiognomist—as all

physicians and surgeons should strive to be. It aids in diagnoses when the burdened victim is loth to reveal past sorrows or a badly spent life. The face of happiness bears its own imprint throughout life, though the ravages of time may have altered the physical features. Yet the tale of love, good cheer, and kind deeds is retold in the light of countenance of what still appears to be “that same sweet face.”— **Ed. Gleaner.**

“THAT SAME SWEET FACE.”—As a notable Swedish songstress, who was about to depart from home to win fortune and fame in foreign lands, bid farewell to parents and friends, she said to her mother, “What shall I bring you when I return?” The maternal reply was, “That same sweet face.” But the mother was asking for something which is flitting; she was governed by an emotion; she sighed for that which could not be. That face must change— its semblance could only be retained in memory and marble. If the daughter of the Swedish matron had never returned, the same sweet face would have been ever present, but after years of exile, of toil, of hope, of triumph, of rivalry, of disappointment, and of heartrending scenes, the features of that still lovely countenance must have changed. In fact it could not remain as it was. Time is exacting. The varied experiences of each passing year leave their indelible impress. What did it avail when the maiden said,

“Backward, roll backward, O Time in thy flight,
Make me a child again just for to-night.”

The man of fifty has a face on which are written in somewhat mysterious hieroglyphics the character of the individual. If the possessor of the countenance chiseled by half a century of time has lived a spiritual, intellectual, and moral life, that face is a study for the painter and the sculptor; but if the owner has indulged in stormy passions, partaken of bloating and gluttonous drinks and foods, and cultivated selfish propensities, the features of such a face beget aversion in the mind of the beholder.

It has been eloquently declared that every man is the architect of his fortune; it might as truthfully be said that every man is the carver of his own facial expression. If a man wear a severe look, he has cultivated that tone of countenance. It never came by accident, nor grew carelessly like a weed. An habitual face is the work of years. That disappointed maiden of fifty never acquired a hateful visage in thinking and wishing well of her neighbors; and the old shrew around the corner never obtained that woeful countenance while doing good to the feeble and unfortunate.

The good Mrs. Bountiful did not stamp that lovable face of hers with benign expressions while trying to pull down a rival or somebody enjoying prosperity. Her smile is a perpetual benediction. Everybody that meets her looks happy.

The Rev. Mr. Holly has the expression which the coal heaver would pronounce "Apostolic," yet how was that facial expression obtained? Why, it was secured during many years of divine thoughts and noble actions. A right-minded man has been "limning that face for a long time. That serene beauty never came by chance—it was attained little by little, and is a marvel of excellence.

Canova said he could not appreciate the beautiful in the world till he had made it a study for years. We are not critics of human faces till we have had great opportunities to study character in its various aspects. A keen detective at a crowded fair will catch a glimpse of every pickpocket present, though he may not catch one in the thieving act. He has cultivated an acuteness for the special work. On the other hand, the experienced thief recognizes the detective at once and avoids meeting him.

The profession a man pursues leaves its mark upon the possessor. The average physician can be pointed out on a crowded thoroughfare; the attorney need not have his green bag with him in order to have his vocation known; nor need the clergyman wear a white neckerchief to be recognized in his true character.

The physiognomy of vocation is well understood and everywhere acknowledged. If a physician would be regarded as an earnest, honest, conscientious man, he must cultivate those qualities of head and heart. If a commonplace doctor thinks he will succeed by thinking and talking ill of his competitors, he will find at length what a grave mistake he has made. If a crusty old physician thinks he can crush that studious, polite, and genial young doctor who has had the hardihood to settle in town, he will egregiously blunder. People have been tired of the old curmudgeon for years, and are delighted with the idea of making a nattering change.

Lately I met on the street a woman clad in sable weeds, and with a face simply stamped with despair. Ten years ago that face and form were divine. What had wrought the change? Thank heaven, she had no

mother to ask for "that same sweet face." The original loveliness had nearly all disappeared. The figure was still slight, and the threadbare dress neat and tidy. From a friend I learned that the girl had married a handsome choir singer and speculator. Drink brutalized what manhood there ever was in him, and he beat his poor wife for his bad luck and ill-fortune. The death of a beloved child, sickness, and poverty drove the woman mad with disappointment and hopelessness. In a few years that once beautiful face was fixed and furrowed like the countenance of a maniac. Can lovely features be made to take the place of those so wibegone? No, time never rolls backward in its flight. Hope and an agreeable change of circumstances would do something toward restoring cheerful features, yet the same sweet face will never return.

But, what is to compensate for this loss of youthful comeliness? Are our faces to be agreeable only in youth? Let us see. Mrs. Linneman, a lady of fifty in our acquaintance, does not appear old, even to children. Her features are those of a cultivated woman; her posture is superb; her general presence is gentle, winning, and commanding. Her face is expressive of matronly goodness, kindness, and grace. Was that face ever so handsome before in her life? Probably not. As a girl she may have been beautiful, but as she lost a feature of mere physical beauty she gained its equivalent in spiritual charms; and as years rolled by the changes necessarily occurring were not against her, but in her favor. Her womanly graces are not less admired than were her youthful attractions.

The stately gentleman on our streets was said to be handsome when he was twenty-five; he is fifty now, yet he is still handsome— everybody acknowledges it. That head, face, neck, and shoulders all combine to display the portraiture of a man. Those eyes kindle with light almost divine. There is an intellectual halo emanating from that head. It is not the brazen aureola painters have thrown around the head of Christ and the Virgin, but it is appreciable, and actively impresses the beholder. How was that wonderful face obtained? The handsome youth of twenty has no such attraction—his is all physical—it cost no effort—it is what time effaces; but that scholarly and cultivated countenance exhibited by the man of fifty or sixty, or even seventy, is a work of art. It is worthy of study; and the more it is observed the more it is admired. In that maturity of manly beauty are peace, plenty, and assurance. The student in science or morals may show premature wrinkles, but these lines are not repulsive—they seem to be the etchings of elves engaged in the portrayal of expression. The face as a whole may exhibit the marks of

care and sorrow, but they do not detract from the interest centering there. The man of fifty who has not passed through solemnizing scenes, who has not been chastened by untoward events, is a phenomenon, and not representative.

I will not depict a face of fifty, wrung with misfortune, pinched with selfishness, and warped by avarice. Such visages are common as clods, and need no delineation. Cultivated faces alone are worthy of study, for they show a subjugation of the lower instincts, and a forcing to the front of the higher intellectual and moral qualities. A fine face costs a lifetime of good thinking and well-doing; bad features are the result of passive negligence. Every individual is largely responsible for facial expression. The juvenile feature is the sport of time, but the beauty of the mature face is a work of artistic elaboration, the soul officiating as the divine limner—HOWE, *Miscellaneous Papers*.

SOME GYNECOLOGIC HISTORY.

Dr. Walter Barnham, one of Dr. Howe's collaborators, was the first surgeon of modern time who ventured to excise the womb, which he did on June 26, 1854. In view of the fact that this bit of history is generally ignored the following is of more than ordinary interest.— **Ed. Gleaner.**

SOME GYNÆCOLOGIC HISTORY.—In no branch of gynaecology have such marvelous changes in professional opinions taken place as in regard to ovariectomy. When Spencer Wells visited Boston, some time after he had established the fact that the surgical removal of ovarian cystomata was legitimate, and warranted by the ratio of successful results, there were many reputable physicians in and about the city who, with expressions of disdain, refused to be introduced to him! Dr. Walter Burnham and Dr. Gilman Kimball, of Lowell, and Dr. Horatio R. Storer, of Boston, were branded as unprofessional characters for practicing what had been demonstrated as unsafe and unsurgical. A man who would perform ovariectomy was a quack surgeon not to be recognized. On account of a senseless prejudice, an operation which was first scientifically performed by an American, ovariectomy was driven to Europe for recognition and development.— HOWE, *Operative Gynaecology*.