

The theological schools report productive funds amounting to \$17,599,979, and stated, at the same time, the value of their buildings and grounds was \$10,720,860. They had 7,672 students in attendance.

Technological schools report productive funds amounting to \$13,229,940. These institutions received from State appropriations or municipal aid in 1891-92, \$747,504, which, if capitalized at 5 per cent., would be equivalent to an endowment of \$14,950,080; making a total endowment for schools of technology of \$28,180,020. There were enrolled in the schools of technology 10,921 students, about one-third of whom were in preparatory courses. It will thus be seen that the endowment of theology is increasing at the rate of about two million dollars a year. The technological schools are well provided for, but medicine has scarcely raised its endowment, even at the most liberal estimate, to a million and a half."

Probably the available funds possessed by our medical schools are somewhat larger than these statistics show, but they give the proportions which are needed to impress upon us how little financial encouragement medicine receives. When we realize what a valuable factor the medical man is in the rapidly increasing development of the territory of a vast and prosperous country like ours, it seems as if his claims to receive encouragement should be listened to. He does not build railroads or organize society in new lands, but he is in the foremost rank of pioneers, with the complete equipment which our teachers can give him to-day, and he becomes a most valuable member of society. He protects the young colony from epidemics; without him State medicine could not exist, and States could not be provided on a basis which could ensure prosperity.

These ideas should be impressed upon our men of wealth and upon the State governments as well. In the meantime it is important that we should adopt as a principle in our new departure in education that the medical faculty should have personal control of hospital wards and management. Let this work begin in a small way at first, but with a view to future development. Such a change can only be brought about by a slow process of evolution. The sooner, therefore, the principle is recognized and adopted, the better. It is difficult for a prosperous school which has abundant opportunities for bedside teaching to realize this, but it can not develop beyond a certain point until it has established its own independence.

I cannot help believing that in this direction lies one of the greatest avenues of development of our system of medical education in the future.

ADDRESS OF THE PRESIDENT OF THE SECTION ON NEUROLOGY AND PSYCHIATRY OF THE PAN-AMERICAN MEDICAL CONGRESS.

BY C. D. HUGHES, M.D.

ST. LOUIS, MO.

Colleagues of the Continent:—I bid you cordial welcome. For the first time in the history of the world the medical profession of all the Americas meets fraternally for mutual work and words of counsel for the welfare of the North and South American medical profession and people.

In this Neurologic and Psychiatric Section, brothers, we also, for the first time, grasp the hand of fellowship. We heartily clasp hands with you and in our hearts we embrace you, with the prayer

that nothing shall ever dis sever the friendship between the Northern and Southern American profession now so auspiciously consummated. May the final handshake between the profession of the North and South American States never be permitted to take place. We want your friendship forever. So long as "earth grows a plant or sea rolls a wave," we pray that it may endure, growing closer and closer in ties of inseparable fraternity.

In our special departments of medical research and labor we have a common interest, and in every department of medical investigation and advance, our interests are likewise mutual. The sanitary welfare of all the American States is alike. The same hygienic, therapeutic and pathologic problems press upon us all for solution; the medical discoveries of each one of these States redounds to the welfare of all the others.

To this end, therefore, we salute and welcome you, wishing you health and happiness, through a mutually advanced and glorified medical profession, and in behalf of the Neurological Section of this great Congress, I join you in the sentiment, "*America laudamus—viva Americana!*"

Before proceeding to the work before us, it may prove a source of pleasure and profit, and it certainly is flattering to our professional pride to note some of the neurological advances of our day and especially the contributions of neurology to general medicine and the consequent welfare of the world.

None of the many victories in the onward march of American medicine during the century now nearing its close, have contributed, or are destined yet to contribute, more to the happiness of mankind than the light which has been thrown on the nature and treatment of inebriety, dipsomania and chronic alcoholism and their neural sequelæ, especially multiple neuritis.

To a distinguished American physician, signer of that Declaration which gave a nation birth, surgeon-general of the Continental army and teacher of the practice of medicine in the first medical university founded in America, Dr. Benjamin Rush, the scientific world is indebted for having taught that inebriety is a disease. His followers, living in the Pan-American States, taking their cue from this distinguished pioneer medical *savant*, have pursued the study until the therapeutics of inebriety has become as successful as that of any other grave nervous disorder and its pathology as well understood, while medical philanthropy, following his advice,¹ has erected hospitals for the cure and care of its unfortunate victims, though, as yet, no monumental shaft mementos, as it should, a nation's grateful memory of Benjamin Rush's noble work.

We record, also, with satisfaction scarcely exceeded by that we enjoy from contemplating the salvation of the inebriate, the successful cure of the opium habit and other kindred forms of baneful drug enslavement. Yet it has not been long since that once brilliant *litterateur*, De Quincy, himself enthralled, proclaimed in despair the "pangs of opium" and the "Illiad of woes" its enslaved victims hopelessly endured.

The opium fiend, as he is with cruel facetiousness so often called, need not be longer regarded as a hopeless wreck if the hand of charity will only conduct him within the pale of professional resource.

¹ "Diseases of the Mind," 1812.

This and alcoholism and all similar forms of nervous derangement are now treated successfully much like certain forms of mental aberration are—by change of environment, by therapeutic repression, including hypnotic support and reconstruction of the damaged and aberrantly-acting neuropsychic centers. This is another jewel medicine offers for the crown of modern progress.

Notwithstanding the illustrious names which, in our own day, the world beyond our geographical boundaries has given to medical science, our American States have likewise their great physicians whose offerings on the altar of that science whose special care is the welfare of man, are worthy of exalted place beside the Old World's gods. For the Virchows, Charcots and Lombrosos, Maragalianos and Kowalewskys, Gulls and Horsleys, of world-wide fame beyond our shores, we have given to the world our Brown-Séquard, who went from America to cosmopolitan fame; our Hammond, another pioneer American neurologist whose books have been translated into all the languages of civilization; our Seguin likewise, and our Pepper, President of this Congress and the peer of Sir William Gull of Great Britain, and Ferran, whose preventive inoculations against cholera Asiatica called the medical world's attention anew to the grandeur of Spanish medicine. If Wigan could conjecture the duality of the mind from theoretical considerations and the general division of the brain into hemispheres, Brown-Séquard later, and at the time an American, proved it, and even my own feeble contribution on the "Duality of Action and Vicarious Functions of the Cerebral Lobes and Hemispheres,"² in 1873, might count for something, even though it emanated from a lunatic asylum in the valley of the Mississippi. If Hitzig, a German, and Ferrier, an Englishman, demonstrated and located motor centers in the cerebrums of the lower animals, Bartholow, an American established by satisfactory physiological experiment their correspondence in the human brain.³ If Victor Horsley and others first clinically applied the discovery of cerebral localization to surgical therapeutics for brain diseases, Professor William Fuller, a Canadian anatomist and surgeon, first trephined the skull in a case of idiocy, an operation which has recently been heralded from abroad as a new surgical procedure.

The author of this operation, now residing in this country, in Grand Rapids, Mich., is the designer from life of a series of brain sections and sectional casts, photographs and models, some of which I now show you, which have not been excelled in Europe.

Now that this operation of Dr. Fuller has come back to America with European approval as a European procedure, it is interesting to note the reception, a part at least, of the medical press of England, gave the novel surgical procedure at its inception on this continent.

The following extract from *The London Doctor*, a monthly review of British and foreign medical practice and literature, No. 1, Vol. 8, page 5, January 1, 1878, is appended as evidence that the case reported in this paper, received at the time a wide publication:

"Dr. Fuller of Montreal, has, says the *Canada Lancet*, conceived the novel idea of trephining out portions of the skull

of an idiot child of two years old, so as to allow the expansion of the brain. The idea is certainly novel, so far as we know, no surgeon having previously ventured to remove portions of the skull cap so as to allow the brain to expand. We sincerely hope this brilliant (!) experiment will not be repeated. How does Dr. Fuller propose to protect the exposed portions of brain, should the brain protrude through the apertures he has made? According to latest advices, Dr. Fuller contemplates removing another piece. We hope not."

Under the name of linear craniotomy, this operation has recently found decided approval both at home and abroad. Engel speaks enthusiastically of it even for dementia epileptica.

If European surgery first exsects a stomach, or a kidney, or cuts down upon and removes a stone from the bladder or gall cyst, American surgery, represented in the person of Ephraim McDowell, with a temerity that startles the conservatism of Europe, first cuts into that surgical terra incognita, the abdominal cavity and saves an imperiled human life by successfully removing an abdominal tumor; a feat common enough now, alas, all too frequently performed by novices with the knife, lacking in mature surgical judgment. He and Battey, another American, led the way for the successful ovariectomies of Lawson Tait and his followers, and Marion-Sims. God bless his gentle, precious memory, lays the foundation, by a peerless procedure on the female perineum, for the rescue of womanhood from untold misery. Marion-Sims, who, when asked to unsex a woman, in whom there was other possibility of salvation, could say to Weir Mitchell, "Let us give her a reprieve; I never unsex a woman without a pang;" and the woman got well as you and I know hundreds of others would, if permitted to do, without oöphorectomy. God bless Marion-Sims.

As we are justly appreciative of the part which American skill has performed in the world's surgical advancement; as the recalling of the names and deeds of our Motts, Brainards, Popes and Stones and Physics, Gross and Hodgens, gives us pleasure; if we revere our Rushs and Woods as England does her Hunters, Sydenhams and Gulls, so of our own American alienists and neurologists and their achievements, we are justly proud. The accomplished Isaac Ray and the gifted Amariah Brigham, Pliny Earle and Tyler, now no longer among us, and Van Dusen, the son of Michigan and a Kalamazoo asylum superintendent, whose essay on "Neurasthenia" preceded that of the classic work of Beard on "Nervous Exhaustion"—Beard who gave to the world a new disease, and gave it a new name, although the term "neurasthenia" was borrowed unknowingly from Van Dusen (*vide Alienist and Neurologist*, Vol. I, No. 4, 1880). Since these contributions appeared, the subject of nervous exhaustion has become too common in the literature of this country and Europe to need further mention here.

There are three works of Dr. Hammond which have had much influence on neurology and medicine generally, and these were accomplished during his service as surgeon general on the active list of the United States army:

1. The establishment of the Hospital for Injuries and Diseases of the Nervous System in Philadelphia, where the foundation of Dr. Weir Mitchell's most original work, "Wounds and Injuries of Nerves" was laid, Dr. Mitchell having been placed in charge by Surgeon General Hammond.

² American Journal of Insanity, Vol. XXXII, 1875.

³ American Journal of the Medical Sciences.

2. The establishment of the Army Medical Museum in Washington.

3. The origination of the "Medical and Surgical History of the Rebellion."

These three things give our colleague just claim to distinction. I think the Hospital for Nervous Diseases was the first of its kind ever established in the world. Besides, our colleague wrote the first systematic "Treatise on Diseases of the Nervous System" in the English language, if not in any language.

If we look for discovery and classification of disease, America has not been entirely wanting. For a long time Beard's claim was controverted abroad; afterward neurasthenia was called "the American disease," then "American nervousness," till finally foreign writers recorded it among their people, even away off in far-off Russia, where Kowalewsky has written his classic book on the subject and given us due credit for our discovery. So in regard to Hammond's discovery of athetosis and mysophobia, and the coinage of these terms; and in regard to neurasthenia, I believe it is even now conceded that the original American claim⁴ of general functional neurotrophica as the foundation of nervous exhaustion is universally admitted.

Seguin, in his clinical lectures in 1890, first suggested the substitution of a mixture of chloral and bromid for simple bromid, in the treatment of idiopathic epilepsy, when certain indications are present, chloral being indicated when the bromids alone produce undue stupor and extremely severe acne; also in cases where psychic disorder follows the stoppage of the bromids. This practice has now become general. He first attempted to subdivide the symptomology of "cerebral hyperemia" (of Hammond and others) into several new groups according to etiology, e. g., cases due to lithemia, to feeble or diseased heart, and (a large group) to eye strain, etc. He also attempted to give the distinguishing clinical signs (*N. Y. Med. Jour.*, Dec., 1892), between cases of cerebral paresthesia due to insufficiency of the interni, and those due to insufficiency of the externi, and recommended the use of nuxvomica and strychnia for weakness of the interni and of belladonna, cannabis indica and other mydriatics for weakness of the externi. These drugs to be used as tests for diagnosis, and also for continuous treatment. He contributed by autopsies and clinical cases to confirm the doctrine of cortical localization of functions, in respect to the visual center (cuneus, in 1880, I think); the speech center (1868); and in subsequent years the facial, brachial and pedal, or crural, centers, and gave absolute postmortem evidence in support of the idea that such centers exist.

Besides Bartholow's communication, the whole subject of cerebral localization has received additional light from the contributions of our Charles K. Mills, of M. Allen Starr, Eskridge, Spitzka, myself and nearly every American neurologist, while the contributions of the latter to cerebral pathology, as those of Isaac Ott to cerebral physiology, have been justly acknowledged abroad.

Seguin and Hammond early advocated before any one else abroad, I think, the use of large doses of potassium iodid in syphilitic or non-syphilitic diseases of the nervous system, giving historical proof of its American origin (New York) and called it the "American method." Attempts have been lately

made in Europe to ignore our great priority in this. Seguin says he learned it from Van Buren and Draper in 1865-7. I adopted this practice at the insane hospital at Fulton in 1867-8.

It falls to the lot of but very few men to discover a really important thing and to cause a great forward step to be made in medical science. Most of us must be content with helping the good work of adding new facts of secondary importance, and trying to apply scientific methods to the treatment of disease. I think that in this sphere of secondary scientific usefulness, American neurologists have made and are making good records.

The clinical relation of absent patellar reflex to locomotor ataxia, though first shown by Westphal and Erb, was extensively studied by Seguin, Gray, myself and others, and its relation to other diseases and the possibility of the knee-jerk being naturally nil in some persons was first shown in this country and acknowledged abroad,⁵ so that the knee-jerk criteria of tabes dorsalis is a lost reflex, and an exaggerated jerk in lateral sclerosis and other states. I myself offered the first proof many years ago that it need not be present in apparently healthy individuals. One of those persons still lives and is free from any spinal or other nervous disease to this day. What is true as to elucidation of this reflex is equally true of the cremasteric and other reflexes, *vide* writings of Weir Mitchell and others. The bulbo-cavernous reflex and the virile reflex, practically the same thing, were discovered and clinically elucidated about the same time in Europe and America.

The value of the cremasteric reflex has been studied by Weir Mitchell with the same thoroughness of elucidation as that he has given to lesions of the peripheral nervous system generally; and Dr. John Ferguson of Toronto, Canada, has also thrown new light upon the patella reflex (*vide* "Remarks on Some Cases of Hemiplegia," *Alienist and Neurologist*, January, 1892). This subject has also lately been enriched in this country by Dr. F. X. Dercum, in a paper on "Optic Neuritis, Blindness and the Knee-Jerk in Cerebellar Disease," read before the American Neurological Society, July 25th.

The important subject of rheumatism affecting the nervous system was embodied in the recent address of Dr. Henry M. Lyman, before the American Neurological Association, and attention called to important clinical facts, especially affections of the sensory nervous system, not commonly recognized as associated with this disease.

The gastralgias, enteralgias, cutaneous irritations, sensitive feet and arthritic and cutaneous neuritides of rheumatism, have often attracted my attention, and have been to me an interesting clinical study, and much more is yet to be written on this important subject.

In the therapeutics of the nervous diseases, as well as in clinical description and pathology, to America belongs much credit for originality and efficiency of discovery and suggestion. Was it not in this country that the great Brown-Séquard first conceived and promulgated his famous treatment for epilepsy, which has done more than all preceding or subsequent therapeutics suggested for the alleviation of this grave malady?

⁴ Vide, *Alienist and Neurologist*, Vol. III, No. 3, 1882.

⁵ "Diagnostic Significance of Absent Patellar Reflex."—*Alienist and Neurologist*, January, 1880; *St. Louis Medical and Surgical Journal*, February, 1879.

All the now acknowledged virtues of phytolacca decandra, or poke root, except the property of phytoline to reduce corpulency, were brought to my attention through the thesis of a student candidate for graduation of the St. Louis Medical College in 1859; and Dr. Bealle, a fellow-graduate with me that same year, from Texas, told in a thesis, which he entitled "Ups and Downs of a Texas Doctor," how he made a satisfactory flexible bougie out of green slippery elm bark, how he employed a smooth green wheat straw for a catheter and the crushed potato bug mixed with lard as a satisfactory vasicant in lieu of Spanish cantharides—practices which I imitated myself while doing a general country practice in Missouri in 1859 and '60, when I could do no better, and there is nothing much better for gentle dilation in certain surgical emergencies than a smooth slippery elm bougie. I could relate other instances of western American surgical genius in the use of therapeutic expedients in pressing emergencies of practice were they strictly germane to our subject.

I claim the credit myself of having first suggested and used in private practice chloral hydrate per rectum in the treatment of convulsive affections, a method based on the West Riding asylum practice in epilepsy, and used by me for arresting the convulsions of children and of the puerperal state.

Leonard Corning's method of local anæsthesia is original and we justly claim the discovery and therapeutic application of general anæsthesia as American, Sir James Y. Simpson, to the contrary notwithstanding. Copious ether douching for cephalo-spinal pain was practiced by myself thirty years ago. I was the first to employ capsicum, hot coffee and ammonia enemata to resuscitate from profound opium narcosis (*vide Appendix*), after failing with a battery. Kiernan was the next to follow the practice.

In the department of electrotherapy, especially in diseases of the nervous system, America stands well forward in therapeutic suggestion and resource. Beard and Rockwell and their followers in this country have done much in this line. It has been fully thirty years since I first employed the constant current for cerebral and other congestive states, not excepting ovaries and pelvis, and recommended it in gynecology, based on a prior recommendation of Legros and Onimus that it would reduce interpelvic sanguineous fluxes. It has been more than twenty years since I began the systematic employment of constant cephalic galvanizations for the cure of insomnia and the treatment of epilepsia, under the conviction that the prominent symptomatology of both of these affections were dependent upon disorder of vasomotor control, which cephalic galvanizations tend to restore as the bromids do. But I must not speak further of myself.

In this connection I may properly mention Dr. Henry M. Lyman's book on "Artificial Anæsthesia and Anæsthetics, Insomnia and other Disorders of Sleep," as a valuable American contribution to these subjects.

We have done no markedly original work in hypnotism, but have some imitators of Charcot and others, as Charcot and his followers have with professional applause followed Braid, the professionally tabooed Manchester follower of Mesmer, the mountebank original.

Cataphoresis in neurotherapy has been considerably advanced in America by Corning, Peterson and

others, and likewise the hypodermic use of arsenic by Moyer; also the employment of antipyrine, acetanilide and other coal tar derivatives, by the last named and many others. (*Vide Appendix*.)

The therapeutics, as well as semiology, of insanity has been enriched by Jewell and Moyer in this country, by treatment directed to the colon. (*Vide Appendix*.)

Nitroglycerine, or glonoine, was first suggested to the regular profession in 1876 and '78, by Allen McLane Hamilton, before Murrell or others abroad had used it, for anemic cerebral states and cerebral arteriole spasm. It was on this recommendation and the recommendation of nitrite of amyl for a similar purpose, that I first employed the latter for the differential diagnosis of supposed hyperemic from anemic intracranial states. (*Vide editorial in Alienist and Neurologist*, October, 1880.)

A decidedly original and successful procedure in American surgical neurotherapy is that of pudic neurectomy as a remedy for masturbation, reported by Dr. J. S. Eastman in the *Medical News* of August 12th, of this year. The nerve being more sensitive on this side, Dr. Eastman cut down upon the left pudic nerve, which he found hypertrophied, and removed three inches of it. The patient gained weight and was freed from this vice, which had existed from the sixth to the twenty-sixth year. She had been previously sutured in the labia, cauterized, oöphorectomized and clitorectomized without benefit.

Veratrum viride, one of the very best remedies I know of for sthenic states of high cerebral and pulmonary congestion with full, bounding pulse and violent cardiac systole, is better than the lancet in high grade apoplexy and pneumonia, as it is fatal to apposite asthenic states of pulmonary inflammation and cerebral congestion, is a distinctly American remedy, and the practice of using it, as well as abusing its use, is of American origin. It may sometimes well substitute the bromids in certain phases of neurotherapy. I have so employed it. But we must not further dwell specially on American original contributions to neurotherapy. We could not complete the subject in the limits of an ordinary duodecimo volume, while another volume of equal size would not record the real practical progress and unequalled elegance of American pharmacy as applied to our therapeutics.

In the direction of neurological originality and advance, the work of our own distinguished Spanish-speaking secretary, Dr. M. G. Echeverria must not be overlooked. Though his modesty has prevented him from publicly claiming his due reward of merit, his claims have not been overlooked by foreign sources of appreciation.

His English publications, notably his great book on "Epilepsy," although scarcely noticed by American authors, are much and favorably quoted by neurologists in Germany, England and France. On their merit he was elected honorary member of the Medico-Psychological Society of Paris, and of Great Britain and Ireland; also vice-president to the first *Congres International de Medecine Mentale*, held in Paris in 1878, when he was called upon to preside on motion of the late Prof. Lesegue, after the sudden illness of Dr. Baillarger, chairman of the congress. So far as I know, Dr. Echeverria was the first physician in this country who, as "Professor of

Nervous and Mental Diseases," delivered didactic courses of lectures on this subject. This was in 1861, in the University Medical College of New York, while Seguin followed at the College of Physicians and Surgeons, in 1873. On his removal to New York from the National Hospital for the Paralyzed and Epileptic, in London, where he had occupied the position of resident assistant physician with Drs. Brown-Séquard and Ramskill as visiting physicians, he induced the Commissioners of Public Charities and Correction to establish the Hospital for Epileptics and Paralytics on Blackwell's island, New York, under his chief direction, and to found a school for idiots in Randall's island. Dr. E. Seguin, père, Drs. Kerlin and Wilmarth, of Elwyn, in their literary and practical works as revealed in the pages of the *Alienist and Neurologist*, vide Appendix, Dr. Brown of Barre, Mass., and the Wilburs have certainly done much creditable pioneer work with this class of defectives.

We may here remark, as facts of historical interest, that Dr. Echeverria was the first in America to perform, in 1865, assisted by Dr. J. H. Douglas, excision of a large portion (two inches) of the ulnar nerve at the elbow for the radical cure of epilepsy following upon traumatic injury. In 1869, in the presence of Prof. Boeck of Christiania, and other physicians and students, he removed at the hospital in Blackwell's island, the largest sanguineous clot (one and three-fourth inches long by three-fourths of an inch wide) ever extracted, to that time, from the base of the second parietal convolution of an epileptic lad, another operation lately originated abroad. The conical fibrinous clot was deeply imbedded in the cerebral substance, and the patient directly recovered his lost intellectual faculties upon the successful operation. The case is reported in his "Clinical and Anatomopathological Researches on Epilepsy," and in a subsequent paper published in Paris in 1878 (*Lesigues Archives Generale*), with the records of five similar cases from Dr. Echeverria's own practice, and one hundred and forty, mostly by American and English surgeons. This paper was written mainly to show how unwarranted was the risk of this procedure then ascribed to it by French surgeons.

This distinguished neurologist, one of our colleagues, to-day, and those I have named before him, will not be overlooked when a candid world enumerates in history America's neurological benefactors.

Worthy of special mention with the foregoing is our indefatigable co-worker and colleague, Prof. Chas. K. Mills, whom the University of Pennsylvania has so lately honored with its chair of mental and medico-legal medicine. His recent studies in "Lesions of the Superior Temporal Convolution," accurately locating the auditory center, his presentation of the subject of aphasia and other affections of speech in their medico-legal relations, and lesions of the cauda equina, are real advances that must be universally acknowledged, as are likewise the complications of multiple neuritis and other papers, which we present in the appendix.

And now I name another star which shines in the neurological firmament of New York—a star emphatically spelled by his far-seeing parents with a double "r."

Among numerous recent contributions, besides his

book on "Brain Surgery" (published by Wm. Wood & Co., New York), he has given us a special study of "Local Anæsthesia as a means of Diagnosis of Lesions of the Lower Spinal Cord" (*American Journal of Medical Science*, July, 1892); "The Cerebral Atrophies of Childhood, with Special Reference to Imbecility, Epilepsia and Paralysis" (*N. Y. Medical Record*, Jan., 1892); "Trephining for Hemorrhage of the Brain Producing Aphasia—Recovery" (*Brain*, 1892); "Hemi-Analgesia Alternans" (*N. Y. Med. Record*, Feb. 11, 1893), and has thrown some new light on the subject of "Syringo-myelia" (*vide American Journal of Medical Sciences*, May, 1888). His book, "Familiar Forms of Nervous Disease," is a credit to any country. Other bright neurological stars are shining, and many have shone longer, in the same scientific and humanitarian sky.

It is my impression that Ord's discovery of myxœdema received its first clinical confirmation in this country, and McLane Hamilton, I think, furnished five of the earliest clinical proofs of its verity as a distinct disease.

Hamilton first pointed out the neuro-genesis of certain meningeal inflammations, and I have maintained and do yet maintain that hemophilia is a vasomotor neurosis.

The *Alienist and Neurologist* (April, 1884, *et seq.*), early maintained that oöphorectomy was too often performed, upon the mistaken assumption that the ovary originated nervous disease, whereas the reverse is the most common clinical fact. This is not only an original American claim, but it is now becoming a generally admitted fact both abroad and at home, and the latest and best articles on this subject are by Dr. Hamilton.

Another rising luminary of this field is Dr. Frederick Peterson, a reference to whose late contributions (*vide the Appendix*) will interest you and show some good spokes, at least, in the wheel of neurological progress. His recent papers on "Cataphoresis," his physiological experiments with magnetism at the Edison laboratory, and his joint papers with Sachs on "The Cerebral Palsies of Early Life" (*Jour. of Nervous and Mental Diseases*, May, 1890), and other papers to be found in Appendix, are all valuable.

But the stars of this firmament are too many to be counted. Should we dwell long enough to attempt it, we should not during our hour get round the circle. There remain Sachs, who has translated Maynert's "Psychiatry" for us; Bert Wilder, "The Brain Builder of Ithaca"; A. Jacobi, "The Universal Genius"; Corning, already mentioned, whose book on "Brain Exhaustion" is standard. There is also Dana, to whom we have already alluded, with Carter Gray, whose respective books are abreast of all neurological advance, and in every way creditable to American neurological science; besides E. N. Brill, Graeme M. Hammond, and Brown of the *Journal of Nervous and Mental Diseases*; also Ambrose L. Ranney and his standard textbooks on "Nervous Diseases and Neurological Anatomy," and Geo. I. Stevens with his Belgian Academy prize essays on the "Oculo-Neural Reflexes, and the Relation of Eye Strain to Nervous Diseases," whose first article on this subject appeared in the earlier numbers of my journal. Too many stars to classify and minutely describe, but they make a brilliant constellation.

If we look back to Philadelphia we discover another neurological star that has escaped our gaze, Wm. C.

Wood, whose treatise stands high, and yet another, Dr. A. H. P. Leuff, of neuro-anatomical fame, also Harrison Allen. There is Wormly, too, of Philadelphia, who is not altogether without the pale.

Far to the southward are Joseph Jones of New Orleans, and Buckley of the occidental metropolis.

And now, casting our eye to Baltimore, our vision falls on three luminaries, Miles, Osler and Hurd, whose light has not shone in vain; there also shine Conrod, Reed, Berkley, Welch and Halstead of Johns Hopkins hospital.

Skirting the sky northward we come to the Hartford constellation, Stearns and Crothers. The book of the former is devoted to practical psychiatry; the contributions of the latter to that important branch of psychiatry which, through Mason, Wright, Crothers and others has made such rapid forward strides in America, as well as in England, the study of inebriety.

The subject of alcoholic trance has been almost exclusively an American neurological study, and Dr. Crothers has contributed more than any other American, perhaps, to make it plain. In the Appendix appear further evidences of American advance in this direction:

"Law of Periodicity in Inebriety" (*vide Alienist and Neurologist*, July, 1892), showing a uniformity in the drink impulse and the laws which regulated it.

As our vision ranges further, Boston, with its neurological and psychological savants, comes into view—Philip Coombs Knapp and his book on "Intra-Cranial Tumors and Other Diagnoses;" Putnam, Channing, Webber, Folsom; John E. Tyler, the departed alienist of Somerville, and Oliver Wendell Holmes, the poet sage and anatomical and psychological savant of Harvard. The subject of "Arterial Tension in Neurasthenia" received some new light from Boston in 1888 (*vide* article on the subject by Webber, *Boston Medical and Surgical Journal*, May 3, 1888); likewise the subject of "Lead Paralysis as it Affects the Brain" (*vide* same source, October 29, 1891); also the "Condition of the Blood in Certain Mental States" *vide idem*, March 24, 1892). The same journal for August 29, 1889, also contained some additional light on "Paramyoclonus Multiplex," and other peculiar forms of spasm, and in September of the same year, in same journal, page 277, this American writer throws additional light on the subject of "Cerebral Tumors and Their Treatment."

As we continue our survey of the neurological heavens, we come to the constellation Chicago, with such bright, particular, neurological stars as Lyman, with his book on "Practice;" Kiernan, the polygot; Moyer, the tireless; Paoli, Sanger, Brown, Brower, Clevenger, Lydston, and their books, and Church,—sadly remembering one bright luminary of these heavens now blotted out, whose light shone for a time upon our particular sky with effulgent luster—Dr. J. S. Jewell. He was a star of the first magnitude, a neurological Jewell of the first water, an indefatigable student, a painstaking observer, and a writer of the highest ability.

He blotted out his own bright life in the prime of his manhood by over zealous work in the cause he loved above his life. He founded and maintained while he lived the *Journal of Nervous and Mental Diseases*. And this reminds us that we should not omit most honorable mention, in this connection, of the name of Dr. Jewell's worthy and industrious co-worker, Dr. H. M. Bannister, among the men of might

in Chicago who have contributed to brighten her brilliant neurological sky.

Moyer has contributed a paper for the advancement of clinical neurology not already referred to: "Clonic Rhythmical Spasm of the Pronator Radii Teres" (*JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*, 1887); "Periodically Recurring Oculo-motor Paralysis" (*The Medical Record*, 1887), being the first case described in this country; "Akinesia Algeria" (*Medical Standard*, 1893), being the sixth case reported, and the second in this country; and "A Rare Occupation Neurosis" (*Medical News*, 1893). By his works ye shall know him (*vide* Appendix for much more than we have here noted).

Within almost a suburban radius of Chicago is McBride of Milwaukee, and his "Review of Insanity and Nervous Diseases."

Modesty forbids my dwelling at length upon what St. Louis has done for the advancement of neurology. We may recover from our modesty sufficiently to appear in the printed Appendix; however, I might briefly intimate that both Dr. Bremer and myself have within the past few years added something to the literature of "Astasia-Abasia;" Fry to "Chorea;" Shaw to the subject of "Trephining for Brain Disease," and Bauduy to the "Study of Alcoholism and its Treatment." This is not all that we have done; but it were better that some one else, non-resident, should record and comment on our work, and I may say again, as I have said before (*vide* Appendix).

Now, if we continue our survey, we find the sky of neuriaty and psychiatry is not dimmed as we approach the region of the apparently setting sun. On the contrary, bright stars illuminate the western heavens. See how Eskridge shines:

He has contributed a valuable paper on "Nervo-Vascular Disturbances in Unacclimated Persons in Colorado" (*The Climatologist*, March, 1892); the important conclusion of which is for persons on going to the high altitudes of Colorado, especially for those who are nervous or who suffer from pulmonary trouble or cardiac weakness, to live comparatively quiet, until they become accustomed to their changed environments.

Likewise another on "Chorea in Relation to Climate, Especially the Climate of Colorado" (*Climatologist*, August, 1891). This study of the effect of the climate of Colorado on chorea shows but little, if any, modifying influence due to altitudes of 5,000 feet to 6,000 feet.

Another exceedingly valuable and advance contribution to the literature is "Retro-Anterograde Amnesia, with Report of Two Cases" (*Alienist and Neurologist*, July, 1892). This is an exceedingly interesting subject, both from a psychological and medico-legal point of view.

This is as far as we can go with Eskridge. But he has written much from his high standpoint in the Rocky mountains, and all is in the line of advanced neurology. (*Vide* Appendix.)

Next comes Howell T. Pershing of Denver, who records five cases of pre-ataxic tabes dorsalis with optic nerve atrophy in which there were marked atrophy of the optic nerves with little or no ataxia. He gives a statistical study of tabes, and shows that (as Walton and Gowers have recently claimed) the early occurrence of optic atrophy is in some way associated with an arrested development of the spinal symptoms.

This fact modifies the ordinary rules of diagnosis and prognosis.

He also records a case of Jacksonian epilepsy, with successful operation; no recurrence of the paroxysms more than a year after operation. Other articles by this writer are: "Language and Brain Disease" (*Popular Science Monthly*, October, 1892), and "Disseminated Sclerosis following Syphilis" (*International Clinics*, July, 1891).

But we cannot go farther in this manner. If we went hence south to the City of Mexico, thence across the gulf to New Orleans, thence north to St. Paul and crossed the continent to San Francisco, we should find working neurologists contributing their quota to the world's neurological and psychological progress.

As I am about to conclude, the proceedings of the July meeting of the American Neurological Association have just appeared in the weekly medical press, and here are its notes of American neurological progress:

Besides the President's Address and Dr. Dercum's paper, to which I have referred, Dr. Smith Baker's paper on "Heterogeneous Personality;" Matthew Field's on "Hospital Detention;" Frederick Peterson's on "Temperature in General Paralysis of the Insane;" Joseph Collins' on "Changes in the Spinal Cord in Old Cases of Infantile Paralysis;" G. M. Hammond's of "Progressive Muscular Atrophy;" C. L. Walton's "New Method of Reducing Dislocation of the Cervical Vertebrae;" Dana's "Acromegaly, Gigantism and Facial Hemi-hypertrophy;" J. J. Putnam's "Thyroidectomy in the Treatment of Graves' Disease;" B Sachs' "Tabes and Syphilis;" Kraus' "New Pedodynamometer;" Drs. Lloyd's and Reisman's joint communication on "Infectious Endocarditis with General Septicemia and Multiple Neuritis;" C. L. Walton's "Tumor of the Angular Gyrus;" Dr. E. D. Fisher's "Autopsy and Report of Congenital Cerebral Hemiplegia;" C. K. Mills' "Lesion of the Thalamus and Internal Capsule;" Wharton Sinkler's "Tumor of the Optic Thalamus;" Geo. J. Preston's paper on the "Localizing Value of Aphasia;" Leonard Weber's on "Neurasthenia;" Kraus' "Case of Myxedema, with Observations;" Philip Coombs Knapp's "Simulation in Traumatic Nervous Diseases;" and "The Microbic Origin of Chorea," by Dr. C. L. Dana, are all instructive, suggestive and progressive in our department. The proceedings of this favorite American society are becoming every year more and more valuable. They are indispensable to neurological advance. The neurological world would not march on to its manifest destiny to rule paramount in the world's medical thought without the original work of this great American society of distinguished neurologists.

There were also papers read only by title before this body, the names of whose authors are also adequate warrant of worth. Among them—"The Genesis of Hallucination and Illusion," by H. A. Tomlinson of St. Peter, Minn.; "The Diagnosis of General Paresis," by L. C. Gray of New York; "Two Cases of Friedreich's Disease," by F. R. Fry of St. Louis; "The Metapore or Foramen of Majendie in Man and in the Orang-Outang," by Bert G. Wilder; "The Relations of Chorea to Rheumatism," by C. Eugene Riggs of St. Paul; "Experiences in the Use of Testiculin and Cerebrine," by J. J. Putnam of Boston; "Paralysis after Surgical Operations," by V. P. Gib-

ney of New York; "Traumatic Brachial Plexus Paralysis in Infants," by Wm. Leszynsky of New York.

If I should go on enumerating the work, present and recent, of American neurologists, it would develop acute cerebrasthenia. It would make you tired.

I had almost forgotten to note the contributions of our hospitals for the insane to the pathology of mental diseases. I cannot now go entirely over this vast subject. Besides what has been done at Utica, N. Y., and Middletown, Conn., with which you are familiar through the *Journal of Insanity*, you may not know that it has for a long time been the custom of Dr. J. W. Blackburn, the eminent pathologist of the Government Hospital for Insane, at Washington, to each year select a number of cases for special study as a pathological supplement to the annual reports of the Government Hospital for Insane. This and the making of nearly one hundred post-mortem examinations yearly, constitutes the work of this hospital, to which I also invite your attention in the Appendix.

You see, America breeds and develops neurologists as the water breeds and develops fishes. The pabulum neurology feeds on is in the American people—their hustling, rushing habits, their business, professional, social and political environment, and the numerous newspapers they read every morning before breakfast and every night before they forget to say their prayers—this moral, political, social and business atmosphere of ambition and bustle, tends to develop the strongly endowed, neurologically and psychologically, as it tends in the weakly endowed to the development of neuropathic conditions. It develops neurologists and psychologists to care for the neuropaths. It builds and it breaks the nervous system. It can not yet be said that we are a neuropathic people, though we are tending that way; but neurology is advancing with equal pace with neuropathic break-down, and will, it is hoped, ultimately enlighten and save the people from their neuropathic sins.

ADDRESS.

BY E. FLETCHER INGALS, A.M., M.D.

CHICAGO.

EXECUTIVE PRESIDENT OF THE LARYNGOLOGICAL SECTION.

Gentlemen and Colleagues:—In calling to order the Laryngological Section of the Pan-American Congress, I take the opportunity to congratulate you upon the number and excellence of the papers which have been secured for your consideration.

I feel that there is a special reason for felicitation upon the propitious circumstances under which we have convened, because of our success in spite of many obstacles.

The laryngologists of this country as well as those who would have visited us from abroad, have been called upon for more than the usual amount of work during the past few months. Early in May the American Laryngological Association met in New York and was largely participated in by those who otherwise would have been free to aid us. Shortly afterward the American Climatological Association met in Philadelphia, taxing the energy and taking the time of many of the laryngologists of this country. Only three weeks subsequently the American