

COPYRIGHT, 1927

JOHN MORGAN, FATHER OF MEDICAL EDUCATION IN NORTH AMERICA

By WILLIAM SHAINLINE MIDDLETON, M.D.

MADISON, WISCONSIN

*Edinburg M's model for U of Penn -
Idea endorsed by Fothergill Hunter
Watson -*

*M. led first professorship med in N. Amer - 1765
(Phila. then had 25,000 inhabitants)*

REPRINTED FROM VOLUME IX, NUMBER 1, PAGES 13-26

ANNALS OF MEDICAL HISTORY

PUBLISHED BY PAUL B. HOEBER, INC., NEW YORK

First faculty - Morgan Park Shippen Keane

PAUL B. HOEBER, INC., 76 FIFTH AVENUE, NEW YORK

JOHN MORGAN, FATHER OF MEDICAL EDUCATION IN NORTH AMERICA*

By WILLIAM SHAINLINE MIDDLETON, M.D.

MADISON, WISCONSIN

The historian who shall hereafter relate the progress of medical science in America will be deficient in candour and justice if he does not connect the name of Dr. Morgan with that auspicious era in which medicine was first taught, and studied as a science, in this country. (Benjamin Rush.)

EARLY American medical history affords few more striking or illustrious characters than John Morgan. Of brilliant intellect and charming personality, he shines forth among a most learned group of Philadelphia physicians of the ante-Revolutionary days. Honored by virtue of his eminent qualifications by his Alma Mater and later by the Continental Congress, we find the unfortunate conniving hand of conspiracy raised to snatch his merited high offices. Then come years of vain efforts for vindication, which, finally won, fails to bring the anticipated comfort to the prematurely aged master-idealist.

John Morgan was born in Philadelphia in 1735 of Evan and Joanna, or Joan, Biles Morgan. Of his paternal connections, George Morgan, a younger brother of John, wrote in a family Bible. "George Morgan, the son of Evan and grandson of David Morgan, gentlemen of Wales, whose ancestors retired to the mountains rather than be enslaved by William of Normandy, called William the Conqueror." Indeed their Quaker ancestry is said to date "back to the days of Alfred" on the father's side. Morgan's parental grandfather came to America about 1700. Evan Morgan, his father, was a resident of Chester, Pennsylvania, for a time. However his wealth and position were largely attained in Phila-

delphia. The older Morgan, in addition to his commercial activities, was a man of affairs, being a member of the Board of Managers of Pennsylvania Hospital for two separate terms, a warden of Christ Church for many years and a member of the Pennsylvania Legislature for several years. Evan Morgan was a personal friend and neighbor of Benjamin Franklin, a heritage which later served John Morgan well. We find the elder Morgan characterized as "virtuous, sober, sensible, good."

Joanna Biles Morgan was descended from the most prominent Quaker families of Pennsylvania. Her father, William Biles, settled in Bucks County in 1679, before Penn's arrival, and there surrounded himself with rich estates and considerable power. He was a Quaker leader, the first recorded meeting of Friends in this country being held in his home near Falls of Neshaminy on May 2, 1683. Mrs. Morgan's mother was a Blackshaw, a family likewise prominent in Quaker affairs. Her grandfather, Randall Blackshaw, came to America with William Penn and was present on the occasion of the consummation of Penn's Treaty with the Indians at historic Shackamaxon.

Of the early home life in Philadelphia, we have but little record. The Morgans were a large family and the quiet Quaker charm of the Colonial days seems to have pervaded their lives. The Morgan residence at Second and Market Streets was located in the best residential section of that day. Their social position was assured by their affluence, church and family connections. John was the eldest of this large Morgan family, of

*Read before the Medical History Seminar, University of Wisconsin.

NOTE. Grateful acknowledgement is herewith made for material assistance from Dr. William Pepper and Dr. William Snow Miller in the preparation of this sketch.

whom only two have left descendants. At an early age young Morgan was sent to the renowned Nottingham School, Chester County, Pennsylvania, under the Reverend Mr. Finley, a scholar in Greek and Latin. John Morgan early distinguished himself by his application and unusual ability, so that he was able to enter the Academy and College of Philadelphia in advanced standing. The degree of Bachelor of Arts was conferred on him by that institution with the first graduating class of 1757.

Morgan's medical training dovetailed with his liberal education for several years. From 1750 to 1756 he served as apprentice



JOHN MORGAN
(1735-1789)

to Dr. John Redman, a preceptor whose influence was felt for three generations of Colonial medicine. Redman was a commanding figure in the medical world of that day and of a type to mold the brilliant apprentice to a lofty conception of the opportunities of his profession. The last year of this apprenticeship was served as apothecary to the Pennsylvania Hospital. Morgan was the second to hold this position and he resigned May 1, 1756, "having a prospect of business more advantageous than his present employment."

His medical education was enlarged by four years' service in the French and Indian Wars. Although commissioned lieutenant April 1, 1758, in the expedition against Fort Duquesne, he acted as surgeon to

his detachment. Morgan's signal services at this time attracted the attention and commendation of his commanding officer, General Forbes. Contemporary opinion is preponderantly biased and does not necessarily imply later approval. However, the written sentiment of the great Benjamin Rush seems to have been the prevailing judgment of that period: "So great was his diligence and humanity in attending the sick and wounded who were the subjects of his care, that I well remember to have heard it said that if it were possible for any man to merit Heaven by his good works, Dr. Morgan would deserve it for his faithful attendance upon his patients." The experience gained by his military service in these wars stood him in invaluable stead in the War of the Revolution some sixteen years later.

Succeeding his resignation from the Army five years of fruitful study were spent under the greatest masters of Europe. The friendship of Benjamin Franklin opened the doors of many exclusive English houses to him and his first year spent in London proved most profitable, medically and socially. From the Hunters he learned the art of making anatomical preparations by corrosion, an achievement which in turn paved the way for high honors on the Continent. Armed with letters from Franklin to Lord Kames and Dr. Cullen, John Morgan left London for Edinburgh in 1761. The great number of Americans who completed their medical training at this institution of learning during this period is explained by the strength of her faculty. That Edinburgh should have attracted Morgan and have so impressed him as to have been his model for a medical school in America, gave an impetus to the infant seat of learning, Pennsylvania, that was felt for a hundred years. Morgan was graduated in 1763 with the degree of Doctor of Medicine. His thesis, "De Puopoesi," was a masterly contribution and the theory he advanced therein of the true secretion of pus from the blood vessels in certain inflammatory condi-

*Edinburgh
model
of U of P*

tions was revolutionary in thought. As expressed in the thesis, his belief was: "Hoc mea speciale habet, pus nempe neque in sanguine neque extra vasi generari, sed in ipsis vasis inflammatis, et vasorum mutationes ab inflammatione inductas, esse causas efficientes quae virtute quadam secretoria, pus a sanguine eliciunt." Priority over Hunter for this theory was given to John Morgan in 1817 by Curry, a teacher of anatomy in Guy's Hospital who had made a special study of the question. A century later Cohnheim demonstrated beyond equivocation the truth of Morgan's theory.

Of Morgan's graduation, we learn that it was the occasion of "an éclat almost unknown before." Surrounded by a circle of admiring friends, he was clearly the lion of the hour, and his promise for a brilliant future received an incredibly wide circulation. A valuable and life-long friend in the person of Dr. Cullen wielded a powerful influence on him both as a student and as a practitioner. Morgan's correspondence with Cullen bears a note of filiale devotion and apparent intimate understanding. Reciprocally, we find in a biography of Cullen (1832) that "Mr. Morgan appears to have fully realized the expectations of his friend Dr. Franklin."

Morgan left Edinburgh for Paris late in 1763. His demonstration of the corrosion method of the preparation of tissues before the Académie Royale de Chirurgie de Paris created a profound impression and the comments on his work were very favorable. His stay in Paris was largely occupied in the study of anatomy under M. Sue, and it was not until later, while in Italy, that he learned of his election to a corresponding membership in the Académie Royale, July 5, 1764. From Paris Morgan started on a tour through Switzerland and Italy accompanied by his friend, Samuel Powel, of Philadelphia. "The Journal of Dr. John Morgan, of Philadelphia—Rome to London 1764" is a diary of the trip written in the quaint style and English of the

period. He has recorded his impressions of the wonderful art of the countries visited in a manner indicative of a working knowledge of painting and architecture. Several amusing incidents related show his human interest. In the Casa Sancta at Loretto, his inquisitive nature questioned the validity of the miraculous butt, from which three wines were produced. The priest refused to allow him to examine the container. Whereat, commenting on the difference, Morgan records: "In the Col'r they were so, but all agreed in one Quality, i.e., of being sower; w'ch made me think the Madonna not so much anxious of commending the goodness of the Wine as the Nature of the Miracle." He found the conditions of medical education in Italy most deplorable. He inspected hospitals at every opportunity with a view to applying this knowledge in America. The Alps and the wonderful Italian scenery appealed to his artistic taste. His practical bent found much to absorb his attention in such details as pavements, streets and the fortifications at various points. Morgan obtained audience with the King of Sardinia, the Pope, Voltaire and many other celebrities. A diplomatic bout with the Italian customs officer at Buffalora gave rise to the following interesting remark: "A Physician who appears before his Patient in a plain Manner with a common Apparel, in the eyes of the World must be ignorant of his Profession, whilst one with a monstrous Paraphernalia of dress, enormous wig & grimace, is esteem'd a second Hippocrates."

Two acquaintanceships on this journey were of more than passing importance. At Padua, Morgan visited Morgagni, the celebrated light of Italian medicine of that time. Morgan again demonstrated the corrosion method. Evidently, Morgagni was properly impressed with the personality of the young American, entertaining him most hospitably and from the similarity of their names claiming relationship with him. Tradition recounts that the venerable Morgagni, then eighty-two years old, was so grateful for the gift of Morgan's thesis

that he reciprocated by giving Morgan his recent work, "*De Sedibus et Causis Morborum*," inscribing in his own hand on a blank page the following: "Affini suo, medico praeclarissimo Johann Morgan, donat auctor." These volumes were placed in the Library of the College of Physicians of Philadelphia by Morgan, and historical accuracy exacts a correction of the above pretty compliment. On the title page of the first volume is inscribed: "Viro experimentissimo et humanissimo D. Di Joanni Morgan Auctor," while in the second volume: "Viro de Re Anatomico bene merito Do. Dr. Joanni Morgan Auctor." While kinship is not avowed in the authentic inscriptions, assuredly a higher appreciation of the medical attainments of Morgan is implied than in the conventional legendary form.

The reception of the American tourists, Morgan and Powel, by Voltaire at Chateau de Ferney was characteristic of that philosopher's regard for English-speaking people. After a delightful call, on their departure Voltaire called after them: "Behold two Amiable Young Men, Lovers of Truth & Inquirers into Nature. They are not satisfy'd with near Appearances, they love investigation & Truth & despise Superstition—I commend You Gentlemen—go on, love Truth and Search diligently after it. Hate Hypocrisy. Hate Masses & above all hate the Priests."

A medical annotation, which should more especially interest inhabitants of Wisconsin, embodies the then accepted explanation of endemic goiter:

In this Country [Turin] I could not but take notice of the tumidum Guttur Alpinum w'ch Horace mentions. It is said to be a Disease arising amongst poor people from their drinking snow Water. It is a sad sight when got to any considerable Degree. Some I saw who had a Swelling on their Throats & Necks as large as their Heads, projecting forw'd & some hanging down an enormous Weight or rising up so as to entirely cover one side of their faces, a most shocking sight.

Obviously the source of endemic goiter was recognized at that time, but the *modus operandi* was unknown.

John Morgan, returning to Paris, took his seat in the Académie Royale on October 4, 1764. While in Paris at this time Morgan corresponded with Shippen and prepared his memorable "*Discourse on the Institution of Medical Schools in America*" under the critical eye of Samuel Powel. In fact, during practically the entire fall and later winter, spent in England on account of the heavy seas, Morgan was carefully planning each step for the realization of his early hope, the first medical school in North America, to be founded in Philadelphia. In addition, he was enlisting the support of the most influential physicians and laymen of England in his project. Dr. John Fothergill, who had furnished much material in the way of charts, models, and so forth to Pennsylvania Hospital for anatomical study under William Shippen, Jr., was hearty in his support of Morgan's plan and probably his name, as a prominent Quaker, carried more weight in the Colony than did those of Hunter and Watson, who likewise indorsed the idea. In a letter to James Pemberton, dated April, 1761, after outlining Shippen's plan for anatomical teaching, Fothergill continues that Shippen "will soon be followed by an able assistant, Dr. Morgan, both of whom, I apprehend, will not only be useful to the Province in their employments, but if suitably countenanced by the Legislature, will be able to erect a School of Physic amongst you, that may draw students from various parts of America and the West Indies, and at least furnish them with a better idea of the rudiments of their Profession than they have at present the means of acquiring on your side of the water." Truly this was a prophecy and a high estimate of the qualifications of the men who planned to undertake the work of medical education in America. Thomas Penn and two former members of the Board of Trustees gave Morgan's plan their sanction.

In his farewell letter to Dr. Cullen before leaving for America, Morgan wrote: "I am now preparing for America, to see whether, after fourteen years' devotion to medicine, I can get my living without turning apothecary or practising surgery. My scheme of instituting lectures you will hereafter know more of. It is not prudent to broach designs prematurely; and mine are not yet fully ripe for execution." Turning his back to an outlook for a brilliant future in Europe, Morgan still adhered to his well-formulated plan. The situation is expressed in a contemporary letter from Powel to a Philadelphian: "Pray, use him as his merits deserve and don't force him from you. For the honor of our country make his residence with you agreeable. It is no small sacrifice he makes in returning, as fine prospects open upon him here if he would stay; but his *Amor Patriae* maintains the upper hand." He arrived in Philadelphia in the spring of 1765.

The transplantation of Morgan loaded with his Continental honors, licentiate of the Royal Colleges of Physicians at Edinburgh and London, Fellow of the Royal Society, member of the Belles Lettres Society of Rome and associate of the Académie Royale de Chirurgie de Paris, to provincial America is most interesting and contemporary comment is noteworthy. Writing to Samuel Powel, George Roberts said: "Morgan comes home flushed with honors and is treated by his friends with all due respect to his merit. He appears to be the same social friendly man, not assuming the solemn badge so accustomed to a son of Aesculapius." On his return home he was regarded as having some of the "eccentricities of genius." Benjamin Rush writes that he was received in open arms. Norris, a later writer, states that in point of learning and experience Morgan was the best medical man in the Province; that a fine reputation had preceded him and great things were expected of him. Indeed, so great was his fame on his return home that it was deemed a privilege to say: "I have seen him."

An attractive personality must have been a large factor in giving such prestige to so young a physician as John Morgan. He was described as being charming and polished in manner and of distinguished bearing. In addition, he was well dressed and handsome. It is a well-established tradition in Philadelphia that he carried the first umbrella in America and for some time crowds followed him on the streets. Morgan's innovation was widely scouted as an "effeminacy." However, Dr. Chancellor and Parson Duché joined him in a short time in the use of a sun umbrella. Portraits and descriptions of that period paint for us a rather dapper, intellectual, handsome young Colonial gentleman.

Of his family affairs we learn that Morgan became engaged to Mary, daughter of Thomas and sister of Francis Hopkinson, just prior to sailing for Europe or during his residence there. An incident of Morgan's journey in Italy, when he went to the extreme to save a miniature, "w'ch I [Morgan] valued above anything else I had there," would seem to indicate his engagement prior to the voyage. From this miniature, Benjamin West painted a portrait, which is still in the possession of the Hopkinson family in Baltimore. September 4, 1765, Morgan was wedded to Miss Hopkinson. Although no issue resulted from their marriage, happiness seems to have reigned throughout their life together. She was characterized as a woman of extraordinary charm of character, disposition and manner. She was a witty conversationalist and a musician of no mean note. She was graceful, unaffected, vivacious and fascinating, in a word, a woman of unusual social attainments. From even a most superficial consideration she was a remarkable mate for the brilliant, sympathetic amiable Morgan.

Immediately on Morgan's arrival in America he set out to consummate his plans for establishing systematic medical education. William Shippen, Jr., about whom Fothergill wrote the trustees of Pennsyl-

vania Hospital in regard to the institution of anatomical teaching, had corresponded with John Morgan in Europe on this subject; but accurate documentary evidence is available in proof of the difference in the aims of the two men. Shippen had from November 25, 1762,¹ been giving lectures in anatomy in Fourth Street, and by some this is believed to have been the beginning of the Medical Department of the University of Pennsylvania. However,

were destined to be at first close friends but later, bitter rivals. Shippen was a year younger, but graduated from Edinburgh a year earlier. His training and preparation were neither as long nor as exacting as John Morgan's. Shippen is described as calm, cautious, far-seeing and self-possessed, qualities that made for leadership, but which were unfortunately at times subservient to a crafty designing nature. Morgan, by way of comparison, was impul-

DE
P U O P O I E S I,
SIVE
TENTAMEN MEDICUM
INAUGURALE
DE PURIS CONFECTIONE.

William Shippen March 18, 1803
Π Τ Ο Π Ο Ι Ε Σ Ι Σ,
SIVE
TENTAMEN MEDICUM
D E
PURIS CONFECTIONE:
QUAM
ANNUENTE SUMMO NUMINE,
Ex Auctoritate Reverendi alimorum Viri,
GULIELMI ROBERTSON, S.S.T.P.
ACADEMIAE EDINBURGENAE PRAELECTI,
SEC KON
Amplissimi SENATUS ACADEMICI iussu,
Et nobilissimae FACULTATIS MEDICAE decreto,
PRO GRADU DOCTORATUS,
SUMMISQUE IN MEDICINA HONORIBUS ET PRIVILEGIIS
AITE ET LEGITIME CONSEQUENDIS;
AERUDITORUM EXAMINI SUBJICIT
JOHANNES MORGAN, A. M.
PENNSYLVANIENSIS.
DEUS enim has leges posuit in creando, et observavit, quas nos oblit-
vendo detegimus. BONAE INIITAE.
Ad diem 18 Julii, hora locoque solitis.
EDINBURGI:
CUM Typis Academicis.
MDCCLXXXIII.

TITLE PAGE OF MORGAN'S THESIS.

we find no evidence of a systematic correlated course of complete medical instruction in Shippen's early teaching or plans for the same in his writings. The plan of establishment of a medical school in affiliation with the College of Philadelphia was clearly the product of the fertile constructive mind of John Morgan, and its early and assured success was largely dependent on his personal ability and untiring efforts.

A moment in passing must be devoted to a consideration of the essential character of William Shippen, Jr., who played so great a part in Morgan's life. Having so much in common in ambitions and so little in common in personalities, these two men

sive, fervent and positive and combined in his makeup all the highest qualities of a statesman-like organizer. Time has largely effaced or overlooked the radical differences between these men, but unfortunately we are compelled to chronicle their years of successful cooperation followed by a period of suspicion, strife and actual hatred.

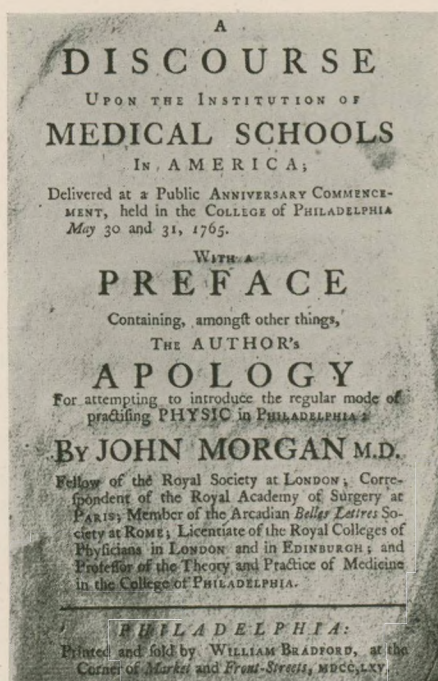
Returning to the events leading up to the foundation of the medical school, we find Morgan actively engaged in the agitation of his proposition. He located in practice at Second and Spruce Streets and, contrary to the custom of the day, divorced surgery and pharmacy from medicine. He was the first man in America to practice

medicine exclusively by choice. The reasons for advancing this plan of procedure were to enable the busy practitioner to devote his time to practice and research, the different qualifications for the three divisions of the existing medical practice and the benefit to the patient of specialization on the part of the physician. The existing conditions of medical practice and the relief to be gained by his plan of specialization are detailed in the "Discourse." To further his

was thus established May 3, 1765. Morgan's task was somewhat facilitated by the fact that, of the twenty-four trustees of the College in 1765, Thomas and Phineas Bond, Thomas Cadwalader, William Shippen, Sr., and John Redman were doctors of medicine.

On May 30, 1765, Dr. John Morgan delivered his memorable Inaugural Address at the Commencement of the College, "A Discourse upon the Institution of Medical Schools in America." The essay

To
Dr. Sullen
Professor of Chymistry
at
Edinburgh
from the Author



TITLE PAGE AND INSCRIPTION OF MORGAN'S INAUGURAL DISCOURSE.

plan of the separation of medicine from pharmacy, he brought with him from London Mr. David Leighton, an accomplished pharmacist and surgeon. Then, too, Morgan instituted the English plan of charging a definite fee at each visit, which failed to meet with popular approval.

The response of the Board of Trustees of the College of Philadelphia to Morgan's appeal for medical instruction in that school was encouraging: "Entertaining a high sense of Dr. Morgan's abilities and the high honors paid to him by different learned bodies and societies of Europe, they unanimously elected him Professor of the Theory and Practice of Physic." The first medical professorship in North America

is not only a masterpiece of English literature, but its logic is forceful and its subject matter indicative of clear insight and foresight. Indeed, even though years have altered certain phases of medical practice, yet none of the force of argument has been lost by time. It is a production worthy of careful perusal by every medical man, and Norris writes:

A remarkable production, and should be republished and circulated as an act of justice to his memory. Although the science has advanced immeasurably since that day, his enlarged views of what is required of a medical practitioner by preliminary education, his high-toned sentiments regarding its practice, honors and emoluments, his recommendations

of clinical teaching and hospital instruction, his recital of the years of labor spent by him in preparation for his active duties, in addition to its historical value, all make this now very rare tract worthy of such attention.

Morgan clearly presents the advantages of the influx of students from distant parts to Philadelphia, then a town of 25,000 and the center of culture of the Colonies. He demonstrates the necessity to medicine for a coalition of able teachers for a regular course of instruction. He shows how even at that time students were attracted to Philadelphia by the reputation of its physicians and the facilities for hospital work.

Regarding medical education, Morgan makes the following divisions: "Anatomy, Materia Medica, Botany, Chymistry, the Theory of Medicine and the Practice." Several expressions and quotations are noteworthy:

It is Anatomy that guides the doubtful steps of the young votary of medicine through an obscure labyrinth, where a variety of minute objects present themselves in such a group as, at first, to perplex his imagination. . . .

As a skillful Pilot informs himself of the least bank of sand or shoal where he is to avoid navigating his ship; so every follower of medical pursuits should be intelligent in the minutiae of Anatomy, if he wishes to practice with ease to himself, and to the benefit of his patient. . . .

Anatomy, Materia Medica, Botany, Chymistry, and the Institutions, are only the ladder by which we are to mount up to practice.

A man is obviously unable to prepare for practice without the assistance of teachers and Dr. Morgan dramatically draws the picture of an unprepared practitioner, ignorant, irresolute, interfering with Nature, snatching away loved ones: "Remorseless foe to mankind: actuated by more than savage cruelty: hold, hold thy exterminating hand." The restraining, ambition-kindling, guiding duties of the teacher are well painted. "Destitute of culture, the imagination of

youth shoots wild and unprofitable: but, directed by art and improved by science, a natural genius is like a rich soil, the fruitful source of many benefits to a country."

In the light of subsequent developments, the following extract from his address would almost grant Morgan the power of prophecy:

Perhaps this Medical Institution, the first of its kind in America, though small in its beginning, may receive a constant increase of strength and annually exert new vigor. It may collect a number of young persons of more than ordinary abilities, and so improve their knowledge as to spread its reputation to distant parts. By sending these abroad duly qualified, or by exciting an emulation amongst men of parts and literature, it may give birth to other useful institutions of a similar nature, or occasional rise, by its example, to numerous societies of different kinds calculated to spread the light of knowledge through the whole American continent wherever inhabited.

Over the main entrance to the new medical laboratories at the University of Pennsylvania are engraved the names of the first complete medical faculty grouped in this manner: Morgan and Rush, Shippen and Kuhn, an arrangement which subsequent events have rendered most happy. William Shippen, Jr., was appointed to the professorship of anatomy and surgery in September, 1765, at the earnest solicitation of Dr. Morgan and on his (Shippen's) personal application. It is in this application that we see Shippen's cherished plans and learn of his correspondence with Morgan in England. Morgan and Shippen constituted the faculty of the first session of the young medical school; Kuhn was added to the faculty in the capacity of professor of materia medica and botany in January, 1768, and Benjamin Rush, a young protégé of Morgan, was elected professor of chemistry in 1769. A tablet in the main hall of the medical laboratories at Pennsylvania commemorates the foundation of the Medical School:

Erected
to the
Memory
of
John Morgan, M.D., Edin.
William Shippen, M.D., Edin.
The First Faculty
of This
The First Medical School
in
North America
1765
Erected by the Medical Class
of 1907
June 19, 1907

The first session of the new school opened on Monday, November 18, 1765² with Dr. Morgan's lectures on materia medica, pharmaceutical chemistry and, time permitting, "Practical Observations on Diseases, Diet and Medicines." This course, meeting three days a week, lasted three or four months and was supposed to be the introductory course to that of the succeeding year, which included the theory and practice of physic.³ On June 21, 1768, the first medical honors in North America were conferred on ten graduates from the Medical School, the degree being M.B. The Medical School of King's College, which has erroneously by certain writers been given priority over Pennsylvania, was not organized until 1768 and was disbanded during the Revolutionary period up to 1792, when Columbia College took the place of the older school.

The support of Dr. Thomas Bond, a famous Philadelphian of the day, was early and continuously added to the new work, and his clinical lectures in the Pennsylvania Hospital formed an important supplement to the work of Morgan and Shippen. In an address, December 3, 1766, Bond stated: "The Professor of the Theory and Practice of Physic has had the best opportunities of improvement, joined to genius and application, and cannot fail of giving necessary and instructive lessons to the pupils." The young school grew rapidly and was well supported in the matter of attendance.

The need for funds, however, constituted a real menace to its progress. To meet this issue, Dr. Morgan at his own expense, bearing the sanction of Richard Penn, went to the British West Indies in 1772. By virtue of his appeal 2,000 pounds sterling were brought back to Philadelphia. However, his teaching was deferred for this year.

The session of 1769-1770 was notable for the youth of the faculty of the Medical School. Thomas Bond (Clinical Medicine) was the oldest, fifty years of age; John Morgan (Theory and Practice of Medicine) was thirty-four; William Shippen, Jr., (Anatomy, Surgery and Midwifery) was thirty-three, Adam Kuhn (Materia Medica and Botany) twenty-eight, and the gifted Benjamin Rush, holding the chair of chemistry, had attained the venerable age of twenty-four. The session ending June, 1771, marked the granting of the first doctorate degree in medicine at the Medical College. Four of the men receiving their primary degree of M.B. in 1768: Jonathan Potts, James Tilton, Nicholas Way and Jonathan Elmer, were thus honored.

The period between Morgan's return to America in 1765 and the Revolutionary War was one of great constructive and organizing activity on his part. In addition to his efforts to establish a medical school, the first medical society in America was founded in 1765 in Philadelphia under his guiding hand. Of this society we have little record. Morgan helped to establish the American Philosophical Society and was active in its proceedings. Another of his favored plans, the College of Physicians of Philadelphia, did not materialize until 1787. On a marble slab in the entrance hall of the present College of Physicians, we find engraved the names of its founders and with Morgan's name those of Hutchinson, Cadwalader, Redman, Chovet and others of equal fame are set.

Dr. Morgan was cultured in the humanities as well as trained in the sciences, and his literary ability is attested by the Sargent

age of
prof's
in 1769

Prize Medal contest,⁴ which he won over a field of notable competitors with an essay on "The Reciprocal Advantages of a Perpetual Union between Great Britain and her American Colonies." The dissertation, which was read at the Commencement of the College of Philadelphia, May 20, 1766, is extremely well written, and one is at loss to know whether its brilliancy or logic influenced the judges more. At any rate, the victory was an enviable one for the young professor. His plan of treating the question is unique, on the basis of commerce and the advancement of the Protestant religion. Carefully he prepares the plea of the Colonies and the obligations of the Motherland. With equal care he outlines the dependence of America on England. He shows a deep knowledge of the commercial products of the young country and the mutual advantages of their use to both parties concerned. With clear insight Morgan points out the weakness of England's geographical situation and the necessity of commerce to her very existence. The growth of England's shipping with the establishment of trade with the Colonies is pictured. The Colonies' part in wars with France and Spain makes them invaluable in event of such occurrences in the future. However, he does not underestimate the debt of the Colonies to England. But, he states:

If the superstructure of a government be raised on any other foundation than the general interest of the whole community, it cannot be durable. Like the image of Daniel's vision, the head whereof was of fine gold, the belly and thighs of brass, the legs of iron, and the feet part of iron and part of clay, which cannot cleave together, it must, when smote upon, be broken to pieces. But the constitution of a country, in which the happiness of a whole community is regarded, is like a firm oak that withstands the fury of the jarring elements, raised up in a storm, fixes its roots deeper in its native earth and lifts its majestic head to the skies.

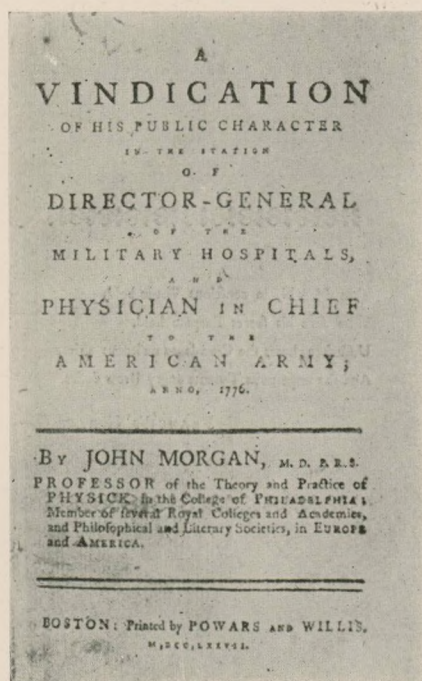
The whole essay constitutes an eloquent appeal for the continued reciprocal advan-

tages of the union between the American Colonies and Great Britain, but the keynote of warning to the Mother Country is not lacking.

The war cloud, which had been temporarily dispelled at the time of the writing of the dissertation, again gathered, and in 1775 and 1776 the Colonies engaged England in a revolutionary struggle. With it came first the highest medical honors in the land to Dr. Morgan, only to terminate in the darkest disappointment of his life. The fortunes of the Medical Department of the Continental Army were first intrusted to Dr. Church, who betrayed his trust by traitorous correspondence with the British. Dr. John Morgan was appointed by Congress in October, 1775, to fill the vacancy. His title was Director-General to the Military Hospitals and Physician-in-Chief to the American Army, and he was the first to be so honored. Of his qualifications there seems to have been no doubt: "His ability as a surgeon, his character as a man, his patriotism, and his influence as a citizen were well known to the public. Therefore no more fitting appointment of Chief Medical Officer could have been made." John Adams in a letter to Abigail Adams, October 20, 1775, commented on the fall of Dr. Church, enlarging on the qualifications of his successor, Dr. Morgan. However, Adams scented jealousy, but added that "all agree that he is attentive, vigilant and laborious for the good of his patients in a great degree and he is said to be pious man." Leaving an admiring group of followers and a lucrative practice in Philadelphia, Dr. Morgan with Mrs. Morgan joined Washington and the Continental Army in Cambridge. In view of subsequent events, his sacrifice was great. Patriotism was the motive in his acceptance. Probably in no position or undertaking did the wonderful organizing genius of John Morgan show to a greater advantage than in the new medical department of the Army. Morgan found the corps disorganized and jealous. The hospital system was poor and the diffi-

culties in obtaining funds and supplies were almost insurmountable. However, had Morgan's task been confined to the organization of the staff and the construction of an efficient hospital system, no doubt another success would have crowned his efforts; but his real problem was to combat an invisible force of intrigue working for his removal from office. The keynote of this underhanded campaign is struck in his "Vindication," a pamphlet advancing the

strife came from Morgan's confiscation of drugs and supplies in Boston. As nearly as can be determined, this act brought much criticism on his head, and in turn led the regimental surgeons to expect their supplies from the General Hospital, of which Morgan had immediate supervision. The Director-General's efforts to organize the regimental medical forces and to correlate the work of the two staffs were misconstrued and resisted on all hands. Handicapped by



TITLE PAGES OF THE VINDICATION.

TO THE HONORABLE
The CONGRESS of the United-States
OF AMERICA.
And to every FRIEND and WELL-WISHER
To the Rights and Liberties of MANKIND;
THE FOLLOWING
VINDICATION,
OF HIS PUBLIC CHARACTER.
In the Station of DIRECTOR-GENERAL
OF THE MILITARY HOSPITALS,
And PHYSICIAN IN CHIEF
TO THE AMERICAN ARMY.
With all deference to Rank and Authority,
AND WITH ALL BECOMING FREEDOM,
CHEARFULLY SUBMITTED
BY
THEIR MOST RESPECTFUL
AND MOST OBDIENT
HUMBLE SERVANT,
JOHN MORGAN

details of the controversy which ended in his dismissal: "That a mean and invidious set of men have looked upon my elevation to the rank of Director-General and Physician-in-Chief, with an evil eye, and long been concerting my removal is a matter of which I have too substantial proof to doubt." To enter into the details of this unfortunate controversy would be tedious. The major events as chronicled in the "Vindication" are matters of historical importance.

In the beginning Dr. Morgan's duties were ill defined, and at the very onset we find friction with Dr. Stringer of the Northern Army, who refused to recognize Morgan's superiority of office. The greatest

insubordination, improper and inadequate assistance and supplies, Morgan overcame great difficulties during his short term of office. In answer to his critics, he offered public explanation and earnestly sought an audience with Congress to prove the wisdom of his plans. To add to his ignominy his colleague, William Shippen, Jr., who but a few months before had asked his advice on the "etiquette" of the service he was about to enter, loomed up as the head of the political faction seeking Morgan's removal. Congress went so far as to elevate Shippen to and even above Morgan's position. Shippen in turn ungraciously demanded the surrender to his command of all hospitals and staff west of the Hudson,

and was upheld by Congress. Morgan still resented only the shifting of titles without the transference of the responsibility to the proper shoulders. With the inevitable in sight Morgan refused to resign under fire. In Congress he was refused a hearing and found himself held responsible for all of Shippen's mismanagement with no credit for his own services. Returning to his degraded position, in charge of the medical corps east of the Hudson River, Doctor Morgan received his order of dismissal from Congress in John Hancock's writing, January 9, 1777.

"If it would have answered any valuable purpose; if the sacrifice of my life would have saved my Country, I could have cheerfully offered it up. I shall not say so of my honor."

Then came the period of great disappointment and prolonged travail in Morgan's efforts to clear himself of the dishonor. Investigation revealed no definite charge and overzealousness seemed in the last analysis of the current rumors to have been the chief fault expressed. However, not until two years later, June 13, 1779, was Morgan entirely exonerated from all blame by Congress. It is interesting to note that no charges were made to the Congressional committee. Throughout the years of struggle for honor and justice George Washington and Benjamin Rush were Morgan's most ardent supporters.

With vindication apparently came the desire for retribution. For Morgan sought to incriminate Shippen. The "Remembrancer of Christopher Marshall" bears witness that he waged an unequal quarrel. For example in January, 1780, Morgan visited Marshall at Lancaster to obtain affidavits relative to Shippen's conduct of the sick. Under the dates of April 28 and 29 two important self-explanatory notes were made:

28. Just going to bed, past ten, came Dr. John Morgan and the Under Sheriff, who had been after him to Ephrata, having a writ against him in the suit of Dr. Houston for slander of him, it's said, in the time of the

flying camp. I proposed that if the officer would leave him here, I would deliver him up in the morning, but the Doctor chose to go down to Adam Reigart's. So they went away before eleven.

29. Returned to dinner. In the interim Dr. Morgan called; said he had been bailed for ten thousand [dollars] by Col. Atlee; thanked my wife for our civilities with his compliments to me, he being just going to pursue the cross-examination with Dr. Shippen in the sundry different places. At dinner, came Dr. Houston. By his coming and conversation, I thought he was conscious that his conduct with Morgan was censurable, which, in conversation, I let him know was mine and many others' judgment on this occasion, it appearing to them as a scheme of Dr. Shippen to prevent his proceedings and therefore altered the minds of sundry of Dr. Shippen's friends, who were in his favor and interest before this action, being so glaring and fraught with malice and ill will

On the resumption of the work at the Medical School, John Morgan and Benjamin Rush, who had resigned from directorship of the Middle Department to escape the fate of his friend, importuned the Board not to reappoint Shippen. In fact, February 28, 1781, they refused to act on the same faculty. However, all were re-elected in the hope of restoring harmony. Morgan did not actively serve in the capacity of Professor of Practice, although the position was held open until the year before his death. An entry in the Minutes of the Board, March 13, 1789, bearing on this point is interesting:

Dr. John Morgan, Professor of Theory and Practice of Physic, not being at present within the State, the Trustees consider him re-instated and entitled to continue in his office until his return home, when he is to be waited on by the Committee in like manner as the other Professors have been, in order to know whether it is his intention to resume the exercise of his Professorship as heretofore.

Another of Dr. Morgan's official connections was terminated by his resignation from the staff of the Pennsylvania Hospital, May 24, 1783. An action concerning the

Disse. J. P. H.

admission of venereal cases to the hospital on a free basis was resented by Morgan and others, who had not been consulted in the matter. In the records of the Almshouse (Philadelphia General Hospital) it is learned that Morgan had been in the habit of transferring luetic patients to Pennsylvania Hospital for salivation. In his letter of resignation Morgan stated that "to devote their time or attention to the Cure of Diseases brought on by Concupiscence, without fee or reward, tends rather to the growth than diminution of Immorality." In conclusion, Morgan assured the Board of his continued support. It was characteristic that John Morgan, though in later life frequently rebuffed, never became embittered.

The medical literature of that period shows a surprising paucity of medical writings by Dr. Morgan. The fires at Bordentown and Danbury destroyed all of Morgan's personal effects and with these many of his medical manuscripts, the result of ten years' labor. However, the surviving medical papers show the hand of a master. His graduation thesis, "De Puopoiesi," is the best known of his writings and deservedly so for its original thought. His article, "Art of Making Anatomical Preparations by Corrosion," describes the steps of the technique of wax impregnation and later corrosion, an art taught him by the Hunters, who in turn had learned it from Dr. Nicolls. One of his most interesting medical writings is found in the *Transactions of the American Philosophical Society* (11, 383), being an account of "a living snake in a horse's eye, and of other unusual productions of animals." It constitutes an accurate description of a living filaria in the eye of a horse on exhibition in Arch Street between Sixth and Seventh Streets. Morgan does not discuss the possible path of entry. He mentions cases of guinea worm (*Filaria medinensis*) at Philadelphia Hospital and refers to a worm, seen in Dr. William Hunter's museum ten years previously, having been "bred in the liver of Mrs. Holt in this

city about thirty years ago." Another article supporting inoculation against small-pox is little known. His "Discourse upon the Institution of Medical Schools in America" and the "Vindication of His Public Character in the Station of Director-General of the Military Hospitals" are probably his best productions from a historical viewpoint.

Dr. Morgan died on October 15, 1789, at fifty-four years of age, and was buried in St. Peter's Church, Philadelphia. The controversy, which ended in his complete vindication, had prematurely aged him and deprived posterity of much of the genius of a man who is ranked with Benjamin Rush as the most interesting character in Philadelphia medicine. John Morgan will ever remain to all Pennsylvania men and to all students of medical history, the father of medical education in North America. As monuments to his creative genius we see the College of Physicians of Philadelphia and the Medical Department of the University of Pennsylvania. "De Puopoiesi" stands forth as a glowing tribute to his original thought. John Morgan's life will for all time stand out clearly as a career, brilliant in promise and early accomplishment, sacrificed to feed the insatiable flames of envy and intrigue, which so marred the records of our struggle for independence. Pennsylvania has been rather frugal in the bestowal of honors on her creating genius but everywhere in her halls we find tokens of her growing appreciation culminating in the recent fusion of her large undergraduate medical societies into the John Morgan Medical Society.

REFERENCES

1. *Pennsylvania Gazette*, Nov. 25, 1726: "Dr. Shippen's Anatomical Lectures will begin to-morrow evening, at six o'clock, at his father's house in Fourth Street. Tickets for the course to be had of the Doctor, at five Pistoles each, and any gentlemen who incline to see the subject prepared for the lecture and learn the art of Dissecting, Injections, &c, are to pay five Pistoles more."

2. *Pennsylvania Gazette*, Sept. 26, 1765: "A course

of Lectures on the *Materia Medica*, by John Morgan, M.D., F.R.S., and Professor of Medicine in the College of Philadelphia. Price, Four Pistoles.

"This Course will commence on Monday, the 16th day of November, and be given three times a week, at the College, viz., Mondays, Wednesdays and Fridays, at three o'clock in the afternoon, till finished, which will last between three and four months.

"To render these lectures as instructive as possible to students of Physic the Doctor proposes, in the course of them, to give some useful Observations on Medicine in general, and the proper manner of conducting the study of Physic. The authors to be read in the *Materia Medica* will be pointed out. The various Substances made use of in Medicine will be reduced under Classes suited to the principal indications in the cure of Diseases. Similar virtues in different Plants, and their comparative powers will be treated of and an Enquiry made into the different Methods which have been used in discovering the Qualities of Medicines, the virtues of the most efficacious will be particularly insisted upon; the manner of preparing and combining them will be shown by some instructive Lessons upon Pharmaceutic Chemistry. This will open to students a general Idea both of Chemistry and Pharmacy. To prepare them more effectually for understanding the art of prescribing with Elegance and Propriety, if time allows, it is proposed to include in this course some critical Lectures upon the Chief Preparations contained in the Dispensatories of the Royal College of Physicians at London and Edinburgh. The whole will be illustrated with many useful Practical Observations on Diseases, Diet and Medicines.

"No person will be admitted without a Ticket for the whole course. Those who propose to attend this course are desired to apply to the Doctor for Tickets, at least a week before the Lectures begin. A

Dollar will be required of each student, to matriculate, which will be applied in purchasing Books for a Medical Library in the College for the Benefit of the Medical Students.

John Morgan.

P. S. Two convenient lower stores to be let by Dr. Morgan, under his dwelling on Water Street, near Walnut Street, where Mr. Mease lately lived, at a very reasonable rate."

3. September 25, 1766, Dr. Morgan announced: "A Course of Lectures on the Theory and Practice of Physic will be delivered for the benefit of Medical students, with a preparatory course on Botany, Chemistry, and the *Materia Medica*, being the substance of a set of lectures delivered to his pupils last winter."

4. Advertisement appearing in *Pennsylvania Gazette*:

"College of Phila., March 6th, 1766.

"Whereas, John Sargent, Esq., Merchant of London and Member of Parliament, hath presented to this College a Gold Medal for the best English Essay on the reciprocal advantages of a perpetual union between Great Britain and her American Colonies, notice is hereby given by order of the Trustees, that the said Medal will be disposed of at the ensuing Commencement, in May, for the best Essay that shall be produced on the subject proposed, by anyone of those who have received any degree or part of their education in this College; and, as the said subject is one of the most important which can at this time employ the pen of the patriot or scholar, and is thus left open to all those who have had any connection with this College, either as students or graduates, it is hoped for the honor of the Seminary, as well as their own, they will nobly exert themselves on a subject so truly animating, which may be treated in a manner alike interesting to good men, both here and in the Mother Country."



[From Boyle: *Opera Omnia. Venetiis*, 1697]