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Chapter 7- Eminent Jefferson Professors, pp. 231-386

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Granville Sharp Pattison (Fig. 1) served as Chairman of Anatomy at Jefferson from 1831 to 1841. He gained a reputation as one of the most effective teachers and lecturers of his day. His writings included Surgical Anatomy of the Head and Neck and Visceral Anatomy, which became classics in their field. Pattison figured importantly in the survival of Jefferson during its early and most critical years. His dynamic and colorful character led, however, to a checkered career in which the sobriquet of "Turbulent Scot" was well chosen. His encounters with Professors Nathaniel Chapman, Philip Syng Physick and William Gibson from the University of Pennsylvania relate directly and indirectly to Jefferson legend and lore. Some details of his tangled life and escapades are worthy of recount.

He was born near Glasgow, Scotland, in 1791, where at the age of 17 he began the study of medicine. In 1812, at age 21, he became the Professor of Anatomy, Surgery and Physiology at the Andersonian Institute in Glasgow. On one occasion he and three students were brought to trial before the high court in Edinburgh on the charge of having removed the body of a Mrs. McAllister from her grave for the purpose of anatomical use. A careful search through the various anatomy rooms had been conducted by the officers. After some difficulty, parts of the body which had been dissected were found and the jawbone was identified by a dentist as that of Mrs. McAllister, whose teeth he had repaired shortly before her death. Dr. Pattison was defended by John Clark, a skillful advocate, who put to the various witnesses for the prosecution the simple and artless question, "Whether Mrs. McAllister was a married woman and had borne several children?" They all answered in the affirmative. It was afterwards proven by the defense through the evidence of several expert anatomists that the body produced was not that of a woman at all. Dr. Pattison was accordingly not found guilty through the simple fact that portions of several bodies had been put together by the officers who conducted the search.

In 1818 Pattison came to Philadelphia under the belief that he was being sponsored by Drs. Nathaniel Chapman and Philip Syng Physick for appointment to the Chair of Anatomy at the University of Pennsylvania, recently vacated by the death of Dr. John Syng Dorsey, the nephew of Dr. Physick. He was disappointed to find that Dr. Physick himself had accepted the position. Worse still, the Chair of Surgery vacated by Dr. Physick, which he hoped to obtain in recompense, was awarded to Dr. William Gibson. This all led to mounting disagreements with Dr. Chapman. Pattison openly blamed Chapman for circumventing his appointment at the University, while Chapman spoke publicly of his embarrassment in having helped to introduce Pattison to Philadelphia. Chapman claimed that Pattison had been forced to leave Scotland because of involvement in a divorce scandal. He went so far as to publish a pamphlet entitled "The Whole of the Proceedings, Duly Authenticated, in the Case of Divorce.
of Andrew Ure, M.D. v. Catharine Ure, for Adultery with Granville Sharp Pattison. This was answered by Pattison in "The Final Reply to the Numerous Slanders Circulated by Nathaniel Chapman, M.D." in which he explained the divorce case and whitewashed his own character.

As a retaliation against Chapman's claim that Pattison's character was not that of a gentleman, the latter challenged Chapman to a duel and named a "friend" as intermediary. Chapman failed to reply to Pattison but wrote to the "friend" that he would never acknowledge a communication from Pattison. Hoping to precipitate action, Pattison in October, 1820, circulated a public pamphlet in which he called Chapman a "A Liar, Coward and Scoundrel." A brother-in-law acted on Chapman's behalf by making application to the public prosecutor for the arrest of Pattison. No further action ensued at this time except a contest of derogatory pamphlets of Chapman and Gibson versus Pattison. The details of these sordid affairs are recounted in an article by Nicholas G. Wainright, "Affair with Professor Pattison," in Pennsylvania Magazine of History and Biography, Vol. 61, p. 331-44, 1940.

Pattison in 1820 wrote an article entitled "Experimental Observations on Lithotomy" in which he wrote a description of the prostatic fascia that he claimed as his personal discovery. William Gibson, Professor of Surgery at the University of Pennsylvania announced that Pattison's description was "imperfect and awkward." He stated that in a book on "Surgical Anatomy" by Colles (of Dublin) there was a description of the very fascia that Pattison had claimed to discover. In further reaction, Pattison attended Gibson's lecture on lithotomy without invitation and immediately afterward posted on the wall of the University a request to the pupils to attend at a stated time Pattison's refutation of Gibson's position. Gibson then published "Strictures on Mr. Pattison's Reply to Certain Oral and Written Criticisms" in which he claimed that Pattison had assailed his private and professional reputation. He concluded by stating, "It gives me pleasure to allow that he (Pattison) may become, in time, an intelligent surgeon. I am willing to hope; his petulant invectives I have disregarded. His vain and abortive sarcasms I have not deigned to notice. Now I take leave of Mr. Pattison forever."

In the same year of 1820 Pattison was appointed to the Chair of Anatomy, Surgery and Physiology in the University of Maryland Medical School at Baltimore. He brought with him the anatomical collection bequeathed to him by his mentor, Allan Burns, which the University purchased for $8,000. This formed the basis of the Museum of the University of Maryland Medical School. Pattison held this position until 1826, at which time he returned to England.

In 1823 Pattison still in Maryland was married to a Philadelphia society leader, and had applied for an invitation to attend the Philadelphia Assembly to which his wife's family entitled her to membership. General Thomas Cadwalader, the brother-in-law of Dr. Nathaniel Chapman who had espoused the grievances against Pattison, happened to be manager of this time-honored group. He blackballed Pattison and was willing to assume all the responsibility for preventing him from appearing at the Assembly. Pattison promptly challenged the General to a duel that was carried out on April 5, 1823, in the vicinity of Newcastle on the border between Delaware and Maryland. Pattison's bullet hit Cadwalader's right arm, while that from the latter only pierced Pattison's coat at waist level. General Cadwalader never regained the full use of his right arm.

Pattison's return to England in 1826 was motivated by his desire to join the faculty of a newly organizing medical school in London as the Professor of Anatomy. No sooner did the school open than the faculty engaged in conflict among themselves and with the students. Pattison became embroiled on all sides. By early 1830 he attempted to have a demonstrator dismissed, but 21 students counteracted by asking for Pattison's ouster on the basis of "negligence, deficiency, and evident want of scientific knowledge." Pattison tried to have another faculty member dismissed as an "agitator", but the Warden (Dean) sided against Pattison. The upshot of the entire affair was that in 1831 Pattison's connection with the University was ter-
minated. His next move was to come to Jefferson that same year as Professor of Anatomy, a Chair he would hold for the next ten years.

On his arrival at Jefferson, Pattison made recommendations for renovation of the anatomical rooms. Not only were his proposed changes implemented, but the dissecting rooms were able to be opened a month earlier so that the students could have the opportunity of an extra month of anatomical work at no extra cost. All seemed to go well until January 1, 1833, at which time Pattison received a letter from a committee of the students.

The letter was a petition from the students to their Professor of Anatomy to answer the question, "Has the Parotid Gland ever been Extirpated?" They wished to validate that George McClellan, their Professor of Surgery, had indeed removed the parotid gland on three occasions. It was the contention of Dr. William Gibson that it was impossible to remove the parotid gland. Gibson was Professor of Surgery at the University of Pennsylvania and author of The Institutes and Practice of Surgery. It was the same Dr. Gibson who 13 years previously had locked horns with Pattison over the anatomical discovery of the prostatic fascia while Pattison was at the University of Maryland. It will be recalled that Gibson at that time took "leave of Mr. Pattison forever." At this latest occasion arguments unworthy of medical college professors flared between them.

Pattison lectured on "Has the Parotid Gland ever been extirpated?" at Jefferson Medical College on the evening of January 24, 1833, and the students published his answer for "Members of the Profession with their Respects." The truth was that McClellan eventually removed eleven parotid glands with only one death, from hemorrhage from the carotid artery. These operations were in no way comparable to the parotid removals of today in which great care is necessary to avoid facial nerve injury, hemorrhage or infection. McClellan's parotid operations were performed in the crudest fashion by plucking out the tumor without benefit of anesthesia. How ten of his cases would have survived seems miraculous.

Somehow or other Dr. Nathaniel Chapman, Professor of Medicine at the University of Pennsylvania, blamed Dr. Robley Dunglison for Pattison's coming back to Philadelphia and Jefferson in 1831, although Dunglison himself did not come to Jefferson as Professor of the Institutes of Medicine and Medical Jurisprudence until 1836. It could have been a previous Maryland connection. At any rate, some years earlier when Chapman had paid a courtesy professional visit to Dunglison in Maryland, he was dined and wined with champagne. On the reverse occasion when Dunglison came to Philadelphia, Chapman refused to recognize him. They both were active on committees of St. Stephen's Episcopal Church on Tenth Street near Market, but these associations failed to soften their ill will. The "Turbulent Scot" was the bone of contention between these two leaders in American medicine. Chapman became the first President of the American Medical Association in 1847 and Dunglison became known as the "Father of American Physiology."

These squabbles were a reflection of the hostility between the faculty members of the University of Pennsylvania and Jefferson. They were all men of distinction in which the emotional heat was unworthy of their dignity. Samuel D. Gross held Pattison in high regard and had come to know him personally in 1850/51 when they both were on the medical faculty of the University of New York. Gross records in his Autobiography that "it is no exaggeration to say that no anatomical teacher of his day, either in Europe or in this country, enjoyed a higher reputation. Pattison's forte as a teacher consisted in his knowledge of surgical and visceral anatomy and in the application of this knowledge to the diagnosis and treatment of diseases and of accidents, and to operations. His great charm in the lecture room was the earnestness of his manner and the clearness of his demonstrations. He was dignified, entertaining and instructive."

Pattison left Jefferson in 1841 to serve at the University of New York. He died there in 1851 at the age of 60. J. Marion Sims (JMC, 1835), later to become "The Father of Modern American Gynecology," considered Pattison his favorite teacher and named his first son Granville after him.
Robley Dunglison: Peacemaker and Walking Dictionary

At Jefferson, Robley Dunglison (Fig. 1.), Professor of the Institutes of Medicine and Medical Jurisprudence (1836-68), was the counterpart in medicine to Samuel D. Gross in surgery. Gross states in his Autobiography: “Of all the colleagues—nearly forty in number with whom I have been associated, Robley Dunglison was by far the most learned.” Personal physician to Thomas Jefferson, “Father of American Human Physiology,” and Dean of Jefferson Medical College (1854-68), he is also acknowledged as the “Peacemaker” on the Faculty.

Samuel X. Radbill, M.D., published The Autobiographical Ania of Robley Dunglison, M.D. in “Transactions of the American Philosophical Society,” December, 1963, which contains much anecdotal material from Dunglison’s own notes. Two such accounts by Dunglison describe his perilous crossings of the Atlantic from England to the United States. Had the dangers become fatal, the history of Jefferson Medical College would have been significantly altered.

In 1824 Dunglison had accepted an invitation on behalf of the Board of Visitors of the University of Virginia, at the behest of Thomas Jefferson, to fill the chair which comprised instruction in “anatomy, surgery, the history of the progress and theories of medicine, physiology, materia medica and pharmacy.” Initially, the Chair was not intended to educate and train physicians. The teaching of medicine was to proceed on historical lines with explanation of its successive theories since the time of Hippocrates for the purpose of affording such information as educated persons would want for the sake of culture. Mr. Charles Bonycastle (1792-1840) was simultaneously enlisted as Professor of Natural Philosophy and Thomas Hewitt Key (1799-1875) as Professor of Mathematics. The three youthful professors, ranging in age from 25 to 32, left London with their wives on October 27, 1824, bound for Norfolk, Virginia, en route to Charlottesville. At that time travel across the Atlantic was entirely by sail. Naively, they chose a private merchant vessel rather than a public passenger ship, believing that by paying somewhat more the accommodations would be more comfortable and the treatment more dignified. They did not reckon on one of the worst hurricanes in maritime history, on navigation without a chronometer (longitude calculated by quadrant and lunars), and a captain who would demean them as “philosophers”.

The trip was delayed six weeks in the English channel by a hurricane of the most destructive nature, followed by hardships and perils that Dunglison described in most graphic detail. It required three and a half months (fifteen weeks and two days) to reach Norfolk.

Fig. 1. Robley Dunglison, M.D. (1798-1869), Professor of Institutes of Medicine and Medical Jurisprudence (1836-68) and Dean (1854-68).

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Voyage from London to Norfolk (1824/25) (Robley Dunglison’s own Account)

"On the 27th of October 1824, accompanied by my wife I left London to join the ship Competitor which had dropped down the river to Gravesend. Being acquainted with the owners of this vessel, which was bound direct to Norfolk, in Virginia, and under the impression that we should be able to obtain more roomy accommodations than in one of the regular packets, we agreed to pay a larger price but made a serious mistake in adopting this course. All experience indeed, has demonstrated that much greater advantages, in all respects, are to be obtained in vessels, which are regularly engaged in conveying passengers, and whose success must be greatly dependent upon the degree of satisfaction which they afford.

"In an ordinary merchant vessel, the passengers are but incidents, and, too often, as in our case, only administer to the cupidity of the Captain, to whom every arrangement is generally left by the owners. At Gravesend, we found two of my colleagues, Mr. Bonycastle, who was the newly appointed Professor of Natural Philosophy and Mr. Thomas H. Key, the Professor of Mathematics, who was accompanied by his wife, an amiable and estimable lady.

"In the evening of the 27th, the ship weighed anchor, but was not able to proceed farther than the Nose, where we remained until the wind and tide favoured, when we made another attempt, but we could proceed no farther than the Downs, where we were detained, in miserable weather for some days; and when, at last, we weighed anchor, we were compelled, after a rough and disagreeable passage, to run in between the Isle of Wight and Portsmouth, where we cast anchor at the Motherbank. Here we were detained by unfavorable winds for three or four weeks, during which time we lived on shore first at the extravagant George Hotel; and, afterwards, at a private boarding house in the same street, where, if the landlady was illiterate, she at least made us comfortable. The bill she rendered us at our departure was such an amusing example of the want of the school master, that I kept a copy of it, as a curiosity, for a long time and published it in the Charlottesville newspaper. Only one or two specimens of it I recollect: 'left too on account, three shillings and three pence' was rendered 'left to in act three shilines and three pines.' At one charge for shrimps as I conceived I demurred, having had none of the article. It turned out, however, that the real word was shrimps or three pence!

"It was whilst we were lying at the Motherbank, that we were exposed to the severe storm, which will be recollected by everyone that witnessed it, as one of the most violent that was ever experienced on the southern coast of England more especially. The weather had been somewhat squally, and my colleagues, with Mrs. Key, had determined to pass the night in Portsmouth. Unluckily, we decided on staying on board. Previous to this, on the 18th and 19th of November, a hurricane had occurred, almost unprecedented in the physical history of Europe. It appeared to have originated on the coasts of England and Holland, whence it swept along the North Sea, causing dreadful shipwrecks on the coast of Jutland. Thence it traversed Sweden, prostrating whole forests in its course. Goteborg and Stockholm were in a state of the utmost terror, and suffered much. It is affirmed, indeed, that there is no instance recorded of such a storm.

"It was not, however, so severely felt at Portsmouth as the one of the 22 and 23rd of November. In the former, we were luckily on shore. In the latter, the wind increased during the after part of the day, until in the night and the next day, it blew a perfect hurricane and although we were lying at anchor, protected to a great extent, by the island over which the wind came, it appeared as if it had not been shorn of a portion of its terrific power by that circumstance. The vessel pitched so as to render all locomotion impracticable to a landsman. She was constantly dragging her anchor, and at one time, the danger became so imminent, that she would be driven ashore, that the carpenter was present for a long period with imminent, that she would be driven ashore, that the carpenter was present for a long period with
should be given by the Captain to give her a chance, a forlorn one, however, of running into the harbor of Portsmouth and in addition to all the horrors of that night, a large Indiaman was beached under our lee, having dragged her anchors and gone bodily ashore and during the night was constantly firing signal guns of distress. No lives, however, were lost. Fortunately, our ship held on to her anchors; and in the course of the following day, the weather abated; and we were rejoined by our companions who had been full of anxiety on our accounts.

"It is indeed impossible to imagine a more dismal night than we passed. My wife, however, conducted herself with great fortitude as she did on other similar occasions during the voyage; and her example was not lost on me.

"A few days after this the wind became favorable and we again set sail. It is curious, however, that on three successive Fridays we had made the attempt to proceed on our voyage but had as often failed, a much larger amount of coincidence by the way than is needed with the feeble minded to convert an idle belief into 'confirmation strong as proof of holy writ.'

"On this occasion our progress was not great. On the following morning we approached the Eddystone light house when the wind became boisterous and contrary and it was deemed by the Captain advisable to put into Plymouth, which was accordingly done. It was a most appalling spectacle to witness the immense amount of mischief and the great loss of life that had been the consequence of the great storm of the 22nd and 23rd inst. through which we had passed. Some of the shipping in the Sound had parted or cut their cables, and being unmanageable drove afoot of other vessels, carrying away their masts, bowsprits, etc. and altogether drifting on the rocks. Along the Devonshire coast, the desolation was of the most melancholy description; wrecks were to be seen in every direction, and valuable property lay floating about without an owner. A large vessel, the Hibernia, was dashed to pieces under the platform of the Citadel. Her cargo, which consisted of hemp and tallow, was scattered about in every direction and five of the crew were drowned. In the Catwater, the havoc was astonishing and melancholy. When our ship entered it, there were, in a narrow space not more than 300 yards in length, the remains of 16 fine merchantmen, all crowded together in one vast ruin and destruction; and it was believed, that had not the breakwater presented a bulwark against the terrific sea and tide coming in from the southward the lower part of Plymouth must have been almost demolished and scarcely a ship in port have survived the hurricane.

"During our stay of a couple of weeks at Plymouth, on the watch, at all times for the signal of the blue Peter when the wind became favorable we had an opportunity of becoming acquainted with some of the scientific gentlemen of Plymouth and Davenport; for example with Dr. Cookworthy, a respectable physician there and with Mr. William Snow Harris since knighted. He was then busily engaged with experiments on electricity and especially with a plan for protecting vessels at sea from the effects of lightning by a proper adaptation of the lightning rod. I also renewed my acquaintance as I remarked in an early part of these 'Ana' - with Mr. Derwent Coleridge - the son of the poet who had studied for the ministry, and held a curacy in Plymouth.

"At length after having spent six weeks in the channel, we succeeded, under favouring auspices, in clearing it; but still were unable to pursue the course that was desired by the Captain. We were driven toward the Azores; and on a beautiful day-Sunday we coasted so near one of the Islands, Terceira, as to be able to recognize distinctly with the perspective glass the people proceeding to and from Church. During the same night, however, one of those sudden storms arose, which are so common amongst the western islands, and we were driven with intense velocity between two of them having our mizzen topsail blown from its fastenings. The gust soon, however, subsided and the following morning we had the beautiful prospect of the sun illumining the lofty Pico - 7000 feet high. The wind had entirely ceased; but the long swell continued so that we were greatly incommoded by the heavy rolling of the vessel. In the
course of a few hours, however, a breeze sprang up and it was determined by the Captain that advantage should be sought for in the tradewinds and that the southern passage by the Bermudas should be attempted. Already did we experience the error we had committed in preferring a private to a public vessel. The ladies had fortunately laid in a private supply of certain articles, which were, nevertheless, to be furnished by the owners; but on reaching the Azores, the sugar gave out and for a long period, the tea and coffee had to be taken without it. Our skipper was an unpolished selfish person - a West Indian, he said by birth who had become practically well informed in his calling, employed the quadrant when opportunity occurred, and calculated his lunars, for we had no chronometer on board. He was, however, conceited with all and had no great liking, whatever respect he might have felt, for “philosophers.” Altercations consequently arose and before we reached Norfolk, I was the only one of the philosophers as he called my colleagues and myself with whom he held any communication; and with me it was restricted and constrained; for his manners were at times not a little offensive. His want of gentlemanly and proper consideration was sufficiently shown on our approach to Terceira, when he stated, in the presence of the ladies, that great danger was to be apprehended in the night in our passage through the narrow channels, which separated the western islands - a communication which it need be scarcely said might have excited intense alarm in their minds; had we not in some measure appreciated his character of which vanity formed a large part; and he felt desirous that great credit should be given him on the following morning for having navigated his ship safely through so many suppositious intricacies and dangers.

“But his want of delicacy and of that savoir faire which is often so beautifully exhibited by the experienced and considerate Captain, was more strikingly shown in a terrific storm which we experienced off Cape Hatteras. The vexed ‘Bermoothes’ maintained their character in our experience by a succession of squalls; and the proverbial dread of Cape Hatteras was not belied in our case.

If the Bermudas let you pass
Beware then of Cape Hatteras.

“We had been sailing rapidly at 12 knots the hour with almost a gale from the S.E. On going on deck in the evening a ‘bank’ of clouds appeared in the N.W. which I remarked to the helmsman, who replied that off the coast of America as he knew by experience the winds sometimes shifted round on the instant from S.E. to the N.W. so that ships were not infrequently taken aback and exposed to imminent danger. Fortunately, this man remained at the helm. I had retired to rest when I was suddenly aroused by the roaring of the wind and waves, and by the skipper calling down the companionway ‘All hands on deck, the ship’s going down.’ It appeared that, as the man at the helm had described, the wind changed on the very instant to the N.W. Being on the alert, however, he slightly altered the course, and prevented the vessel from being taken wholly aback. The danger was, therefore, of short duration. When the Captain’s coarse announcement was heard below everyone of course started up. We had no deadlights up, and if the ship had made sternway would have been the first to suffer. Mr. Bonnycastle rushed on deck, almost in puris naturalibus with his nightcap on and his appearance was so droll as to excite the laughter of the sailors, all immediate danger having passed away. Mr. Key who inhabited the apartment next to my own kindly but most tremulously called to me not to be alarmed. My wife exhibited great fortitude, scarcely uttering an exclamation, and I was surprised at my own freedom from agitation. Yet an anecdote occurred in her case which is worthy of being recorded, and exhibits with what equanimity evils of magnitude may be tolerated, whilst those of a trifling character may occasion intense feeling. In the following night, the gale from the N.W. still continuing, I was awakened by her sobbing bitterly and on inquiring into the cause, she said in great alarm she was sure ‘there was a mouse in the cabin.’

“In the evening of the storm we were under the belief that we should be able to reach Norfolk on the following day. In the morning, however, when I rose, everything had changed. The day before I
had tried the temperature of the air and the water, and found them to differ but little being about 72. We were then in the gulf stream. In the morning, the water was 72; the air at 44; and on going on deck the change of temperature was severely felt; and the gales well deserved the name given it by the sailors of 'the harbor.' All around were mists and water spouts of various shapes often presenting the appearance of distant ships. In this condition we were kept for nearly a week, lying to under a storm tripsail when at length the wind changed, and we directed our course to Norfolk entering between the capes on the 10th of February, 1825, and casting anchor in the river at Norfolk the same evening, after having eaten our last portion of fresh meat that day at dinner.

"At some distance from the capes we took a pilot on board with much more stolidity in him than in the Americans in general of that class, who are usually remarkable for the amount of their information especially on everything that relates to their own country. We were extremely anxious to learn from him whether Mr. Adams or General Jackson had been elected President of the U.S., but he was unable to inform us. We were soon, however, boarded by a loquacious custom house officer who gave us the necessary information and immediately made us acquainted with the notabilities of Norfolk and especially Senator Tazewell who appeared to him to be the lawyer and statesman par excellence."

The dominant factor in Dunglison's acceptance of his Professorship at the University of Virginia was financial. It provided the opportunity for him to marry his fiancee Harriette Leadam, the daughter of a practitioner of medicine in London, in October of 1824. The offer consisted of an annual salary of $1,500, free rent in one of the University pavilions, $50 tuition fee from each student attending only his class, $30 from each student attending his class and only one additional, and $25 from all other students attending multiple classes of which at least one was his. A five-year covenant secured by $5,000 guaranteed the arrangements. This represented an early example of academic tenure.

Dunglison on arrival at Norfolk proceeded to Charlottesville, the seat of the University, where he was to reside until 1833. These happy years were enhanced by intimate friendships with Presidents Jefferson and Madison. On May 17, 1825, scarcely three months after his arrival, Thomas Jefferson first requested the services of his new medical professor. Until he had met Dunglison, Jefferson had always distrusted physicians, feeling that nature was preferable. Dunglison shared the opinion that a conservative common sense approach of treatment in letting nature play the major role was correct. Jefferson wrote to Dunglison, "I had therefore made up my mind to trust to her altogether until your arrival gave me better prospects."

Jefferson's complaint was urinary frequency. A diagnosis of stricture of the urethra from an enlarged prostate was made. Dunglison alleviated the condition temporarily by passage of a bougie. Within the next two weeks, Dunglison called on the Ex-President eight times, making the trip from Charlottesville to Monticello by horseback. Mutual confidence and respect quickly developed and broadened into friendship with social visits that included Mrs. Dunglison. Between May 27, 1825, and April 7, 1826, a remarkable series of letters was exchanged between the physician and his patient-friend. These "Jefferson-Dunglison Letters" are among the last that Jefferson wrote to anyone and extend to within three months of his death on July 4, 1826, the fiftieth anniversary of the signing of the Declaration of Independence. These letters were first published in full in 1960 by the University of Virginia Press under the editorship of John Morris Dorsey, M.D. They contained a running dialogue in which Jefferson expressed gratitude for his medical services with protests about not being billed, counteracted by Dunglison's rebuttals about the honor and privilege of treating the former President and current University Rector, and repeated refusal to accept payment. During the last eight days of Jefferson's life, Dunglison remained at his bedside and closed his eyes in death.

Jefferson was aware of Dunglison's admiration for the grandfather clock which stood in his bedroom. This handsome eight-day wind-up time-
piece was marked inside to indicate the day of the week by the level of a weight. Jefferson often isolated himself in the recess of his study and bedroom for days at a time, such that the day of the week might readily have escaped him. Hence the device was especially useful. Jefferson was in debt near the end of his life, which explains why he could not bequeath the clock directly to Dunglison. He did, however, instruct his family to procure it for his physician-friend when his furniture would be sold upon his death. A misunderstanding existed at the auction.

Dunglison was unaware of Jefferson's wish. With intent to buy the clock he bid to his limit of $150 but lost to Nicholas P. Trist, an executor to Jefferson's will. Dunglison apologized to Trist for having innocently bid against the family, only to be told that it had been purchased on his behalf. It was later presented to Dunglison by Jefferson's daughter, Martha Randolph. The family also gave him the thermometer that Jefferson had used for 40 years.

One of the sons, William Leadam Dunglison, a merchant, inherited the Jefferson clock from his father. He bequeathed it to the Historical Society of Pennsylvania to which it was shipped by his widow in 1894. Keeping accurate time, it remained for many years on public display in the main exhibition room with a simple inscription:

THOMAS JEFFERSON CLOCK GIVEN TO HIS DOCTOR ROBLEY DUNGLISON LATER PROFESSOR AT JEFFERSON MEDICAL COLLEGE.

In 1992 the Historical Society was planning to return the clock to its rightful place in Monticello.

In the early 1980's, Thomas Jefferson University received an anonymous gift of a replica of the Jefferson-Dunglison clock reproduced by the Franklin Mint (Fig. 2). It stands in the Board of Trustees Room in the Scott Building as a testimony to the unusual relation that existed between these two remarkable men and the institutions they served.

Attending one of the greatest Presidents of the United States and serving as faculty head in the School of Medicine of the University of Virginia at
the age of 28 was only the infancy of Dunglison's career. He subsequently could claim as patients Presidents James Madison, James Monroe and Andrew Jackson.

Dunglison for a time participated actively in the research of William Beaumont, M.D., surgeon in the U.S. Army, on the gastric juice obtained from the fistula of Alexis St. Martin, a Canadian half-breed. He personally performed some of the experiments on the juice and outlined some chemical examinations, which when aided by his chemist friend Emmet, identified hydrochloric acid as a significant constituent. According to Radbill, of all the respectable scientists to whom Beaumont applied, Dunglison was the only one who came to his aid. Further, were it not for the pressure from his cousin Samuel Beaumont to publish his work alone, it is likely that Dunglison would have been an associate author of the famous "Experiments and Observations" (1825).

After nearly nine years at the University of Virginia, Dunglison accepted the Chair of Materia Medica, Therapeutics, Hygiene, and Medical Jurisprudence at the University of Maryland. This move was made in hopes that a climate farther North would benefit his wife Harriette who was suffering from rheumatic heart disease.

In 1836 Jefferson Medical College expressly created the Chair of Institutes of Medicine and Medical Jurisprudence for him. This started his 32-year association in the last 14 of which he would also serve as Dean and Treasurer.

On arrival at Jefferson, Dunglison encountered internal strife, the result mainly of jealousy and pettiness which was surprising among men of stature and repute. He was warned of this before coming, but by nature and intent he determined to remain nonpartisan in the quarrels. He refused to take sides in the struggle between George McClellan and the Board of Trustees which would not yield to attempted domination by the Founder. Dunglison's famous "Letter of Appeal" of March 9, 1839 to the Faculty established him as "the peacemaker". Edward L. Bauer, M.D. appropriately reproduced this classic letter in the appendix of his book on Jefferson history, *Doctors Made in America* (1963). It is worth quoting again as follows:

**Dunglison's Letter Of Appeal To The Faculty - 1839**

"I would call attention to the fact that not among the students but throughout the city, members of the faculty were grieved to be told, by some of the latter, that they had authority for stating that the Institution was "going to the Dogs," and that for certain reasons it must do so.

"It is as far from the object as it is from the province of the undersigned to lay charges against anyone of his colleagues of desiring to injure an institution to which he is attached. Such a desire would be discountenanced - by the fact that the Professors on the occasion of their recent reappointment engaged to exert their influence to promote the welfare of the Institution as at present constituted. It is the report that these sinister statements rest on the authority of a member or members of the Faculty, which is deplored and which is calculated to exert as baneful an influence on the Institution as if it were founded in truth.

"Against such reports - as vividly existing at this as at any former period, it seems to the undersigned of vital moment for the Faculty, individually and collectively, and, in the manner that may appear most fitting to them, to exert all their influence of the acts of the Board of Trustees; the undersigned has but one opinion, and this was openly expressed on the back of a communication, which - it was recently proposed - should be laid before the students on the contested subject of the Graduation fee.

"The acts of the Board have met with the most unqualified approbation of the undersigned, and it is not less gratifying to himself than it is just to that body, to attest the devotion and disinterestedness which they appear to him to have exhibited in the cause of the College. But even were their acts other than they seem to the undersigned to be and to have been, the whole history of similar institutions has shown that hostility on the part of
the Professors cannot fail to destroy the institution in which it prevails. The power of managing the affairs of the institution is vested in the hands of the Trustees, and all experience shows that they will not be driven from its exercise by any hostile movement on the part of the Faculty. It is scarcely to be expected, that, in directing the complicated machinery of an extensive institution, the Board of Trustees can always act in such a manner as to give entire satisfaction, but where this is not the result, it is with the Faculty respectfully to represent the matter to the Board and not to allow their objections to become public; - still less the impression to go abroad that the acts of the Board are objected to by the Professors, and likely to interfere with the prosperity of the school.

"In like manner it is scarcely to be expected that entire harmony of sentiment can exist amongst all the members of a Faculty accidentally brought together, owing to their possessing certain intellectual requisites. Yet harmony of action is essential as it is practicable, and this is all that can be meant, when the importance of harmony amongst the members of an institution is spoken of. Nothing is more calculated to produce excitement amongst a body of readily impressionable and enthusiastic gentlemen than an assertion resting or presumed to rest on any competent authority, than that differences of opinion and action exist amongst the Faculty on any measures which materially affect the interests of the class.

"In the preceding statement the undersigned has restricted himself to topics which appear to him after full and mature, and he is persuaded - unprejudiced consideration, to be exerting a most malign influence on the onward course of a great Institution, and feeling as he does, he would regard himself culpable, did he not express in the most frank and explicit manner his sentiments to his Colleagues. So satisfied indeed is he, that no exertion of talent, or of zeal, or both combined on the part of his Colleagues or himself can counteract the bad effects of the influences to which he has referred, unless they are firmly and energetically repressed by every member of the Faculty, that should this course not be adopted, the question may and he fears will, arise on his part - and he will regret for many reasons, the occasion - whether his continuance in an Institution so circumstanced, can be productive of advantage either to it or himself. The undersigned has always thought, that under an energetic Faculty actuated by ordinary prudence and judgement, there is ample space in the city of Philadelphia, for two noble Institutions, and he sees no reason whatever to modify that opinion."

Robley Dunglison, M.D.
"Professor of the Institutes of Medicine and Medical Jurisprudence"

Dunglison's qualities as a teacher were most authoritatively described by his colleague, Samuel D. Gross.

"As a lecturer, ready, fluent, entertaining, and instructive, Dunglison had few equals. His presence was commanding, his voice mellifluous, his manner graceful. He never was at a loss for a word. If he had any fault it was that he talked too rapidly and too much in a monotone. Perhaps, too, he did not make points enough. He never, as he respectfully told me, went into the presence of his class without due preparation, and the consequence was that he was always abreast of his subject."

Gross comments further in his Autobiography:

"As a husband, father, brother, neighbor, friend, there never was a kinder or better man. In all the relations of life he was a model. As a profound medical scholar, ages will probably elapse before the profession will have another Dunglison. His executive ability, his industry, and his power of endurance were remarkable. As Dean for many years, he performed his arduous duties with promptness and fidelity. He did not approve of frequent faculty meetings, believing from long experience, that they were prejudicial to the interest of the school — an opinion fully concurred in by his colleagues. The fact is, he was in every respect conservative; perhaps at times a little too much so. He thought that seven chairs in any college were quite enough; and he never could see good in an auxiliary summer school. He had a large, well-selected and costly library. System was the great-

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est factor in his success as a writer and as a teacher. Practice he never coveted, and he made no effort to get it... His mind was one of the best balanced I ever knew... He was a fluent talker, an insatiable reader, and a rapid writer... The chirography of Dunglison was so angular and so crabbled that it was difficult to decipher it. Before I became his colleague, I often received letters from him, which, after a cursory perusal, I generally laid aside for a more careful reading the next day. Printers, however, soon became used to his copy.”

Dunglison’s Visit to England

Dunglison’s wife, Harriette, died of rheumatic heart disease in March, 1853, after 29 years of marriage blessed with five surviving children. This prompted him to take the time to make a long-anticipated trip back to England to visit his aged mother. Accordingly, in April, 1854, he sailed from New York on the Pacific, this time a steam ship.

Much progress had been made since Dunglison’s arduous transatlantic voyage by sail nearly 30 years previously. These years had seen the conversion of power from sail to steam. In 1827 an all-steam crossing was made by the British-built Dutch ship Curacao, a ship of 438 tons with steam-driven paddle wheels of 50 horse power each. By 1839 there were 776 steam-propelled ships registered in the British Isles alone. A merchant named Samuel Cunard formed a company that obtained a subsidy from the British Government to carry mail, and built four ships that started the famous Cunard line. Their 750 horse-power enabled them to cross the Atlantic in 14 days. In 1850, in the United States, a competitive Collins line achieved temporary dominance in transatlantic crossings.

Dunglison’s April, 1854, crossing to England was made in a commercial passenger steam-ship and accomplished in what was top speed of twelve days. His account is as follows from the Waterloo Hotel in Liverpool:

“My dear Willie (his son)
“I have just concluded my dinner, and as my luggage and paper have come up to the Hotel, I at once sit down to apprise you of my safe arrival after an agreeable voyage, somewhat agitated owing to head winds, but without any actual storm. I stood, my dear Willie on the poop, waving my handkerchief towards you, but could not descry you and Mr. Trist (former lawyer for Thomas Jefferson). I wished you, however, to go away with the impression that I did so. That first day I enjoyed my meals, but on the day after, the wind was dead ahead, and the pitching of the ship soon disordered me greatly, so that for two or three days I did not venture down stairs to dinner or indeed to any meal. Gradually however, I became well, but immediately afterwards I was attacked with a violent fit of gout in the knee. On the Sunday I was confined to the state room, and, for a day or two, was an object of commiseration to my fellow passengers. The joint rapidly swelled, however, so that the pain soon subsided. I took my colchicum freely and for the last few days was able to take exercise on deck. Today I have been somewhat tired, for although we reached Liverpool at 8 A.M. we were not able to enter the dock until past 12; and I did not get away from the Custom house until past four. Not one of my articles was touched, tell Richard (another son, JMC, 1856), that all his affairs went safe. I was called up as Professor Dunglison, and was most civilly received by the recording officer, who peeped in himself. The lid was soon closed down and I was let off. By the by, did you recollect that we left Harper’s at the St. Nicholas. I hunted for it in vain in my carpet bag, and it all at once occurred to me that we had left it with the janitor at the Hotel. Our company on board was a very pleasant one. My roommate turned out to be one of the best of fellows. He is a highly respectable man, the agent of the great Pulteney estate in New York embracing originally 1,000,000 acres. Geneva is situated in it. He was on his way to England on business connected with the estate and was all that I could desire as a room mate; exceedingly kind and attentive to me and anxious to anticipate all my wants, another example of the fallacy of judging from first and imperfect impressions. Lord Mountcashel was most amiable, but
not very profound. I had many communications with him on subjects connected with the United States, on which so far as his ability had permitted he has gathered much interesting matter. The O'Sullivans were agreeable also. I did not touch on filibustering, and on other subjects he was rational and well-informed. She (Mrs. O'Sullivan) begged to be introduced to me, telling me that she had heard so much and so often of me that she wished to know me. His mother was on board. She is a sensible, well-mannered old lady. I shall not at present specify others, for all made themselves agreeable to me, and I endeavoured to return the compliment. The Captain is an admirable seaman, and I like him altogether. He was very kind to me and told me the day after we set sail that somebody had spoken to him of me, but he could not recollect who it was. He strongly desired me to come to the Waterloo Hotel; I was going to the Adelphi, and I am not sorry that I followed the Captain's wishes. We had 164 passengers on board, and it is not possible to imagine more unanimity. Dr. Magoon officiated on the Sabbath, but I was too unwell to hear him; and on Wednesday night last, we had an amateur concert, very creditable to those who took part in it. On Friday the 7th, inst. I was called out of bed to see an iceberg, and in the course of the day we saw many, none at a less distance than ten or fifteen miles. On her last voyage home the Pacific had her copper rubbed off by the ice, and her cutwater injured, condition which retarded us and made our voyage nearly twelve days. Everything during the voyage, with the exception of the inseparable concomitant sea sickness - and in my individual case, the gout, was pleasant and although I sadly missed my own dear but now lamentably restricted circle, I experienced as much comfort as could be experienced under the circumstances."

Dunglison proceeded from Liverpool to Keswick, Cumberland, his birthplace, where he found his mother still alive. She was striking in her turban which was the traditional style of the day. Unfortunately, her memory had failed and she was unable to recognize her son. He was greatly disappointed and frustrated after many hours of chatting about the "old days". She would generally conclude by saying: "So you have seen Robley. He was the best boy that ever was."

Dunglison spent the summer with friends, relatives and medical colleagues, including visits to museums in London and Edinburgh. His originally booked return to America aboard the Arctic had to be changed to an earlier sailing on the Pacific because of an urgent message from Dr. Robert M. Huston, Dean of Jefferson Medical College. Huston begged him to return home early in September because of the infirm state of his health and "as he thought some changes would have to be made in the assignment of college duties which he found himself unable to continue."

**The Arctic Sank!**

According to Dunglison, "How providential was this change. The Arctic which sailed on the 21st of September was run into by an iron propeller and almost all the passengers were lost including some acquaintances of my own — Professor Reed and Mr. Jacob G. Morris."

**Return To America, September, 1854**

"The first portion of our passage for five days was stormy. To employ the language of Captain Nye, 'it was a January voyage, saving the temperature.' I suffered from seasickness for three days, but missed my attack of gout. My sister Mary suffered greatly from seasickness. My sister Sara Ann by no means so much. At the end of eleven days, we arrived at New York on one of the hottest days of an unusually hot season, where I met my sons William and Richard; and, on the following day, I was in the bosom of my family; pleased with the long voyage I had made, and the numerous objects of interest I had seen; but delighted to be again with my dear children."

Fig. 3. Residence of Robley Dunglison at 1115 Girard Street.
Dunglison Becomes Dean
(1854-68)

"Dr. Huston I found to be in bad health, and very desirous to see me. He was anxious that I should take the offices of Dean and Treasurer from him. A meeting of the Faculty was accordingly called; and although I had the greatest objection to assume the offices, I scarcely felt myself at liberty to refuse. I, accordingly, was appointed at my desire, 'Dean and Treasurer pro tempore.' I had been so long the Dean's Counsel that the duties would probably be easier to me than to anybody else, and one or two of my colleagues seemed to feel that the School would be greatly benefitted by my exertions in this direction. I made therefore no more difficulty."

Back in Philadelphia in September, 1854, Dunglison resumed his literary labors, his Professorship of Institutes of Medicine and Medical Jurisprudence, and the added duties of the Deanship. In the 14 years of the latter office he signed his name to 2,388 diplomas, while as Professor from 1836 to the time of his Deanship he had signed 2,616, making a total of 5,004. Many of these may be seen in Jefferson's archives.

Dunglison’s residence was at 1115 Girard Street, located in the block between Chestnut and Market Streets and from 11th to 12th Streets (Fig. 3). This area is now known as Girard Square, since it was once owned by Stephen Girard, financier and founder of Girard College. The houses are replaced by commercial buildings and the street is called Ludlow. Former Girard Street must not be confused with Girard Avenue.

Dunglison’s busy life was located within easy walking distance from his home, - Jefferson Medical College at 10th and Sansom, the College of Physicians at 13th and Locust, the Academy of the Natural Sciences at Broad and Sansom, the American Philosophical Society at 105 South 5th Street, the Musical Fund Society Hall on Locust between 8th and 9th, and Saint Stephen's Church at 19 South 10th Street.

Dunglison’s textbook, Human Physiology (1832), dedicated to Ex-President James Madison, was the first comprehensive treatise on physiology by an American author. It earned for him the title of “Father of American Physiology” and immediately became a leading classbook for students. Periodically updated, it reached the seventh edition by the time of his death. In 1833 his A Dictionary of Medical Science was the first of this type in our country which through 23 editions was a classic for 40 years. He accordingly became respectfully known as a “walking dictionary”. Like Samuel D. Gross he made translations from the German and French. By publishing his systematic lectures he created the first formal textbook of hygiene on this side of the Atlantic. His other textbooks included Practice of Medicine: General Therapeutics or Principles of Medical Practice, New Remedies with Formulae on their Preparation and Administration, and General Therapeutics and Materia Medica. Sales of his books totaled more than 150,000 copies.

Equally astonishing were his contributions to lay journals on such topics as Road Making, English Fashions in the 17th Century, Construction of Words from Sounds, English Pronunciations, Penitentiary Discipline, Universities, Legends of the English Lakes, Richard the Lion-Hearted and Blondel, Superstitions, Americanism, Early German Poetry, Etymological History, Sanskrit Language, Ancient and Modern Gymnasia, Cradle of Mankind, English Orthoepy (correct diction), Canals of the Ancients, Jeffersonian Biographical and Obituary Notes, and a voluminous dictionary for the blind in raised type.

Unfortunately, Dunglison’s life after return from England, at age 56, was saddened by his mother’s failed state of mind and the recent death of his wife. He never remarried. Added to this was a steady decline in his own health.

In the last 15 years of his life, Dunglison suffered from gout which made him quite lame. He tried to not let this disrupt his routine. Whenever he could not walk to the Medical College he would take a carriage and would sit down while delivering his lectures. If this were not enough, he also suffered from heart disease, manifested by angina and edema of the lower extremities. By the winter of 1866/67 he was forced to ride to and from the
College. He improved somewhat during the summer, which permitted him to carry out his duties of what would be his last session in 1867/68 as both Professor and Dean. On April 13, 1868, Dunglison wrote his letter of resignation to the President and members of the Board of Trustees. The original is on file in the historical society of Pennsylvania, and reads in part as follows:

"Gentlemen:

"It is with infinite reluctance that I feel compelled to lay before you my resignation of the chair of "institutes of medicine and medical jurisprudence", which was created for me by the Board of Trustees, thirty two-years ago.

"The pressure of organic disease induced me, about a year since, to address my colleagues; and to propose my withdrawal from the School, - under the apprehension, entertained by me, that I might not be able to fulfill, satisfactorily, the responsibilities that devolved upon me. My colleagues, however, for reasons in the highest degree complimentary to me, requested, 'that I would continue my connection with the School until, in my judgement, a final separation should become absolutely necessary.' I, therefore, took no farther steps, but continued as Professor and as Dean and Treasurer of the Faculty, until now, when it seems to me, that such a separation has become necessary."

After elegant expressions of thanks to his colleagues and the Board for their support and his wishes for the best welfare of the College, he concluded:

"I am gentlemen,

with greatest respect,

Your obedient, obliged and humble servant,

Robley Dunglison"

One of Dunglison's contemporaries wrote: "I listened to his last lecture, rendered doubly sad by the fact that it was upon death — always the closing lecture of his course — which, it was certain must soon overtake himself. His voice was throughout solemn, yet most clear and distinct, and he controlled his feelings in a wonderful degree, while many of his young auditors, conscious that they were hearing him for the last time, sat mute and melancholy. Profound silence prevailed, and soon the large hall, which the venerable professor had graced with his presence for nearly a third of a century, knew him no more forever."

Two later giant professors at Jefferson would have to lecture toward the end of life while seated, - namely, John Chalmers DaCosta (1933), the Samuel D. Gross Professor of Surgery, and Thomas McCrae (1935), the Anna Magee Professor of Medicine.

The memory of Dunglison is alive and well at Jefferson today. In 1970 a unique plan was initiated in which students could enter into a combined M.D./Ph.D program under the joint auspices of the Medical College and the College of Graduate Studies. The first two years were to be spent in the Medical School and the next five followed in combined M.D./Ph.D work. Since 1985 such students have been named Dunglison Scholars and are aided financially by stipends and fellowships.

In 1984 the University restored Dunglison’s grave in East Laurel Hill Cemetery and added an adjacent commemorative granite slant-faced headstone (Fig. 4). This is one of the graves highlighted during the scheduled tours in this historic cemetery.

Mr. Jack Tannett, the great-great grandson, a descendant through Robley Dunglison’s daughter Emma, has taken special interest in collecting information about his illustrious ancestor. A resident of Alberta, Canada, he has visited Robley’s birthplace in Keswick, England, and has written a history for his relatives. The family heirloom of a silver tray with gold-lined liqueur cups, given to Dunglison by President James Madison, is pictured in Figure 5. In March, 1992, Mr. Tannett spent several days in Philadelphia visiting Robley’s old haunts and is pictured in front of the Dunglison portrait, painted posthumously by Samuel Bell Waugh in 1876 (Fig. 6).

It has been stated before that if George McClellan, the founder of Jefferson Medical College, was its George Washington, then Robley...
Dunglison, the peacemaker, was the Abraham Lincoln. In the nineteenth century Samuel D. Gross was Jefferson's greatest surgical scholar and Dunglison its greatest medical scholar.

Fig. 4. Gravesite of Dr. and Mrs. Robley Dunglison in East Laurel Hill Cemetery, with adjacent commemorative headstone.

Fig. 5. Heirloom of silver try with gold-lined, liqueur cups given to Dunglison by President James Madison.
The 1819 graduating class of the Medical School of the University of Pennsylvania lists four men who became outstanding in the history of Jefferson. They are George McClellan (Founder and Professor of Surgery, 1824-38), Jesse R. Burden (Member of the Board of Trustees, 1838-75 and President pro tempore during the last two), Samuel Henry Dickson (Professor of Medicine, 1858-72), and John Kearsley Mitchell (Professor of Medicine in the “Famous Faculty of 1841”, 1841-58). The focus of this article is on the last named. During the years 1824 to 1875, one or more of these men occupied a position of prominence at Jefferson. They never became intimate friends or knowingly cooperated for the welfare of the school. It is understandable, however, why they may not have become acquainted as students. They came together only for lectures in a class that graduated 102. The lectures were only for four months in each of two years, without laboratory or clinical experience, and each
student had his private preceptor. While the University of Pennsylvania strongly opposed the founding and early existence of Jefferson Medical College, it must be freely acknowledged that it educated and supplied many of the professors that contributed to its survival and fame.

In 1818 the first effort for a second school in Philadelphia had been headed by William P.C. Barton, Professor of Botany in the University of Pennsylvania, but a charter was refused by the State Legislature. Furthermore, a resolution of protest against the granting of a charter for another school was organized by students of the University, headed by none other than John Kearsley Mitchell, who ironically was destined to become a celebrated Professor of Medicine in Jefferson Medical College. Just as the resolution was proposed, with expectation of unanimous support, "a tremulous piping voice rose in the back row, which showed with logic and perfect lucidity the need for another school." The voice was that of Benjamin Rush Rhees, a student from another class who also was to become a Professor at Jefferson in Materia Medica and Institutes of Medicine, 1825-30, and First Dean, 1825 - 27. His rebuttal created confusion and failure of the resolution to pass.

Our subject, John Kearsley Mitchell (Fig. 1), was born in Shepherdstown, Virginia, on May 12, 1793. His father, Alexander Mitchell, a Scottish physician, had emigrated to this country just shortly before his son's birth and died before that son reached the age of nine. It was the start of four generations of physicians in two of which there would be much literary talent. At the age of 14 John Kearsley was sent to the care of a guardian in the village of Ayr, in Scotland, to become educated. After several years of preliminary study he attended the University of Edinburgh where he came under the influence and teaching of some of the most brilliant of Scottish literary personnel and completed his education in the arts. On return to Virginia in 1816 he studied medicine under the preceptorship of Dr. Kramer, but the following year came to Philadelphia. There he became a private student and protege of Dr. Nathaniel Chapman, Professor of Medicine at the University of Pennsylvania. As already noted, he graduated in 1819 along with three classmates who were to play important roles in the history of Jefferson Medical College.

Mitchell's relationship with Chapman is ironic in that Chapman was an avowed enemy of Jefferson. Chapman not only secured young Mitchell's leadership for student objection to Jefferson's proposed charter but also openly opposed George McClellan. Indeed, Chapman was challenged to a duel by Granville Sharp Pattison, Professor of Anatomy at Jefferson, a duel that was fought by his brother-in-law, General Thomas Cadwalader, resulting in permanent injury to the latter. Chapman also remained unfriendly to Robley Dunglison, because the latter had been influential in bringing Pattison to Jefferson. Another irony that cannot be laid aside was that Nathaniel Chapman's grandson, Henry Cadwalader Chapman, became Professor of Physiology at Jefferson.

Following graduation, Mitchell took an ocean voyage to China and then briefly settled into private practice in Philadelphia. His health failing him (tuberculosis?), he took a second trip to China as a Ship Surgeon with lasting benefit. He then accepted a lectureship in chemistry in Dr. Chapman's 'Medical Institute" while building a successful private practice. He published a small volume of poems and also wrote lyrics for some of the
popular songs of the day. In 1822 he was appointed Physician to the Philadelphia Alms House. It will be recalled that his classmate, George McClellan, had worked in the Alms House as a student. After six years of service, Mitchell resigned this charity position to take a similar appointment in the Pennsylvania Hospital. He retained an interest in chemistry and published a series of experiments on the “Penetration of Gases” in the American Journal of the Medical Sciences. This included work on the solidification of carbonic acid which earned him the notice of learned societies on both sides of the Atlantic. He still found time to continue writing poems and songs in fine literary taste (Fig. 2).

Mitchell was appointed Professor of the Theory and Practice of Medicine at Jefferson in the “Famous Faculty of 1841.” By this time Jefferson had survived its early struggles and was attaining national recognition. In the year 1854 the Jefferson classes were the largest that had ever been assembled at one time anywhere in the world, and 270 graduated. Mitchell achieved equal teaching excellence with Joseph Pancoast, Robley Dunglison, Franklin Bache, Charles Delucena Meigs, Robert Huston and Thomas Dent Mutter.

In 1850 Dr. Mitchell was the first in Philadelphia to administer ether anesthesia to a woman in labor (at Jefferson). Dr. Charles Delucena Meigs, Professor of Obstetrics shared the opinion of Dr. Hodge, Professor of Obstetrics at the University, that women conceived in sin and should bear the pain of childbirth. Furthermore, Meigs set out one day to prove to the class that ether was lethal by anesthetizing a goat until it ceased to breathe. As he was finishing his lecture the goat recovered consciousness and began to stagger around, much to the amusement of the class. It is said that Mitchell thereafter, whenever he encountered Meigs, would inquire about the health of his billy goat. This anecdote appears in Edward L. Bauer’s Doctors Made in America.

Dr. Mitchell was a Renaissance man, equally well versed in the arts and sciences. He wrote a monograph on “The Cryptogamous Origin of Malarious and Epidemic Fevers” (1849) which suggested that infectious diseases might be caused by small organisms, an idea in advance of his time. He belonged to the important scientific and social organizations of his time and was in demand on public occasions.

Several years before his death in 1858, Dr. Mitchell suffered a stroke with partial paralysis that slowed him down, but still allowed him to continue his lectures with only minimal interruption. In his last year of life he missed a class only on one occasion. Death resulted within one week from “pleuro-pneumonia” when he was 65.

Mitchell left behind him a wife and six children, one of whom, Dr. S. Weir Mitchell, continued his father’s fame in literature and science and will be the subject of a special feature. John Kearsley Mitchell lived at 1100 Walnut Street (Fig. 3) from 1837 to 1858 (site of the present Jefferson Medical Office Building) and is buried in Woodlands Cemetery (Fig. 4).

Fig. 2. Lyrics by John K. Mitchell set to music (1839).
Jacob M. DaCosta (JMC, 1852): Master of Physical Diagnosis

Jacob Mendes DaCosta (Fig. 1), the seventh Chairman of Medicine (1872-91), embodied the state-of-the-art knowledge of physical diagnosis of his time not only in his writings but in his practice. He must be recalled among those past giants in Jefferson history who made lasting contributions not only to the College but to medicine as a whole. His broad cultural background, extensive medical education, talent for teaching, diagnostic ability, excellent scientific articles, prominence in organizations, and genial personality all combined to establish him as a unique professor. The details of his career provide a fascinating chronicle.

Early Life

The roots of the DaCosta family date back to the sixteenth century in Spain and Portugal. Probably because of the Spanish Inquisition, the DaCostas fled to Holland and England. The forebears of John Chalmers DaCosta (The first Samuel D. Gross Professor of Surgery, 1910-33) came from the Spanish line, while those of Jacob Mendes DaCosta came from the Portuguese. Both these DaCostas became outstanding at Jefferson but were not related. Jacob Mendes also was a generation earlier than John Chalmers. In any event, both of these DaCosta lines
found their way to England.

The ancestors of Jacob Mendes DaCosta left England early and migrated to St. Thomas in the Virgin Islands, where for several generations they acquired great wealth as bankers and planters. His father, John Mendes DaCosta, and his brother Charles lived lives of leisure. Jacob was born on February 7, 1833. At his age of four, the family moved to Philadelphia. Later in life he recalled a great fire at this departure and also remembered the ship that carried them. He was educated at first under private tutors until the age of 13. Then he was sent along with his brother Charles to friends in Dresden, Germany, where he studied for three years. He learned to read, write and speak fluently in German and French, which for a time became his dominant languages. He also acquired a reading knowledge of Latin, Spanish, Portuguese, Italian and Dutch, along with a heavy dose of the classics. This was a remarkable education for a young man about to study medicine at a time when the requirements for admission were practically nil.

At about this time (1849), the family suffered financial reverses that fortunately were not entirely ruinous. Jacob had sufficient funds to choose a career in medicine under the preceptorship of the famous Professor Thomas Dent Mutter of Jefferson Medical College. Nevertheless, he had to make his own way as did most other young men. In the preceptorship as well as in subsequent medical school courses, a life-long friendship with John Hill Brinton evolved. He and Brinton, while undergraduates, demonstrated the specimens removed by Professor Mutter to their classmates and later became colleagues in practice and professors at Jefferson in medicine and surgery respectively. DaCosta married Brinton’s sister, Sarah Frederica, in 1860 and thus they became brothers-in-law. Eakins painted both their portraits, the DaCosta now located in the Pennsylvania Hospital and the Brinton in the National Gallery of Art. A third member of their Jefferson Class of 1852 was William Smith Forbes who became the Professor of Anatomy and whose portrait, also by Eakins, is now in the Eakins Gallery at Jefferson.

DaCosta was but 19 at the time of his graduation, despite the requirement of age 21. His thesis was “Epithelial Tumors and Cancers of the Neck.” In September, 1853, at the instigation of Monsignor Doane, he was made a Master of Arts of Burlington College, New Jersey.

In the grand style of his time, DaCosta completed and enhanced his medical education by spending 18 months in the most famous clinics of Paris and Vienna. His intimate knowledge of French and German permitted him to obtain considerably more benefit than the average visiting American. His chief interest was in pathology and internal medicine. In Paris he lived in the Latin quarter and attended the demonstrations in the Hopital des Cliniques, Hotel Dieu, la Charite, la Salpetriere, Lourraine, and l'Hopital du Midi. He attended the lectures of Professors Trousseau, Orfila, Nelaton, Velpeau and Ricord. Time was also found for instruction in water-color painting. In Vienna he became associated with the German physician and writer August Klaatsch, as well as a pupil and friend of Josef Hyrtl, who made him the gift of a collection of microscopic specimens. For a time he was joined by his classmate, Dr. John Hill Brinton, whom he piloted around to the various clinics.

Dr. DaCosta returned to Philadelphia in 1853 and opened an office at 212 South Eleventh Street. He supplemented his embryonic practice by work at the Moyamensing House of Industry and by the

Fig. 1. Jacob Mendes DaCosta, Chairman of Medicine (1872-91).
instruction of students in physical diagnosis. These classes of ten or twelve students or even graduates in medicine were given for three months at a time in his private office. They became very popular and were filled in advance. This teaching prepared him for his lecturing on clinical medicine at Jefferson Medical College some years later.

DaCosta early manifested an interest in clinical investigation. His inquiry into the nature of yellow fever evoked the appreciation of Rene La Roche, who was the recognized authority of that time. In 1854 he edited Kolliker's *Manual of Human Histology* for which his training with Hyrtl had qualified him. His article on "Researches into the Nature of Typhus" increased his reputation as "a clear and brilliant writer as well as an original investigator."

**Civil War Years: Turner's Lane Hospital and DaCosta's Syndrome**

Philadelphia became a major hospital center as the Civil War progressed. By the end of the conflict, there were 27 hospitals and 25,000 beds in or surrounding the city. A number of specialized infirmaries developed, one of which was the U.S. Army Hospital for Injuries and Diseases of the Nervous System. The Turner's Lane Hospital for this purpose was opened in August, 1862, with pavilions for 400 men. In this setting a number of Jefferson graduates earned lasting fame for their observations and articles. One team composed of S. Weir Mitchell (JMC, 1850), George Morehouse (JMC, 1850), and William W. Keen (JMC, 1862), collaborated in a joint authorship of *Gunshot Wounds and Other Injuries of Nerves* (1864). The other notable investigator was Jacob Mendes DaCosta who from studies of over three hundred cases was able to publish his definitive report on *Irritable Heart: A Clinical Study of a Form of Functional Cardiac Disorder and Its Consequences* in 1871.

DaCosta's report on "Irritable Heart" represents the thorough work of a young clinician using his skill in history taking and physical diagnosis in a large series of carefully selected cases to establish the classic description of a condition that would pass through various names as DaCosta's Syndrome, Soldier's Heart, Irritable Heart, Effort Syndrome, Neurocirculatory Asthenia, Anxiety Neurosis, or most lately claimed to be the Mitral Valve Prolapse Syndrome. This was an impressive example of nineteenth century purely clinical research without laboratory aid. DaCosta was thus a pioneer in the field of functional heart disease.

**DaCosta as Teacher**

DaCosta's magnum opus was *Medical Diagnosis*, published in 1864, which went through nine editions in 38 years. It was a guide to the knowledge and discrimination of disease, grouping morbid states "according to their marked symptoms." It was translated into German, French and Russian, while acclaimed as the most elaborate work on diagnosis in the English language.

Appointed lecturer in medicine at Jefferson in 1866, DaCosta was the first to rise through the ranks of a department to become the Professor of the Theory and Practice of Medicine in 1872 (Fig. 2). He succeeded Samuel H. Dickson who had held the Chair for the previous 14 years. He earned fame as a teacher, lecturer and author both at home and abroad. Indeed, in company with the elder Gross and Joseph Pancoast, he completed "the great trio."

Samuel D. Gross, in his *Autobiography*, relates the following anecdote: "A gentleman of London, a man of wealth, the subject of a thoracic fistula consequent upon an attack of chronic pleurisy, was informed by an Italian organ-grinder who was one day playing before his window that he had, some years before, suffered in Philadelphia from a similar disease, of which he had been cured by Dr. DaCosta. He forthwith embarked for the United States, and in due time found himself in that professor's office. He had been under the care of different physicians in London without material benefit, and was determined to see what American skill might have in store for him." [Ed. Results of the consultation are unknown.]

Gross credited DaCosta for aid in the third edition of his Elements of Pathological Anatomy by stating: "I was assisted in its preparation, especially
the microscopical portion, by Dr. J.M. DaCosta, now my distinguished colleague, who was well informed on the subject.” Gross also related: “In the autumn of 1857 I founded, along with Dr. J.M. DaCosta, the Philadelphia Pathological Society, at which I was elected the first president and Dr. DaCosta the first secretary... The idea of instituting such a society was first broached by myself to Dr. DaCosta, whose feelings were at once warmly enlisted in the matter; and within a few weeks after we had talked it over its preliminary meeting took place in my office.”

DaCosta regarded himself foremost as a teacher. His clinics were not only well attended by the students but also by outside visitors. One of his students was overheard to say: “DaCosta always puts the thing in a nutshell.” One example of his skill in diagnosis was often repeated “of a man being brought into the reception room of the hospital, when Dr. DaCosta, earnestly regarding him, declared him to be suffering from an abscess of the liver; looking again, still more earnestly, he pronounced him to have three abscesses, which proved to be the case.”

It would be burdensome to record the titles of all his literary contributions, but examples may be mentioned to show the diversity of his interests: Inhalations (1867), Harvey and His Discovery (1878), Starvation Fever (1880), The Fluorides in Medicine (1881), Nervous Symptoms in Lithaeemia (1881), Pathology of Tubercle (1882), The Higher Professional Life (1883), Cocaine in Hay Fever (1885), and The Significance of Jaundice in Typhoid Fever (1898).

DaCosta was a physician’s physician. When the foremost British Surgeon, G.W. Callender, fell ill while touring in the United States, he demanded to be attended only by DaCosta. The administrators of St. Bartholomew’s Hospital sent DaCosta a resolution of thanks for the successful outcome of his case. DaCosta was a consultant in the deaths of James Aitken Meigs and the younger Gross. He
also attended the elder Gross in his last illness and performed the autopsy.

In addition to his responsibilities in Jefferson's first detached Hospital in 1877, DaCosta was an attending physician to the Protestant Episcopal Hospital, the Pennsylvania Hospital, the Philadelphia Hospital, and consulting physician to the Children's Hospital.

DaCosta was a member of numerous learned societies both in this country and abroad: the Association of American Physicians, the American Philosophical Society, the Academy of Natural Sciences, the American Academy of Arts and Sciences of Boston, the New England Historic-Genealogical Society, the American Academy of Political and Social Science and the Medical Society of London. He served as President of the Philadelphia College of Physicians from 1884 to 1886 and again from 1895 to 1898. Jefferson granted him the LL.D. degree in 1884; and the same degree was awarded by the University of Pennsylvania (1892) and by Harvard (1897).

Retirement Years

It came as a surprise in the Spring of 1891 when DaCosta resigned his professorship at the age of 58. This was soon after his delivery of a powerful valedictory address to the graduating class in the Academy of Music. He was promptly elected to Emeritus status. His retirement years were spent in his estate in Villanova, Pennsylvania (Fig. 3 and 4).

Perhaps DaCosta’s early retirement was occasioned by his loss of strength after an attack of influenza in 1890. A severe illness in 1894 further impaired his strength and was followed by attacks of angina pectoris. For several months he had a premonition of death before its sudden occurrence on September 11, 1900, at the age of 67. He was buried in Woodlands Cemetery (Fig. 5) alongside his wife, Sarah Frederica who predeceased him in 1889. Their son, Charles Frederick, became a member of the Philadelphia Bar.
The subject of a famous Thomas Eakins portrait, W.S. Forbes has been viewed by thousands of art lovers, most of whom have had little understanding of the man and his noteworthy accomplishments. Perhaps no Jefferson Professor had a more varied career, characterized by war and peace, controversy and litigation, adventure and excitement, in addition to his surgical and academic achievements. His greatest area of life-long interest and dedication, however, was the study and teaching of anatomy.

William Smith Forbes was born in 1831 at Falmouth, Virginia, into an old colonial family (Fig. 1). His great grandfather was Brigadier General Forbes who commanded the second expedition against Fort Duquesne in 1758 during the French and Indian War. He began his education at Fredericksburg Academy and Concord Academy where major emphasis was on the classics. Apparently, his decision to become a physician was made early and he began the study of medicine under Dr. George Carmichael. In 1850/51 he attended lectures at the University of Virginia but in November, 1851, he came to Philadelphia and matriculated at Jefferson Medical College. His experiences were more varied than usual. His Jefferson professors included famed Joseph Pancoast in Anatomy, Thomas Mutter in Surgery and John Kearsley Mitchell in Medicine, but he also became an office student under Pancoast. Upon his graduation in 1852, he attended instruction in medicine, surgery, and diseases of the chest at Pennsylvania Hospital under William Pepper, Edward Peace, and William Wood Gerhard. He also
attended E. Parrish's School of Practical Pharmacy. In 1853, he became Resident Physician at Pennsylvania Hospital, serving until March, 1855, a total of 18 months. Also, at the Medical Department of the University of Pennsylvania in 1854/55, he attended lectures in anatomy by Professor Joseph Leidy, the great Philadelphia naturalist. His anatomical teaching thus included the most eminent anatomists of his time.

It is not clear what motivated the next phase of Forbes' career. It is assumed that adventure was a factor, his British heritage an attraction, and the Crimean War a challenge. In any case, he obtained a letter from the British Consulate in Philadelphia certifying him as a physician and a letter from Secretary of State John J. Crittenden to British authorities in London "offering his services as an American Volunteer Surgeon to the British Army in the Crimean War." He sailed for England in April, 1855.

His route to the war zone was slow and circuitous. After a few weeks in London, during which he had a chance encounter with Charles Dickens, he spent a month in Paris and then traveled in Switzerland, Austria and Germany until late August. Sailing for Constantinople, he was shipwrecked near the Gulf of Smyrna but escaped with his baggage and arrived at his destination on September 16, 1855. He then served at the British Barrack Hospital in Scutari, Turkey, on the surgical staff until the War ended in February, 1856, with the Treaty of Paris. Although having worked only five months, the British were so impressed with his work that they offered him "a commission with the permanent rank of Major in the British Medical Services." This he declined since it would have required giving up his American citizenship. A historic sidelight at the conclusion of his Crimean service was the gift of her instrument kit by Florence Nightingale in memory of their association and the moral support he had given her as a hospital administrator.

Once more seeking further experience in his major field of interest, he took a course in surgery and anatomy in Paris and returned to Philadelphia in the summer of 1856. Forbes' Philadelphia career began in 1857 with a medical practice and his opening "the College Avenue Anatomical School" which served mainly dental students and continued until 1871. After marriage to Miss Celanire Bernoudi Sims in 1859, his life was soon seriously complicated when the Civil War challenged his loyalties and sensibilities. As a Southerner, he was drawn toward the Confederacy and his brothers quickly joined the Confederate side. But he was also a Philadelphian married to a northern woman. He decided to support the North. His first assignment as Acting Assistant Surgeon was examining recruits. In November, 1862, he was appointed Surgeon of Volunteers by the War Department with the rank of Major, first in the Port of Philadelphia, but later he served as Medical Director of the Thirteenth Army under General Grant, with whom he became well acquainted. He resigned his commission in 1863 and returned to Philadelphia where for a time he was a Contract Surgeon at the Summit Hospital. Having been previously appointed Surgeon to Episcopal Hospital in 1862 he resumed this duty but also took a refresher course at the University of Pennsylvania and received the M.D. degree on March 14, 1866, with his thesis "The Treatment of the Wounded at Vicksburg."

Prior to the Civil War, there were no formal le-

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Fig. 1. William S. Forbes (JMC, 1852), Professor of Anatomy, 1886-1905. Author of the definitive Pennsylvania Anatomical Act of 1883.

Legend and Lore

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gal sources of bodies for anatomic dissection in Pennsylvania. Most of the bodies used for this purpose were obtained by informal arrangement and involved criminals and paupers. In 1866, Forbes attempted to have the State legislature pass a bill to provide bodies in a fair and legal manner but the bill failed. The following year he enlisted the aid of the College of Physicians of Philadelphia and a committee of three, Dr. Forbes, Dr. Samuel D. Gross, and Dr. D. Hayes Agnew, was appointed to resubmit the Anatomical Act. The bill was finally passed in March, 1867, but an amendment limited it to Philadelphia and Allegheny Counties, a restriction which would cause trouble later. Forbes continued his efforts to enlist support for a more comprehensive solution to the problem, but fifteen years would elapse before the matter came to a head.

Meanwhile, Forbes pursued his surgical career. After closing his anatomy school in 1871, he was still ambitious toward academic advancement. In 1873, Jefferson Professor of Anatomy, Joseph Pancoast, announced his plan to retire and competition for his post was keen. The Trustees, at an impasse, asked Pancoast to delay his retirement for one year, which he did. The following year, the problem was no more easily solved and in spite of active efforts to obtain the appointment, Forbes failed when Dr. William Henry Pancoast, son of the incumbent, was appointed. Forbes continued his surgical career, advanced to Senior Surgeon at Episcopal Hospital and went on as Professor of Anatomy at the Pennsylvania Dental School. It should be noted that during the nineteenth century professors of anatomy usually practiced and often taught surgery. In fact, skilled anatomists were often regarded as the most able surgeons. The chair of anatomy was thus desirable for reasons not limited to that discipline and Forbes surely regarded the appointment as important to his surgical career.

During this period, Forbes also engaged in medical writing. Although he published few papers, he observed the tercentenary in 1878 of the birth of William Harvey (1578-1657) with a presentation to the College of Physicians of Philadelphia concerning William Harvey's understanding of the capillary circulation. Forbes held that Harvey had a mature conception of the route of blood from arteries to veins while others insisted that he had no facilities for microscopic study and his description merely implied such a process without actually demonstrating its structure. Forbes' paper began a debate among his colleagues, Professor Jacob Mendes DaCosta supporting the negative side of the question.

An important change in Forbes' career occurred in 1879 when he accepted his first post at Jefferson as Demonstrator of Anatomy under Dr. William H. Pancoast. This appointment carried with it some responsibility for procurement of bodies for dissection, the increase in the number of medical students requiring more material. Forbes perceived the need for amendment of the Anatomy Act of 1867. Furthermore, the 1867 Act was too loosely drawn and resulted in illicit export of bodies to other states. Meanwhile, the shortage of bodies was relieved by dealing with persons of dubious legality who were able to deliver bodies without questioning their source but that with little doubt resulted from grave robbery. In fact, Forbes had openly described the traffic in bodies during the period prior to the introduction of the legislative bill in 1867. When speaking of the handling of unclaimed bodies, he wrote: "They are therefore buried, and are afterward obtained surreptitiously by a third party, the so-called 'resurrectionists', who engage in a degrading traffic and sell them to the highest bidder, and as is well known that the anatomists of medical schools in distant states send here every winter to supply their dissecting rooms, the debasing trade is stimulated and the practical teachers here find themselves in competition with each other."

The matter was brought to a head late in 1882 with the arrest of three men in the act of transporting six bodies from Lebanon Cemetery to the anatomy department at Jefferson. The arrests were organized by Pinkerton detectives in the company of newspaper reporters after rumors of night-time traffic had surfaced. The story received extensive publicity, not limited to Philadelphia, and as a re-
sult Dr. Forbes and his associate, Dr. Lohman, were arrested and charged with conspiracy to despoil graves. Both were released under $5,000 bail but public opinion, stirred up by sensational reporting and threats of riot by angry crowds posed threats to Drs. Forbes and Lohman as well as to Jefferson. At the trial in March, 1883, it was brought out that grave robbing was going on and that Jefferson had received bodies from such sources. The key question for Forbes related to whether or not he had identified such bodies or arranged for their acquisition. He was able to show that he was entirely innocent of the charges and was acquitted, whereas the actual robbers were convicted.

Friends and colleagues rallied to the support of Dr. Forbes. A fund was raised to aid in his defense and he received many letters from anatomists and surgeons. Dr. D. Hayes Agnew, Professor of Surgery and former Demonstrator of Anatomy at the University of Pennsylvania was called as a witness and supported Forbes in his acquittal.

As a corollary to the grave robbing events, Forbes perceived the need to end the sub rosa procurement of anatomical material by modification of the 1867 Anatomical Act to prevent the export of unclaimed bodies from the State and provide for sufficient material for legitimate purposes. Under that Act, the Coroners had claimed the bodies without any specified responsibility for assignment to medical facilities, often resulting in the illicit sale of bodies by the Coroners or their attendants. Forbes offered a resolution that the Philadelphia County Medical Society send a Committee to Harrisburg to promote modification of the Act. This would require that Coroners turn over all unclaimed bodies to an Anatomical Board which would distribute them equitably to the medical facilities. The action was one step in a process which recent evidence has proved more involved than previously recorded, but finally on June 13, 1883, the Anatomical Act of 1883 became law in spite of opposition from Coroners and a relatively un receptive legislature.

The mechanism by which the Anatomical Act became law has been commonly ascribed to the persistent efforts of Forbes. Only recently has it become apparent that although he was mainly responsible for gaining the legislative supports for the 1867 Act, there were other persons who carried much of the burden for the Act of 1883. Principal among these was Dr. William J. McKnight (JMC, 1884) the story of whose role is related in Chapter VI. The evidence for this has only recently been developed at Jefferson and includes the participation of other Jefferson people, the Philadelphia Anatomical Association, which organization was responsible for the drafting of the Act, and Dr. William H. Pancoast who initiated the action to present a Bill to the legislature at a time which many regarded as unfavorable. It is of interest that Forbes attended only one of the special meetings of the Anatomical Association between January 4 and February 9, 1883, for the drafting of the Act. It is entirely likely, therefore, that Forbes was preoccupied at the time with his defense against the charges pending and was glad to have his colleagues assume the responsibility.

Forbes, vindicated by his victory in court and relieved of the responsibility of involvement in anatomical procurement by the new law, continued as Demonstrator of Anatomy for three more years during which he appears to have enjoyed the enthusiastic approval of the medical students. In 1886, he succeeded Dr. William Henry Pancoast as Professor of Anatomy. The students expressed their esteem by presenting him with a gold watch on September 30, 1886. Although now 55 years of age, Forbes brought great skill and experience to his new role as the last in a series of anatomist/surgeons for which Jefferson had become noted. In 1887, he resigned as Senior Surgeon to the Episcopal Hospital, and the Jefferson Board appointed him to conduct the general surgical clinic in addition to his duties in anatomy.

The next few years saw a great increase in the areas of responsibility for Dr. Forbes. Although he enjoyed the surgical clinic, he found that the anatomical program had increased to the point where he needed relief. He was doing more writing and research including the development of a lithotrite, a device for crushing urinary bladder stones by him and his son John S. Forbes, an engineer. The num-
ber of medical students had increased and his addition of the laboratory of microscopic anatomy in the past few years ("and now furnished by me with forty microscopes"), made a real difference in the hours of teaching time. His comment on his memorandum to the Board of Trustees of November 21, 1894, was: "In holding the general surgical clinic for the last seven years, I have endeavored to do my entire duty to the best of my ability, especially has this been the case in regard to teaching and practicing the relief of the diseases of the urinary bladder, (stone in the bladder, inflammation of the bladder and its appendages), having lost but one case during my entire term of service, and that one from no fault of my own."

The Board granted his request with the provision that Forbes present five clinics yearly "upon the surgery of the bladder, prostate, and the removal of calculi" (Fig. 2). In 1898, he published a paper describing the "liberation" of the ring finger by dividing the accessory tendon, thereby purporting to improve its mobility in piano players. Forbes was a member of the Academy of Natural Sciences, the College of Physicians of Philadelphia, the usual Medical Societies, the Loyal Legion, and the American Surgical Association. Although widely known for his activities as the originator of the Anatomical Act, his greatest satisfaction appears to have been the teaching of anatomy to medical students.

Honors accrued during the next few years, probably the best of his life. He was honorary president of the W. S. Forbes Anatomical League, the student society organized in 1903 as the first anatomical society in any American School of Medicine. He very much appreciated the students' expressions of respect when he was presented with a humidor in 1900 and a formal gold-headed black cane in 1901. In 1905, he was given a loving cup by the Medical Alumni of the University of Pennsylvania "in recognition of his eminent services to the cause of Medical Science" (Fig. 3). His portrait, commissioned by the Jefferson classes of 1905-1908, was painted by the famous artist, Thomas Eakins, and is regarded as a medical and artistic

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**Fig. 2. Surgical Clinic of Dr. Forbes (ca. 1890, Forbes second from left). Note suspended container of irrigating solution.**
Fig. 3. Loving Cup presented to Dr. Forbes in 1905 by Medical Alumni of University of Pennsylvania. (Donated by Forbes Family and exhibited in Eakins Gallery).

classic (Fig. 4). Eakins' lifelong commitment to anatomy in art, which had its beginning at Jefferson, made this portrait and its presentation at the June 2, 1905, Commencement Exercises uniquely memorable.

Following successive attacks of angina pectoris, Dr. Forbes died December 17, 1905, only five days after delivery of his last lecture to Jefferson students (Fig. 5). Following services at Holy Trinity Church, 19th and Walnut Streets, his ashes were interred in the family plot in Fredericksburg, Virginia.

Forbes' anatomical career proceeded from informal anatomy instruction through his own School of Anatomy to his Jefferson experience in organizing a modern program in a leading medical institution. It included the addition of histology as a vital part of the discipline and the successful conclusion of his determination to provide appropriate material for dissection. He is remembered for his efforts in obtaining passage of legislation toward the latter purpose, but he was also revered by Jefferson students as a dedicated master teacher, a role which evolved late in life but no doubt the one he himself regarded most highly in a varied and productive career.

Fig. 4. William Innes Forbes, III (JMC, '73), great grandson of Dr. Forbes, photographed with Eakins 1905 portrait of Professor Forbes. The portrait, reproduced on the cover of this volume, is exhibited in the Eakins Gallery, Jefferson Alumni Hall.
Striking parallels with the career of George McClellan will introduce Samuel H. Dickson, a lesser known Professor of Medicine at Jefferson. First, born within one year of each other, they both attended Yale College for their preliminary education. Second, they graduated from the Medical School of the University of Pennsylvania in 1819. Third, in 1824 while McClellan was founding Jefferson, Dickson was co-founding a medical college in Charleston, South Carolina. Fourth, they both held professorships at Jefferson for 14 years - McClellan in Surgery (1824-38) and Dickson in Medicine (1858-72). McClellan has been widely heralded, but Dickson deserves better remembrance for the honored place he also holds in Jefferson’s history.

Samuel Henry Dickson (Fig. 1) was born in Charleston, South Carolina, on September 20, 1798, of Presbyterian Scotch-Irish parents. He entered the sophomore year of Yale College in 1811 (at age 13) and graduated with honors in 1814. He promptly started the study of medicine with a preceptor with whom he remained for five years. In 1817, even before entering medical school, he rendered services as an unlicensed physician to victims of Yellow Fever in Charleston. He attended two courses of lectures at the Medical School of the University of Pennsylvania from which he obtained his M.D. degree in 1819, as stated above as a classmate of George McClellan. Like McClellan, soon after graduation, in addition to entering general practice, he started a series of lectures to city students. Along with Drs. Ramsay and Frost he established a medical school in Charleston which opened its doors in 1824. In this school Dickson was appointed Professor of the Institutes and Practice of Medicine. This school, like the one simultaneously established by McClellan in Philadelphia, experienced internal strife. The difference was that this school collapsed with the resignation of Dickson while Jefferson survived. Dickson later founded another institution, the Medical College of South Carolina, which remained successful. (In 1838, McClellan was dismissed from Jefferson, but founded another Philadelphia school, the Medical Department of Pennsylvania College in Gettysburg, which survived until the time of the Civil War).

Dickson taught with eloquence on the Practice of Medicine in Charleston until 1847, when he was called to the University of New York. After three years there he was urgently invited again to fill his old Chair in the Charleston Medical College. At his return he received an ovation and public dinner. There he taught and practiced with success until 1858, when at the death of John Kearsley Mitchell, he was called to the Chair of Medicine at Jefferson. He thereupon sold two of his three homes in the South and left his six slaves (whom he called “my negroes”) in charge of the third. This was the worst of times for a slaveholder to move to Pennsylvania, an abolitionist stronghold. His maintenance of sympathy with the Confederate cause was to do him much harm. Since Samuel D. Gross was his colleague through-

Fig. 1. Samuel H. Dickson, M.D., Chairman of Medicine (1858-72).
out fourteen years at Jefferson, it is well to quote impressions from his Autobiography.

"Dr. Dickson entered the faculty of the Jefferson Medical College in 1858 as the successor of Dr. John K. Mitchell, who died the previous April. Austin Flint (from University of Louisville School of Medicine) was the choice of some of its members; but the wishes of the Dean (Robley Dunglison), who was all powerful with the Board of Trustees, prevailed, and everyone acquiesced in the appointment. Dickson was at this time a resident of Charleston, South Carolina, where he was remarkably popular; and as nearly two-fifths of our classes were drawn from beyond Mason and Dixon's line, his selection was regarded, apart from his eminent fitness, as a compliment to our Southern medical friends. But the war of the Rebellion soon followed his appointment. Dickson warmly sympathized with the people whom he had so recently left, and who had always so much loved and admired him, and the supply of Southern students was cut off. I have elsewhere stated that nearly two hundred left us in a body soon after the publication of the ordinance of secession. The consequence was that our income was greatly diminished, and Dickson, who was never rich, suffered more than any other member of the Faculty. In consequence of an indiscreet expression in an intercepted letter addressed by him to a friend in Mississippi he came near being shut up in Fort Lafayette. During these trying times he had our warmest sympathy. We all loved him, and did all we could to make him comfortable, if not happy. After the close of the war he accepted the inevitable; but the Southern students were unable to return to our school, and Dickson remained a poor man when, on the 31st of March, 1872, death overtook him. As a practitioner he never took root in the soil of Philadelphia. He had no family practice, and Philadelphia doctors shirk consultations if they can. His funeral was private. The pallbearers were his late colleagues, who laid him with heavy hearts in Woodlands Cemetery."

Dickson's death was ascribed (in an obituary of Medical Times, May 1, 1872) to "the result of the growth of a large solid abdominal tumor seated over the aorta, which had itself been diluted for a long series of years. It was probably of mesenteric origin, and by its pressure on the intestines had often given rise to serious obstruction and intense suffering. No postmortem examination was made."

Gross continued his evaluation of Dickson by saying that he "was a fine scholar and an excellent writer, with an intense love for the beautiful in nature and in art... He possessed in an eminent degree what some of the strong men whom I have known were destitute of — native refinement, gentlemanly instincts, winning manners, and high breeding. Dickson was not a clinical teacher; and his colleagues willingly gave him an assistant (Dr. Jacob Mendes DaCosta) to assume that portion of the duty of his chair... As a colleague and as a companion he was equally charming... He was of slender form, medium height, with good head and light blue eyes. For many years he was an invalid from Nephralgia, for which he was obliged constantly to take large doses of morphia. He was seldom seen on the street without gloves; and in company he was a center of attraction."

Gross concludes that "despite his amiability and marked refinement, he had a singular fondness for witnessing executions. He said to me, a few years before his death, that he had attended not fewer than thirty-nine of them and that his desire was to witness more! If Macaulay may be believed, even William Penn was not free from a similar penchant... I have seen one man swing from the gibbet, and that sight was enough for me. He had choked his wife to death, and richly deserved his fate which depended largely on the strength of my testimony."

Dickson himself stated: "I have passed my whole life in minorities — political, religious, professional — I was one of the few Democrats in College in the War of 1812 — I was a Clay Whig and Union Man in the midst of Calhounism and Nullification. I am a Southern Slaveholder living (1860) among Abolitionists. I am a Unitarian — Rationalist — Free-thinking man. I have always been a Humorist - almost alone for much of my life. I became an early convert as a Contagionist and quasi-curist."

According to Bauer in Doctors Made
Fig. 2. Gravesite of Professor Dickson in Woodlands Cemetery, Philadelphia.

in America the word quaicurtinist probably is meant to mean Quarantinist.

Dr. Samuel X. Radbill in Annals of Medical History, 4:382-9, 1942, reports that he came into the possession of the memorandum book of Dr. Dickson which "is of prime importance in the early annals of the medical history of the South." This ledger book, about five inches by eight and bound in leather, contains a catalog of his books, an autobiography, list of his diplomas, memberships in societies, classes to which he had lectured, a list of his private office pupils, and a catalog of his library. Fortunately, Dr. Radbill reports many of the salient points of information from this ledger in his article. Although Dr. Radbill bequeathed his papers to the College of Physicians at his death, this ledger is currently not in that collection. It is evident that Dickson's attainments were beyond those of solely a scholarly physician. Among his community interests, besides co-founding a medical school, he helped to pioneer railroads in the South, played a role in numerous enterprises, and held strong political convictions. Prominent among his medical contributions were: Elements of Medicine; Essays on Life, Sleep, Pain, and Death; and Studies in Pathology and Therapeutics.

Dickson's health was never robust. Although he lived to be seventy-four he was constantly threatened by tuberculosis, manifested by pulmonary hemorrhages and other symptoms. In 1825 he traveled to the North and the following year made a tour of Europe in hopes of improvement. According to Gross, most of his children died from this scourge. His first marriage was to Miss Elizabeth B. Robertson, daughter of Major S. Robertson. She died in 1832 and in 1834 he married his sister-in-law, Irene Robertson, who died in 1842 after giving birth to a child that lived only a few hours. His third marriage was in 1845 to Miss Marie Seabrook Dupre who survived him by one year. She shares his tombstone in Woodlands Cemetery (Fig. 2).

The final parallel between Dickson and George McClellan is that they both died poor after having served Professorships at Jefferson for fourteen years each, - Dickson because of his Confederate sympathies and McClellan from unwise speculation in real estate.
Of the 249 contributions to the medical and surgical literature by William Williams Keen, Jr. (JMC, 1862), more than 50 were written about diseases of the nervous system. He was a pioneer in the innovation and development of many neurosurgical procedures, a deep and abiding interest that began during the Civil War when he was assigned to Turner’s Lane Army Hospital in Philadelphia to care for war injuries of peripheral nerves. Nevertheless, over the next two decades there were still those who believed that touching the brain would result in instant death. Therefore, until 1870, trauma was considered the only indication for intracranial surgery. Moreover, pre-Listerian wound sepsis and the lack of knowledge about cerebral localization were the main deterrents to such surgery. In the 1860s and 1870s, these difficulties were ameliorated to the extent that brain surgery became more feasible.

Thus, in the “fullness of time,” Keen was a prepared instrument at the advent of Theodore Daveler, a 26 year-old carriage maker from Lancaster, Pennsylvania, into Keen’s surgical practice. The history revealed a cranial injury at three years of age with a residual left fronto-parietal scar. In February, 1885, occurred the onset of generalized, epileptic seizures, and eventually right hemiplegia, aphasia, severe visual loss, and chronic headache. In the Spring of 1887, the patient was admitted to St. Mary’s Hospital in Philadelphia for study. Various neurologists (including S. Weir Mitchem) and an ophthalmologist examined the patient. It was concluded that an intracranial tumor, related to the childhood head injury, was the likely diagnosis, but surgery was considered unwise because of “irritative discharges which might be lighted up by an operation.” The patient was therefore discharged to the care of Dr. M.L. Davis of Lancaster (who originally had made the correct diagnosis), to be treated with iodides and arsenic for possible intracranial syphilis, the alternative diagnosis.

Seizures and other symptoms continued, precipitating the patient’s readmission to St. Mary’s Hospital on November 30, 1887, as hospital case number 878. The aforementioned scalp scar was considered an important landmark delineating a probable underlying tumor. Hence, primitive thermography (skin temperatures) was utilized to confirm such a concept and determine exactly where the patient might be a hothead. The results were inconclusive. Surgery was planned.

The import of it must have been well appreciated since all the carpets were removed from the operating room; the entire room and furniture were scrubbed with carbolic acid, again sprayed throughout the room the morning of surgery; in-

Fig. 1. Autopsy specimen of brain from which Keen successfully removed a tumor in 1887. Center defect is site of previous tumor.
 Instruments were boiled for two hours; new, clean, deep sea sponges were treated with carbolic acid and corrosive sublimate; the patient’s head was shaved, scrubbed with soap and water, then with ether, and then covered with wet sublimate dressings. The surgeon’s “hands and nails were, of course, most carefully cleaned and disinfected by soap and water, alcohol and sublimate solution.”

At 1 p.m. on December 15, 1887, in the presence of Doctors Grove, Mears, Roberts, S. Weir Mitchell, Mills, White, Oliver, Taylor, the resident hospital staff and Messrs. LeConte and Goodwin, medical students, ether anesthesia was established and left frontal craniotomy began, centered over the ancient scar, the eventual opening measuring two and a half by three inches. Incision of the dura disclosed a frontotemporal meningioma which Keen enucleated with his finger (Fig. 1). Profuse hemorrhage was controlled by ligatures, hot water douching, and sponge pressure, followed by primary closure. The tumor was benign, measuring $\frac{7}{8} \times \frac{1}{2} \times \frac{1}{4}$ inches, and weighing 3 ounces, 49 grains. Almost two hours were required for the operation.

The patient had a stormy postoperative course characterized by blood clot, hernia cerebri, cerebrospinal fluid leak, fever, aphasia, and paralysis of right arm and face. He gradually improved and was discharged on the 84th postoperative day, although with a permanent, sunken skull defect.

Over the ensuing years, Keen saw the patient periodically in his office. In later years the patient’s condition deteriorated with occasional convul-
sessions, progressive blindness from optic atrophy, and a bedridden state for one to two years prior to death, because of generalized weakness. Davele died on January 29, 1918, 30 years and 45 days postoperatively. Aller G. Ellis, M.D. (JMC, 1900), Jefferson pathologist, journeyed to Lancaster, performed the autopsy and brought the brain back to Jefferson. Ellis wisely retained a rim of bone around the huge tumor bed, a porocerebhal, subarachnoid cyst communicating with the left lateral ventricle. The tumor had not recurred, and was totally absent from the brain. The tumor and the brain were displayed for many years in the museum of Jefferson’s Department of Pathology.

This writer used both the tumor specimen and the brain in teaching over a period of eighteen years, and took them both to various medical meetings including a scientific exhibit at the Centennial Session of the American Medical Association in June, 1947. When the museum of the Department of Pathology was dissolved in the middle 1960s its chairman, Dr. Peter Herbut, invited the writer to take whatever specimens interested him. Therefore, he preserved the tumor specimen in his locker for about ten years, while the brain itself was kept in the Neuropathology Laboratory at least into June, 1978. Sometime thereafter, the brain disappeared, without a trace or explanation, despite an intense search.

In early 1976 the tumor specimen was lent to a U.S. Bicentennial Celebration exhibit, “Learning, Revolution, and Democracy,” at the Penn Mutual Towers in Philadelphia. On February 5, 1976, the responsible, extramural archivist reported the tumor missing and allegedly discarded by a careless workman.

Thus, this was the tragic end to an otherwise glorious saga, the tale of the first incontestably documented surgical cure of an intracranial tumor in the United States, if not in all the world.

William J. Hearn (JMC, 1867):
Master Clinical Surgeon

On the Eakins Gross Clinic, the physician depicted draping an anesthetic towel over the face of the patient was a youthful assistant destined for a distinctive career of his own. This was Dr. William Joseph Hearn (JMC, 1867) who had already in 1875 been designated as Dr. Gross’ favorite “anesthetizer.” His inclusion in the portrait gave evidence of his having very early achieved a position of importance in Jefferson’s Department of Surgery.

Dr. Hearn (Fig. 1) was born in Laurel, Delaware, December 27, 1842. Upon graduation from Jefferson Medical College in 1867, he returned to Delaware where he practiced successfully for three years, but desiring “greater opportunities” he moved to Philadelphia in 1870. He immediately joined the Gross Clinic at Jefferson, no doubt through the efforts of Dr. F.F. Maury, his preceptor who was Gross’ Chief of Clinic and private assistant. Hearn was appointed “anesthetizer” at once

Fig. 1. William Joseph Hearn, M.D. (JMC, 1867), Master Clinical Surgeon, Clinical Professor of Surgery, 1894 (Emeritus, 1910).

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and soon succeeded Dr. Maury as Gross' private assistant. Upon the opening of the new Jefferson Hospital in 1877, he advanced to Chief of Clinic as Maury became ill and in 1879 died of tuberculosis. Hearn's status as "anesthetizer" continued through Dr. Gross' retirement in 1882, at which time his son Samuel W. Gross became Professor of the Principles of Surgery and Clinical Surgery and appointed Hearn Surgeon to the Hospital. Gross in his System of Surgery commented: "At my clinic at the Jefferson Medical College Hospital, where until recently I employed chloroform in all my operations, no mishap from its use has ever occurred. Dr. Joseph Hearn, who has been my anesthetizer for the past eleven years, has given it in many hundred cases, at all periods of life, and under every variety of disease and accident without any serious occurrence." Hearn was also anesthetist for Professor Joseph Pancoast, having administered ether anesthesia for him during the last five years of his extensive Jefferson experience.

During this period, Hearn's own surgical skills were developing. Participating in much of the inpatient surgery with Gross and Pancoast and directing the Surgical Outpatient Department he became established as a dedicated and progressive surgeon. Upon his appointment as Surgeon to the Hospital, he was able to develop his own ideas. Having served as Assistant Demonstrator of Anatomy (1871-1879) and Assistant Demonstrator of Surgery (1879-1882), he had also conducted a course in operative surgery and bandaging in connection with Dr. McClellan's School of Anatomy. (This School was established in 1873 with private students and expanded in 1881 as the Pennsylvania School of Anatomy and Surgery. Dr. George McClellan (JMC, 1870) was the grandson of Jefferson's founder, George McClellan, M.D.)

In addition to his increasing responsibilities at Jefferson, Dr. Hearn in 1882 was appointed to succeed Dr. John H. Brinton (JMC, 1852) as Surgeon to Philadelphia General Hospital upon Brinton's election as Professor of the Practice of Surgery and Clinical Surgery at Jefferson. This further enlarged Hearn's experiences and broadened his perspectives. He later advanced to Senior Surgeon at Philadelphia General.

After a brief period during which Hearn shared the skepticism of many physicians regarding the role of bacteria in medicine, he became a strong convert to the bacterial theory of infection. Opinion at Jefferson was divided early on with several strong opponents of the theory being quite vocal. Hearn required objective evidence of the infectious role of bacteria but having been persuaded, became a strong advocate of antiseptic and aseptic surgery and wrote a paper describing his careful techniques. He was also credited with being one of the first to provide instruction in microscopy and in the histology of tumors, the latter effort no doubt reflecting his contacts with Samuel W. Gross who was responsible for early surgical pathology of tumors at Jefferson.

Hearn became known as a skilled surgeon with excellent judgment and unusual diagnostic capabilities. As such he was often referred to as a "physician's surgeon." In 1894 he was promoted to Clinical Professor of Surgery. He was innovative to a degree and reported his efforts in a number of papers, articles and monographs but published no textbooks. The numerous publications of his colleagues - Gross, Keen, DaCosta - no doubt limited his writing but his commitment to operative surgery was probably the principal reason. He is stated to have been the first to perform a number of operations, trephining for removal of a part of the motor cortex for epilepsy, tapping the lateral ventricles for internal hydrocephalus, ligating the external iliac artery transperitonally for aneurysm in Scarpa's triangle, and suturing the bowel to the abdominal wall for prolapse of the rectum. He performed the second operation on record for diverticulum of the esophagus just after von Bergmann had done it for the first time. He also devised little clips for stopping bleeding vessels prior to the time haemostatic forceps were used in this country.

Dr. Hearn's career proceeded with the respect of his students and colleagues. He delivered the opening address to the College in 1907 emphasizing recent historical events and urging careful use of new diagnostic methods. He welcomed scien-
tific discoveries but stated that “the real physician
stands only for the truth.” The class of 1907 dedi
cated its Jefferson Medical College Yearbook to him
with the concluding paragraphs:

“As a surgeon, Prof. Hearn stands among the
first. Although not an orator, his preliminary talks
at his clinic are replete with sound advice and good
suggestions. As an operator, he is always prepared
for any emergency that may arise. Referring to this
quality, Prof. Keen has often told the students, ‘I
feel very much safer during a difficult operation,
if I can have Prof. Hearn at my elbow and receive
the benefit of his cool head and steady hand.’
But it is as a diagnostian that Prof. Hearn takes
first rank on the Surgical Staff. He seems to
possess a sixth sense which enables him to make
an accurate diagnosis in doubtful cases, and on
innumerable occasions has his ability in this line
been demonstrated.

“His kindly manner, his quiet humor, his never
failing interest in what the students are doing have
endured him to them, and in dedicating our
class book to him, we feel that we can offer but a
slight tribute for the affection and esteem with
which he is held.”

In 1906, Dr. Hearn sustained an injury in a ca
riage accident which was regarded as life threat-
ening but after many months he made an almost
complete recovery. He resumed most of his nor-
mal activities and in 1910, at age 68 he was named
Emeritus Clinical Professor of Surgery. The respect
in which he was held was reflected in a tribute paid
him in an article published January 2, 1915, by the
Philadelphia Evening Bulletin celebrating his 72nd
birthday (December 27, 1914): “Strong in courage
and self-reliance, yet uniformly courteous to all
with whom he comes in contact, Dr. Hearn is a type
of the solid and useful citizenship who achieves
success by indomitable force of character and con-
centration of purpose. We join in congratulations
on this anniversary occasion. Being now at the
flush of mature manhood we may naturally expect
even greater professional achievements in the years
to come. We trust that for many years the com-
unity may have the inspiration of his personal pre-
se ne and the benefit of his wise counsel.”

Dr. Hearn died of pneumonia at the Media
home of his daughter December 21, 1917. His
son, William Prettyman Hearn (JMC, 1899)
followed his father’s course and practiced surgery
in Philadelphia, advancing in Jefferson’s De-
partment of Surgery to Assistant Professor (Fig. 2).
William P. Hearn, Jr. (JMC, ’35) became interest-
ed in industrial medicine which became his life-
time pursuit as physician to the Philadelphia
Electric Company (Fig. 3).

Fig. 2. William Prettyman Hearn, M.D. (JMC, 1899).

Fig. 3. William Prettyman Hearn, Jr., M.D. (JMC, ’35).
George McClellan (JMC, 1870): Grandson of the Founder

The fame and colorful aura surrounding the memory of Jefferson’s Founder, Dr. George McClellan, partly obscures the person and Jefferson relationships of another George McClellan, the Founder’s grandson (Fig. 1). George McClellan, M.D. (JMC, 1870) is worthy of more than the cursory glances usually awarded him by Jefferson observers. No less than the great J. Chalmers DaCosta, in a memoir read before the College of Physicians of Philadelphia, March 4, 1913, countered this casual impression with a laudatory and detailed account of McClellan’s life and accomplishments. DaCosta’s close acquaintance with McClellan as a faculty colleague eminently qualified him for this task.

Dr. DaCosta carefully traced the McClellan ancestry to his aggressive Scottish forebears. Their military skills and fighting principles in pursuit of their patriotic goals were noted both in Scotland and in early American history where McClellans were prominent, including his great-grandfather Samuel McClellan, a Revolutionary War General. Their military propensities were last manifested through the uncle of George McClellan, George B. McClellan (son of the Founder) who was the General of the Army of the Potomac in the early part of the Civil War (1862) and candidate for President of the United States in 1864. Dr. DaCosta attributed many of the fine character traits he perceived in McClellan to his family background.

McClellan was born in Philadelphia to Dr. John H.B. McClellan and Maria Eldredge McClellan, October 29, 1849. He began his education privately under Dr. Short and went on to three years of study in the Department of Arts and Sciences at the University of Pennsylvania. In 1868 he matriculated at Jefferson and received his M.D. in 1870, having been particularly stimulated by his contacts with Professors Gross and Pancoast who DaCosta regarded as the greatest in the country in surgery and anatomy. Beginning his practice directly, he interrupted it in 1872 for several years of study in Europe, visiting Edinburgh, Paris, Berlin, and Vienna. He was captivated by the skillful anatomical teaching of Dr. Josef Hyrtl of Vienna, a master anatomist with a world-wide reputation who was also a friend of Jefferson’s Professor H.C. Chapman and whose collection of skulls was later acquired by the College of Physicians of Philadelphia.

McClellan adopted Hyrtl’s teaching methods and upon return to Philadelphia in 1873 he resumed practice but also began the private teaching of anatomy the same year. His courses became quite popular and were further organized in 1881 as the Pennsylvania School of Anatomy and Surgery which was located in a building on Medical Street at the present site of Jefferson Hospital. The School was very successful, attracting medical, dental, and art students as well as medical graduates. Dr. DaCosta described it as a special experience to attend his demonstrations and admire the perfection of his dissections as well as the pictures he drew on the board with great speed and dexterity. He discussed regional and surface anatomy as well as deep dissections and included the sur-

Fig. 1. George McClellan, M.D. (JMC, 1870). Portrait includes Cooke skull.
gi cal relations of the organs and tissues. He was assisted for a few years by Dr. Joseph W. Hearn (JMC, 1867) who taught a course in operative surgery and bandaging. The popularity of this type of private teaching waned during the end of the century and McClellan's school closed in 1893. Meanwhile in 1890 he was elected Professor of Artistic Anatomy in the Pennsylvania Academy of the Fine Arts where he taught until three days before his death.

McClellan's career in surgery paralleled his anatomical experience. He was early elected Surgeon to Howard Hospital and in 1880 he became Surgeon to Philadelphia General Hospital where he served for 10 years. He was also for several years a surgeon at St. Joseph's Hospital. He was an able author, his Regional Anatomy (1892) having gone through four editions and was translated into French for two editions. Pictures included in the book were described as "real works of art", made from actual dissections and photographed. He also published Anatomy in Relation to Art in 1901. On its title page is the quote by M.A. Shee: "Whatever excuse may be made for the Artist in not teaching anatomy, there can be none offered for his not learning it."

In 1906, McClellan was appointed Professor of Applied Anatomy at Jefferson Medical College. In the opinion of some, this appointment should have been made much earlier but there are probably good reasons for his late association with Jefferson. It is suspected that McClellan had long harbored ambitions to head the Department of Anatomy at Jefferson but failed to win the appointment in 1886 when William Smith Forbes (JMC, 1852) was selected and became a strong Chairman. No vacancy then occurred until Forbes' death in 1905. Much debate surrounded the selection of his successors and the issue was finally settled arbitrarily by dividing the Chair between Edward A. Spitzka, M.D. and McClellan. There followed cool relations between Spitzka and McClellan but their areas of contact were relatively limited since McClellan, as Professor of Applied and Topographic Anatomy lectured only to the third year class whereas Spitzka assumed the basic anatomy teaching in the first two years. Nevertheless, McClellan (at 56) had reservations about sharing responsibilities with a much younger man (age 29). His teaching was well received by the students especially since his graphic skill enabled him to relate the anatomy to surgery in a very practical way. At his death in December, 1913, the student publication The Jeffersonian published a memoir which concluded as follows: "The world has seen the passing of a great and famous surgeon; but hosts of personal friends, we of the present classes of the academy and Jefferson, and thousands gone before us, will carry through our lives the memory of his charming personality, his ever-ready word of encouragement and the expression of his beautiful thoughts, as inspiration to better things."

McClellan was described as one of "the truest of gentlemen". He was dignified and at home in "refined and intellectual society." As a gracious host, he entertained friends always in his home rather than in a hotel or club. His interest included art and probably the theater. A story about his acquisition of the skull of the noted Shakespearean actor George Frederic Cooke is told in Chapter XIV. Suffice it to add that his widow presented the skull to Jefferson's Dean Ross V. Patterson and it now resides in the Archives.

Although in his life and practice McClellan differed greatly from his famous grandfather, it is clear that in his own right, he earned a special place in the annals of Jefferson. DaCosta concluded that "he was a modest gentleman of the old school," who "believed in the formal courtesies, grave dignities, cherished obligations, high integrity, culture, refinement, conventions, and traditions."
In March, 1887, Dr. Josef Hyrtl, Professor of Anatomy at the University of Vienna, wrote a letter to Dr. Henry Cadwalader Chapman, Professor of the Institutes of Medicine and Medical Jurisprudence at Jefferson. Dr. Hyrtl had been a valued friend and instructor, introducing Chapman to comparative anatomy as well as instilling a spirit of intellectual curiosity which drove him toward medical and physiological investigation. In the letter, Dr. Hyrtl, then elderly and with failing vision, acknowledged Chapman’s friendship, described the origin of certain anatomical terms and went on with the following paragraphs which indicate the depth of his scholarship:

"...I rejoice with all my heart that you entered the anatomical career, with such good omens as you had the kindness to send me. Your introductory address is by her noble words, a honor to your heart! And the placenta of the elephant, which has never been seen by mortal eyes, assures to your name a honorable place among first-rate anatomists. So I think as an old dissector. There is no other science, which gives so much satisfaction to the cultivator, but anatomy. There is a great deal of the artist in it."

"And now I shake my hands with you, and take leave. May you be happy in life and productive in the working of the deep mine of our science. May also the stars and stripes of the glorious banner of freedom float aloft forever, adorned with a new and magnificent emblem, the broken chains of slavery."

Yours forever,

J. Hyrtl.

It is notable that along with the sophistication and “gemütlichkeit” of late nineteenth century Austria, there was a deeply rooted concern for human values and increasing respect for the challenges of medical and natural science. Dr. Hyrtl expresses these in almost poetic style reflecting the continuing limitations of liberty in imperial central Europe. Dr. Chapman’s acquaintance with this classic scholar surely played a role in shaping his career.

Henry Cadwalader Chapman (Fig. 1), born August 17, 1845, was the grandson of Nathaniel Chapman, a Founder and first President of the American Medical Association. Nathaniel Chapman was Professor of Clinical Medicine of the University of Pennsylvania medical faculty which exerted much effort to prevent the founding of Jefferson Medical College.

The family was important in early Philadelphia affairs, Nathaniel having married Rebecca Biddle, daughter of Colonel Clement Biddle, Commissary General of the Continental Army. Their son, George W. Chapman, married Emily Markoe, whose grandfather Abraham Markoe, was the first Captain of the historic Philadelphia City Troop. Their family was known for wit and humor, a trait fully manifested by Henry throughout his life, a memoir by Nolan describing him as “possessing a
congenial and joyous nature." At the same time he demonstrated early interest in physics, chemistry, and natural science. His well-rounded education began at the Faires Classical Institute on Dean Street (now Camac), operated by the Reverend John Faires. The strict discipline enforced by the size-graded collection of sticks used for "daily floggings", extended to the Latin, Greek, and mathematics which formed the basis of excellent preparation for college. Chapman participated fully in the fighting and the other breaches of decorum and thus absorbed the punishment as well. His academic achievement was not spectacular at this stage but he learned easily and followed through with a B.A. from the University of Pennsylvania (1864) and an M.D. from its medical school in 1867. He then served as a resident physician at Pennsylvania Hospital (1867-69).

In 1870, he began a three-year postgraduate tour in Europe, including London, Paris, Berlin, and Vienna. He was stimulated by his time with Alphonse Milne Edward in Paris but appears to have profited most from his Viennese experience, especially working with Dr. Hyrtl. Upon return to Philadelphia, he was a lecturer in anatomy and physiology at the University of Pennsylvania and from 1874-80, Coroner's Physician for the City. He continued his anatomical investigations as Prosecutor of the Philadelphia Academy of Natural Sciences and of the Zoological Society. It was during this period that he studied the placentas of elephants and kangaroos referred to by Hyrtl. He also had the privilege of following and recording the pregnancy and delivery of an elephant in winter quarters of a circus in Philadelphia. The published article evoked much comment as the first of its kind. During these years, Chapman was also associated with the well-known naturalist, Dr. Joseph Leidy, Professor of Anatomy at the University of Pennsylvania. The two became close friends. Chapman wrote a memoir of Leidy in 1891 and also delivered an address upon the occasion of the dedication of the statue of Leidy at City Hall, October 30, 1907.

Dr. Chapman's basic education in the humanities, his inherited bent for scientific investigation, and his early contacts with scholars, especially Joseph Leidy, led to numerous publications. During the 1870s, these related mainly to a long list of presentations to the Academy of Natural Sciences. In 1873, he published his first major work entitled "The Evolution of Life", which was written with an urgency to get his ideas in order. He later appeared to have regretted not having waited for more maturity in his thinking on the subject and he appears to have pursued it no further.

In 1878, Chapman also completed his second medical course with an M.D. degree from Jefferson. The influence of his European studies is shown by the title of his graduation thesis: The Persistence of Force in the Study of Biology. (One might raise the question as to how many of his classmates would have understood his advanced ideas!).

From 1878 to 1888, Chapman also served as Professor of Physiology at the Pennsylvania College of Dental Surgery but in 1878 his association with Jefferson began with his appointment as Demonstrator of the Institutes of Medicine and Curator of the Museum under Dr. J. Aitken Meigs. Dr. Meigs' sudden death in 1879 resulted in Chapman's taking responsibility for the departmental teaching in mid-term. The following spring he was unanimously elected Professor of the Institutes of Medicine and Medical Jurisprudence.

The Department retained the traditional title throughout Chapman's professorship. The term "Physiology" was employed, however, for other department members as they were appointed. Dr. Albert P. Brubaker who would succeed Dr. Chapman was even advanced to Professor of Physiology and Hygiene in 1904, five years prior to the end of Chapman's chairmanship.

It was the first instance of the department having two Professors at the same time and signaled the increasing importance of the basic sciences in medical teaching. Dr. Chapman added many exhibits to the museum, some from his experiences at the Academy of Natural Sciences and the Zoo.

The teaching of the basic sciences was undergoing major changes during Chapman's chairmanship. Pathology, including surgical pathology, was coming into its own and bacteriology was becom-
ing a vital science in the diagnosis and prevention of infectious diseases. The course of physiology included more experimental work by the medical students utilizing the new laboratory building (1878) rather than demonstrations in the lectures. In anatomy, histology and embryology were assuming definitive significance. Chapman's skills in teaching may be estimated by the reaction to his introductory lecture October 4, 1880, following which the students presented him with a floral arrangement along with a "brief but flattering address" by the "orator of the occasion", Mr. William W. Brown. In his address Chapman referred to identity among the basic sciences as disciplines and made a comment which might be regarded as prophetic: "Indeed, many of the phenomena of physiology can be shown to depend upon physical and chemical laws, and probably with the advance of knowledge the whole subject will be treated as a branch of molecular physics". He also expressed advanced views of the role of animal experimentation in physiology, advising that "the greatest caution should be observed that the method is not abused. The animal experimented upon should be treated with the same consideration as a human being undergoing a surgical operation, anesthetics being used wherever possible...."

The new laboratory building (1879) was used for increasing experimentation by the students. Chapman purchased newer and better apparatus for teaching and research with which he had developed familiarity during his European studies. Subsequent visits to Europe in 1882, 1887 and 1899 enabled him to provide increasingly modern apparatus. Throughout his tenure he continued to upgrade teaching facilities and to explore new methods. He shared his methods and prepared demonstrations for the American Physiological Society at its Philadelphia Convention in 1895. In 1899 a new student laboratory was established, funded by Board member Louis C. Vanuxem, Esq., which enabled students to perform their own experiments. Drs. Chapman and Brubaker designed the laboratory and its equipment, evoking from the student publication The Jeffersonian a comment that it was "second to none in this country."

In many respects the career and teaching under Chapman signaled a new departure in medical education at Jefferson. His comprehensive biological interests in anatomy, comparative anatomy, and classification of animal species contributed greatly to his ability to make physiology "come alive" for students with a less than desirable educational background. Chapman's interest in natural history was furthered during summers in Bar Harbor, Maine (Fig. 2), where he maintained a laboratory. Friends and fishermen were stimulated to collect for him unusual specimens for his study. Reflecting his many expanded biological skills and intimate teaching methods clearly related to the feeling of personal affection entertained for him by his students.

In 1884, Chapman wrote a History of the Discovery of the Circulation of the Blood in which he summarized in classical sequence the discoveries prior to the work of Harvey in "De Motu Cordis". This was later incorporated as a chapter in his Human Physiology published by Lea Brothers and Company in 1887. The textbook was well received and a second edition followed in 1899. Also published was a Manual of Medical Jurisprudence by Saunders in 1892, second edition which included Toxicology in 1896, and the third in 1903. In his writing, as in his lectures, Chapman succeeded in combining the essentials of his subject matter with developing knowledge. In the later years of his chairmanship, his talents were strongly supplemented by the contributions of Dr. Albert Brubaker who was to suc-

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Fig. 2. Chapman summer residence, Bar Harbor, Maine.
ceed him. The result was improved teaching, contributing to the enhancement of Jefferson’s reputation for clinical excellence.

Nolan’s memoir records evidence of Chapman’s personal charm enhanced by his acute sense of humor. He loved droll stories, his visits to the Academy of Natural Sciences and to the Bar Harbor Laboratory being accompanied by wit and laughter. On one occasion, he was reported as having told a story while dissecting an oyster before some distinguished scientists. He delivered the “punch line” without interrupting or even looking up from his specimen and it was greeted with “roars of laughter.”

Until his last year Chapman maintained the intensity of his studies and research. He traveled extensively and included visits to museums and zoological collections in Paris, Italy and Egypt. In 1908, he was awarded a Doctor of Science degree by the University of Pennsylvania in recognition of his contributions to original research. It was his intention upon his retirement in May 1909, to pursue his varied interests independently but this was not to be. Dr. Chapman died September 7, 1909, at Bar Harbor after a summer of gradually failing health (Fig. 3).

It is difficult to overestimate the value of the contributions of this man of many interests and skills to the progress of Jefferson during a period of great ferment in medical education. In addition to having been largely responsible for the Jefferson student laboratory program being in good standing during the upgrading of medical schools in 1910, it is notable that increased requirements for admission, another of his goals, would presently be implemented.

Fig. 3. Chapman burial marker, East Laurel Hill Cemetery.

References
3. The College and Clinical Record, April 1880, November, 1880.
John Chalmers DaCosta ("Jack"), the first Samuel D. Gross Professor of Surgery at Jefferson (1910) was such a dominant figure that his two blood relatives of the same name, who also graduated from Jefferson and taught there, are apt to have been forgotten or at least confused. Their stature was sufficient, however, to warrant a separate remembrance. Of Spanish ancestry, they were not related to Jacob Mendes DaCosta, whose family origin was Portuguese. The latter was also a Jefferson graduate (1852) and Professor of Medicine (1872-91).

John Chalmers DaCosta: Gynecologist And Obstetrician

The elder John Chalmers DaCosta (Fig. 1) was born in Philadelphia in 1834. His early education was in the City's best schools and he became a practicing civil engineer for twenty years, serving as a member of the staff of the St. Paul and Duluth Railroad. At the age of 40 he began the study of medicine at Jefferson in the U.S. Centennial year and graduated in 1878.

Immediately following graduation, Dr. DaCosta was made a Demonstrator of Obstetrics under Professor Ellerslie Wallace. Subsequently, he became Chief of the Gynecologic Clinic at Jefferson in which he served until 1901. For more than 20 years he was a visiting gynecologist to Jefferson Medical College Hospital and on his retirement was named Emeritus. He also was visiting gynecologist to the Lying-in Charity and St. Agnes Hospitals.

Dr. DaCosta was active in medical societies: Vice-President of the Philadelphia County Medical Society (1894); Chairman of the Gynecological Section of the College of Physicians of Philadelphia; President of the Philadelphia Obstetrical Society (1900/01); President of the Mutual Aid Society; and member of the American Medical Association.

Dr. DaCosta died on December 6, 1910, at the age of 76 from pneumonia complicated by cardiovascular renal failure. His son, John Chalmers DaCosta, Jr. ("Black Jack") became a pioneer hematologist and internist at Jefferson and his nephew ("Jack"), the first Samuel D. Gross Professor, was named after him by his brother, George Tallman DaCosta.

John Chalmers DaCosta, Jr.: Pioneer Hematologist

John Chalmers DaCosta, Jr., born in Philadelphia in 1871, was the son of John C. DaCosta, Emeritus Gynecologist to Jefferson Hospital, and the cousin of the legendary John Chalmers DaCosta ("Jack"), the first Samuel D. Gross Professor of Surgery. He came to be known as "Black Jack" because of his jet black hair and moustache (Fig. 2).

"Black Jack's" premedical education was under the finest auspices, - Hill School, Rugby Academy, and Princeton University, supplemented by his service as First Lieutenant in the United States Army Medical Corps (1888/89, Fig. 3). He ob-
tained his professional training at Jefferson Medical College from which he graduated in 1893. After adding a postgraduate course at the University of Pennsylvania, which was completed in 1894, he served an internship at the Episcopal Hospital in Philadelphia and St. Joseph's Hospital in Lancaster, Pennsylvania. In 1894 he married Elizabeth S. Hays of Carlisle.

Dr. DaCosta's professional appointments were varied both clinically and academically. As early as 1895 he became an Assistant Demonstrator of Clinical Medicine and Morbid Histology. His appointments on this track became Demonstrator of Clinical Medicine (1902), Associate in Clinical Medicine (1906) and Chief of the Medical Clinic of Jefferson Hospital (1902-08). He taught the course in physical diagnosis (Fig. 4) and took part in Senior ward work in Clinical Medicine.

It is important to note that he was the first American Physician to write a textbook on hematology. It was entitled Clinical Hematology and constituted a practical guide to the examination of the blood with reference to diagnosis. It was first published in 1901, only eight years following his graduation from Jefferson, and predated Wintrobe's famous textbook of the same name which appeared 41 years later. The second edition (1905) was used in the teaching of medical students during their rotation in the newly created Laboratory of Clinical Medicine, at the time considered one of the first and most advanced developments in the use of a laboratory for medical teaching. He also wrote the chapter on Surgical Hematology in Keen's System of Surgery, (1907) and Principles and Virtue of Physical Diagnosis, (1909). Among his other writings were such topics as "Serum Diagnosis in Enteric Fever, Blood Picture in Appendicitis, Filariasis, Iodophilia, Cellular Degeneration of the Erythrocytes, Opsonin Studies in Diabetes Mellitus, Resistance of Diabetes to Bacterial Infection, Diagnostic Value of Vertebral Percussion, Chlorosis, and Symptomatic Anemia."

As part of Dr. DaCosta's research work in applied pathology and hematology, he established in 1909 at the German Hospital (later called Lankenau) an Inoculation Department for the study and treatment of infectious diseases by the method of "auto-vaccination." This met with some success in combating bacterial diseases not amenable to the ordinary remedial measures.

In addition to the customary local, state and national medical organizations, Dr. DaCosta was a Fellow of the College of Physicians of Philadelphia, Associate Member of the Association of American Physicians, Member of the Philadelphia Pathological Society, the Philadelphia Pediatric Society, and the American Climatological Association.

Ill health prevented Dr. DaCosta from fulfilling his teaching and hospital obligations at Jefferson and he was forced to resign his appointments in 1918, at which time he was an Associate Professor of Medicine. He died on April 26, 1920, at the age of 49.

The Legendary
John Chalmers DaCosta:
First Samuel D. Gross
Professor Of Surgery

Jefferson's four surgical giants (Gross, Keen, DaCosta and Gibbon) were all profound scholars with broad interest in the humanities. They all had well balanced personalities, but DaCosta's was undoubtedly the most colorful. "Jack" DaCosta manifested this aspect not in the drama of the op-

Fig. 2. "Black Jack" DaCosta (JMC, 1893).
Fig. 3. John C. DaCosta, Jr. (left) in Army Medical Corps (1888-89).

Fig. 4. "Black Jack" DaCosta teaching physical diagnosis in the "pit" (ca. 1910).
erating room, but in his uncanny diagnostic skill in the clinical amphitheater ("pit"), in his elegant weaving of history and literature into his teaching, in his brilliant oratory, and in the strong opinions voiced in his writings.

DaCosta's parents were cultured and moderately affluent. They recognized and encouraged the talents of their brilliant son. His mother taught him much of the history of England, especially about the Elizabethan period, before he was eight. His father was a lover of books and president of the Camden-Atlantic railroad. As a boy, "Jack", as he was called, was privileged to ride the trains, sitting in the fireman's seat next to the engineer. He never lost his love of locomotives. Later in life he used the railroads in a unique manner to grade the final examinations in surgery. He would purchase a $20 mileage book for 1,000 miles at two cents a mile. The ride was always long enough for him to finish grading the papers. He also used this rail line to host fishing parties for his surgical staff and friends at Spidel's Hotel in Atlantic City. Near the end of his life, when he was bedridden with ar-

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**Fig. 5. DaCosta on ambulance service at "Blockley" (1885).**

**Fig. 6. DaCosta (lower left) with fellow residents at the Old Blockley Hospital (1885).**
thrillis, he expressed the desire for just one more train ride to Atlantic City.

This John Chalmers DaCosta was born on November 15, 1863, in Washington, D.C. At the age of nine an unfortunate event occurred. He was struck by a pine cone in the right eye which caused its loss of vision. So well did he overcome this handicap that few people were ever aware that he had a glass eye. One curious incident did relate to it, however, in the halls of Jefferson. When a student bumped into him one day, DaCosta exclaimed, "Why don't you look where you are going?" The student retorted, "Why don't you go where you are looking?" It is strange that DaCosta should have dared to become a surgeon with only one eye, but there is no evidence that this caused him any concern or any harm to his patients. Surgery in those days was much less technical than that of today, and he always operated with competent assistants who could "bail" him out if control of bleeding became a problem.

When DaCosta was fifteen his family moved to Delancey Street in Philadelphia between 23rd and 24th. Despite his father's preference for him to study law, Jack borrowed a skull from a medical student and began to study 

Horner's Anatomy. After an excellent preliminary education at Friend's Central School he entered the University of Pennsylvania in 1880 at the age of 17. During his two years there while majoring in chemistry, he would attend the clinics of Samuel D. Gross. Later in life, DaCosta wrote of the elder Gross that he "beheld the mighty leader a great many times, heard him lecture frequently, and in him always saw the embodiment of surgical learning, dignity, and distinction, and felt that fifty years of American Surgery were speaking through his lips."

While DaCosta was still at college his father died and the family suffered financial reverses. Railroads in the 1880s often failed to pay dividends and frequently became bankrupt. There fortunately were sufficient funds for Jack to enter Jefferson Medical College in 1882 and graduate in 1885 as the Class Valedictorian. His thesis was "The Vivisection Question." After 13 months of residency in the Old Blockley Hospital (Figs. 5 and 6) (Philadelphia General) he took the position of Assistant Physician to the Insane Department of the same institution. Dr. Edward L. Bauer in his 

Doctors Made in America relates two unique episodes relating to DaCosta's experiences in neuropsychiatry.

"One is about a comely girl who would wait until the wards were crowded with visitors. She would then run screaming through all of them, absolutely naked, without even fans. The medical and nursing staffs followed her as did the visitors. One day Dr. DaCosta caught up with her and while both were running, he gave her a hypodermic injection of a drug (apomorphine) that made her vomit. She left Blockley that day after dressing. Soon thereafter, a Philadelphia newspaper published a squib under a Cleveland headline stating that the doctors in a hospital there were baffled by a young girl who behaved as DaCosta's patient had. He wrote to the hospital and shortly received a reply that his recommended treatment had worked. The girl had left the hospital but not before she had cursed DaCosta for his interference. He never heard of her again."

"Seeing a very sad patient sitting on the lawn at Blockley, DaCosta asked him the reason for his melancholy. 'I have six cats in my stomach' was his complaint. DaCosta procured six kittens and put them in a bucket of sawdust. He then gave the man a hypodermic injection that would make him vomit, and as he vomited DaCosta pulled the kittens out of the bucket counting as he did so. The patient spent the next week following the doctor about singing his praises. When he stopped his eulogy DaCosta found him on the grass again. Upon inquiry the doctor was told, 'I have an eight day clock in my stomach.' DaCosta said that with the very next tick he decided to become a surgeon."

After other distressing events in the Insane Department the straw that broke the camel's back occurred when one of DaCosta's patients committed suicide by hanging. According to the memoir by Dr. Thomas A. Shallow who succeeded him as the Gross Professor of Surgery, "With the wind outside howling and the lunatics inside shrieking, Dr. DaCosta cut down the body, took a large drink.
of liquor and wrote his resignation.”

Strangely enough, DaCosta could not resist his fascination for diseases of the mind, and immediately after terminating his resident physician services at Blockley (Philadelphia General) he became an Assistant Physician to the Pennsylvania Hospital for the Insane, located at 44th and Market Streets, known then as Kirkbride’s (Fig. 7). There he worked with Dr. John B. Chapin, a prominent neuropsychiatrist who further stimulated his interest in the nervous system. These experiences laid the groundwork for his extensive knowledge of neurology which enhanced his later teaching in the surgical clinics.

After less than a year at the Pennsylvania Hospital, DaCosta pursued his academic career in 1887 by obtaining an appointment as Assistant to Professor Samuel W. Gross in the surgical outpatient department, and as Assistant Demonstrator of Anatomy (Fig. 8). At that time he opened his private office at 2047 Locust Street in one room of the first floor of a dressmaking establishment (Fig. 9). His first patient not only failed to pay a fee, but stole his umbrella. According to DaCosta, “In those days patients regarded the 9 to 1 on my sign as the odds against them.”

DaCosta’s curious interest in neuropsychiatry, led to his seeking an appointment as surgeon to the Eastern Penitentiary, a prison that Dickens once visited to observe the criminally insane. This put DaCosta in contact with many inmates, some of whom he felt could be rehabilitated by financial and social aid. An outstanding example was his encounter with “Split-the-wind” Dunlop, a notorious burglar and safecracker. In the words of Dr. Edward L. Bauer (in Doctors Made in America): “For quite a number of years ‘Split’ went uncaught in his unlawful profession. At last he came to the ‘Pen.’ He was smart and knew that when he got out he would be a marked man. He talked it over with DaCosta, who did not fail him. He and ‘Split’ arranged a new name, a residence at the doctor’s house, and a job as ‘Diener’ in the dissecting room at Jefferson. ‘Split’ soon showed such proficiency in preparing specimens that Dr. McClellan (Professor of Applied Anatomy) employed him in that

![Fig. 7. This knife was found in the sleeve of an inmate at “Kirkbride” who was waiting for Doctor DaCosta.](image)

![Fig. 8. Dr. Jack DaCosta, Demonstrator of Surgery (on right with hand on thigh) with section of Class of 1894.](image)

![Fig. 9. DaCosta at 25 years.](image)
When Dr. W.W. Keen (JMC, 1862) became Professor of Surgery at Jefferson in 1889, he took on Dr. DaCosta as an office assistant and greatly aided the young man's career. At that time DaCosta had very little private practice and would tell people that the name on his office was only "a coffin plate on a dead business." His spare time away from Jefferson and Dr. Keen's office was spent busily, however, in writing clinical articles and preparing his *Modern Surgery, General and Operative*, which was first published in 1894 when he was but 31 years of age. That book became a classic throughout the medical schools of the United States, passing through ten editions, the last of which appeared in 1931. By 1895 DaCosta had written additional articles and was appointed Clinical Professor of Surgery.

The year 1895 was pivotal in Jefferson history. The Medical College was changing from "proprietary" to a nonprofit corporation status. This meant that the full professors could no longer pocket the fees from their lectures, but would accept salaries and pass the profit from tuition to the benefit of the school. This change produced some controversy, but DaCosta rallied the support of the Alumni Association in favor of the change at the annual banquet in his famous speech entitled "The Professorial Jackpot". This was the beginning of his leadership in the Alumni Association in which he would serve as President (1908/09) and become honored by it in many ways.

Rival medical schools began to offer DaCosta alluring teaching positions. In 1900 Drs. W.W. Keen and John Hill Brinton, who were co-professors, agreed to DaCosta's promotion to a third full professorship in order to hold him at Jefferson. DaCosta, then 37 years old, had "arrived." When Dr. Keen retired in 1907 he was appointed the successor. In 1910 when Maria Gross Horwitz endowed the Samuel D. Gross Professorship in Surgery in honor of her father, DaCosta was the unanimous choice. It was Jefferson's first endowed Professorship (by a gift of $60,000) and the start of a noble tradition.

The Wednesday afternoon surgical clinic in the "pit" before the combined junior and senior classes...
was in its heyday during DaCosta’s time (Fig. 10). Dr. Edward J. Klopp (JMC, 1906), who served as Professor of Surgery from 1931 to 1936, described DaCosta’s teaching as follows: “He loved to teach and his hearers were impressed with his foundation in anatomy, his knowledge of surgery, his familiarity with history, his frequent quotations from literature, his inimitable manner in presenting a subject. Jack DaCosta was at his best before a large audience. Only those who knew him before he became incapacitated in 1922 (Fig. 11) will remember his characteristic attitude while conducting a diagnostic clinic for the students; with amphitheater filled to capacity, the clinic floor and doorway were crowded with visiting physicians, confreres, assistants and former students. First standing to one side of the ‘pit’, with arm resting on the rail and one foot crossed in front to the other (Fig. 12), then walking across the floor with body vibrating and knees bending, he spoke giving clear, systematic, unmistakable facts, which left an indelible impression. He was the idol of the medical students. Their admiration was spontaneous. He appealed to their imagination, aroused enthusiasm, and stimulated effort.”

DaCosta added spice to his lectures with aphorisms and pithy statements. Some examples are as follows:

“A surgeon is like a postage stamp. He is useless when stuck on himself.”

“A vain surgeon is like a milking stool; of no use except when sat upon.”

“Sometimes a man tells the truth out of pure meanness.”

“Many a man who is brooding over alleged mighty discoveries reminds me of a hen sitting on billiard balls.”

“A fashionable surgeon, like a pelican, can be recognized by the size of his bill.”

“The public has an idea that a consultation is a meeting of accomplices.”

“There is a splendid chance to do good in surgery, especially if you don’t care who gets the credit.”

“To write an article of any sort is, to some extent, to reveal ourselves. Hence, even a medical article is, in a sense, something of an autobiography.”

“Of all the causes of failure I doubt if any is more potent than vanity. The proper attitude toward all scientific questions is one of humility. When one can no longer wonder at nature, he can no longer progress.”

“Those who embark on the matrimonial sea for gain and not for love often come to wish they had missed the boat. The lady in the case, too, may sometimes have reason to doubt if she obtained the worth of her money.”

“Some men are like an electric button and won’t do any work unless they are pushed.”

“Every now and then I see a judge on the bench who reminds me of a fly in amber. I know he is there but I can’t imagine how he got there.”

“Some medical experts (in court) swear to things they would not bet on.”

Fig. 11. John Chalmers DaCosta ("Jack", JMC, 1885) at approximately age 50.
"A man who has a theory which he tries to fit the facts is like a drunkard who tries his key haphazardly in door after door, hoping to find one it fits."

"When a man finds his idea doesn’t appeal to the tired and indifferent world, he is apt to speak to posterity. I heard a man do this once and before he finished he almost had his audience there."

"Diagnosis by intuition is a rapid method of reaching a wrong conclusion."

"Some people get credit for using a big word instead of a shorter one, yet every now and then a synonym is used because we forget how to spell the word we want to use."

"Now and then a very learned article or lecture increases the sum total of human ignorance."

"Some who approach the summit don’t stay there long. They can’t stand the altitude."

"It is not enough for a surgeon to have ‘go’; he must also have ‘stay’."

"Each one of us, however old, is still an undergraduate in the school of experience. When a man thinks he has graduated he becomes a public menace."

"The world is very small if we would avoid an enemy, huge if we would find a friend."

"Appearances are deceptive. I knew a man who acquired a reputation for dignity because he had rheumatism in the neck and back."

"Sometimes when a doctor gets too lazy to work, he becomes a politician."

"Tact is a valuable attribute in gaining practice. It consists in telling a squint-eyed man that he has a fine, firm chin."

"It may rain upon the just as well as upon the unjust, but when it does the unjust usually have the umbrellas of the just."

"Some men don’t try to have footprints on the sands of time nearly as hard as they try to cover up their tracks and to avoid leaving their fingerprints in the central station."

Benjamin F. Haskell (JMC, ’23) remembered an episode in the “pit” from his student days. One of the Mayo brothers had visited a DaCosta clinic and was asked to stand up and make a few remarks. He said: “In the presence of the greatest teacher of surgery in the United States today, I have nothing to say,” and he sat down.

George F. Wheeling (JMC, ’23) was in the “pit” holding the femur of an Egyptian mummy for DaCosta as the latter was about to start his clinic. Wheeling was nervous, as all students were when in the surgical arena, and somehow the ancient bone slipped from his hands. It crashed to the floor and broke into several pieces. To the amazement of poor Wheeling, Dr. DaCosta calmly remarked, “This bone lasted for centuries in Egypt, but for only five minutes in our pit.” Legend has it that the bone was repaired at
Eberhardt’s China Restorers (still at 2010 Walnut Street), but like many of Jefferson’s old pathology specimens, it has disappeared.

DaCosta served for many years as Surgeon to the Philadelphia General Hospital and later as Consultant to St. Joseph’s and Misericordia Hospitals. In the operating room he exhibited a thorough knowledge of anatomy, a reflection of his having edited Gray’s Anatomy in 1905 (Fig. 13). He excelled in diagnosing what would be encountered when the abdomen was opened and what procedure was most appropriate for that situation. He was not always right, however, but his integrity was unquestioned, to which the following incident related by his assistant, Dr. Thomas A. Shallow, attests. DaCosta operated on this particular lady for what he believed to be appendicitis. He used the current and popular McBurney incision which in most hands at that time was preferred because it overlay the region of the appendix and resulted in a smaller, better scar from the cosmetic standpoint. The disadvantage of the incision was that it made exploration of the abdomen more limited. It turned out that the patient was not relieved by the surgery. DaCosta re-operated, using a right rectus incision that allowed better exposure and he found that the real trouble was in the left ovary, which he removed with cure of the problem. DaCosta explained the reason for his failure to the patient, did not charge for the second operation, and thereafter used only the right rectus incision in suspected cases of appendicitis.

An example of DaCosta’s sympathetic nature, somewhat belied by his austere demeanor, was his affection for his handyman, Willie Barrett. This black man was occasionally fired at the end of the day for the poor performance of a chore. A smile would appear on Willie’s face, for he knew to report for work the following day, and that he would receive an extra dollar. Willie eventually died of coronary thrombosis in the comforting arms of DaCosta, who refused a postmortem examination because “Willie would not like it.”

At the outbreak of World War I, DaCosta served as a Junior Lieutenant in the Navy and rose to the rank of Commander. In 1919 he sailed on the George Washington under Admiral Gleaves on a mission to care for President Woodrow Wilson, while negotiations of the peace treaty and League of Nations were under way.

DaCosta could just as well have been a professor of English literature or of history in any of the prestigious colleges of the country. His Selections from the Papers and Speeches of John Chalmers DaCosta, M.D. (1931) are replete with scholarly articles in these fields. In pungent and precise style he reveals his encyclopedic mind in historical sketches, biography, political outcries, critiques of medical trends, and reflections on social dilemmas. His Personal Side of Pepys revealed “the lousy, noisy, merry, amorous, drunken London of the Restoration.” Medical Paris during the Reign of Louis Philippe depicted the France of that period as “the laboratory of civilization in which experiments were made in art, literature, science, government and vice, and Paris was a crucible in this laboratory, gleaming with incandescence.” He had devoured all the works of Dickens and often quoted some sections from memory. His Dickens’ Doctors, delivered before the Philobiblon Club of Philadelphia in 1903, disclosed the low esteem of the great novelist for the medical profession. DaCosta lamented, “What a pity that he never delineated such a lion heart as Abernethy’s, such a lordly soul as Hunter’s, such a noble career as Paget’s, or such a helpful life as Gross’s. The world will always be poorer that he did not.”

One of DaCosta’s more visible acts relating to appreciation of his alma mater’s heritage was in his resurrection of the “old operating table” (Fig. 14), which is recounted in a subsequent chapter of this book.

Although not a “joiner” in the ordinary sense, DaCosta held membership in the prestigious professional organizations of his time. His ill health in later middle life retarded his participation in high level office, but he was as active and loyal as his dwindling physical energies would allow. One must mention his belonging to the American Surgical Association, the Society of Clinical Surgery, the International Surgical Society, the American College of Surgeons (Vice-President, 1928/29), the
Fig. 13. DaCosta's instruments.
American Philosophical Society, the College of Physicians of Philadelphia, the Philadelphia Academy of Surgery, the Philadelphia Neurological Society, the Pathological Society of Philadelphia, the Philadelphia County Medical Society, the American Medical Association, the U.S. Naval Reserve, and Honorary Fellow of the Society of Surgery of Bucharest, Rumania.

A most unfortunate affliction descended upon DaCosta in 1922 when he was 59 years of age, which consisted of a relentlessly progressive form of arthritis deformans (rheumatoid arthritis). With courage and tenacity he persisted in teaching, giving speeches, writing articles, and editing his Modern Surgery. Two poles placed beneath his wheelchair permitted his transport out of the house to a waiting automobile. Drs. Thomas Shallow (JMC, '11), Harvey Righter (JMC, 1896), and Henry Seelaus (JMC, '18) teamed up to ensure his safe passage to and from his Wednesday Clinic, which still commanded standing room only. His first letter of resignation to the Board of Trustees in 1925 was rejected.

The letter of response to DaCosta from President of the Board of Trustees, William Potter, on April 13, 1925, is worthy of complete quoting:

“Dear Dr. DaCosta:

‘Yours of the tenth instant, tendering your resignation of the Samuel D. Gross Professorship of Surgery in the Jefferson Medical College has been received at a regular meeting today of the Trustees in Committee of the whole, to consider College matters.

‘They have, by unanimous vote, refused to accept it. We want you never to entertain the feeling that owing to your present physical illness, your resignation would be for the best interest of the College, or, as you state that you ‘stand in the way of younger men.’

‘There is room and need for both in Jefferson. Dr. Keen has truthfully said, that you are the greatest teacher of clinical surgery in the world, and this is the conviction of everyone connected with the Administration of this great independent Medical School.

“We appreciate the unselfish spirit of your letter, but the interests of humanity, in our judgment, will be best conserved by continuing a service which for thirty-eight years, has greatly added to the fame of your Alma Mater.”

Yours faithfully,
William Potter (signature)
President

DaCosta’s final resignation was accepted in 1931 when he agreed to maintain the title of Gross Professor and oversee the running of the Department by Drs. Shallow and Klopp. During the eleven years of this miserable existence he gratefully received visits from his staff, Admiral Gleaves, officers of the Fire Department and friends. As solace in his constant pain, a bottle of whiskey was always a welcome gift.

Despite his deteriorating physical condition, DaCosta’s mind remained active and he received many honors. In 1923 the students’ Yearbook was dedicated to him for the second time (the first was in 1906). The Class of 1924 had his portrait painted, depicting him teaching from his wheelchair in the amphitheater; this started the yearly tradition in which each class presented the portrait of a favorite professor to the College. The Class of 1902 also presented DaCosta’s portrait in 1929, and the Alumni Association commissioned two others. All four portraits are prominently displayed within the institution. The Class of 1926 presented him with a gold-headed cane inscribed with his name as the first Samuel D. Gross professor. At its fiftieth reunion in 1976 the same class endowed a fund in perpetuity to add the name of each succeeding Gross professor on a separate gold plate (six to date). He received the Strittmatter Award of the Philadelphia County Medical Society in 1926. The Jefferson Alumni Association in May, 1927, erected a tablet (Fig. 14) that recorded the gift of $100,000 as a memorial in his honor for the establishment of a Department of Experimental Medicine in the new (1928) Medical College building. In 1979 one of the six rooms in the Kellow Conference Area of the Medical College was named in honor of Dr. DaCosta (Fig. 15).
On April 30, 1930, the “DaCosta Surgical Night” was held under the auspices of the Philadelphia County Medical Society to establish the DaCosta Foundation for postgraduate education of members of the Society. Scientific papers were read by Drs. John B. Deaver, Rudolph Matas, and Walter E. Dandy. DaCosta himself gave the second annual oration the following year in a farewell address to the Society. He spoke from his wheelchair with an attendant to hand him the pages and wipe his brow. In The Philadelphia Record it was reported that “An audience of about 1,000 physicians and their wives alternately shouted with glee and wept as the aged and broken surgeon and teacher denounced and applauded the things he had found good and bad in his profession and in mankind generally.”

Both DaCosta’s father and his uncle (John Chalmers DaCosta, JMC, 1878, after whom he was named) were members of the volunteer fire departments of Haddonfield, New Jersey, and Philadelphia. When young Jack was 12 he became fascinated with the Philadelphia fire department and for many years he would visit the stations at 16th and Sansom Streets or 21st and Market. There he would entertain the firemen on their off moments in reciting “The Charge of the Light Brigade” and “Sheridan’s Ride”, quoting the poetry of Shelley and Keats, or his own poetry. This association lasted until the end of his life. Within a few years after graduating from Jefferson he had a fire alarm system installed in his home so that he could receive calls of the major fires. Whenever possible he would stop whatever he was doing and ride on the horse-drawn engine with the Fire Chief. His purpose was to render aid to injured firemen. In 1903 he wrote an article on “The Effect of the Inhalation of Smoke and of Irritating and Poisonous Gases by Firemen.” For 35 years he served without remuneration as surgeon to the Firemen’s Pension Fund. In 1931, in an impressive ceremony in the clinical amphitheater ("pit") of the Thompson Annex, DaCosta was awarded a diamond studded badge which designated him as an honorary Deputy Fire Chief. At that time he was a total cripple confined to a wheelchair (Fig. 16). The fac-
Percy Dr. Gillespie drama, in which the doctor made astonishing diagnoses from his wheelchair and enhanced by the acting of Lionel Barrymore, was conceived from the real life of DaCosta.

In his library where he had spent the final years of his life, the end came at about 3:00 P.M. on May 16, 1933 (Figs. 17, 18, 19, 20). Mrs. DaCosta had provided to the end the devotion with which she had understood and supported him in every endeavor. They had no children. He was buried in Woodlands, Cemetery, Philadelphia.

Mrs. DaCosta, although two years older than her husband, outlived him by 18 years and died in 1951 at the age of 90. She maintained a very low social profile. The many visitors to the DaCosta household were customarily ushered from the front door to the doctor’s library by a black domestic. Few people came to know her since the doctor entertained socially during his physically active years outside the home. Jefferson students regarded their revered professor as a bachelor or perhaps a widower. It is evident that Mrs. DaCosta led a selfless life that allowed her husband to come and go as he pleased, giving him time for his academic pursuits and providing for his every creature comfort.

It is little known that DaCosta wrote poetry. A collection of 27 poems dedicated to his wife was published posthumously in 1942 by Frederick Keller (JMC, ’17), who had been one of his admiring students. It is fitting to quote a few lines:

Give up the play of idle priestly canting.
Go out among mankind with loaf and cup.
Without a thought of praying or of chanting,
Give food and drink and raise the fallen up.

As one tallies the sum total of DaCosta’s life, the conclusion emerges that his brilliant talents were as effective in internal medicine as they were in surgery.
Fig. 18. DaCosta's library.

Fig. 19. View from library into DaCosta's office.

Fig. 20. DaCosta's desk (courtesy of Frederick E. Keller, M.D.: Trials and Triumphs of the Surgeon. Dorrance & Co., Philadelphia, 1944).
Chevalier Jackson (JMC, 1886): From Poverty to International Fame

The attributes of genius have been variously understood and described. Criteria have included heredity, hard work, dogged determination, dedicated singleness of purpose and relentless practice. Among a few other Jefferson alumni, the term genius has often been applied to Chevalier Jackson who emerges as a sensitive personality, one with a well defined goal pursued with relentless determination, and one with mechanical and graphic skills appropriately attuned to his thought and observations. These attributes and many others, characterized this man of many talents (Fig. 1).

Jackson’s earliest experiences influenced his career even more directly than is the case with many people of great accomplishments. Born in 1865, from early childhood his family was on the edge of poverty in spite of dedication to education. In an environment of poor farmers and rough coal miners he had to avoid or absorb physical violence on an almost daily basis. His family lack of funds, however, caused him to learn woodworking and to make small items for sale. His decoration of some of these items generated a sense of beauty and very early included innovative designing of new objects. He was also able to learn quickly the decoration of china and glassware, enabling him to earn funds for his college work as a commuter to Western University of Pennsylvania (later the University of Pittsburgh), and for matriculation at Jefferson in 1884. Financial problems continued to plague him following graduation, in part by reason of his reluctance to charge patients for his services but also because of his expressed lack of financial competence.

Jackson’s medical career began in 1882 with a preceptorship under Dr. Gilmore Foster, combined with working as a decorator to accumulate funds. In 1884, he estimated that he could get through the first year at Jefferson with his savings permitting him to live on sixty three cents a day. This was accomplished. His free time in 1885 was first taken up by a position as a traveling book salesman with little success but also by a Gloucester fishing boat job as a seaman and cook which was more satisfying, and he raised money for his last year.

Jackson’s letters to his family during his Jefferson student years reflect continuing interest in his home and family. He accounted strictly for his expenditures along with his frequent requests for funds. Although his autobiography describes his frugality in cooking his own meals, his letters indicate his payments for room and board at several boarding houses. He also remarked about limited contacts with fellow students but in his last year he wrote that he and Ross Foster, son of his preceptor, were “running Wallace for class president.” His letters also describe his devotion to the work indicating that his lectures plus hospital work and extra quiz courses usually kept him busy all day and evening. That he was well ahead of his peers in medical progress is evidenced by his possession of a microscope and making his own preparations, the latter including demonstration of an encysted “trichina spiralis” in pork muscle.

Fig. 1. Chevalier Jackson, M.D., Sc.D., LL.D., L.H.D. (1865-1958).

Eminent Jefferson Professors

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It is revealing of his character that soon after starting in practice in Pittsburgh, Jackson determined to become a laryngologist in spite of much advice against specialization. He proceeded to read extensively to supplement the knowledge he had acquired at Jefferson by attending regularly the clinics of Drs. Jacob Solis-Cohen, Charles E. de M. Sajous and Louis Jurist. Dr. Solis-Cohen had loaned him his own book on laryngology as well as a set of the writings of the British specialist, Sir Morell Mackenzie. Once again after a short period of practice he embarked for Europe with very limited funds and had brief but successful experiences, visiting the clinic of Mackenzie and attending European Clinics. With exhaustion of his funds he returned to Pittsburgh. At once he limited his practice and found ways to promote his ideas for study in his selected field. Before long, while practicing and promoting the increasing use of tonsillectomy, he became interested in the problem of foreign bodies, first in the esophagus and later in the tracheobronchial tree. Noting that he had observed Mackenzie using “an unpractical device to inspect the esophagus”, he began with a primitive scope which he first used in 1890 to remove a toothplate from the esophagus of an adult and a coin from that of a child. A new specialty was born.

This early success was built upon by careful redesign of his original instrument, soon improved by the addition of a light carrier as suggested by Dr. Max Einhorn. At the same time he added efforts to design an instrument to examine the air passages beginning with the primitive tube described earlier by Green, and the scope devised by Killian who demonstrated the practicality of passing it through the larynx for removal of foreign bodies from the tracheobronchial tree. Beginning with dogs, Jackson soon demonstrated the practicality of bronchoscopy and began to refine the design of his early instruments. Success with removal of foreign bodies led to the development of further knowledge of the diseases of the air and food passages which greatly expanded the field.

He employed his mechanical skills to great advantage and quickly collected many instances of removal of foreign bodies. As early as 1907 he published his standard work entitled “Tracheobronchoscopy, Esophagoscopy and Gastroscopy. During this period he was working almost entirely alone. In 1910, however, his reputation among Pittsburgh laryngologists resulted in his election as Professor of Laryngology at the University of Pittsburgh and the establishment of the Bronchoscopic Clinic. By this time also his work had become known more widely through presentations at medical and specialty societies, leading to election as President of the American Laryngological, Rhinological and Otological Society.

At a critical point in Jackson’s career, a threatening interruption with serious potential occurred when he was discovered to have pulmonary tuberculosis in 1911. It was first regarded as early disease and he was advised to limit activities and accept long hours of bed rest. He improved and gradually resumed his many responsibilities. Two years later he had a pulmonary hemorrhage signaling a recurrence of active tuberculosis, and a total interruption of his career was mandated. Even this period was turned to advantage by his moving to an old farmhouse on the hills bordering the Ohio River and using his bed rest time to write a new book: Peroral Endoscopy and Laryngeal Surgery. In 1915 the New York Post-Graduate Medical School elected him Professor of Bronchoscopy. There he developed courses in bronchoscopy which became part of the curriculum in Otolaryngology, and for a time he commuted to New York with some regularity. This chair was resigned in 1917.

The major move in Jackson’s career occurred in 1916 when he was offered the Professorship of Laryngology at Jefferson. Although content with his locale, he recognized that the move “offered great opportunities for the spread of the life-saving methods of bronchoscopy”, and he accepted. He was highly impressed with the reception he experienced, the cordiality of laryngologists and surgeons, providing great satisfaction. He was especially gratified by the welcome of Drs. W.W. Keen, J. Solis-Cohen and H.A. Hare. The event was heralded by the Philadelphia Public Ledger with the headline “Jefferson Medical Obtains World-
Famous Specialist.” Not long after his transfer to Philadelphia, Jackson experienced his third bout with active tuberculosis, and again he sought a rural environment where he gradually recovered.

The new forum for his work proved highly effective. His teaching clinics were popular and in demand, his skills receiving much comment. He developed the ability to manipulate foreign bodies with specially designed instruments adapted to the problems at hand or anticipated (Figs. 2 and 3). This came into full use as he depicted the findings observed through the scopes with drawings and paintings long before the adaptation of color photography for illustrative purposes. His fame spread widely, developing a large referral practice and demand for instruction in his methods (Fig. 4). Graduate programs for laryngologists as well as the training of his assistants proved popular. In 1924 he was made Professor of Bronchoesophagology and head of the Department, while the Chair of Laryngology was awarded to Dr. Fielding O. Lewis.

During this period an extension of his innovative program occurred when he acted aggressively to promote the prevention of inhalation and swallowing of foreign objects by infants and children by publicizing the need to avoid opportunity to handle them. Furthermore, he crusaded for passage of a federal law for prevention of esophageal strictures by controlling hazardous substances available to children. In 1927, after time-consuming national efforts, including his appearance before U.S. Senatorial committees, Congress passed the Caustic Act providing for poison and antidote labels for hazardous substances and it was signed by President Coolidge.

In 1919, there began a dispersion of Jackson’s academic activities. Having become well established at Jefferson, he retained his appointment there but accepted a parallel appointment as Professor of Bronchoscopy and Esophagology at the University of Pennsylvania and its Graduate School, where the chair was established for him. He was appointed Lecturer in Bronchoscopy and Esophagoscopy at Temple University in 1924. The following year a similar appointment as Lecturer at Woman’s Medical College completed his simultaneous involvement with five schools of medicine, an unprecedented honor.

He achieved no remuneration from any Chair, but his income from his large consulting practice caused his earlier lack of funds to remain only a memory.

Jackson’s motives in so extending his terrain arose mainly from his conviction regarding the urgency of disseminating knowledge and skill in the field which he had developed as a new specialty. He was devoted to children and to spreading the “Gospel” of preventive measures particu-
Fig. 3. Fragments of bone removed by Dr. Jackson from pharynx and larynx.

Jackson was particularly for protecting them from inhalation and swallowing of objects. He enlisted the aid of pediatricians and lay persons in this process. His teaching of residents and students in the clinics he established was demanding and intense, and many completed his programs to follow his lead in their local areas.

The Jefferson phase of his career came to an end in 1930 with his mandated retirement at age 65.

Dr. Louis H. Clerf, a loyal student and associate, succeeded him as Chairman. Jackson moved his headquarters to Temple University Hospital where he headed the department and the Jackson Clinic was established for him. His son, Chevalier Lawrence Jackson, ultimately succeeded him there as the director. The most active and productive years of his career, however, had been spent at Jefferson. During the next decade while continuing his activities mainly through Temple’s Jackson Clinic, his world-wide fame was in full flower. His activities at Woman’s Medical College, however, expanded when in 1934 he was elected to a newly established Chair of Bronchoscopy and Esophagoscopy. Soon thereafter he became President of Woman’s Medical College of Pennsylvania.

Dr. Jackson lived until age 93. Prior to and during his retirement years he was one of the most celebrated physicians in United States history. Continuing his writing (Fig. 5), often in bed or on a boat (Fig. 6.) in the creek near his house, he also pursued his artistic proclivities with oils and other media (Fig. 7) and as a woodworker. A number of medical societies were provided with decorative gavels produced of distinctive woods at his lathe (Fig. 8).

In his autobiography, Jackson says little about his family life. He acknowledged that he was always regarded as a relatively private individual but this refers mainly to his failure to indulge in purely social activities, preferring the privacy of his home and its simple comforts. It does not apply to his medical relationships since he attended many medical meetings both as participant and speaker. His papers, speeches and addresses were much in demand and were appreciated, especially in view of his speaking and illustrating skills. He used his ambidexterity to great effect while lecturing and graphically presenting his endoscopic findings with his own paintings. Also, he held office in many professional and specialty societies. From the time of his move to Philadelphia he lived in quiet rural surroundings, first near Ardmore where he carried on a rest program for his recurrent bout with tuberculosis and in 1919 in an old restored mill on Montgomery County’s Swamp Creek. There he lived until his death in 1958 enjoying the countryside which provided many scenes for his paintings.

Perhaps no other Jefferson alumnus was ac-
corded the honors bestowed upon Chevalier Jackson. He was awarded numerous citations and medals by medical associations and governments. He was an honorary member of many American and foreign societies and was decorated by the governments of France, Belgium, Italy and Brazil. He was the winner of Philadelphia’s Strittmatter award and Bok award, the Distinguished Service Medal of the American Medical Association, and the Gold Medal of the Radiological Society of North America among others. Numerous honorary degrees were received including the degree of Doctor of Humane Letters from Jefferson in 1954.

It is interesting to speculate regarding the influence his experience with tuberculosis had on his personal habits and behavior. It has been observed with respect to the accomplishments of many famous people that their tuberculosis provided a drive partly because of risk of early death, that led to full and urgent use of their abilities. Also the way of life generally regarded as necessary for recovery from the disease, namely tranquility, rest, and milk in the diet could readily have influenced him all his life. Surely his writing in bed, his writing chair, or sitting in a boat as he did during his treatment and convalescence, reflected these principles. In this context Dr. Harvey Cushing, the great Boston pioneer neurosurgeon, was an admirer of Jackson and invited him to address the prestigious Harvard Medical Society in 1924. The story from the Fulton biography of Harvey Cushing is told as follows.

“Jackson had been invited to come to Boston to speak at a meeting of the Harvard Medical Society, and the Chief had arranged a dinner for him before-hand, inviting Ally Porter, David Cheever, John Homans, Mosher and Crockett, among others. The train from Philadelphia arrived that noon and there was no word from Jackson. Finally Miss Stanton ran him down at the Copley Plaza and received the reply that never, in any circumstances, would he think of going out to dinner before delivering an address. He always went to bed and had bread and milk or something of the sort. He was immovable in this decision and yet the dinner was already arranged. Dr. Cushing, with his characteristic resourcefulness, called in his resident and informed him that he was to be Chevalier Jackson for that evening. The fact that there was a disparity in stature between the two and also that Jackson had a beard while the resident did not, did not stand in the way for a moment. A beard was improvised and Mosher and Crockett, who knew Jackson, were tipped off. It was arranged that Jackson should arrive later at the Harvard Club. There the Chief met him and they encountered Samuel Levine who was duly introduced and who asked after a patient they had treated together. I do not know, but it appeared that some of them at least felt they had met a celebrity. Only David Cheever maintained that he had guessed the identity of the distinguished visitor, but had dismissed the idea from his mind as altogether fantastic. I believe that there were even those who, after hearing the evening’s address, felt it better to disbelieve their own eyes than the Chief’s introduction.”

Although written to illustrate Harvey Cushing’s “practical joke” propclivities partly relating to his closeness to William Osler, the incident suggests that Jackson rather than exhibiting eccentric behavior was merely carrying out his normal routine which had been learned during his prescribed treatment for tuberculosis.

Jackson died August 16, 1958 and was entombed in a mausoleum at West Laurel Hill Cemetery (Fig. 9). The American Medical Association in its obituary described him as “one of the greatest, if not the greatest of laryngologists of all time.” Dr. Louis H. Clerf (JMC, ’12), his successor at Jefferson in his

Fig. 4. Autographed photo of Bronchosopic Clinic at Jefferson ca. 1922. Jackson at right, Louis H. Clerf at center, rear.
Fig. 5. Jackson writing at his own designed chair in library at home. (Courtesy of "Pennsylvania Heritage," the Pennsylvania Historical and Museum Commission, Harrisburg, Pennsylvania.)

Fig. 6. Jackson working on his electric-powered specially designed boat on Mill Pond. (Courtesy of "Pennsylvania Heritage," the Pennsylvania Historical and Museum Commission, Harrisburg, Pennsylvania.)
memoir stated: "Dr. Jackson enjoyed a unique position in the medical profession of America. Few physicians have left behind so many monuments to their skill. He created a new specialty in medicine, perfected an instrumentarium and technic for its practice, taught the need for its use in diagnosis and treatment, and because of his knowledge and skill became the Master of his Art."

The esteem in which he was held at the peak of his career was shown with the presentation to him of the Bigelow Medal of the Boston Surgical Society at a meeting of the American College of Surgeons on October 10, 1928 when Harvey Cushing, its President, described Jackson in these eloquent words:

"Merit cannot be made greater by calling it to public notice. Virtue lies in the struggle, not in the prize. And the members of this society are fully aware that in conferring this medal they give prominence to themselves rather than to the object of their attentions. For he, in the natural course of things, will already stand high in the esteem and affection of the profession and be one who seeks no other reward. Nor would he so stand did he not look with modesty upon his attainments, be unconscious of the fact that he is a celebrity and instinctively shun the lift of public acclaim.

"The works of a sculptor or painter or architect endure for posterity to appraise. The art of surgery in which you so excel calls for gifts no less rare, for perseverance and training no less arduous, for craftsmanship no less artistic and painstaking. But the material on which the surgeon does his work is like himself in the end perishable, and the fact that there was a man whose manual skill and deftness in his chosen field surpassed that of all others of his time become soon a fading memory.

"But the Recording Angel knows how few there be among us who day after day, year on end, sacrifice themselves as you have done to be continuously at the sudden call principally of stricken children who by your unique talent are literally snatched from the very crossing of the river. For one who can thus spectacularly transmute agony and grief to health and happiness, the blessings of patient and parents are rec-
cept for one elderly lady who felt sorry for his lack of recognition and finally clapped with her gloved hands. No one could have predicted that this small, lonely man would become world famous. In any event, Jackson was not present at the gathering that afternoon and the banquet that evening when the accident occurred. The newspapers of the day made much of the event which took place at Natatorium Hall (Fig. 11), Broad Street South of Walnut. The account appeared the next morning in the Philadelphia Press.

DOCTORS IN A CRASH
Thirteen Jefferson College Graduates Make A Narrow Escape Two Of Them Seriously Hurt And The Others Cut And Bruised By The Giving Way Of The Floor Natatorium

A serious accident which by mere chance had no fatal results was a startling preliminary to the annual banquet of the Alumni Association of Jefferson Medical College to the faculty and class of 1886 at the Natatorium last night. One corner of the temporary floor over the swimming tank which is unused in winter, on which a large crowd of students were gathered, crashed downward, carrying with it about thirty of the young doctors, burying many of them beneath fragments of beams and articles of furniture. Thirteen students in all were injured, two of them seriously. This is the list of the injured.

Those Who Were Hurt

Casselberry, Henry B., Hazelton, PA (foot sprained and badly bruised).
Deakyne, Clarence G., 9th and Spruce streets, Philadelphia, PA, (nose broken and badly injured).
Goe, John Graham, (seriously hurt about the head, breast, and stomach).
Guss, Harry T., Pennsylvania, (badly bruised about the limbs).
Lindsay, James W., Pennsylvania, (ankle sprained and toe dislocated).
Miller, Joseph Elias, Pennsylvania, (badly bruised about the leg).
Seitz, Frederick, Pennsylvania (severely bruised).
Tren, Aaron, Russia, (hurt about the chest).
Valls, Bartholomew, Texas (ear cut nearly off and badly hurt internally).
Wilson, Robert, Delaware (head badly cut).
Woodruff, Charles, E. Pennsylvania, (leg bruised and head cut).
Wiseman, William, Albert, Illinois, (bruised and cut about the head and neck).

How The Accident Happened

The accident occurred at about 8:15 o’clock. The dinner in the large hall upstairs was not ready and the entire party gathered in the Natatorium. The staid Professors fraternized with the new doctors and many a party gathered around the piano where late student, Harry Casselberry of Hazelton, was
playing. The piano was in the Southwest corner of the room. Somebody started to sing "John Brown's Body". Then there was a crush toward the piano with fifty students running to be a part of the swelling chorus. J.A. Payne, proprietor of the Natatorium, says many of the students were jumping up and down. The students say they were standing still. Anyway, the floor gave way as suddenly as though a tremendous weight had fallen upon it and the chorus of "John Brown's Body" was drowned by the crash of timbers and the cries of the young men who went down with them. A section of the floor fifteen feet square had sunk with a big piano and the very compact bodies of the newly graduated physicians. The big piano had fallen upon a number of the young doctors and cries of fright were speedily succeeded by cries of pain.

Then followed a scene of alarm. The fall had been about nine feet to the bottom of the pit. Twenty-five were struggling to get out. The big piano fell directly upon John G. Goe and he was unable to move. Two or three others were under it and stalwart B.F. Scholl of this city managed to keep an end of it up so that Mr. Goe was the only one badly crushed. It was ten minutes before he could be taken out and he was unconscious. Those painfully hurt were made comfortable on the benches.

Fig. 10. Invitation to members of Jackson's 1886 class for graduation reception.

Fig. 11. The Philadelphia Natatorium at 219 South Broad Street. This facility was an indoor pool but in winter it was used as a gymnasium. A "dancing academy" occupied the second floor. "The place was conducted in a superior manner, and its clients in the main, came from the fashionable sets in Philadelphia."
until the arrival of conveyances, and the Natatorium speedily assumed an appearance not entirely unlike the hospital of a great medical college.

Caring For The Injured

None of the Faculty had been up close to the piano and they at once busied themselves looking after the injured. Drs. DaCosta and Brinton were particularly industrious and Professor Pancoast, who came in a trifle late, inquired anxiously for those who were hurt. Goe and Valls were taken to the hospital and the others to their homes. With care, it is hoped that all will soon be able to be about but the injuries of Drs. Goe and Valls are, it is feared, serious.


[Ed. It is gratifying that none of the injuries proved serious in spite of the threat at the time and at no time since 1886 did any notable mini-disasters occur to mar the graduation ceremonies.]

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Edward P. Davis (JMC, 1888):
The Wilson White House Connection

The career of Dr. Edward Parker Davis has not been well known to recent generations of Jefferson's Alumni for reasons not entirely clear. He may have been eclipsed by the strength of his successors in obstetrics and gynecology as well as the fact that many of his major professional contributions occurred in the early years of his professorship. It is time for Jefferson once more to chronicle and acknowledge his accomplishments.

Edward Parker Davis was born September 16, 1856, in Baldwinsville, New York. After three years in business, he went to Princeton where he graduated with an A.B. degree in 1879 and was awarded an M.A. in 1882. He received his M.D. at Rush Medical College, Chicago, the same year and began practice in that city. From 1882 to 1886, he spent much time in graduate work. He studied obstetrics and gynecology in Vienna and went on to Berlin and Prague. Dr. E.L. Bauer in Doctors Made in America states that "everywhere he went to study in Europe he heard the Jefferson Medical College and its Faculty discussed as an authority in so many subjects that he returned to America to enroll in the regular course at Jefferson." Receiving his second M.D. from Jefferson in 1888, he became Assistant Demonstrator of Obstetrics and quickly advanced to Clinical Professor. In 1898, he became the first Chairman of the Department of Obstetrics and served until 1925. According to Bauer he was "looked up to as the outstanding obstetrician for three decades"..."Edgar of Chicago was his nearest rival."

Dr. Davis also served in various capacities at the Philadelphia Polyclinic, at the Philadelphia Gen-

Fig. 1. Edward Parker Davis (JMC, 1888). JMC Professor of Obstetrics (1898-1925). Lifelong friend of President Woodrow Wilson.
eral Hospital, and for a time as Professor of Diseases of Children at Womans' Medical College. His interest in nursing led to his Chairmanship of the Committee for the Nurses’ Training School at Philadelphia General Hospital from 1886 to 1924 and the publication of Obstetric and Gynecologic Nursing which went through five editions. For eight years, he was editor of The American Journal of the Medical Sciences (1891-98) and also published five books and numerous monographs on obstetrics. Well known internationally, he was a founder of the International Congress of Obstetricians and Gynecologists and represented the United States at its convention in St. Petersburg. In 1910, he was President of the American Gynecologic Society.

During his Chairmanship, Dr. Davis expanded the teaching of clinical obstetrics, requiring all Jefferson graduates to have observed and attended 12 deliveries. He was also ahead of his time in teaching principles of pre- and post-natal care for maternity patients, making extensive use of satellite clinics located at 327 Pine Street, 224 West Washington Square, and 2545 Wharton Street.

In 1896, Davis reported (Medical News, 86, 119) his Cesarean delivery of a living child in the home of its mother within minutes of the mother’s death from eclampsia and convulsions. The infant, however, survived only two weeks, giving evidence of the limited measures for the care of the newborn then available. He was also interested in asepsis for delivery, having observed the transition from antiseptic methods with their chemical ill effects to the benign results of aseptic procedures.

Dr. Thaddeus L. Montgomery (JMC, ’20, Emeritus Professor of Obstetrics and Gynecology), in a personal communication (3/17/91), discussed his recollections of Dr. Davis as teacher and chief. He remembered Davis as a large man, somewhat bombastic as a lecturer, and he further observed that he enjoyed hearing himself speak, but was well regarded as a clinician. At the beginning of each lecture, he was likely to say a few words about world and national events which at the time appeared to take precedence in his thinking. Dr. Montgomery also remarked about the good record of the Department of Obstetrics with respect to maternal mortality under Dr. Davis and his fairness in dealing with his staff. On one occasion during Dr. Montgomery’s internship, a young girl was seen in the dispensary whom he (Dr. Montgomery) had diagnosed as having tuberculous peritonitis, but Dr. Davis on review regarded it as abdominal pregnancy. At operation, tuberculosis was confirmed and Davis publicly congratulated Dr. Montgomery for his accurate diagnosis. Dr. Montgomery further noted that Davis took great pride in having been a college classmate of Woodrow Wilson.

Davis and Wilson (Figs. 1 & 2) were close friends during their Princeton years (1875-79). Although their interests were widely at variance, their friendship endured. In a sense, the friendship was unusual because Wilson, although a gregarious man, had a private side described by one of his professors at Princeton as a “section of his composite being which he kept under lock and key and into which no one outside his family was ever allowed to enter” (Josephus Daniels, The Life of Woodrow Wilson, Philadelphia, The John C. Winston Co., 1926). Wilson was active in many areas during his undergraduate years but concentrated on the pursuit of his already developed concern about constitutional government and history. He also wrote

Fig. 2. President of the United States, Woodrow Wilson (photo during presidency, ca. 1918).

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several articles for publication while a student. His democratic bent was frequently at odds with the current thinking at Princeton. Perhaps Wilson was drawn to the friendship with Davis since he had already attended Davidson College and Davis had also engaged in other pursuits prior to his matriculation at Princeton. Their mutual maturity may have been partly responsible for drawing them together. In any case, all evidence points to a respected relationship which ripened through the years.

On the evening of the inauguration of Woodrow Wilson as President of the United States (March 4, 1913), Davis was at the new President’s elbow when a minor injury occurred to the President’s sister. This caused Wilson to ask Davis: “What shall I do for a doctor here in Washington, E.P.?” Davis replied: “The Navy’s surgeons have a fine reputation. Send for Dr. Grayson.” This created a relationship with Dr. Cary T. Grayson which extended throughout the Wilson years. Grayson had already been the White House Physician during the Taft Presidency (1909-13) and Assistant Surgeon for the prior Theodore Roosevelt years. President Taft also gave his friendly endorsement as he left the White House. Grayson’s loyalty to President Wilson extended until the President’s death in 1924. Advanced to Rear Admiral in 1917 and at the center of the controversies surrounding the President’s illness in 1919, his management was never questioned.

The terminal illness of the President’s first wife on August 6, 1914, was the occasion for another visit of Dr. Davis to the White House. The President was difficult to persuade that the end was near but Davis was compelled to inform him that death was only hours away. She died the same day. It is not clear whether or not Davis was directly responsible for the consultation of a famous Jefferson Professor, Dr. F.X. Dercum, in October, 1919, following President Wilson’s stroke of September 26, resulting in disability which impaired the President’s effectiveness during the last 18 months of his administration. Bauer, however, states that Davis “called Dr. Dercum in consultation.” Dercum, Jefferson’s Professor of Nervous and Mental Diseases (1900-25), saw Wilson October 4 and remained in touch with his medical advisors until the end of the presidential term in March, 1921.

Perhaps the most widely publicized event relating Jefferson to the Wilson-Davis friendship was the delivery of the President’s grandson, Woodrow Wilson Sayre (Fig. 3), by Davis on February 23, 1919. Wilson’s daughter, Mrs. Francis B. (Jessie Wilson) Sayre came to Jefferson specifically for this delivery by Davis. The timing was fortuitous since Wilson was at the peak of his popularity, World War I having ended three months earlier, and his disabling illness was still seven months in the future.

On March 4, President Wilson visited Jefferson as a stop on his way to New York to embark upon his second post-war trip to Europe. A motorcade met him at Broad Street Station and moved slowly through cheering crowds to the Tenth Street entrance at Jefferson Hospital (Fig. 4). The Wilsons were met by Dr. Davis. They were accompanied by the President’s physician, Dr. Cary T. Grayson as they were escorted to the sixth floor for the brief visit with Mrs. Sayre and the new grandson. Curiously, details of the visit were not recorded by Jefferson people. Perhaps this related to the absence of alumni and student publications during the war and post-war period. Dr. T.L. Montgomery, however, recalls the President’s visit as gener-
ating much interest and excitement among the students and hospital staff. The following quotation from the Philadelphia Record, March 5, 1919, describes the scene: "The smallest audience which ever listened to an important speaker greeted the most prominent man in the land yesterday afternoon in a very calm, orderly fashion, but showed absolutely no enthusiasm at all over the League of Nations, the 34 willful senators, or any bothersome question of national import. Outside, the streets were echoing with cheers of the greatest throng that has turned out since the armistice celebration. But within the walls of the meeting place, a great speaker was meeting a situation unique in his career. He was being laughed at, chuckled at with a cooing, happy gurgle not one bit suitable to the dignity of the most important man in the world."

"The meeting place was a room on the sixth floor of the Jefferson Hospital. The audience was Woodrow Wilson Sayre, aged 10 days. The speaker was Woodrow Wilson, President of the United States, but his stay in Philadelphia was concerned only with his duties as an exceedingly happy grandfather."

"For a solid hour, from 14 minutes after five until quarter after six, President Wilson, who had just left the turbulent scenes at the Capitol on his way to address a great audience in New York before sailing again for the peace conference, forgot the cares of his great office. Privacy for more than a few short minutes he could not have, but for those few minutes he could be and was simply a loving father and a tickled-to-death grandfather."

Newspaper reports of the departure of the Wilson party and its return to Broad Street Station again reflect the high level of enthusiasm of the large crowd. The only exception was described by the Philadelphia Record as the motorcade passed the Union League where was seen "—the sparsest crowd ever seen on a public occasion. Glum faces with never a cheer, were all the greeting the President got from the big Republican stronghold."

Although Davis left no memoir or notes detailing his close relationship with Wilson over the years, there are a few biographical references which provide some information. Daniels (The Wilson Era, Chapel Hill, University of North Carolina Press, 1944) states that Davis was interviewed a few days after Wilson's death and provided many insights into the Wilson background, personality, and character. In addition to a detailed description of Wilson's routine and habits during the interval between the end of his presidency and his death, Davis also recorded his recollections of their experiences at Princeton. Davis had spent a reminiscent day with Wilson in January, 1923, a year before Wilson's death. He was designated an honorary pallbearer at Wilson's funeral.

While not specifically documented, it is probable that Davis was responsible for earlier Wilson family experiences at Jefferson through referral to Dr. W.W. Keen. In the Spring of 1912, Dr. Keen operated on Mrs. Ellen Wilson and a few years earlier, he also operated on two of the Wilson daughters. (The Memoirs of William Williams Keen, W.W. Keen James, Ed., p. 216, 1990).

The career of E.P. Davis at Jefferson terminated
rather abruptly with his resignation December 29, 1924. There are few records of his activities between 1925 and his death in 1937. His earlier forward-looking accomplishments in the teaching of obstetrics and gynecology indicate a man with a commitment to education, to progress in his chosen field, and to the practice of excellent clinical medicine. His own education, both general and medical, was exceptional for his times and reflected an organized mind and determined personality. His work with the poor was noteworthy as shown by the importance he attached to the care of poor maternity patients in the clinics. His liberal views in addition to his closeness to a liberal president are indicated by the motion he made at a meeting of the Jefferson Faculty on November 25, 1919, that "Jefferson approve of coeducation." This led to committee activities and meetings with Womans' Medical College that ultimately failed to accomplish the result envisioned by Davis.

The Wilson connection provides an historically oriented opportunity to appreciate more fully this important Jeffersonian.

Roberts Bartholow: His Dismissal Protested by Students

In 1879, Roberts Bartholow succeeded John Barclay Biddle as Professor of Materia Medica. He served in a highly respected fashion for eleven years (1879-90) and as Dean for four years (1883-87). That this distinguished scholar should have been dismissed from the faculty by the Board of Trustees under controversial conditions protested by the Professor himself, as well as by his Jefferson students, is a tale worthy of recount.

Dr. Bartholow (Fig. 1) was born in New Windsor, Maryland, on November 28, 1831. His father was a Huguenot of Alsatian stock to which his biographer, Dean James W. Holland, ascribed his "independence, tenacity of opinion, and non-conformity." His mother was of English ancestry. Raised in a loving but secluded household, he was afforded a collegiate and professional education by his well-to-do parents.

In 1848, Bartholow graduated in the classical course from Calvert College in Maryland and in 1854 received a degree of Master of Arts from the same institution. He became proficient in French language and to a lesser extent in German.

After obtaining his M.D. degree from the University of Maryland, in 1855 he signed up as an Assistant Surgeon in the Army, serving in Utah and New Mexico during the disturbances created by the Mormons and Comanche and Apache Indians until the Civil War. His academic nature was manifested by his authorship of a Manual for Instructions for Entering and Discharging Soldiers and his composition of Qualifications for the Medical Service.

Although a Southerner by birth in a slave state (Maryland), Bartholow with only one other fellow officer joined on the Union side in the Civil War. In September, 1861, he was sent to Baltimore, Mary-

Fig. 1. Roberts Bartholow, M.D., LL.D., Professor of Materia Medica and Therapeutics (1879-90) and Dean (1883-87).
land, which had in borderline fashion entered in the Federal cause. In the Fall of 1863, while at the Lincoln General Hospital in Washington, D.C., he wrote a series of articles for the instruction of the United States Sanitary Commission and served on a Board for modification on "registers and returns of sick and wounded" and upon "a suitable diet to be prescribed for the general hospital of the army." At his resignation in 1864 he was in charge of the general hospital at Nashville, Tennessee.

At age 33, after seven years as an Army Surgeon, married and with children, he set out in civil practice in Cincinnati, Ohio. At that very time (1864), he accepted the offer of the Chair of Medical Chemistry in the Medical College of Ohio, a position familiar to him since he had served as an assistant instructor in chemistry while an undergraduate in college. His course stressed the application of chemistry to medicine and met with favor. In 1866, he was in charge of the Cholera Hospital during an epidemic and subsequently became connected with the staffs of several hospitals.

Bartholow proved successful as a teacher, writer and practitioner. He founded a medical journal *The Clinic* with editorials on controversial subjects. In 1867, Bartholow was transferred to the Chair of Materia Medica. With industry and talent he began to achieve fame as an exponent of the exact sciences as applied to the action of medicines. He was the first in that institution to illustrate his lectures by experiments on animals to demonstrate the physiological effects of drugs. At this busy middle period of his life, he was professor, pathologist, editor, practitioner, and author of books (Disinfection; Spermatorrhea; Manual of Hypodermic Medication), as well as scientific essays. His main literary production was *Materia Medica and Therapeutics*, which dealt with pharmacological, physiological and clinical aspects of therapeutics and diet. It went through eleven editions and 60,000 copies.

In 1874, Bartholow achieved notoriety by his publication of a dramatic experiment in the *American Journal of the Medical Sciences*. A case came under his care of a rapidly spreading epithelioma of the scalp with exposure of the dura mater. With the consent of the patient who was aware of his hopeless condition, Bartholow applied electrical stimulation to the posterior lobes of the cerebrum by needle electrodes in a pioneer attempt at localization of brain activity. Work of this type had been started on lower animals to discredit the old belief that brain tissue was uniform like that in the liver. The patient's death some days later was controversial as to whether due to the external injury or to extension of the cancer itself producing a thrombus of the longitudinal sinus. Bartholow ended up with little credit for his aggressive investigation and was censored in medical journals at home and abroad. The stimulus to further research in this field could not be ignored, and Bartholow eventually received the recognition he deserved. He was awarded a Doctor of Laws from Mount St. Mary's College and became a Fellow of the College of Physicians of Philadelphia. He was elected a member of the American Philosophical Society, as well as Honorary Member of the Royal Medical Society of Edinburgh and the Society of Practical Medicine in Paris.

From 1874 to 1879, Bartholow ably served as the Professor of Practice of Medicine in the Medical College of Ohio. At the latter year, Jefferson Medical College elected him to be the successor to John Barclay Biddle as the Professor of Materia Medica and Therapeutics. He was then 48 years of age and reputed to have "the largest and most lucrative practice ever attained in Cincinnati."

Bartholow brought to Jefferson his method of therapeutic investigation by experiments on lower animals. He shared the medical clinic with Professor Jacob Mendes DaCosta in complementing the latter's diagnostic skill with his therapeutic knowledge. One year after his arrival at Jefferson, he published his *Treatise on the Practice of Medicine* which incorporated his lectures from the Medical College of Ohio. A second edition appeared three months later and five additional ones followed. It was further honored by being translated into Japanese.

In 1881, Bartholow delivered the Cartwright lectures on *The Antagonism between Medicines and between Medicines and Diseases.* In the following year, he became one of the original members of the edi-
editorial staff of the newly organized Medical News of Philadelphia, a weekly paper. Among these arduous labors, he still found time to enjoy a summer home with his family in Buzzards Bay, Massachusetts.

From 1883 to 1887, Bartholow served as Dean of the College, but the demands of his clinical practice forced him to yield this position to James W. Holland, the Professor of Medical Chemistry and Toxicology.

Shortly after opening of the College classes in October, 1890, the students were shocked to learn that the Board of Trustees had requested the resignation of Dr. Bartholow, so that he could take an extended rest. No reason for this action was revealed at the time. Because Dr. Bartholow did not wish to resign and the students wished him to be kept on, the affair was touted in the newspapers. A special meeting of the students was proclaimed "an uprising." One of the articles was as follows:

THE TIMES - SATURDAY
OCTOBER 16, 1890
A Students' Uprising
Jefferson College Men Standing
By Professor Bartholow
They Want Him To Stay
An Exciting Meeting At Which The
Committee Was Appointed To Confer
With The Doctor

"Every student of the Jefferson Medical College, and they number 600, assembled yesterday at a called meeting at the Mercantile Library rooms, to take action on the forced retirement of Dr. Roberts Bartholow, Professor of Materia Medica and Therapeutics at the College, by the Board of Trustees.

"It appears that the Professor, who has a worldwide reputation as a medical author and for skill as a physician, has been requested by the Trustees to relinquish his position on account of the condition of his health, at least for a time period. This Dr. Bartholow is unwilling to do, and says his health is not such as to require the giving up of his position, and that words derogatory to him which have been circulated by his enemies are the cause of the Trustees' actions.

Excitement At The College

"The students and faculty at Jefferson College are in a state of considerable excitement about the matter and are at 'daggers point,' the former valiantly championing the Professor's side of the case and the latter naturally holding a conservative view indisposed to oppose in any way the Trustees' decision.

"On Thursday, his day for service, he was not present and the students had to forgo the benefit of his lecture and instructions. No explanation was given or could be gotten from the faculty for his actions, but the real state of the case came to light from a published letter of the doctor's.

"Since that time, a perfect furor of excitement and anger has been listed among students. The great majority of them were disposed to put on record at once their protests against what they considered flagrant injustice.

"The Dean of the Faculty, however, refused the use of any part of the College Building for a meeting which the students decided to hold for the purpose, and accordingly a room at the Mercantile Library Building on 10th Street was engaged.

A Meeting Was Held

"Yesterday afternoon a tumultuous meeting of all the students of the College was held, when Mr. Harris was elected temporary Chairman and Mr. Hazard Secretary. A committee was appointed to Dr. Bartholow and asked him for advice as to their actions. He advised them to be moderate and let their actions be in the form of a written remonstrance to the Board of Trustees against his removal. The committee reported to the meeting and a committee of five delegated to wait on him for further instructions. The meeting was adjourned until today at ten o'clock.

Dr. Bartholow Talks

"Dr. Bartholow, at his residence, on Locust Street, above 16th, said last evening that he had received
a written notice from the Board to resign 'on account of the state of his health.'" He continued: 'It is all the work of my enemies. Every man has them, and I have mine. I am perfectly able in mind and body to continue at my work, but rumors have been set abroad to the contrary. I advised the committee of the students when they called on me this afternoon to address a remonstrance against my removal at the meeting by the Board of Trustees of the College. They say that they became students of the College and paid their tuition money with the expectation of getting the benefit and profit of my lectures and instructions, and that they have a perfect right to protest against my removal, and I believe they are right.'

**WORN OUT IN HARNESS**

Dr. Bartholow's Professorship Soon To End

A VERY PAINFUL AFFLICTION
A Famous Physician's Mind Has Suffered From the Wear and Tear of Too Active Work

"The announcement came with a shock upon the city yesterday that the long time connection of the eminent Dr. Roberts Bartholow with the Chair of Materia Medica at Jefferson Medical College is likely soon to be severed. Many rumors accompanied these reports in feeling of regret through the wide circle of Dr. Bartholow's friends and professional associates. It has been known for a long time past that the well known physician had broken down under the string of great activities in professional and scientific work. Never before have his medical writings and his lectures in Jefferson been more brilliant or effective. At the same time the Board of Trustees of the College have learned of such facts in connection with the professor's condition as have made it incumbent on them to take some action.

**Broken Down in the Service**

"A meeting of the Board of Trustees of the College was held yesterday to consider the matter and although no member of that body would reveal the action taken, it was learned from good authority that it was decided necessary to either send Dr. Bartholow away for his health or to secure his resignation. A prominent member of the Board said last night, 'All will be settled at our meeting on Monday.'"
necessitated absolute rest for a long period. His explanation of the attack was that some years before he had suffered from diabetes and to cure it had been put upon a course of opiates which he had seconded with other drugs. These had enabled him to go on with his many employments until he reached the limit of his endurance."

When Dr. Bartholow's Chair was vacated on October 27, 1890, it was filled temporarily for a year by Albert P. Brubaker, M.D., Demonstrator of Experimental Therapeutics. The permanent Chair was awarded to Hobart A. Hare, M.D. in 1891.

There was a resolution in the November 4, 1890, Faculty Minutes of the College regarding Dr. Bartholow's departure "that the Faculty present their regards to Dr. Bartholow with the request that he consider the sum of money received by him from the College this session as justly his in view of his great and brilliant services to this institution." A handwritten note of thanks from Dr. Bartholow is attached to this entry in the Faculty Minutes.

After a period of rest, Dr. Bartholow made a recovery but never attained his former vigor. He resumed his practice, revised his textbooks and wrote additional articles for medical periodicals. The esteem in which he was held by his Jefferson students may be understood from the fact that the Class of 1892 inaugurated a fund for the purchase of an oil portrait of Professor Bartholow to be presented at the next Commencement. One hundred years later, the portrait occupies an honored position in Jefferson's Art Collection.

In 1893, Bartholow was awarded Emeritus status. He died at his home in Philadelphia on May 10, 1904 after a lingering illness, at age 72, and is buried in the cemetery of the Associate Reformed Presbyterian Church of New Windsor, Maryland, the city of his birth. A simple tombstone is engraved Roberts Bartholow, M.D., LL.D. (Fig. 2).
Randle C. Rosenberger (JMC, 1894):
From Transition to Tradition

The graduating class of 1894 was a participant in the progression of eventful changes taking place in medicine and medical education which heralded the era of scientific medicine. One of its members, Randle Crater Rosenberger, was destined to become a representative of this era with the longest Jefferson teaching career of his time (Fig. 1).

Dr. Rosenberger was born in Philadelphia, March 4, 1873, to Levi and Amanda (Crater) Rosenberger, descendants of the early settlers of Germantown. His education in public schools and graduation from the highly regarded Central High School was followed by a preceptorship in medicine under Dr. William R. Claridge and matriculation at Jefferson with graduation in 1894. Perhaps no Jefferson faculty member began and pursued his career with as great a variation in his early appointments and different services as Dr. Rosenberger. Receiving his first appointment at his 1894 graduation, as the basic sciences were differentiating from the more general Institutes of Medicine, he began as Assistant Demonstrator of Histology under Dr. Charles S. Hearne and Assistant in the Outpatient Children’s Department under Professor E.E. Graham. To our knowledge the Children’s appointment was the last clinical one he held at Jefferson but in addition he also served for a few years as an Assistant in Diseases of the Heart and Lungs at the Philadelphia Polyclinic beginning in 1895. His chief there was Professor Thomas Mays who at the time was a leader in the movement against tuberculosis. This experience may well have been responsible for Rosenberger’s lifelong interest in and study of the bacteriology of the tubercle bacillus.

In 1897 he became Demonstrator of Morbid Anatomy and Bacteriology under Professor W.M.L. Coplin, his academic standing becoming thus more clearly defined in the Department of Pathology. In 1898 he was made Assistant Pathologist to Jefferson Hospital and Curator of the Medical College Museum. In 1903 his laboratory experience led to his appointment as Director of Clinical Laboratories at Philadelphia General Hospital, which post he held until 1919. In spite of the diversity of his appointments, however, his interests and the progress of the basic medical sciences led to his central focus on bacteriology. In 1902 he was promoted to Associate in Bacteriology and in 1904 to Assistant Professor. In 1909 he was appointed to the new Professorship of Hygiene and Bacteriology, setting the course for his lifetime teaching career. His progress upward in the academic scale in many respects mirrored the changes which were taking place in medical education.

During his early years, Dr. Rosenberger held several other appointments beginning with the post of Pathologist to the Henry Phipps Institute for Prevention and Treatment of Tuberculosis (1903-1905). He was for a time Pathologist to St. Joseph’s Hospital. He served as Lecturer on Hygiene and later as Professor of Preventive Medicine at Woman’s Medical College of Pennsylvania.

This recital of early progress, though necessary for our story, does not begin to describe the contri-

![Fig. 1. Randle C. Rosenberger, M.D. (JMC, 1894).](image-url)
butions of a great Jeffersonian. For two generations, Jefferson students held "Rosy" in great respect and affection (Fig. 2). His teaching schedule was prodigious but he had time not only to devote to many other interests but to learn to know each student by name and background. For years returning alumni could count on being received with intimate recollections and continuing interest. The maturing of his career from clinical medicine through histology, general pathology, bacteriology, microbiology, hygiene, public health, preventive medicine and immunology signified a remarkable adaptation to the development of knowledge in his field and the need to provide curriculum changes for effective student instruction.

With the gradual increase in the complexity of subject material, Rosenberg's teaching time also became more demanding. Although research required a significant time commitment, he carried on with very limited help until late in his career. He was always personally on hand for all laboratory teaching and was responsible for all lectures until the 1920s when finally some help was provided. Students remember his well organized lectures, always punctuated with experiences and relevant anecdotes. During successive years these progressed from basic bacteriology through parasitology, preventive medicine, and ultimately immunology. His academic title was accordingly changed in 1927 to Professor of Preventive Medicine and Bacteriology and finally in 1941 to Professor of Bacteriology and Immunology. Responsibility for preventive medicine at that time was transferred to the new Dean, William Harvey Perkins.

Although his research led to no major discoveries, Rosenberg carried out numerous projects with extremely limited facilities. He studied tubercle bacilli in connection with the Phipps Institute (1903-1910) and later with Jefferson's Department for Diseases of the Chest. Upon the discovery of the Treponema pallidum, the agent of syphilis, in 1905, he embarked on a study with publication in 1907 on Spirochaetes Found in Syphilis and later ones on Biology of the Spirocheta pallida and A Series of Studies for Recognition and Diagnosis of the Treponema pallidum. Later his studies included parasites like Trichinae, Schistosoma, Filariae, Amoebae; the bacteriology of foods; skin lesions from industrial oils and his last publication in 1942, A Case of Cutaneous Myiasis Due to the Larva of Cordylobia anthropophaga. His published papers numbered 66.

In addition to the usual medical organizations, Dr. Rosenberg was a member of the Society of American Bacteriologists, a Fellow of the American Public Health Association, Aesculapian Club and Medical Club. He served on the Milk Commission and later the Pneumonia Commission for the City of Philadelphia and for a time was Chairman for the Study of Poliomyelitis and Encephalitis. True to his heritage, he was active in the affairs of the Pennslyvania German Society and the Cannstatter Volkfest Verein, the latter a German Social Club.

Also, apart from his medical career, Dr. Rosenberg's life-long interest in music illuminated his later years. He was a regular attendant at the Friday concert of the Philadelphia Orchestra and was an accomplished violinist. One of his great regrets was the theft of his 1678 Stradivarius violin from his Jefferson office in 1934. The treasure was never recovered.

Of all his accomplishments, none could match the esteem in which "Rosy" was held by Jefferson students. Although he demanded solid effort, he was eminently fair in all his relationships and the students respected and admired him. In a memoir Dr. Aller G. Ellis (JMC, 1900) commented: "Rosenberg's first hold on a student came from his uncanny ability to couple names with faces and remember both. After two or three periods with a laboratory section of fifty students he could quiz us by name without a roll book, using the latter only to record our degree of ignorance concerning the appearance and habits of bacteria. That ability to remember names made Dr. Rosenberg an ideal welcomer of visiting Alumni. No matter how many years had elapsed since the visitor had graduated he would without hesitation be greeted by name. Always affable, always enjoying a joke whether on the giving or receiving end, conversa-

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tion with Rosenberger was certain to be reminiscent and enlivening." The Class of 1928 presented his portrait to the College. A highlight of the Christmas season was his organization and conducting of Christmas Carols held either in the lecture room or McClellan Hall (Fig. 3).

An occurrence early in his career illustrates a lighter side of "Rosie". Dr. George P. Blundell, an Associate in Bacteriology and Immunology at the time of Rosenberger's death in 1944, retrieved an old cartoon from his papers. It recalled an episode when Rosenberger had attended a convention of the American Public Health Association in 1897. There was an exhibit on "Plague" which included culture tubes of Pasteurella pestis, the organism of bubonic plague. Assuming that the tubes were intended for distribution, he took one for teaching purposes. Discovering the disappearance, the exhibitors traced the tube to Dr. Rosenberger and retrieved it, much to his embarrassment. A cartoon (Fig. 4) was drawn as a spoof by W. Nicholas Lackey (JMC, 1899).

Fig. 2. Dr. Rosenberger in a typical laboratory teaching posture.
The respect accorded “Rosie” by the first-year students is exemplified by their response to the substance of a lecture delivered by him at some unscheduled period early in the course. This traditional event was anticipated and always cordially received. “Rosie” had a fatherly, yet professional concern for the well being of the students, many living on their own for the first time in a mid-city environment. Among the observations he made were references to established values and behavior so often threatened by temptations not previously encountered. Warning finally about the need for sexual continence and the risk of sexually transmitted diseases, he was careful to add that “clandestine” prostitution posed as serious a threat as the professional commonly observable on downtown streets. This application of the principles of preventive medicine to the students as well as to the public proved a remarkably effective teaching device especially when treated with the understanding and sensitivity of a role model of “Rosie’s” caliber.

Not entirely separated from his official duties was Dr. Rosenberger’s Montgomery County residence at Rahns, near Collegeville, reached via the old Perkiomen Valley Railroad. His home since 1925, he enjoyed the outdoors, gardening, and riding with horse and buggy. The student members of his fraternity, Nu Sigma Nu, were invited annually for a week-end party and baseball games at his home, experiences never forgotten.

A lover of the outdoors, he maintained membership in the Academy of Natural Sciences, the American Museum of Natural History, the Zoological Society of Philadelphia, and the Audubon Society. He was an avid observer of the flora and watchet of the fauna of his rural landscape.

Dr. Rosenberger was awarded the honorary degree of Doctor of Science by the Philadelphia College of Pharmacy in 1932, but perhaps the most cherished honor of his lifetime came to him as the guest of honor at Jefferson’s Annual Alumni Banquet, January 5, 1944. His photograph appeared on the cover of the Banquet menu and was accompanied by a citation and gift honoring his 50 years of faithful service to Jefferson.

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Medical College (Fig. 5).

Death occurred unexpectedly on February 21, 1944. At a memorial service Rev. W.A. Kline, A.M., B.D., Litt.D., Dean of Ursinus College, included the following remarks:

"I knew Dr. Rosenberger intimately. We met each other frequently and on many different occasions. My long career as a teacher and a professional man had brought me in close personal relationship with many fine personalities, in every walk of life, but in all these years I never met a finer character than Dr. Rosenberger. His manliness, his genial nature, his willingness to serve, his devotion to duty, his loving kindness and his true genuine fellowship endeared him to all who came in contact with him and made him beloved by all.

"The influence of his life and character upon his colleagues, his students, of whom there are many, and upon those with whom he came in close personal touch will continue to live and bear fruit as the years come and go, and his death will be a challenge to those who are still in the flesh to emulate his noble example."

As a long time Senior Faculty member, Dr. Rosenberger served as its Chairman and on several occasions as Acting Dean. From 1940 to 1941 he was designated Acting Dean following the death of Dean Henry K. Mohler. In this capacity, his wise counsel and accurate memory were always respected. One may unquestionably place him in that elite group designated as "Mr. Jefferson."
Hobart A. Hare (JMC, 1893): The Sutherland M. Prevost Professor of Therapeutics and Materia Medica

"For, in diseases of the mind, as well as in all other ailments, it is an art of no little importance to administer medicines properly: but, it is an art of much greater and more difficult acquisition to know how to suspend or altogether to omit them."

Philippe Pinel (1785-1826)

Hobart Amory Hare, Professor of Therapeutics and Materia Medica at Jefferson (1891-1931), paraphrased the words of Pinel when he stated: "A good physician is one who having pure drugs knows when to use them, how to use them, and, equally important, when not to use them." Hare, over a period of forty years, held a professorship the longest of any faculty member, and distinguished himself in writing, teaching, and clinical practice. This unique man was not only revered by his colleagues and students, but was a dynamic force in college and hospital policy appreciated by the Board of Trustees. The Class of 1932 presented to the College in May, 1931, just a month before his death, a large tablet commemorating his long and faithful service.

Hobart A. Hare (Fig. 1) was born on September 20, 1862, the son of Episcopal Bishop William Hobart Hare and maternal grandson of Bishop Mark Anthony de Wolfe Howe. Among his forebears who came from England in 1773 were other distinguished ministers. Dr. Hare married Miss Rebecca Clifford Pemberton in 1890. Their only daughter, Mary Amory Hare (wife of Dr. James P. Hutchinson of Philadelphia) was an artist, novelist and poet. His nephew, Hobart Amory Hare Baker, "Hobey Baker", was a legendary Princeton athlete in football and ice hockey, and Captain in the U.S. Air Squadron, killed in France in 1918. Hare, in his distinguished family, considered himself "born to the purple."

Hare obtained his preliminary education at the Episcopal Academy of Philadelphia and his medical degree from the University of Pennsylvania in 1884. He received the degree of bachelor of science the following year. In 1893, he obtained a second M.D. degree from Jefferson Medical College which led to his Presidency of its Alumni Association in 1909.

Shortly after his graduation in medicine, Hare traveled abroad for special studies in physiology at Leipzig, Berne and London. Upon his return, he was appointed lecturer in Physiology in the Biological Department of the University of Pennsylvania. There he promptly instituted original research on the physiological action of drugs in which he had already demonstrated unusual ability while still a student. This activity led to his award of an amazing number of prizes. At graduation in medicine from the University of Pennsylvania, Hare was awarded the Faculty Prize for his thesis, The Influences of Quinine on the Blood. During the next six years, he twice won the Fisk Fund Prize of the Rhode Island Medical Society (1885 and 1886), shared the Carthwright Prize with Dr.
Edward Martin (1889), the Warren Triennial Prize of the Massachusetts General Hospital (1889), the Dr. Christian of France Prize of the Royal Academy of Belgium (1889), and Boylston Prize of Harvard University (1890). These awards were for such articles as: Fever and Drugs Which Control it, Studies on Respiration, Intestinal Obstruction, Treatise on the Pathology and Treatment of Epilepsy, Physiological Effects of Tobacco, and New and Altered Forms of Disease due to the Advances in Civilization in the Last Half Century. In 1888, Hare won the Fothergillian Gold Medal of the Medical Society of London for his essay on Mediastinal Tumors, a distinction never previously won by an American (Fig. 2).

Hare, after serving as Instructor in Physical Diagnosis and Demonstrator of Medicine, was appointed in 1890 the Clinical Professor of Diseases of Children in the Medical School of the University of Pennsylvania. The following year he was elected by a vote of 11 to 3 to succeed Dr. Roberts Bartholow at Jefferson as Professor of Therapeutics and Materia Medica. Thirteen men had been considered for the Chair. This marked the beginning of his 40-year tenure that would end with his death on June 15, 1931.

At Jefferson, Hare continued his prolific writing which amounted to well over 100 articles and three successful textbooks. His Practical Therapeutics (1890) passed through 21 editions and was translated into Spanish and Chinese. Practical Diagnosis (1896) underwent nine editions and The Practice of Medicine (1907) through three. His monograph on the Medical Complications and Sequelae of Typhoid Fever and the other Exanthemata became authoritative and went through two editions. He edited a system of therapeutics, Modern Treatment, which contained articles by outstanding American and English authorities. In addition to his teaching and research he was founder and first editor of the Medical Magazine of the University of Pennsylvania and editor of Medical News and Therapeutic Gazette. One outstanding piece of research was done on an international scale when, as a member of the Hyderabad Chloroform Commission in 1894, he, with Dr. E. Quinn Thornton, submitted Study of the Influence of Chloroform Upon the Respiration and Circulation. Hare and Thornton both received a silver plate from the Nizam of Hyderabad of India in recognition of this work (Fig. 3).

Hare’s Lecture: The Last Of The Day

The material in Hare’s lectures included the indications, contraindications, physiological actions, and methods of administration of the various therapeutic measures. His colleague in medicine, Dr. Thomas McCrae, characterized his teaching as “incisive and dogmatic.” Lectures of this type would have been easier to absorb during the morning hours of the curriculum, but, fortunately, Hare had the rare ability to hold the student’s rapt attention throughout his discourses. The 1913 Clinic Yearbook, nevertheless, gave an amusing account of the irregular behavior that sometimes occurred in anticipation of the last lecture of the day, which was Hare’s.

“Wearily the class drags their ‘peds’ into the west lecture room prior to the entrance of Professor Hare, all worn out from previous attacks made
upon them by many of the faculty with discourses pertaining to medicine. One fellow, glad that the day was nearly gone, could be heard piping ‘Nearer My God to Thee’ — and appropriate indeed is this song, for we are about ‘all in’ at this time.

‘Yet after a moments rest, hostilities often commence. ‘Rough Neck’ Gottschall (Ed., Amos Wilson Gottschall, ’13) starts the fireworks by yelling forth the noble-spirited song of ‘Hail, Hail, the Gang’s All Here,’ and suit is followed by the whole class. Really, to my mind, pedestrians on Walnut and Tenth Streets surely must wonder where such hideous and infernal noises are coming from.

‘Off in a corner of the lecture room can be seen a modest youth reading the latest edition of the Bulletin when one of the ‘rough necks’ discovers the fact and immediately plans are laid for a conflagration of this piece of high literature. Sneaking gently up to the individual the manuscript is lighted, — then just as Nero watched beautiful Rome burning, so we watch this mysterious element fire slowly but surely eating away the flagrant paper and in the meantime, the possessor of same, being unconscious of its burning, suddenly scared by the burst of flame, he hurls the paper from him, naturally drawing it on his neighbor and thus you can imagine the noise, disturbance, smoke, etc., that is caused by the passage of the paper from place to place, until finally the last flame flickers from it.

‘Not content with this, one clique of gentlemen begin to formulate plans for the removal of Dr. Bonnell (Ed., Frank Summer Bonnell, ’13) from his seat of honor on the front row. By a systematized set of signals the ‘honorable’ Bonnell is suddenly seized, and, just as a comet shoots about in the heavens, so Bonnell is seized as if by Satan himself, and finds himself hurled about in the air by many sturdy, helping hands. Can you picture him tossing about, head down, one foot here and another there (Fig. 4)? But surely and steadily his figure is carried to the highest point of the house, where he is deposited in by no means a gentle manner — and as Longfellow would have expressed it: ‘As a feather is wafted downward from an eagle in his flight.’ Enraged by this meteoric flight, Bonnell ventures to make some caustic remarks for which he is immediately rewarded by being passed down to his former place.

‘The attention is now attracted to a lone figure sitting on the second row, whose beaming face emits sunshine in all directions, and on account of his portly shape and red-streaked, full-moon face, is quite popular with the boys.

‘Dear old Jack Cressler (Ed., John Webster Cressler, ’13), as Joe Pancoast would say — ‘how he sits there serenely gazing upon his self-made cigarette and meditating the following lines:

‘Yes, social friend I love thee well,
In learned doctors spite;
Thy clouds all other clouds dispel,
And lap me in delight.’

‘But lo — behold, as if the gods were conspiring against him, flashes of flame are seen traveling towards him from one particular set of gentlemen around him. These flashes increase in number and velocity and now come from all directions, each resembling in itself a shooting star and brings to my mind Tennyson’s words:

‘Matches to right of him,
Matches to left of him,
Matches in front of him,
Volleyed and thundered,
Stormed at with fire and shell
Came they with aim and well
On to the head of Jack
Came the fiery matches.'

"Indeed the laughter provoked by Jack's trying to protect himself from being burned alive was enough to change that sun-beaming face to one of gloom and uneasiness. With the cessation of this cannonading, Jack portrayed a sad picture indeed, disheveled, weak, puffy, and eyes staring wildly as if saying:

'Blow, blow thou winter wind,
Thou art not so unkind
As man's ingratitude.
Thy tooth is not so keen
Because thou art not seen.
Altho thy breath be rude.'

"And now one might think that after such demonstrations of frivolity the class would quiet down — but nay — the momentary calm that follows the last storm is disturbed by the barking apparently of a dog — but no — it's only Flick (Ed., John B.L. Flick, '13) imitating one — yes, and he follows this up by stealing all of the chalk from the counter and hurling pieces about the room, hitting anyone and any place much to the amusement of those that are not struck. And can't you all picture 'Dutch' Cope's (Ed., Roscoe Ziegler Cope, '13) sunny features disturbed suddenly by a piece of chalk landing on his partly bald head much to everyone's amusement?

"Again, plans are made for Bonnell to take another upward journey, and, as he is lifted up and tossed about as on a stormy sea, Professor Hare is seen to enter. Bonnell is dropped no matter where he's at, cheers start up for our venerable professor and noises ensue such as only wild men can make. Professor Hare then begins to talk of ancient history in which he has learned that the site of Jefferson was once occupied by a wilderness and howling men — then remarks that the wildness has gone but the howling still remains."

Hare Wired Aneurysms In The "Pit"

Aneurysms of the ascending aorta as a manifestation of tertiary syphilis were fairly common dur-

ing the first three decades of the twentieth century, despite the discovery of salvarsan, "606", by Paul Ehrlich in 1910. These lesions on occasion would reach the size of a grapefruit and erode through the anterior chest wall, causing death by internal or external rupture. It might seem strange that a medical professor would take an interest in inserting gold wire through a needle punctured directly into the lumen and passing an electric current from a storage battery through the wire to initiate clotting. Hare was indeed a Professor of Therapeutics but the procedure seemed more surgical than medical. In any event, Professor Hare did perform this procedure in the "pit" of the 1877 Hospital before the entire class on numerous occasions (Fig. 5).

According to Edward L. Bauer in Doctors Made in America, the following "true" anecdote was told by Professor Hare as he was performing a second wiring on the same patient before the class of 1914:

"After the first wiring this man walked from Philadelphia to Trenton, New Jersey, to see his lady love. After an amorous meeting he was too tired to walk home, so he nicked his skin and drew out the wire, pawned it for train fare and then returned to Professor Hare for another wiring."

Fortunately, syphilitic aneurysms are rarely if
ever seen today because of modern prevention and cure of the primary disease. Furthermore, it is most doubtful that the wiring treatment was of any value. On the other hand, it was another of the many dramatic demonstrations that took place in the old amphitheater between 1877 and 1924.

Class Of 1916 Presents Hare With Bronze Statue Of Mercury

The following account was taken from *The Jeffersonian* for May, 1916:

"On the afternoon of April 11, at 4 o'clock, more than six hundred students, members of the Faculty, and friends of the institution assembled in the clinical amphitheater of the College to honor Doctor Hobart A. Hare, and to celebrate his twenty-fifth anniversary as Professor of Therapeutics, Materia Medica and Diagnosis in Jefferson Medical College. For more than half an hour before the ceremonies began, the crowd began to assemble, and soon every available seat in the amphitheater was filled and a number were forced to stand. Promptly at the appointed hour, when the guest of honor appeared, the large body of students arose from their seats, and for several minutes a storm of applause spoke the sentiment of the crowd who had assembled to do honor to one of the most be-
loved members of the Faculty.

"Professor F.X. Dercum, Professor of Nervous and Mental Diseases, acted as master of ceremonies. In his introductory remarks he paid a glowing tribute to the work of Doctor Hare, not only since he became connected with Jefferson Medical College, but of his entire life. In substance Doctor Dercum emphasized the fact that in celebrating this anniversary we do not find a man bearded and gray, but on the other hand one full of life and inspiration characteristic of one many years his junior. In speaking of his work as a teacher and leader in the science of medicine, he told of how the noted professor had won prize after prize, made research after research, and written books that are today circulated throughout both continents. In the words of the speaker, 'We come today not to celebrate the termination of his career, but to mark an epoch of a great career.' Following his introductory speech; Doctor Dercum presented Professor J. Chalmers DaCosta, who holds the Samuel D. Gross Professorship of Surgery, as speaker for the occasion.

"In the beginning of his remarks, perhaps one of the most masterful addresses ever listened to by the present student body at Jefferson, Doctor DaCosta said that he felt it a peculiar honor to be selected as the mouthpiece of the great student body of Jefferson on this occasion. This fact alone was not all that brought forth words of appreciation from the speaker for having been chosen by the students for the occasion, but the thing which pleased him most was the fact that he had been the life-long friend and co-worker of Doctor Hare. Going briefly into the family history of Doctor Hare, Doctor DaCosta pointed out the fact that the eminent professor is one of a long line of distinguished ancestry. In a humorous manner he told of how he felt that a man of the ability of Doctor Hare could have served as a clergyman, general in an army, or admiral in the navy, but notwithstanding the fact that he was the son of a proverbial clergyman, from the former he would have been excommunicated. Speaking of his work of a teacher, he began with the time when Doctor Hare graduated from the University of Pennsylvania in 1881.

Fig. 6. Bronze statue of Mercury presented to Dr. Hare by Class of 1916.

He was appointed Professor of Therapeutics at Jefferson in 1891 at the age of twenty-nine, and since that time has been a teacher, author, practitioner, diagnostician, and has worked in 'a maze of activities almost inconceivable.'

"It was of no little interest to the students as they listened to Doctor DaCosta tell of how he and Doctor Hare started in their career as practitioners in the profession. 'The difference in Hare and me,' said Doctor DaCosta, 'as we started in practice, is that my office would have been compared to an epitaph of a stillborn business. He was at the top, while I was at the bottom of the ladder.'

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"Friendship struck the chord of life and struck the chord itself, sending music outside. Hare is a living, breathing, real personality, not an actor; a voice, not an echo; a spring, and not a well. His faculties as a teacher teach not only facts but ideals, teach to think, and do it with enthusiasm. He has great powers of work, has edited several medical magazines, served on the Board of City Trusts, written volumes of books, and his boyish heart of things is the greatest thing which make us love him.

"At the conclusion of his address Doctor DaCosta presented Doctor Hare with a beautiful bronze statue of Mercury, the gift of the entire student body as a token of their love and esteem for their instructor (Fig. 6).

"As Doctor Hare arose to respond to the beautiful tribute, he wore his characteristic smile, and started off in a jovial manner, which he declared was deceptive of the feelings in the depths of his heart, which had been touched by the occasion. He said that there was either of two things for him to do - to laugh or to cry - and that it was better for those about him that he laugh. As he continued to speak, giving words of admonition to the students as to the manner in which they should go about their work as practitioners, and telling them of the importance of wearing the smile of optimism at all times, and to stand by their work when the battle was fiercest, and to remember that 'the darkest hour is just before dawn,' the same voice that has meted out instruction to hundreds of young men in the classroom in the past twenty-five years, spoke words of encouragement and told of the deep interest that every member of the Jefferson Faculty feels for the success of the student in College and after life. As Doctor Hare reached this point in his talk it could plainly be seen that the 'laugh' that he preferred to wear in the beginning was being overcome by the emotions incited by the occasion, and which had thus far been suppressed, and that they were creeping slowly to the surface, and with an expression on his face that bespoke the feelings of a heart overflowing with emotions and love for those about him, he closed by saying, 'There is much that I might say, but I can't.'"

**The Sutherland M. Prevost Professorship Of Therapeutics**

The Sutherland M. Prevost Professorship of Therapeutics was established in 1916 by the Board of Trustees from a contribution of funds by Mrs. Prevost in memory of her husband who had been a Trustee of Jefferson Medical College from 1891 to 1905. Dr. Hare was the first appointee and served until his death in 1931. The staff members who worked in Dr. Hare's Department were Drs. Ross V. Patterson, E. Quinn Thornton, E.F. Appleman, and Reynold Griffith.

The heyday of the Prevost Professorship was during the Hare era, because the Department of Pharmacology, established in 1932, absorbed much of the material of this course. Nevertheless, Dr. Elmer H. Funk served as the Professor for two years until his untimely death in 1933. Dr. E. Quinn Thornton served from 1933 to 1934 and Ross V. Patterson succeeded until his own death in 1938. Dr. Martin E. Rehfuss was the next and last Prevost Professor until the Board of Trustees discontinued the post in 1949.

**Hare's Additional Honors**

Dr. Hare "arrived" early in his career and remained prolific throughout his life. By age 29 he was a full Professor of Therapeutics and Materia Medica at Jefferson, while having served the previous year as Professor of Diseases of Children at the University of Pennsylvania. His many prizes in the immediate years after graduation from medical school have been mentioned. He was secretary of the convention on the revision of the U.S. Pharmacopoeia in 1890. In 1912 he became a member of the Board of City Trusts, which demanded a great deal of his time and energy on behalf of the medical problems of Girard College. This membership also entailed work on behalf of Wills Eye Hospital. For both these institutions he exhibited keen business sense and judgement.

During World War I Dr. Hare served as a Naval
Commander both in Washington and at various naval bases. Dr. Reynold Griffith (JMC, '18) recalls Dr. Hare appearing before his class in naval uniform and encouraging enlistment in the navy. Dr. Griffith did indeed join this arm of the service under the influence of Dr. Hare. He later served in Dr. Hare's Department at Jefferson and also became his personal physician.

Among Hare's many honors, probably none gave him greater satisfaction than his presidency of the College of Physicians of Philadelphia (1925-28). He became a Fellow of the College in 1889 and a member of the Association of American Physicians in 1890. The University of Pennsylvania honored him with an LL.D. degree in 1921.

**Hare's Headaches**

Hare's colleague, Professor Thomas McCrae, stated that "sometimes he might be quick and almost brusque in his manner." McCrae attributed this in great part to the fact that Hare suffered from recurring headaches that he diagnosed as migraine, a condition uncommon in men. Hare confessed to McCrae that it was a rare day that passed without an attack of severe pain for a varying period. The duration could be a half hour or most of the day. He was sometimes seen just before a lecture or clinic sitting with his hands pressed on his head and groaning with pain. He never allowed this to be noticed during a lecture. It is said that he occasionally had to take 1/4 grain of morphia for the pain but this never became an addiction. Oddly, he was free of these attacks during his last illness.

**Hare's Last Illness**

Dr. Hare's last illness was due to carcinoma of the prostate. His most intense suffering occurred during the last six months, because of osseous metastases. He first consulted Dr. Edward J. Beardsley (JMC, '02), Clinical Professor of Medicine at Jefferson, who suspected the diagnosis and referred him to his classmate, Percy S. Pelouze (JMC, '02), then a urologist. Dr. Pelouze made the definitive diagnosis. Because of the advanced stage of the disease, the treatment was by radiation.

The radiation therapy only added nausea and diarrhea to Dr Hare's suffering. He spent many weeks off and on in a corner room of the Thompson Annex under the medical care of Dr. Reynold Griffith, already alluded to as his former student and staff member. Dr. Frederick Wagner obtained a recorded oral history from Dr. Griffith in 1984 concerning Dr. Hare's final illness and demise. Dr. Griffith was then in his early 90s and himself dying of carcinoma of the prostate. The following reminiscences were obtained from Dr. Griffith.

As an aside, Dr. Griffith revealed that Dr. Hare was very fond of limericks and was always happy to add a new one to his collection. This side of his nature was never revealed in the lecture hall, where his demeanor was always austere. This was not to say that Hare was without wit in the classroom, but he was not known to relate gross jokes to the students.

Hare's reaction to the nature of what he knew was his final illness was one of disbelief and hostility. Dr. Griffith stressed that Hare felt his dignity was demeaned by such a lowly diagnosis as carcinoma of the prostate. Being "born to the purple" in his clerical family background, together with his distinguished career, should, in his opinion, have allowed a more graceful exit from life. One Saturday evening his wife, Rebecca, entered his hospital room in the Thompson Annex in a bright red dress. "Reba," he said, "Why on earth are you wearing that dress?" "To brighten up the sick room", she replied. According to Dr. Griffith, who was present, Hare retorted: "Damn the sick room!"

As Hare grew sicker and closer to the end he became severely depressed. One evening during a visit, Dr. Griffith was greeted by a statement from Hare: "I have thoughts." "Thoughts of what?" asked Dr. Griffith. "Thoughts of using this," said Hare, as he reached under an adjacent pillow in his bed and withdrew a revolver. Dr. Griffith was stunned and practically speechless before his famous mentor. Recovering from surprise, Dr. Griffith then volunteered a reply to the effect of "Why not wait just a little longer to give the
medicine more chance to take effect?” The medicine in question was heroin in doses of 1/6 grain which he was receiving freely. Two weeks later, on June 15, 1931, Dr. Hare was pronounced dead by Dr. Griffith.

Dr. Baxter L. Crawford (JMC, '04), the Hospital Pathologist, came to the house and performed an autopsy in the bedroom. Dr. Griffith drove Dr. Crawford with Hare’s brain back to the hospital. Dr. J. Parsons Schaeffer kept Hare’s brain in the Anatomy Department for many years, and photographs of it are preserved in the University Archives. It is not certain whether Hare was a member of the Anthropometric Society (for study of brains) of which his colleague at Jefferson, Dr. Francis X. Dercum, had been a founding member.

The Class of 1932 erected a plaque in honor of Dr. Hare (Fig. 7).
Epilogue

Around 1946 Dr. Wagner was called upon to take care of Mrs. Hare because of a fractured wrist. At that time she was 82 years of age and still living in the Hares' three-story brown sandstone house at the northwest corner of 18th and Spruce Streets. Dr. Thomas A. Shallow, a colleague of Dr. Hare, had told Dr. Wagner that in her younger years Mrs. Hare had maintained the house as a mansion. The living room was very large, with a tall ceiling and stained glass windows which gave a cathedral effect, suggesting that Hare's father, the Episcopal Bishop, had previously owned the building. A handsome walnut staircase, ornamented below with a large carved ball, wound its way to the second floor. Mrs. Hare, a pleasant looking elderly lady, was lying comfortably in bed with a glass of "ice water", more authentically known to her physicians as gin on the rocks, on her night stand. Her wrist was obviously fractured and needed no x-ray confirmation. Dr. Wagner had been instructed to simply apply a cast and not be concerned about the displacement, since Mrs. Hare was bedridden. She died in 1949 at the age of 85. Dr. and Mrs. Hare are buried in a family grave in the Cemetery of the Church of St. James the Less. A single tombstone in front of the church marks the site (Fig. 8).

In the 1950s the Hare house was demolished and replaced by a commercial building.

Ross V. Patterson (JMC, '04):
Iron-Willed Dean
by Thomas A. Shallow (JMC, '11)

Ross Vernet Patterson was one of the many medical men who made large contributions to the advancement of Jefferson (Fig. 1). As a physician, an executive and an organizer he had no peer.

Dr. Patterson was born October 5, 1877, in New Orleans, Louisiana, the son of John Harrison Patterson and Marguerite Jeanne Vernet, of Scotch and English ancestry. His parents were in comfortable circumstances but owing to the poor health of his father they left Louisiana, settling in the little town of Hoxie, Kansas. Here, Ross attended a small school where at a very early age he became interested in athletics. It was here that he showed his first evidence of leadership, being chosen captain of the baseball team, and on the wall of the family home still hangs a photograph of this baseball team with its Captain, Patterson, in a most dignified position, leaning on his baseball bat, the same "self-satisfied" expression on his face that we grew to know so well in later years.

In addition to their home in Hoxie, the Patterson family lived on a ranch several miles out of town. This was a typical Western ranch-house built of sod and it was the joy and delight of young Ross in his boyhood. During this period of his life on the

Fig. 1. Ross V. Patterson (JMC, '04), Sub-Dean (1906-16) and Dean (1916-38).
ranch, Patterson spent most of his spare time in raising turkeys and selling them to friends and neighbors. This poultry business was perhaps responsible for his interest in Medicine for he soon began to dissect turkeys and to study their anatomy, taking great pride in his skill. While living on the ranch, Ross was given a very fast pony which he learned to ride very well. He won a number of races on this horse but perhaps the most thrilling was that with a prairie fire. His fine horsemanship enabled him to reach home safely and take refuge in the cyclone cellar.

At the age of only thirteen, Dr. Patterson begged his father for a gun which was given to him together with instructions in its proper use. Thus, with gun and dog, Ross roamed the prairies in search of game. He became an excellent marksman and at the age of fifteen was considered one of the best in that part of the country. His chief pleasure consisted in hunting the rabbits, coyotes and other wild animals on the prairies. To his riding and hunting may be added another sport of which Patterson became fond in his youth, that of fishing.

The Pattersons moved again to Colorado Springs and here Ross finished his grade school course. His first position was with a newspaper in Manton Springs, just outside Colorado Springs, on which he served as a Society reporter, garnering news from the summer hotels which might be of interest to his paper. It is said that in this association with Society, Dr. Patterson took an aversion to matrimony. Whether this was an actual fact or an excuse for his bachelorhood, we shall never know. While working in this capacity as reporter, he contracted typhoid fever from which he almost succumbed. This disease left him with the complication of phlebitis, and until the time of his death, Dr. Patterson was a constant sufferer from recurrences of this inflammation.

After completing his course in Colorado Springs, he attended the Chenet Institute in New Orleans, followed by two years at Washington University in St. Louis. From here he matriculated at Jefferson Medical College, graduating with the Class of 1904. According to his classmates, Patterson was a good student, well satisfied with himself and possessing a forceful personality.

Following his graduation from Jefferson, little was heard of Dr. Patterson except that he interned at Philadelphia General Hospital and later became an Assistant Physician to the Department of the Insane. It is of interest to note that Dr. Patterson followed exactly in the footsteps of the late Dr. J. Chalmers DaCosta who filled both of these positions twenty years before Dr. Patterson.

Recognizing the dynamic personality evidenced by Patterson while in the capacity of Assistant Physician, many of the Jefferson Staff who were connected with Philadelphia General Hospital persuaded him to return to his Alma Mater to fill the position of Sub-Dean in the year 1906. Dr. Patterson deliberated for some time before agreeing to return to Jefferson, feeling that by accepting an executive position he would forever close the doors on his ambition to be a great physician.

The advent of Dr. Patterson as an executive officer with the title Sub-Dean, ushered in a new era for Jefferson. One wonders why any change was necessary in Jefferson, recalling the great men who made up the Faculty at that time. In Medicine, Wilson was the outstanding diagnostician in this country. Hobart Hare was noted for his books on the Practice of Medicine and his work in Therapeutics. Solomon Solis-Cohen was a Clinical Professor of Medicine and even at this early period manifested a tendency to scientific investigation.

DaCosta, Gibbon and Stewart held the Chairs of Surgery. DaCosta's text-book was the Bible in all Medical schools. It was the Supreme Court decision in all State Board controversies. As a diagnostician, a teacher and an orator, DaCosta had no equal in the United States. Gibbon, the polished gentleman and surgical technician, was also known throughout the country, while young Francis Stewart earned the reputation of being a brave, bold and masterful surgeon.

Even with these great men, the scope of Medical teaching was quite limited when one considers today's curriculum. Typhoid fever, the contagious diseases, pneumonia, rheumatism and physical diagnosis constituted most of the teaching. In Sur-
Surgery a few thyroidectomies were performed each year. Gastroenterostomies were done for cancer and ulcer of the upper intestinal tract. Fixation of the kidney, removal of stone, prostatectomies and appendectomies constituted the major surgical work. The surgery for carcinoma of the rectum was in its infancy and Dandy had not yet shown the neurologists how to localize brain tumors. Thoracoplasty was crude and was often unsuccessful because of the surgeon's lack of knowledge of the physical properties necessary to combat collapsed lungs.

At this time, Edward Anthony Spitzka was the Professor of Anatomy. There was no Baugh Institute in those days. Anatomy was taught on the top floor of the old College which stood on the site now occupied by the Curtis Clinic. Francis X. Dercum was Professor of Mental and Nervous Diseases; H. Augustus Wilson of Orthopaedic Surgery; D. Braden Kyle of Laryngology and S. McCuen Smith of Otology. The Chair of Ophthalmology was held jointly by Howard Hansell and William Sweet.

In the pre-clinical branches, Henry Chapman and Albert Brubaker held the Chair of Physiology. The laboratory course in Physiology consisted of experimental work on the frog and other rudimentary experimentations.

James Holland, the Professor of Chemistry, was Dean when Dr. Patterson came to Jefferson. The course in Chemistry offered one didactic lecture a week and a clinical laboratory for the purpose of chemically and microscopically examining urine. Coplin was the Professor of Pathology and the strong man within the Institution with the coming of Dean Patterson. It was not long before these two minds began to clash.

The College Building (Fig. 2) had but two lecture rooms, designated as the East and West rooms (Fig. 3). These were fairly comfortable for taking notes but the acoustics were very poor. There were two large amphitheaters, one on the top floor and the other on the ground floor where the rest of the teaching was done. These were the most uncomfortable rooms in the Institution although they had one redeeming feature - the columns which studied the rooms offered an ideal place behind which to sleep on "the morning after the night before." In addition to these four rooms and the dissecting room (Fig. 4) already mentioned, there were four rooms for laboratory work. The major laboratory work was done in clinical histology and pathologic histology. Dr. Brubaker gave an excellent course in Physiology and he was one of the greatest teachers and finest men ever connected with Jefferson. Dr. Rosenberger taught Bacteriology, his course being one of the favorites of the entire curriculum. In the Laboratory of Pharmacology, the student made pills, filled capsules and concocted emulsions, no doubt a necessary procedure in those days when most physicians compounded their own drugs.

The X-Ray Department in Jefferson consisted of one room, one machine and one man. That man
later became the greatest Roentgenologist in this country, Willis F. Manges.

All of the above paints the picture of Jefferson as it was when Ross Patterson took up his duties as Sub-Dean. Today you see the transformation which has taken place, not only in the personnel of the Faculty, the buildings and their equipment but also the expansion in the scope of the Medical education as it is now given. One does not say that Dean Patterson was solely responsible for all the changes which took place but it is certainly admitted that his was the guiding hand in most of them. When Dr. Patterson took up his duties at Jefferson, William Potter, Alba Johnson, Daniel Baugh and many other influential men of Philadelphia were on the Board of Trustees, none of whom is still serving in that capacity. To those men, the Jefferson of today owes much. Mr. Johnson was President of the Board of Trustees when the Curtis Clinic and new College were built. The diligence and enthusiastic work of Mr. Johnson, Mr. Hooper his successor, and Dr. Patterson placed Jefferson in the foreground of Medicine.

Following the death of Mr. Johnson, Robert P. Hooper who had served as a member of the Board for over twenty years, was elected to the Presidency and he carried on the work begun in Mr. Johnson's tenure of office, supporting and cooperating with Dr. Patterson in the completion of our present Jefferson.

When Dr. Patterson first came to Jefferson, he attracted attention by his mannerisms. He had a habit of clearing his throat before addressing the students or Alumni Association, which was mimicked by the graduating class on each Alumni night. Later, he affected a facial contortion during the course of his conversation. As time passed and he gained more self-confidence, he developed a characteristic pomposity and dignity. His pride in Jefferson grew with the years and was noticeable whenever he spoke of his Alma Mater. In this connection a story is told concerning a tour of inspection made by a member of an organization which supervised medical schools. As Dr. Patterson con-

One of the first contributions of Ross Patterson to the Institution was the reorganization of the Alumni Association. He established chapters in all of the States and in the various Counties of Pennsylvania and was responsible for the Post-Graduate Clinics which are still carried on in the various chapters of the Alumni Association throughout the country.

Through his association with Dr. Hare, Patterson’s first position in teaching Cardiology was Demonstrator of Experimental Pharmacology, in the year 1910. Before this time, Cardiology was taught entirely by clinical means but through the interest of Dr. Hare a Mackenzie polygraph was purchased and Patterson was the first man to use this apparatus, thus beginning the scientific investigation of cardiac disorders. Shortly after this, he was responsible for the establishment of a heart station and the purchase of an electrocardiograph instrument.

His collateral associations at this time were as Physician to the Philadelphia General Hospital and to the Episcopal Hospital. Unquestionably in this period of his life the seed of scientific investigation was sown. He saw the need for expansion in Medical teaching and it was then that we began to have many changes in the Faculty.

In 1911, James C. Wilson resigned from the Chair of Practice of Medicine and it is interesting to note how his successor was obtained. While on one of his voyages to Europe, Mr. Potter encountered the late Sir William Osler who, upon learning of Dr. Wilson’s resignation, recommended Dr. Thomas McCrae as his successor. At that time Dr. McCrae held a minor position in Johns Hopkins University. Upon Mr. Potter’s return home, a conference was held and Dr. McCrae was selected to fill the vacancy. At that time it was remarked that “The Lord takes care of drunken men and Jefferson Medical College.” There is certainly no question about the beneficial effect which Dr. McCrae’s coming had upon the school, for with him he brought new ideas for progress, most of which were acted upon with success.

We might continue with the gradual breakdown of the old Faculty up to the present time but space does not permit. It is, however, sufficient to say that all of these changes were brought about through the foresight and wisdom of Ross Patterson who had become Dean in 1916. As his power increased, Patterson made enemies and many of the contemplated changes were bitterly contested. As a result of this, he combined sagacity with cunning and, according to some, even resorted to intrigue to achieve his ends. When confronted by his critics, he would often reply in the words of Lincoln. “If I am right, my claiming to be right will not make it more so; if I am wrong, then all the protestations which I might make will only add to my mistakes.” Consequently he accepted both victory and defeat in silence and began to live within himself, becoming more sensitive with the years.

Ross Patterson was not a happy man and to some of us who knew him well, there was more than a trace of sadness in his life. He lived in a large house with two servants and I well remember the cold formality of those evenings when we dined there together. The Dean had a fine appreciation of literature and a great love for Dr. Da Costa. During that time when Dr. Da Costa was crippled and confined to his home, Dr. Patterson would spend many of his evenings with him, discussing literature and College matters. It was in these surroundings that I saw his icy exterior melt in the warm glow of the friendship which existed between these two men.

Dr. Patterson admitted to two loves in his life - the first his trap-shooting in company with Tom Stellwagen and Willis Manges in the Gun Club beyond Media. Here he demonstrated that he had not lost any of the skill for which he was noted in his boyhood. His second love was deer hunting and many a week-end was spent in a hunting lodge in Pike County where again his superiority as a
marksman was quite evident. In these surroundings he found ease and comfort reliving the days of his youth.

Dr. Patterson’s ambition kept abreast of his progress. He desired a new college building and greater facilities for teaching dispensary work. He coveted a seat on the Faculty. He wished to be President of the Philadelphia County Medical Society, the Medical Society of the State of Pennsylvania and the Association of American Medical Colleges. Above all it was his dream to be recognized by other institutions as a leader in the field of medical education. Each of his ambitions was realized. He became the Sutherland M. Prevost Professor of Therapeutics in 1934 and received honorary degrees of Doctor of Science from LaSalle College and Colgate University and Doctor of Laws from Ursinus College and Wake Forest College.

His “wife and family” were Jefferson and as he lived, he died, leaving to his Alma Mater all his earthly goods. This last contribution of Patterson’s, establishing fellowships in the various branches of Medicine, indicates clearly how he felt and for what he was working.

If, in this tribute to Dean Patterson, I seem to have digressed from my subject, it might be well to remember that more than half of his life was devoted to Jefferson. It is impossible, therefore, to give his biography without incorporating the metamorphosis of Jefferson. Dr. Patterson was Jefferson and his unswerving devotion to her will always be an inspiration to those who come after him.

Why I Am A Bachelor
Interview of Dean Ross V. Patterson (JMC, 1904) for 1935 Clinic

He is a world-renowned diagnostician of the human heart and its frailties, but he doesn’t believe that matrimony is a sure cure for heart ills.

Sufferers from cardiac ailments consult him daily, but he never yet has surrendered his own to any member of the fair sex - nor will he ever (Fig. 5).

Dr. Ross V. Patterson, Dean of Jefferson Medical College, and President of the Medical Society of the State of Pennsylvania, believes in the theory that “marriage is carrying a love affair too far.”

With his characteristic philosophical forbearance, he treated the whole subject of matrimony in a facetious vein, refusing to be impressed by its “pseudo-advantages.”

Bachelors’ Lives More Serene

“I honestly think that bachelors are happier than married men,” he asserted. “Unmarried women are happier than married ones, too. If you could chart the emotions of unmarried people, you would find they do not reach the extreme heights of married emotions; but they are much more serene.

“Single people do not enjoy the tremendous exultations nor the tremendous depressions to which married people are prone, but they achieve thereby in their emotional life a more satisfactory level.

“Personally, I never knew any bachelors who started out with preconceived ideas of bachelorhood. I have a brother and sister. We are all unmarried, but none of us had any notion of celibacy early in life.”

“Do you believe that the 600 students in your college supply the family instinct in you?” Doctor Patterson was asked.
Glad All His Students Are Men

"Perhaps," he replied slowly and thoughtfully. "They're all men, though thank goodness," he added hastily and smilingly.

"Does every bachelor carry in his heart an ideal woman?" came the next query.

"I don't believe there is such a thing as an ideal woman. I've never known one, but then you see I do not recommend matrimony. Both by precept and example I warn the student against it, but it's no use. They get married just the same. It's a weakness inherent in the masculine composition, which makes them susceptible to the wiles of women."

"What do you do about leap years?" he was asked.

Won't Give Away His Secret

"Sh! I keep running," came the reply. "But I won't give away my whole scheme for avoiding matrimony. It's a secret.

"You see, I do not doubt that the female is more deadly than the male. Man is woman's natural prey and I believe most women are instinctively predatory.

"Most love affairs are unfortunate; but those that end in marriage are the most unfortunate of all. Misguided spinsters with 'broken hearts' feel they are blighted when in reality they are blessed."

"Any woman who wants to marry can do so. All she needs to do is plot and plan and set a trap or two and she'll get some hapless fellow to fall into it, if she's persistent enough. She may not get the man she wants, but she'll get someone.

"I believe woman proposes. After some poor man falls into the trap, he doesn't even know he has fallen in nor does he know there was a trap. If the woman is smart he thinks he ran the whole show himself." A broad smile illuminated his rugged features.

"You know to get a husband all women have to do is to look adoring eyes at some male and sigh, ‘Oh, you great, big, strong man,’ or something like that, and the poor benighted male will think to himself, ‘Here is the only woman who has really appreciated me in my whole life.’ Yes, it is as easy as that - really."

Despite his adherence to sweet celibacy, Doctor Patterson has a word of praise for the modern woman.

"I like sophisticated women," he admitted with candor. "They are more direct and more satisfactory. I prefer the modern woman to the old fashioned - her clothes, her manners, her habits, and her frankness."

70 Ideal Age For Marriage

"I am not really a confirmed bachelor because I believe the ideal age for marriage for a man is 70 for two reasons. According to Biblical estimation, he has a sporting chance of not reaching the ideal marriageable age, and, if he does attain 70 years of age, he hasn't long to endure matrimony. Perhaps when I am 70 I'll get married; if I'm still alive."

Doctor Patterson is now 58 years of age, and a wait of twelve years he feels will discourage even the most predatory of females.

"You know it's a queer thing, but even if a man is toothless and decrepit he can still get married. Some woman will have him."

"These theoretical plans for making marriage successful should be stopped. Marriage will never be a success. The doctor knows, for he has poured into his lap all the intimate truths of matrimonial misfits that never see the light of day in divorce courts."

Exposes Marriage Evil

"We hear a great deal about the crime of divorce. That is only the effect, while marriage is the cause. Why doesn't someone mention the marriage evil? Marriage is responsible for all the divorces and most human unhappiness." Again the disarming smile temporized his remarks.

"Why is it that a bachelor is a challenge to every woman?" he asked, veering suddenly philosophical. "A bachelor is a perpetual challenge to all womanhood, it seems. Even women, all tangled up with matrimony, wish wistfully that they were free so they could take a whack at some poor bachelor."
“Won’t you ever get married?” he was asked, in conclusion.

“Well, perhaps I may have a moment of weakness some day,” he parried. “But not before I am 70, I warn you.”

His laughter trickled out of the office as a musical accompaniment to his final cryptic comment on matrimony.

**Editor’s Addendum**

Dr. Patterson’s characteristic manner of introducing his lectures on the drugs acting on the central nervous system is well remembered and characteristic of his confirmed bachelorhood.

He began by writing on the blackboard in his excellent flowing hand the title “Drugs Acting on the Central Nervous System”. Turning to the students he then began: “The more discerning among you will have perceived that the subject of the day’s lecture relates to the drugs acting on the Central Nervous System. It is of historical interest that general anesthesia was first described in the book of Genesis with the statement that God cast Adam into a deep sleep for the purpose of the surgical removal of one of his ribs, which he then proceeded to use for a most unfortunate purpose.”

Dr. Patterson firmly believed that a bachelor was a man who never made the same mistake once.

**Infatuated With Physician, Insane Woman Arrested**

**Dean Patterson, Annoyed by Attentions, Is Obliged to Act**

Katie Braun's ideal dream of love was rudely shattered yesterday, when Dr. Ross V. Patterson, acting dean of the Jefferson Medical College, took her by the hand and led her gently to the station house at Fifteenth and Locust streets (Fig. 6), where a physician committed her to the Philadelphia Hospital.

“I am not insane, indeed I am not,” Miss Braun protested, as she was placed in the patrol wagon. Turning to Dr. Patterson, she added: “I did not do anything, did I, doctor?” “Not a thing, except annoy me,” answered the dean, dryly.

It was a great, overwhelming love that prompted Miss Braun to force her attentions upon the dean, she explained to the patrol crew.

“I cannot help liking him, even though he has had me arrested,” she declared. Dr. Patterson, however, did not appreciate Miss Braun’s attentions. He had only begun to observe her faithfulness to him last Tuesday, but has since learned that she had been following him, watching and waiting for him all through the winter. For the young woman’s own good, he finally decided, yesterday, to have her sent to the Philadelphia Hospital.

On Tuesday afternoon, as Dr. Patterson was walking from his office at 2018 Locust Street, he noticed for the first time that a woman was following him. Every time he looked around at her she giggled girlishly and brushed back an imaginary wisp of hair.

The doctor paid no more attention to her. He walked quickly to his office. The students who were standing on the steps smiled as they saw the familiar figure of Miss Braun swing by a few minutes later. They had noticed that this woman had been following the Dean for sometime past.

When Dr. Patterson returned to his home that evening he mentioned the incident to his relatives. “Why,” they immediately exclaimed, “that is the woman who has been following you for some time. A tall, rather pretty woman, well dressed and foreign-looking?”

“That’s the woman,” said the doctor.

“Well, she was here this afternoon,” said one of those in the house, “and declared that she must see you without delay. We knew it was not one of your patients and told her that you were out. She seemed perfectly familiar with your office hours, the time that you go to the office and the time that you return, even the days when you stay later than usual. We have begun to be afraid of her. Why, today she even went so far as to ask if you were married.”

Before Dr. Patterson left the house the following day, Miss Braun was at the door asking to see him.

“How do you do, doctor,” said the young
Several days ago, Dr. Patterson noticed that every time he left his office at 2018 Locust Street, Katie would be waiting for him. No matter what kind of weather, she was there at the house, and would follow him as far as she could. She placed herself directly in his path, and she often inquired at his house if he was married. These are only a few of the actions that caused Dr. Patterson to think disapprovingly of the young woman, and when she followed him into a crowd of medical students and began to laud him before the boys, well, then that was too much, and as a consequence the police got Katie.

The doctor thinks Katie will get over it, if she has proper care and medical attention. But for the life of him, he cannot recall who she is, where she came from, or why she lavished her attention on him. He learned that Katie has been on his trail all winter.

Publicly Wooed Physician
Dr. Ross V. Patterson Had to Have Leap Year Maiden Arrested

Dr. Ross V. Patterson, acting dean of the Jefferson Medical College, is trying to think if he ever saw Katie Braun before she tried to make him her affinity. Katie, who is about twenty-three years old, is in the Philadelphia Hospital suffering from delusions that led her publicly to woo the physician.
In Philadelphia in 1889 a society was formed, bringing together some of the greatest medical and scientific minds of the time, with a most unusual mission. The founding members of the American Anthropometric Society were giants in their fields: Harrison Allen, physician, surgeon, comparative anatomist and anthropologist; Francis X. Dercum (Fig. 1), neurologist, neuroanatomist, and future Chairman of the first Department of Nervous and Mental Diseases in Philadelphia at Jefferson Medical College; Joseph Leidy, internationally renowned descriptive anatomist, biologist, naturalist, and then President of the Academy of Natural Sciences of Philadelphia; William Pepper, Professor, Provost, and critical force in the development of the Hospital of the University of Pennsylvania; and Edward Charles Spitzka, New York neurologist and neuroanatomist (Lissauer’s dorsolateral fasciculus of the spinal cord often bears his name). Sir William Osler also writes of having been present.

In convening this group, each made a commitment to anatomy, neuroanatomy in particular, of a distinctly personal nature. The Society would be devoted to the search for an anatomical basis within the brain for genius, the mental talents which drove great minds. These men, as members and eminently gifted thinkers, pledged to give their own brains, removed after death, to be studied for signs of what made them who they were.

Society President Joseph Leidy was already advanced in years, and with the untimely deaths of Allen and Pepper, the society’s collection was soon begun. Outside contributions were also received, and by 1902, the Society held the brains of eight men:

1. Joseph Leidy (d. 1891) founding member and first President.
2. Philip Leidy (d. 1891) physician and surgeon.
3. J. William White, Sr. (d. 1892) renowned surgeon.
4. Andrew J. Parker (d. 1892) anatomist and zoologist.
5. Walt Whitman (d. 1892) poet.
6. Harrison Allen (d. 1897) founding member.
7. Edward Drinker Cope (d. 1897) paleontologist.
8. William Pepper (d. 1898) founding member.

Living membership had enlarged to include: S. Weir Mitchell (JMC, 1850); Charles K. Mills, Dean of American neurology; internist Henry W. Cattell; William G. Spiller, a prominent and literary neurologist; and Joseph Leidy II, physician, and nephew of the founder.

That such men were willing to pledge their own brains to the Anthropometric Society, marks the group as the focus of a uniquely endowed and enlightened plan of research. Understanding how such an esteemed group of individuals, all scholars of scientific technique and inquiry, could embark on such an unusual mission requires an appreciation of the neuroanatomical
knowledge of the time.

To physicians and anatomists of the nineteenth century, the brain stood as one of the last great uncharted territories. Its oblique structure and homogeneous cellular composition offered few, if any, hints as to how it managed to do the things they knew it did. Lesions of the cortices were known to produce deficits not only in motor and sensory function, but in thought, personality, and "consciousness". Clearly, they reasoned, if the brain served one in so many abstract capacities, it must be functionally organized around such traits. All aspects of one's mentality must derive from some corresponding cortical feature. Virtues and vices, "ideality", "sublimity", "hope", and "amativeness" were all presumed to have neuroanatomical locales, and in the best scientific tradition, researchers set about mapping them onto the brain. As early as 1810, comprehensive maps relating brain surface quadrants to a vast range of mental attributes were devised and published on both sides of the Atlantic.

An illegitimate offshoot of this course of research was the pseudo-science of Phrenology. Individuals as eminent as educator Horace Mann and landmark biologist Alfred R. Wallace (collaborator with Darwin on the theory of evolution) professed that with use of phrenological maps (Fig. 2) and guide books, one could interpret the aspects of a person's mental capacity. If a person excelled in some feature of mind, they theorized, the large size of the brain area responsible for that talent would be apparent, not only on postmortem inspection, but on trained examination by a phrenologist of the bumps formed by pressure on overlying regions of the skull.

The schemes they used, mapping bumps to brain areas to attributes of character relied on a rather flimsy proof of cause and effect. Observing the skull of patriot and noted philanderer Aaron Burr, phrenologist S.R. Wells noted a bulging of the lower occiput. Contrasting this bump with the meager size of the same area on the skull of a noted chaste bachelor, Wells declared the underlying cortex (in this case the cerebellum) the "organ of amativeness". A similar line of reasoning, backed up by meticulous measurements of a great many famous heads, gave birth to a phrenological map of twenty-seven such "organs".

Phrenology survived with varied levels of credibility through the end of the nineteenth century. Attempts to discredit its theories were hindered by the fact that contemporary neuroanatomists could find little in the way of hard facts to the contrary.

While rarely as grand in scope as the phrenologists, physicians and anatomists had long tended to equate external physical features with mental correlates. Samuel D. Gross himself had associated a broad forehead with an underlying superiority of mind. While brain scholars of the time may not have gone so far, they certainly expected to find gross morphological differences between the brains of great thinkers and those of lesser minds.

Fig. 2. A phrenological map from the 1916 Library of Health compiled by B. Franklin Scholl (JMC, 1886) and John Forsyth Little (JMC, '04).
Researchers began to look for such physical signs of greatness, and as the 19th century progressed, work on such theories became increasingly popular. A wealth of data was meticulously collected, filling numerous tables with precise anatomical measurements, lengths, ratios, and the like. Particular emphasis was placed on the brains of criminals, perhaps because the brains of those executed were the easiest to obtain.

In 1878 Moriz Benedikt, a Viennese scientist of Hungarian birth, compiled and published “Anatomical Studies upon Brains of Criminals, a Contribution to Anthropology, Medicine, Jurisprudence, and Psychology.” Through detailed inspection and measurement of the brain surfaces and skulls of twenty-two criminals (Fig. 3), Benedikt derived a theory. He had looked for “atyply” in the anatomy of these murderers and thieves, and he found it, he claimed, in a deficiency of gyri. A resulting abnormal confluence of fissures marked these criminals as a distinct “anthropological variety of their species.”

Benedikt’s findings stirred much debate. Sir William Osler was moved to conduct some studies of his own. Francis X. Dercum studied the brains of epileptics, searching for fissural confluences. Neither man’s observations duplicated Benedikt’s, and a call went out for more data. Benedikt’s initial findings might not hold the key but, it was felt, with additional cross-cultural measurements, anatomical correlates of the gamut of mental distinctions, from criminality to genius, were certain to appear.

It was towards this end that the founders of the Anthropometric Society launched their group. Not merely interested scientists, but great thinkers themselves, the founders felt certain that a meeting of such men, with their own brains to be entered as evidence, would in time get to the bottom of the issue. They stressed caution, and were not eager to let established dissectors approach their valuable specimens. Even H.H. Donaldson, eminent neurologist, author of a major text on the nervous system, and future head of the Wistar Institute was discouraged from dissection. Members meeting in 1890 to discuss plans for the fledgling collection felt too little of certainty was known to allow investigative studies of even basic cortical structures. Donaldson was advised to conduct preliminary work on more common specimens before approaching the brains of the Society’s collection.

It was not until the winter of 1902 that the Anthropometric Society found someone they felt qualified to perform a detailed study of their collected brains. Edward Anthony Spitzka (Fig. 4) was still a senior medical student at Columbia when he wrote to Society member Joseph Leidy, II, in the spring of 1901. Although his father, E.C. Spitzka had been a founding member, he addressed the Society as a scholar in his own right. He was initially interested in pursuing traces of “hereditary transmission” in the brains of past members Drs. Philip and Joseph Leidy. When he

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**Observation I.**

Balázs—Murderer and Robber.  
(Românian.)

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Fig. 3. One of the 22 criminal brains studied by Benedikt in 1878.
learned the identities of those whose brains the Society held, he became very excited. "It seems to me," he wrote, "that a delay in examining and describing such illustrious men's brains almost borders on disloyalty. If what is needed is someone enthusiastic enough to devote much time and labor to such tasks, at least so far as the Leidy brains are concerned, you have only to command me, and as soon as my college examinations are finished, I would deem it an honor to do so."

Although Spitzka was still a student, he was already a brain expert of some renown. A paper presented before the Association of American Anatomists in his Junior year had outlined his observations of features of some 100 brains. He had received numerous undergraduate distinctions, and barely five months after his letters to Joseph Leidy, he was asked to perform the postmortem examination of Czolgosz, the executed assassin of President McKinley.

During the autopsy, Spitzka paid expert attention to the anarchist's brain, making detailed drawings and a thorough series of weights and measurements. Aware of Benedikt's work on criminal brains, he no doubt looked for similar signs which might explain Czolgosz's dreadful crime. Although the autopsy showed nothing amiss, Spitzka gained much renown for his thorough and widely published report.

When the members of the Anthropometric Society agreed to let him examine their collection, it was no small gesture. Twenty years had passed since Benedikt's studies, and nothing to their satisfaction had emerged to link the structures of the brain to any cohesive pattern of mental abilities. Spitzka proceeded with the utmost care, and his study represents the entirety of the Society's published record.

Spitzka's work with the Society's brains took nearly two years. Given access to the collection in the winter of 1902, he was able to present a preliminary report to a meeting of the Association of American Anatomists in December, 1904. The brains he observed were seven of the eight previously mentioned, although all were not in the best of condition. While those of Professor Cope and the brothers Leidy were excellently preserved, Allen's brain had become flattened, and William Pepper's both flattened and distorted. White's brain was poorly preserved, and Parker's quite fragile and somewhat broken, having been left in Muller's fluid for the last twenty years. Walt Whitman's brain was entirely absent, having been dropped by a careless assistant and the pieces discarded, an unfortunate loss. Brief efforts at restoration, and the production of plaster casts of especially fragile items, allowed Spitzka to proceed with studies of nearly all of the collected brains.

His work involved not only measuring the specimens, but comparing these observations with data he was receiving from other sources. Spitzka enjoyed a special arrangement with the New York State prison system which allowed him to attend executions, autopsy the electrocuted prisoners, and study their brains. Consideration of his findings from numerous criminal brains played an important role in his concurrent analysis of those in the Society's collection. His final report was delivered in an address to the American Philosophical Society on March 16, 1906.

The published article, "A Study of the Brains of Six Eminent Scientists and Scholars Belonging to the American Anthropometric Society, Together with the Skull of Professor E.D. Cope," included meticulously detailed illustrations (Fig. 5).

![Fig. 4. An early photograph of Dr. Edward A. Spitzka, Eighth Chairman of General Anatomy (1906-1914).](image-url)
Spitzka next considered cerebral size, relative to "non-thought" areas, as a possible index of the superior mind. "Cerebro-cerebellar ratios" among the Society's great brains were shown to exceed the average. McKinley's assassin Czolgosz ranked nearly a full point below both Leidys, but Harrison Allen defied the trend with a ratio even lower than this. Was any feature truly decisive?

Spitzka dropped mere massiveness as a false hope, and returned to the roots of intelligence in mental and, therefore, perhaps neural inter-connectedness and integration. Such ideas had been proposed by Ramon Y Cajal, and reiterated by Osler at the opening of the Wistar Institute, storehouse of the Society's collection. The corpus callosum, the body of myelinated fibers joining the cerebral hemispheres, seemed an appropriate anatomical analog of such abilities, and in measuring its size in the brains before him, Spitzka observed a trend.

Compiling a graph, Spitzka showed the cross-sectional areas of the callosa of ten "eminent" brains to equal or exceed those of ten "ordinary laborers and mechanics." The brains of the collection bore out this trend. Joseph Leidy's massive brain, the leader in so many measurements, again led the field with a callosom more than twice the size of a laborer's of "ordinary intelligence."

Herein, concluded Spitzka, lay the "index in somatic terms of how we may distinguish the brain of a genius or talented man from that of persons of only ordinary abilities."

There ended the report. Spitzka's findings were indeed encouraging, but it is unclear whether the Anthropometric Society was ready to end its search. Did callosal size satisfy their curiosity for the anatomical key to genius? Their reactions, like all other records of their proceedings, remain unrecorded. It is unclear even whether they continued to meet past this date. Spitzka's efforts were clearly expert, and his findings, while not overwhelming, did represent careful scientific research. Would such men simply give up their efforts, discarding such an unusual and distinguished collection?

Whether or not further meetings occurred or
further studies were performed on the brains of
the Anthropometric Society, the collection re­
mained intact. That interest persisted in exam­­
ing the specimens is suggested by the continua­tion of members to fulfill their membership vows
and donate their brains after death. Osler, not
forgetting his early quarrels with Benedikt, left
his brain to the Wistar Institute. It was trans­­
ported there from Oxford, England, in 1920 by
his nephew by marriage, Thomas McCrae, then
Chairman and first Magee Professor of Jefferson’s
Department of Medicine.

Spitzka continued to rise in the field of neu­roanatomy. His delivery of the paper before the
American Philosophical Society in March of 1906
was followed that Fall by his appointment as Chair­­man of Anatomy at Jefferson. The death of Wil­l­liam Smith Forbes had left the Chair vacant, and
Spitzka was welcomed as “an athlete who has
qualified well in the preliminary heats.” A new
position was formed for him as Chair of General
and Descriptive Anatomy. The duties of Forbes’
chair were split between him and the new Chair­­man of Applied and Topographical Anatomy,
George McClellan (JMC, 1870), grandson of
Jefferson’s Founder. Spitzka’s career flourished at
Jefferson. He directed the design and conversion
of the old Pennsylvania College of Dental Surgery
into the Daniel Baugh Institute of Anatomy, and
was awarded its first Directorship.

He edited three successive American editions of
Gray’s Anatomy, the 17th with J. Chalmers DaCosta,
the 18th and 19th alone, and continued to develop
his theories of brain anatomy and function. He
received and studied the brains of executed crim­­inals, many of which were displayed in the Mu­­seum at Daniel Baugh Institute, Examination of
several old photos of the D.B.I. offices show what
appear to be other parts of his library and personal
collection, perhaps even the death mask he made
of the assassin Czolgosz. If these items were in­­deed in his offices, they were lost when the Insti­­tute moved in 1968. The brains of the Anthropo­­metric Society remained at Wistar, where most
of them can be found to this day. A full account of

Dr. Spitzka’s remarkable career at the Daniel Baugh
Institute and the events leading up to his resigna­tion can be found in Dr. Ramsay’s recollection, in
another chapter of this book.

Francis X. Dercum, one of the Society’s founders,
assumed the Chair of Nervous and Mental Dise­ases at Jefferson in 1900. His distinguished leader­­ship of that Department lasted twenty-five years.
He died in 1931 as Emeritus Professor, and Presi­dent of the American Philosophical Society. It is
not known whether he left his brain to the
Anthropometric Society.

The brain of Hobart Amory Hare was trans­­ported to the Daniel Baugh Institute upon his death
in 1931. It was examined and photographed by
Director and ninth Chairman of Anatomy, J. Par­­sons Schaeffer (Fig. 6). Given Hare’s position of
esteem within Philadelphia medicine, it is not un­­likely that he attended the proceedings of the
Anthropometric Society. Whether any Society re­­mained in 1931 to examine and discuss his brain
remains unknown. That his brain was allowed to
be removed to the Institute and remained in their
collection for many years, might suggest some per­­sistence of the Society’s interests.

The brain of Professor W.W. Keen was simi­larly preserved upon his death the following
June (1932). While his professional associations
and the period of his esteemed career might,
as with Hare, suggest association with the
Anthropometric Society, his membership was
never a matter of public record.

Societies of physicians, some private, some pub­­lic, remain popular to this day. Yet few professi­onals as markedly unusual as that of the Ameri­can Anthropometric Society. Rarely had recogni­tion of one’s mental talents extended beyond the
congratulatory to such an extreme sort of philan­­thropy. Given the wealth of other, less physical
contributions the Society’s members made to sci­ence, one cannot fairly call their efforts egotis­tical. Rather, one must give them credit for their sincere
ttempts, however inconclusive, to present for
peer review the literal basis of their own interests
and talents.
Fig. 6. The brain of Hobart Amory Hare, examined by J. Parsons Schaeffer at the Daniel Baugh Institute in 1931.

Epilogue

Dr. Spitzka died on September 4, 1922, at the age of forty-six. He had returned to New York following his resignation from the Jefferson faculty on June 6, 1914, an event brought about by his increasing problems with alcoholism and the emergence of certain paranoid delusions. Barely four months prior to his departure from the Daniel Baugh Institute, Spitzka had drawn up his last will and testament. It is a remarkable document, testifying to his enduring commitment to his life’s work in neuroanatomy, as well as to D.B.I., the proud recipient of so much of his effort and expertise.

The will is quite brief. In addition to his wife and son, who receive his estate, Spitzka made but two bequests. To the Daniel Baugh Institute, he left his body for scientific study as might serve their needs. The body, however, would be lacking one crucial item. As Spitzka requests: “Recognizing the need of studying the brains of educated and orderly persons, as well as those of the ignorant, criminal, or insane, in order to determine the weight, form and fissural pattern, the correlations with bodily and mental powers of various kinds and degrees and of hereditary characteristics, I hereby declare my wish that at my death, my brain shall be entrusted to the American Anthropometric Society for scientific uses, and for preservation, as a whole or in part as may be thought best.” He asks that his relatives not deny him this wish, and that the proper individuals be promptly notified of his death, “if possible, even of its near approach.” It was his wish, no doubt, that his brain might be quickly removed, and not suffer the postmortem handling which had damaged other famous brains. He did not want his examiner to face a flattened, distorted specimen, like those he had received on behalf of Harrison Allen and William Pepper.

Despite the unfortunate and untimely end of his professional career, Dr. Spitzka was clearly committed to the objects of his scholarly work to the end of his life. His career was one of distinguished effort, which lives on in the success of the Daniel Baugh Institute, and the continuing efforts of neuroanatomists to measure and understand the human mind.
Francis Xavier Dercum was born in Philadelphia near 6th and Market Streets on August 10, 1856. His ancestry featured, for many generations, men of learning, science, law, and the military. He was fortunate, also, that Earnest Dercum, his father, an immigrant from Germany, became successful in a book importing business as well as a grain merchant, thus affording the financial means for his excellent education.

Young Dercum, after graduation from Central High School, entered the Medical School of the University of Pennsylvania from which he received his M.D. degree in 1877, and still later his Ph.D. degree. Shortly after graduation he became Assistant Demonstrator of Histology in his medical alma mater, followed by appointment as Demonstrator of Physiology.

Early on he manifested an unusual interest in natural history, which led to his joining the Academy of Natural Sciences. He remained an active member and was a participant in many of its debates. His earliest published article was on the nervous system of fish, followed by one on the sensory organs. Also, early in his career, he became a pathologist in the State Hospital for the Insane at Norristown in which he studied the lesions of the nervous system. Thus, his first special interest in medicine was in organic neurology while his interest in psychiatry came later.

In 1884 Dercum was appointed Chief of the Nervous Clinic in the Hospital of the University of Pennsylvania. It was at this time that Eadweard Muybridge was conducting studies of the movement of horses on the lot in the back of the University Hospital. He took photographic pictures by means of a timing mechanism, set on line, with an electromagnetic latch to release the camera shutters. The pictures were made to revolve on a wheel, which laid the foundation for the later moving picture industry. Just as Muybridge had photographed the normal gaits of horses, he photographed for Dercum the pathological gaits of patients as well as those in convulsions. Dercum was able to throw certain patients into convulsions by suggestion under hypnotism. These pictures were the first of their kind. Muybridge published an 11-Volume treatise, *Animal Locomotion*, containing 100,000 photographic plates in which Volume 8 records the patients provided by Dercum. In 1887 Dercum was named neurologist to the Philadelphia Hospital (then the famous Old Blockley and later the Philadelphia General), where there was a wealth of neurological patients. In spite of his large private practice he remained active in this voluntary service until 1911, almost a quarter of a century.

In 1892 Dercum was elected to the newly created Clinical Professorship of Neurology in the Jefferson Medical College, and in 1900 he became its first Chairman of Nervous and Mental Diseases, a position he held until his retirement as Professor Emeritus in 1925 (Fig. 1.). The history of Jefferson Medical College records him as one of its “giants.” He was a revered and popular teacher (Fig. 2), a highly regarded author, a much sought after clinician.
Fig. 2. Dr. Dercum as caricatured by his student, Carl E. Miksch (JMC, '23)

cian, and a highly ethical expert in court cases involving litigations for nervous and mental diseases as well as injuries. From the public viewpoint, his most important patient was President Wilson, whom he attended in 1919 and 1920.

His professional colleague, Dr. John Chalmers DaCosta, wrote the following about Dercum in *The Trials and Triumphs of the Surgeon*, p. 180-82: "I admire Dr. Dercum immensely as a teacher and for years whenever I had an opportunity I attended his clinics. His clinics were admirable. He developed a history so as to show much of the patient and also much of the questioner and he always showed full knowledge of the psychology of the one he questioned. In developing a history he pointed out the influences of age, sex, habits, heredity, previous diseases, occupation, etc., and in all of these questions showed the most comprehensive knowledge. I don’t pretend that I could always understand. I have been lost more than once in the tangled webs of subcortical aphasias, apraxias, amnesias, and other almost untangleable complexities; although gradually there dawned on my benighted mind certain rude ideas, which though crude and fundamental have been of the greatest use to me. I feel that if I could ever really come to understand all about aphasia, I would be able to raise the dead. Doctor Dercum would develop the signs and symptoms of a case with beautiful clearness and precision. He would demonstrate the reflexes, the mental, sensory and motor phenomena, the gait, the coordination and various other things so that the student could not forget them. The locations of tumors always seemed to me a wonderful procedure for it gives to a problem vague and shadowy, ‘a local habitation and a name’. He was particularly strong in teaching insanity and his demonstrations of those borderland cases which lie near but not in the dark continent of insanity were masterly. It was striking to hear him develop from a patient a story of an obsession, of a morbid impulse, of a morbid act, of an illusion, of an hallucination, of a delusion. In regard to that curious condition, hysteria, he actually convinced me that the condition is a reality and not clever acting. He used to speak with fine scorn of the extreme views of the followers of Freud, views which can only be called loathsome to one of the uninitiated, of which group I am one. He would sum up a case like an able judge sums up from the bench. He was positive whenever it was possible to be positive, admitting doubt if doubt existed, and he always gave credit to others who deserved it, especially it seemed to me, to his old friends, Mills and Lloyd. He was comprehensive, acute, learned, transparently honest and invariably held the close interest of the class. He showed that to the very basis of his nature he was a good doctor."

Tom Bentley Throckmorton (JMC, '09) describes his appreciation of Dr. Dercum’s Clinics as a student: "I shall never forget the first of Professor Dercum’s clinics that I attended. His ability to engage the attention of the students and then to hold it seemed almost uncanny. On this particular
morning he demonstrated the difference between lesions involving the upper motor pathway and lesions involving the lower motor pathway. A patient who had suffered a cerebral hemorrhage, with the resultant hemiplegic state, was the first subject of discussion before the class. The spastic arm and leg, the scythemike swing of the palsied limb as the patient walked, the characteristic attitude of the affected arm, the weakness of the lower part of the face, the deviation of the tongue, the increased tendon reflexes, the patellar and ankle clonus and the extensor toe signs were all pointed out and then analyzed with such clarity of thought and logical deductions as to hold the listeners spellbound.

"In contrast, another patient was used as a demonstration of what lesions of the lower motor pathway produced. This patient was a child who had suffered from an attack of acute poliomyelitis which resulted in paralysis of both legs and one arm. Here, again, the professor pointed out the cardinal symptoms of a lower motor neuron involvement, such as lost tendon reflexes, flaccidity and atrophy of muscles with associated electrical reactions of degeneration, and an absence of pathologic toe signs. Throughout the hour he moved about in the arena of the amphitheater and executed his tasks in a manner which showed him to be a master craftsman at his work and drew from his assistants, as well as from the class, the conscious appreciation of a really great teacher. During the year I never knew Professor Dercum to hold a neurological clinic which was not worthwhile and of practical value, for every one was packed full of the choicest cullings from a great department of the Jefferson Hospital."

Dercum wrote many articles and several books. In 1892 he published his famous report on Adiposis Dolorosa, which became commonly known as Dercum's disease (Fig. 3). In 1895 he was editor of a Text Book of Nervous Diseases by American Authors, the first book of its kind with multiple authorship. Other publications were: Rest, Suggestion and Other Therapeutic Measures in Nervous and Mental Diseases; Clinical Manual of Mental Disease; Hysteria and Accident Compensation; Biology of Internal Secretion (1924); and the Physiology of the Mind (1925). In later years he became more interested in psychological and philosophical subjects.

Dercum belonged to the many societies related to his field: President of the American Neurological Association, of the Philadelphia Neurological, and the Philadelphia Psychiatric. His association with foreign neurological societies was prestigious: a foreign corresponding member of the Neurological Society of Paris (1908), member of the Royal Society of Budapest (1909), corresponding member of the Psychiatric and Neurological Society of Vienna (1911) and honorary member of that society (1921), corresponding member of the society of Physicians of Vienna (1921), and Chevalier of the Legion of Honor of France (1922).

In 1927 Dercum was elected President of the American Philosophical Society of which he had been a member for 35 years. On April 24, 1931, while presiding at a meeting of this society and sitting in the very chair used by all presidents since Benjamin Franklin's time, he collapsed and died on the spot (Fig. 4). His gravesite in West Laurel Hill Cemetery is well marked by a tombstone (Fig. 5). His name may be added to the immortals in the history of American neurology and psychiatry.

![Fig. 3. Caricature of Adiposis Dolorosa known as Dercum's Disease. (Courtesy of Dr. Morton Nathanson.)](image-url)
The Solis-Cohen family history includes the legendary “Grandees”, the old Sephardic Jewish “first families” of America, the displaced Jewish aristocracy of the Iberian peninsula, to which this name traces its ancestry. In the Philadelphia, Sunday Inquirer of September 12, 1976, Eric C. Levin, a writer of articles on Jewish history, gives a detailed account of the Solis-Cohen background. He pointed out that there is truly a Jewish aristocracy in Philadelphia of which the Solis-Cohen family dates back as long as the Biddies. Jewish families equally distinguished were the Gratz, Levy, Moss, Hays and Rosenbach. The Solis-Cohens are especially outstanding because of the continuity of their contributions not only to Jefferson but to the City of Philadelphia. According to Mr. Levin “The Solis-
Cohens are different, in certain aspects, from some of the families that make up the City's Quaker and Anglican elite. There is no great family fortune, no ancestral family seat. The Solis-Cohens don't think of themselves as 'society' and dislike being thought of as such."

The name Solis-Cohen is hyphenated, representing the two major groups of Jews who came to America, the Sephardic and Ashkenazic. This division designates the two principal directions taken by Jews following their expulsion from Palestine in Biblical times by the Romans and also to central Europe and the Iberian peninsula. The word Sephardic derives from the Hebrew word Sepharad from Spain and Ashkenazic from the Hebrew word for medieval Germany. Through the Solises the name traces back to medieval Spain and Portugal. For many years before expulsion of Jews from the Iberian peninsula they were highly honored as the advisers and confidants of kings.

It was in 1492, when Columbus sailed to the New World, that Ferdinand and Isabella, yielding to pressure from the Catholic Church, signed the Expulsion Edict. Jews had to convert to Catholicism or flee. These Sephardics spread into the rest of Europe, North Africa, the Balkans and the Arabian peninsula. Holland and England took them, but they were never as secure as they had been in Spain before the Inquisition. The first Sephardic Jews arrived in America in 1654 on the St. Charles, later referred to as the "Jewish Mayflower." According to Mr. Levin in his article, "These early Sephardic arrivals had names that do not today sound Jewish, - DeLucena, Gomez and Henriques. Solis-Cohens today, when so inclined, can find some of the 'twenty-three' up in the middle of their family tree."

The Ashkenazic name of Cohen was added through the marriage of Judith da Silva Solis to Myer David Cohen in the 1830s. According to Mr. Levin, the Solis-Cohens point out that Myer David Cohen was "just a little man from Germany." The 19th century descendants of Mr. and Mrs. Meyer David Cohen began the practice of hyphenating the name as Solis-Cohen. During the Civil War, those of the family in the fray found their names, for the sake of military records, temporarily lumped with the many other Cohens.

In the 1700s the Hays family which was Sephardic arrived from Amsterdam, Holland, and settled in New York City. Some of the members made their way to Philadelphia. The Solis-Cohens trace their history in Philadelphia to the arrival of the Hayses at the time of the American Revolution. Again, according to Mr. Levin, "The Solis-Cohen family has founded or given impetus to just about every Jewish organization or activity in Philadelphia (and a few secular ones as well): Graduate Hospital, the Academy of Natural Sciences, the YM/YWHA, Gratz College, the Jewish Publication Society of America, Dropsie University, the Philadelphia Committee of Seventy and the Philadelphia Board of Education. The Solis-Cohen imprint rests firmly on all of these and more. Solis-Cohen forebears helped to found the American Medical Association, cleaned up the frontier town of Portland, Oregon, and wrote the words inscribed at the base of the Statue of Liberty, inviting the world's 'tired...poor...huddled masses yearning to breathe free...to America's golden door.'"

There are four members of the Solis-Cohen family who enhanced the welfare of Jefferson Medical College. Their importance justifies that they be chronicled separately.

Fig. 1. Jacob da Silva Solis-Cohen, M.D.
Jacob DaSilva Solis-Cohen, M.D.: Pioneer Laryngologist (1838-1927)

Jacob da Silva Solis-Cohen (Fig. 1) was born on February 28, 1838, in New York City. Two years later, his family moved to Philadelphia where he received his early education at the Central High School. He attended lectures at Jefferson Medical College but ultimately received his M.D. degree from the University of Pennsylvania in 1860. His residency training at Old Blockley (Philadelphia General) was interrupted by his enlistment as a private in the U.S. Army during the Civil War. After being transferred to the Medical Corps as an Assistant Surgeon, he resigned this commission after one year to become an Assistant Surgeon in the U.S. Navy. At the termination of the War he returned to Philadelphia to resume practice.

The transfer of Dr. Solis-Cohen to the Navy entails an interesting anecdote related by him in an address at the Annual Dinner of the American Laryngological Association in 1918 (in archives of Thomas Jefferson University), as follows:

"A medical friend in the regular service came to see me and told me that a naval expedition was being organized to go to the Southern Coast, and that Judge Kelley of Philadelphia, the great iron Congressman who 'never forgot the rock from which he had been hewn,' had requested him to call and find out whether I would not like to go along as many Philadelphians in the expedition as he could get, and if so, he would manage the exchange. Well, we still looked upon the war as a sort of picnic, and as I had passed a few months in the army, I thought it would be a good thing to get some experience in the navy, too, before the war ended, and so I said I'd be glad to make the exchange.

"In a few days I received a notice from headquarters ordering me to appear at Washington on the following Saturday at the office of the Secretary of the Navy for a permit to go before the Medical Examining Board for the position of Acting Assistant Surgeon in the U.S. Navy. Getting leave of absence for a day from General Hooker, our brigade commander, I rode to Washington and presented myself at the office of the Secretary of the Navy. On explaining my business and replying to a question that I had been sent by Congressman Kelley, the Secretary called in an officer and directed him to take me over to the office of the Bureau of Medicine and Surgery and introduce me to the Chief with his compliments. So I came to the Head of the Medical Staff of the Navy under very good auspices. When I explained my business to the Chief of the Bureau of Medicine and Surgery he asked me when I would be ready for examination and I said: 'I'm ready now, that's what I've come here for.' 'I'm very sorry,' he replied, 'but the Board has just adjourned and they won't meet again for several days.' Noticing my dejection, he said after a moment's thought, 'Suppose I examine you myself? Will that do?' "Admirably," said I. So he asked my whole name, the whole name of my father, the whole name of my mother, the name of my clergyman, and asked me to mention the names of any of my friends prominent in the medical or legal professions, or in commerce. Then having quieted my agitation, he said 'Well, Doctor suppose you were called to a patient who was bleeding internally from a bullet wound in his lung, what would you do?' 'I'd bleed him at the arm,' I responded. 'Why?' said he. 'To reduce the force of the flow of blood in the entire organism, and thus favor clotting at the seat of the internal hemorrhage.' 'So,' said he, 'and suppose that it did not avail, what would you do then?' 'I'd bleed him at the other arm,' 'and why?' said he. 'For the same reason that I had bled him in the first place.' 'Well, said he,' 'I'm satisfied. Now go back to your regiment and you'll hear from us before long.' On Monday the report of the Board of Examiners was published, and in deference to the Chief of the Bureau of Medicine and Surgery, the candidate whom he had passed in a special examination headed the list as number one in the record. In a few days I received my commission in the Navy and showed it to General Hooker, who gave me permission to go to Washington again where I presented the document to General McClellan and he ordered me an honorable discharge from the U.S. Volunteers 'in consequence of an appointment by
the President of the United States as an acting Assistant Surgeon in the U.S. Navy.' Up to this moment I had been for several days in both branches of the Military Service at once, and had been drawing double pay."

Dr. Solis-Cohen promptly adopted laryngology as a specialty and used Morrell MacKenzie's *The Use of the Laryngoscope* as a guide. He was fascinated with the laryngeal mirror as a diagnostic aid and developed expertise in its use. This was at a time when the medical profession looked upon specialization with skepticism. He actually met with some opposition in his effort to establish the specialized study of diseases of the throat. Within in a few years, however, he became recognized as a foremost authority in this branch of clinical medicine.

In a paper entitled "Early Laryngology in Philadelphia" (Annals of Otolgy, Rhinology and Laryngology, September, 1918, p. 1-7) Dr. Solis-Cohen related some anecdotes which revealed his strength of character and sense of humor. The following paragraphs from the article are quoted verbatim:

"Shortly after, Dr. Bertolot came from Europe, where he had studied the subject, and with his aid and that of Dr. La Roche, who had become interested, I decided to open a private clinic, which I did in Ninth street, opposite the University of Pennsylvania buildings, in a couple of rooms just vacated by the orthopaedic and nervous dispensary run by Dr. Thomas Morton and Dr. S. Weir Mitchell, who had removed to their present location.

"Most of our patients were sent by my good friend Dr. Slocum, the physician of the Northern Dispensary, but it was a long time before we got any students. It was a little hard to keep the patients, too. Sometimes I had to pay them for coming so that we should not be out of material should we have any professional visitors.

"After a while I thought it time to begin a course of lectures, so I rented the use of Dr. Agnew's anatomic room in Chant street, now part of the Post Office building, for two nights a week and got out a prospectus which I tacked up on the bulletin boards of the University and the Jefferson.

"I went to one photographer after another to get some enlargements made of laryngoscopic images for purposes of class demonstration, but I could not get them to do it for me. They all thought the pictures were those of the female genital organs and indignantly refused. So I had to go to New York where I found the photographers were not so fastidious, and got some splendid reproductions, which were used successfully for a number of years.

"Well, the course was to be opened, and I had sold but two tickets, both to Jefferson men, one of them, Dr. Graham, subsequently Professor of Surgery in the Denver Medical College, and the other to Dr. Watson, of Hot Springs, Arkansas, subsequently a noted practitioner in his own state.

"The first lecture was attended by Dr. Watson only, but I did my best and lectured as enthusiastically as though the amphitheater was crowded.

"At the second lecture I had no audience, not even the janitor, and just as I was giving up, Dr. Graham came in and I gave him the lecture all to himself. This went on for a week or two, only one or the other showing up at a time, when finally, as I was entering the room I heard the end of a conversation like this: 'Hello, Watson, are you attending this course of Dr. Cohen?' 'Yes,' said he, 'and are you?' 'Yes, I am, too, but I have always been the only one.' 'Well,' said Watson, 'let's come together after this and give the poor doctor a class."

"Well, the thing got around the college, and after that there were always these two, and once in a while one or two more who dropped in to see the doctor who was lecturing at such odds.

"The next year I had perhaps a dozen students, and so it went for a year or two, and I wrote a little primer on 'How To Use the Laryngoscope.'

"I used to attend Professor Gross' clinics to report them for the Medical and Surgical Reporter, who paid me at the rate of five dollars per clinic.

"One day Dr. Gross introduced me to his class ironically as a man who was devoting his energies to a single cubic inch of the human anatomy, and when the laugh he raised had subsided he added, 'and some day I suppose some specialist will con-
fine himself to diseases of the navel."

"So you see the respect shown to specialists in those days. Later, however, Dr. Gross always got me to lecture on laryngoscopy before his class, and engaged me to write the chapters on Diseases and Injuries of the Air Passages in the last edition of his Surgery.

"Shortly after this the University got up a summer course of collateral branches, leading to the degree of Ph.D., and the next year the Jefferson got up a summer course on some practical branches and made me lecturer on diseases of the throat and chest, with the understanding that I should bring my clinic into the building, where it became established in the dark chamber under the amphitheater where the regular clinics were held.

"Gradually we forged along until finally quite a respectable clinic was formed, with a very fair attendance of students.

"A fairly good laryngoscopic joke may be interpolated here. Dr. Seiler was examining a woman’s throat one day, and not seeing anything wrong in larynx, remarked: ‘I think your cough must be a reflex from an irritation in your womb,’ and the woman replied, ‘Doctor, if I thought you could have seen so far down I would not have allowed you to put that looking glass in my throat.’

"Faber’s talking machine was brought to Philadelphia, and Faber brought me a letter of introduction from a medical acquaintance in Germany. This talking machine was an imitation of the vocal cords in thin ivory moved by cords, the levels of which were worked by a piano key arrangement, and the artificial larynx was enclosed in a rubber head, the lips of which could be moved and the posterior nares of which could be occluded by means of cords also worked by the piano keys, and so a good many words and short sentences could be admirably imitated.

"The faculties of the University and of the Jefferson readily accorded me permission to lecture on the voice at both institutions with this apparatus in demonstration, and I gave one lecture at each college to audiences which filled the rooms.

"I was getting better known in Philadelphia, because I had just delivered a course of lectures on acoustics at the Franklin Institute and at the Institute of Technology at Hoboken, when the institution was formally opened.

"One day the late Professor Harrison Allen came into my office complaining of conjunctivitis which hampered him in finishing his great work on anatomy which was being published by the Leas, and I said to him, ‘Allen, let me cure your nasal catarrh, and the conjunctivitis will get well of itself,’ and he replied, ‘Why, you can’t cure nasal catarrh.’ ‘Let me try,’ I answered, and when he consented I immediately flushed the parts out with the nasal douche and then covered them with a weak solution of silver nitrate. His catarrh gradually improved, his conjunctivitis subsided, he finished his book, and became so enamored with rhinology that he gave up his general surgical practice for rhinology and laryngology, and soon became one of its leading exponents, and acquired such an extensive practice that he had to relinquish his professorship at the University to attend to its demands. He devised a number of operative procedures most of which however, have become superseded."

Having thus established himself as a specialist in laryngology, in 1866 he initiated regular organized lectures in this field at the Philadelphia School of Anatomy. It was the first systematic course in laryngology for undergraduates in America. In 1867 he was appointed lecturer on electrotherapeutics at Jefferson. Two years later he began his lectures there on laryngoscopy and diseases of the throat and chest. In 1882 he was made Honorary Professor of Laryngology, in which capacity he lectured regularly until 1888. He continued to supervise the throat clinic at Jefferson until the late 1890s when he retired from teaching.

In addition to his work at Jefferson Medical College and Hospital, Dr. Solis-Cohen served for many years on the staff of the Old German Hospital (now Lankenau), the Jewish and other Hospitals. Toward the end of his life he was the oldest living Ex-President of the Philadelphia County Medical Society. He was one of the founders of the American Laryngological Society and served as its President for two terms. He was an active member of

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many medical societies, military organizations, the Union League of Philadelphia and other clubs.

Dr. Solis-Cohen, in addition to his many articles, published his magnum opus Diseases of the Throat in 1872. It was a guide to the treatment of affections of the pharynx, esophagus, trachea, larynx and nares. In a volume of 583 pages he expounded upon all that was known at the time in that specialty. It was considered more complete and comprehensive than anything that had appeared in this country or abroad.

Dr. Solis-Cohen’s significant contributions to the literature in laryngology were matched by his innovations in the surgery of this field. His service in the Civil War provided a most valuable surgical background experience. In 1867 he performed a laryngotomy for a large fibrous tumor of the vocal cord, a procedure that had previously been applied for benign lesions. The following year he performed the first successful laryngotomy in the world for cancer of a vocal cord. (Solis-Cohen, J.: Surgical Affections of the Larynx. Medical Record 4:244, (1869-70). Two biopsies had made and confirmed the diagnosis. In connection with this historic operation, a preliminary tracheotomy was performed by Dr. Solis-Cohen assisted by Dr. D. Hayes Agnew, the later Professor of Surgery at the University of Pennsylvania. The operation, performed under chloroform anesthesia, was witnessed by none other than Professors Samuel D. Gross and Joseph Pancoast. The patient had an uneventful recovery and died from apoplexy over 20 years later.

In 1884 Dr. Solis-Cohen took the ultimate step and performed the first complete laryngectomy (Delavan, D.B.: Trans. A.L.A., 156, 1918) in America. In this procedure he completely severed the larynx from the trachea and sutured the open end of the trachea to the skin at the lower part of the neck. The patient survived eleven years and died without recurrence.

During the many active years in the long life of Jacob Solis-Cohen there was no time that he was not considered by his colleagues and compatriots as the acknowledged leader in this field. This profound scholar, writer, lecturer and innovative surgeon died on December 22, 1927, in Philadelphia just two months short of his 90th birthday.


The fame of Jefferson physicians has resulted in admission to the Hospital of well known and important people from many parts of the world. One such was in 1927 when James Ramsay MacDonald, Great Britain’s first Labour Prime Minister, was brought for treatment between April 22 to May 12. He was visiting this country partially for political reasons, but also seeking rest and refreshment from mental and physical exhaustion. While appearing to be regaining his health, he became acutely ill in the Middle West from an infectious disease rampant there but of unidentified etiology. He was rushed to the care of Dr. Solomon Solis-Cohen (Fig. 2) in Jefferson Hospital. After hovering between life and death, he made a slow recovery and returned to England. His convalescence required additional months, but he regained his former physical vigor and resumed his political activities from 1929 until 1935 through turbulent times.

In 1929 the Minister returned to Philadelphia to publicly honor his Jefferson physicians and nurses at a luncheon. Figure 3 is a photograph from Jefferson’s archives showing standing, from left to right, Dr. Thomas McCrae, the Consultant; Dr. Solomon Solis-Cohen the Attending Physician; Miss Caroline Ditto (R.N., Jefferson, 1902); Miss Mildred L. Hatfield (R.N., Jefferson, 1926); Mr. S. Burns Weston, a personal friend of the Prime Minister; and seated are MacDonald’s daughter, Isobel; and the Prime Minister himself. Figure 4 shows the Prime Minister with his physician (Dr. Solomon Solis-Cohen) and daughter at the same occasion. This special tribute focuses further attention on the career of another Solis-Cohen, a great physician and humanitarian.

Dr. Solomon Solis-Cohen (Fig. 2), the younger brother of Dr. Jacob Solis-Cohen by twenty years, was born on September 1, 1857, in Philadelphia. He was graduated from Central High School with
honors in 1872, at which time he received a Bachelor’s Degree. Five years later he received the Master’s Degree from the same institution, and in 1883 he graduated from Jefferson Medical College. Thereupon he started a lifetime teaching and clinical connection with his medical alma mater.

In 1884 Dr. Solis-Cohen became Chief Clinical Assistant in the Outpatient Department under Professor Jacob Mendes DaCosta. From 1887 until 1890 he was the Lecturer on Therapeutics, delivering the first systematic course on “Therapeutic Measures other than Drugs.” He was appointed Assistant Professor of Clinical Medicine in 1902, and in 1904 he became the first incumbent of a new Chair as Professor of Clinical Medicine. He served in this capacity until 1927, at which time he became Emeritus. He was an Attending Physician to Jefferson Medical College Hospital from 1902 until 1927, and thereafter a Consulting Physician. In addition, he was Physician to the Philadelphia General Hospital and the Jewish Hospital from 1887 to 1927, and subsequently as Consultant Physician. His other hospital activities included Physician to Rush Hospital for Consumptives (1890-1920), Consulting Laryngologist to the Pennsylvania Institution for the Feeble-minded at Elwyn (1894/95), and Consulting Physician to the Pennsylvania State Hospital for the Insane at Norristown (1900-24).

Other organizational activities of Dr. Solis-Cohen included: Member of the Board of Managers of the Municipal League of Philadelphia (1893-96); one of the Founders of the National Tuberculosis Association (1904); Trustee of the U.S. Pharmacopeial Convention (1920-40); Director of the School of Design for Women (1927-30); President of the Philadelphia County Medical Society (1898-99); Member of the Philadelphia Board of Education (1925-43); and honored for his wise deliberations by the naming of an elementary Public School in Northeast Philadelphia after him.

Dr. Solis-Cohen received the Honorary Degree of Doctor of Hebrew Literature from the Jewish Theological Seminary of America (1928), Honorary Doctor of Science from Jefferson Medical College (1933), and Honorary Doctor of Science from the Philadelphia College of Pharmacy and Science (1939).

Dr. Solis-Cohen was a prolific contributor of articles in clinical medicine. In 1914 he authored a paper that first reported in the English literature a rheumatic entity now known as “Palindromic Arthritis.” His magnum opus was the editing of *A System of Physiologic Therapeutics* in eleven volumes (1901-5).

The artistic qualities of Dr. Solis-Cohen were expressed in his poetry “of charm and grace”. One of his poems appeared in an anthology edited by John Greenleaf Whittier. His translations of ancient Hebrew poems into English preserved masterpieces of Jewish culture that might otherwise have been lost. He also found relaxation by painting in oil and pastel.

Dr. Solis-Cohen was a leader in Philadelphia’s Jewish Community both in organizations and in his writings. His *Judaism and Science* is a collection of 37 masterful addresses and papers. He frequently stated that there was no conflict between science and religion and that science conflicted only with “dogmatic theology” for which he had no taste.

This foremost physician, teacher, Hebrew scholar and humanitarian, whose professional career spanned 65 years, found time to engage actively in education, politics and civic affairs. He

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*Fig. 2. Solomon Solis-Cohen, M.D., Sc.D.*
died on July 12, 1948, at the age of 90. Two of his sons, Dr. Leon Solis-Cohen (JMC, '12) and D. Hays Solis-Cohen, Esq., also entered into Jefferson History and will be chronicled.

**Professor Solomon Solis-Cohen Holds A Clinic**

Jefferson students traditionally have poked fun at their favorite and most distinguished professors. Dr. Solomon Solis-Cohen was not one to escape this custom. In the 1910 *Anamnese* (Yearbook) there is a spoof of how his clinics were perceived. The unsigned article is reproduced in its entirety because it demonstrates how students were called upon to interact in the clinics of that time and in good-natured fashion exaggerates certain features of Dr. Solis-Cohen's teaching.

"The wise men from the East, or, in other words, the Trustees and Governors of the Jefferson Medical College, have set aside two hours a week in which they are enabled to have the Senior student forget his cases under observation and study in the wards of the hospital and the obstetrical cases in the slums, which are the source of so much worry to him, to attend the vaudeville (Fig. 5) under the management of Dr. Solomon Solis-Cohen and his staff - Max Goepp, M.D. (Fig. 6 and 7), Tello D'Apery, M.D. (Fig. 8), Oscar Wilson, M.D. (Fig. 9), and others too numerous to mention. Just why
these two hours a week should be allowed us is not known, unless it be to prevent students from spending their valuable time and money in the library, smoking-room, pool-room, and afternoon at Keith’s, or wandering the tenderloin district. However, without these semi-weekly seances the fourth year at Jeff would be a wearisome study of incurable diseases. There would be that horrible fear of examinations, probably leading to the production of a number of subjects from the asylum. There is no doubt there would be concentration of gloom and each of us would be wondering if the other fellow knew so little as he.

“We have been exceedingly fortunate in having with us this year the silver-tongued orator and statesman (scab by some) Wallace. Wallace is a man of broad ideas. This fact is shown by his famous lecture entitled “A Circle with A Radius of Twenty-five Miles.” He has traveled considerably and is rather fond of telling us of his trip abroad, during which time he visited the following countries: Camden, Manayunk and Kensington. During these travels he learned to speak several languages, especially Pennsylvania Dutch, and it is not rare for Dr. Cohen to call upon him to act as an interpreter.

“The vaudeville takes place every Tuesday and Thursday, at 4 P.M., in the clinic amphitheater, and lasts for sixty minutes, sometimes more and sometimes less, depending on the man holding it. If Goepp, M.D., not so long, but if Solomon Solis, usually longer.

“In these vaudeville performances the manager tries to show us some of the freaks of nature, how to recognize them, and teaches us never to allow a cripple to go by our office without an examination.

“As a rule, two classmates, usually of the same section, are assigned one of the so-called freaks of study. These unfortunates are really not all freaks in the sense that they have gross abnormalities, for many of them are apparently normal to the eye of a novice or embryo physician, and even when collected by the master, our distinguished Dr. Cohen, from no one knows where, it is hard to distinguish them from other persons. However, when we study them we find that they complain of symptoms they do not have - only think they have - and I think we can well place them in a class of their own. Neuroses, angioneurotic crises, hysteria, etc., seem appropriate to a large majority of them.

“The two persons assigned the case are supposed to report at a subsequent vaudeville and prove themselves wise. You may or may not be given warning that your case is to be exhibited, so it is always best to be prepared for any emergencies that may arise. No one can tell you what is required to prove an honor to your class, but you are expected to examine the patient carefully and secure his family and personal history and the history of the present trouble. After you get this far, the patient is carefully cross-examined before going further. Then he is subjected to a rigid physical examination, being careful to take note, first, of his appearance and posture, and then to look, feel, measure and listen to his anatomy, beginning at the cranium and going down to the toes. Notes are carefully taken of this examination, and your part-

Fig. 5. Professor Cohen holds a clinic (from 1910 yearbook, Anamnesis).
PROF. COHEN HOLDS A CLINIC
ner keeps an eye on the interne or nurse in charge of the ward while you ransack the resident's history to see if you have neglected anything. If you are spied copying the history, you explain to the resident that you were only getting the report of the urine, blood, feces and gastric contents. Note that the two Seniors have secured all the data they can from the patient, the interne's history, the interne himself and the nurses. They go home and study, taking particular note of the lesions the patient does not have, as valuable negative evidence, and make a long list of possible things which they must study in order to converse intelligently if questions arise. After exhausting the newspapers, the medical journals and books on diagnosis at their disposal, they copy a few statements from some author who is not too well known that any one might suspect the originality, and they are then prepared to meet the class and decide if the case should be referred to a surgeon or not for diagnosis. Of course, if they are in any doubt about themselves, and fear that they will be shown up, they simply say that they have forgotten their report of the case, and as a rule they are safe, but God bless the patient. For in such case Dr. Cohen usually begins by addressing the interne, Ulmer or whosoever may be present arrayed in white, something like this:

"How old is she?"
"Forty-six."
"How old is her youngest child?"
"Thirteen?"
"She has had no pregnancies for thirteen years."
"Then it suddenly dawns on him that he might catch some of the class absent. So he opens the roll book and calls, 'Mr. Orndoff?' who to his surprise answers. 'Here?' 'Where?' 'Here' 'What is it you notice on looking at that abdomen? Never mind the chalk marks."
"Orndoff - It is distended."
"Dr. Cohen - Come down and examine it. Mr. Beck! (Silence) Is Mr. Beck absent? Mr. Rosenfeld? 'Here!' What are the causes of a distended abdomen?"
"Rosenfeld - Fluid, gas, tumors, cysts."
"Dr. Cohen - Mr. Lynch! 'Here!' How do you
distinguish between fluid and gas in the abdomen?

"Lynch - Posture, palpation and percussion."

"Dr. Cohen - Mr. Laferte, he addresses Orndoff:
Mr. Orndoff, what did you find?"

"Orndoff - Great deal of fat."

"Dr. Cohen - You have or have not a pouting unbilicus?"

"Orndoff - You have? (class applauds)"

"Dr. Cohen - Now, Mr. Orndoff, percuss and let the class hear what you hear."

As Orndoff percusses, the class keeps time by knocking on the benches.

"Dr. Cohen - Please don't make any noise; keep very quiet now; we want to hear this; we might learn something. (Orndoff continues to percuss.) Dr. Cohen - You notice that the deeper the percussion, the more marked what? Orndoff - The tympany."

"Dr. Cohen - Dunkleberg? 'Here!' You come down. I'm going to turn the patient on the right side. (Speaking to the patient, he says:) Can you turn over? Now we will wait a few minutes. (Addressing Dunkleberg:) What question shall I put to her?"

"Dunkleberg - Ask her when she had her dinner."

"Dr. Cohen (to patient) - When did you have your dinner?"

"Patient - at 12 o'clock I had a little soup by the porter."

"Dr. Cohen - That will do, Mr. Orndoff."

"As Orndoff comes back to his seat on the top row, the class keep step by stamping on the floor. Dr. Cohen continues: 'Mr. Hilly! Is Mr. Hilly absent?"

"Some member of the class saves his life by calling out, 'Out on a case!'"

"Dr. Cohen - Mr. Donahue!"

"A friend of Donahue's saves his by saying 'Both out together, Doctor!'"

"Dr. Cohen - Mr. Gaston! Mr. Forcey! Mr. Merscher! Mr. Fielden! (And so forth.) Is there an epidemic in the class? What is it? Grippe?"

"Class - Sleeping sickness."

"Dr. Cohen (to d'Apery) - Have you the report there?"

"D'Apery - Yes, the salol test."

"Pointing to the various students on the back row, Dr. Cohen asks the significance, and, getting no satisfactory reply, he appoints a committee of three, with Wallace as chairman, to report at the next vaudeville."

"Dr. Cohen - What other tests did you perform?"

"D'Apery - Sahli's test."

"Dr. Cohen - Can any one tell me what Sahli's test is? (No response; he goes on to explain:) Well Sahli makes a rubber capsule containing iodine and methylene blue. This is given by the mouth, and the saliva is tested for iodine and the urine for methylene blue. Seven hours is the normal period. (Looking at d'Apery, he said:) What did we find?"

"D'Apery - Diminution in absorptive and pepsic power."

"Dr. Cohen - What other tests were made?"

"D'Apery - X-ray."

"Dr. Cohen - Dr. d'Apery has outlined the stomach on the board. I will go over it with red chalk. I don't know whether I make it more visible or not."

"Class - You do not."

"Dr. Cohen inquires again who had the case for study, and asks for a diagnosis. The Senior replies that he has not had sufficient time to come to any definite conclusions, has only had the case under observation five days, but that he thinks he has
Glenard’s disease.”

“Dr. Cohen - Yes, go on! Stop! How do you account for the gastric disturbance?”

“Senior - Poor circulation, resulting in gastric catarrh, etc."

“Dr. Cohen - Yes, very good. Now, how shall we treat the case?”

“Scudder - Abdominal binder.”

“Dr. Cohen - Dr. Achilles Rose has a plaster bandage which he applies to the abdomen, and, kept in position for a long while, does good. Then gastropexy and other operations could be recommended.”

“Some of the many favorite treatments that we have learned from Dr. Cohen this year are:

(1) The use of colargol in malignant endocarditis. Dr. Cohen thinks this especially valuable in the colored race, because of its action on the skin.

(2) Aspido-spermin, the active principle of quebracho.

(3) The Perogen and Nauheim baths, which depend upon the bombardment of the skin with small bubbles of gas for their action, and are to be used in angio-neurotic edema or neurasthenics, where ordinary massage is painful.

(4) Atoxyl has no untoward effects, and can be used as a substitute for arsenic.

“We all know that Dr. Cohen has tried these ‘journal remedies,’ and has culled out the good from the bad.”

“Some of the rare things we have seen this year are:

Nauheim bath.
Wasserman Nagootchie expert.
Case of aneurism who has made the rounds of all the surgeons in the country and could show their signatures.”

Leon Solis-Cohen, M.D.: Prominent Radiologist (1889-1965)

Leon Solis-Cohen (Fig. 10), the son of Dr. Solomon Solis-Cohen and nephew of Dr. Jacob da Silva Solis-Cohen, was born on June 7, 1889, in Philadelphia. After graduating from the University of Pennsylvania he entered Jefferson Medical College and received his M.D. degree in the Class of 1912. He served in France in the First World War with the U.S. Medical Corps as Commander of a field hospital in several campaigns.

Dr. Solis-Cohen entered the field of radiology and became a Clinical Assistant in the X-ray Department of Jefferson Hospital (Old Main Building) in 1921. By 1926 he became Chief Clinical Assistant until 1932. In 1929 he was the main organizer of the “X” Society at Jefferson and considered historically as the “Founding Father.” This society has remained active and flourishes until the present time. Its history is presented in a separate article of this book.

Dr. Solis-Cohen became Director of the Radiology Department at Einstein Medical Center and the Memorial Hospital in Roxborough. He was the Chief Radiologist at the Home of Jewish Aged, a member of the World Affairs Council, and Chairman of the Executive Committee of the Philadelphia Anti-Defamation Council.

This prominent radiologist and Jefferson Alumnus died on May 6, 1965.

David Hays Solis-Cohen, Esq., LL.D.: Trustee and Civic Leader (1887-1978)

David Hays Solis-Cohen (Fig. 11), the son of Dr. Solomon Solis-Cohen, nephew of Dr. Jacob da Silva
Solis-Cohen, and brother of Dr. Leon Solis-Cohen, was born on August 21, 1887, in Philadelphia. He was thus a Jeffersonian by inheritance and adoption. All of his education was in the city of his birth. He graduated from the William Penn Charter School, attended the Wharton School of the University of Pennsylvania, and obtained a Bachelor of Laws degree from the University of Pennsylvania in 1909.

Mr. Solis-Cohen was admitted to practice in the Philadelphia Bar and became a partner in the law firm of Wolf, Block, Schorr and Solis-Cohen. In the business world he became a Director of the Horn and Hardart Company, New York; Luria Brothers and Company, Inc. and Wilkening Manufacturing Company, Philadelphia; and Booth and Flinn Company, Pittsburgh.

Among other professional activities which transcended the boundaries of his vocation, he was a member of the American Bar Association, the Pennsylvania Bar Association, the Judicature Society and the Lawyers Club.

Mr. Solis-Cohen served as a Life Trustee on the Board at Jefferson from his appointment in 1951 until his death 27 years later. During his many active years on the Board he was always a pillar of strength and intimately involved with the growth and development of the institution. His work on various committees was a major factor in the evolution of education and health care delivery at Jefferson.

At the Board meeting of December 4, 1961, Mr. Solis-Cohen read a prepared statement with regard to the announced formal resignation of Mr. Percival Foerderer as Chairman of the Board. “I wish I could suggest some suitable honor which we, the Trustees, might bestow on him. While I have nothing to offer in that regard, I am very certain that the collective intelligence of the Trustees might be sufficient to accomplish such a discernable objective. I take the liberty to say to his successor, on behalf of all of us, that action to this end is in order.” At the very next Board Meeting of January 8, 1962, it was announced that it was the unanimous decision of the Board to henceforth call the Pavilion Building (known previously as the “New Pavilion” since 1954) the “Foerderer Pavilion.”

The Trustees of Jefferson thought so highly of Mr. Solis-Cohen that they conferred on him an Honorary Degree of Doctor of Laws in 1965. Other major honors came to Mr. Solis-Cohen on September 22, 1971, at which time his portrait was formally unveiled and a reception was held honoring the Solis-Cohen Auditorium in his name in Jefferson Alumni Hall (Figures 12 and 13).

Mr. Solis-Cohen was a member of the Pennsylvania Society of Sons of the Revolution, the Midday and Penn Athletic Clubs, the Historical Society of Pennsylvania, the Philadelphia Museum of Art, Free Library of Philadelphia, and the American Jewish Historical Society. He had a profound interest in Judaism, evidenced in his having served as an Honorary Director of the Federation of Jewish Charities, Vice-President of the American Council for Judaism, Trustee of Gratz College, Treasurer of Dropsie College for Hebrew and Cognate Learning, Hebrew Education Society, and President of Congregation of Mikveh Israel.

Mr. Solis-Cohen died on October 11, 1978, at the age of 91. His physician father and uncle had attained nearly the same age. His genetic inheritance had been for long life and mental acuity. The Solis-Cohen family and its descendants from colonial pre-revolution times has blessed not only Jefferson, but other institutions, civic organizations, and the humanities until the present time.
Martin E. Rehfuss: Gentleman, Researcher, Clinician

In Jefferson’s annals, there are individuals who, although not alumni, are remembered for their lifetime devotion to Jefferson and for certain distinctive attributes. Such a figure is Martin E. Rehfuss who was known to a generation of alumni as a dignified, serious physician always resplendent in a white vest with gold watch chain who was known as a “society doctor.” This identity would be accurate only if it were quickly added that in spite of his prominence with the well-to-do and his formal manner with them, there was no snobbery about his devotion to patients regardless of ability to pay. Also, not always appreciated was his solid scientific background and research accomplishments upon which his later reputation was founded. A commanding presence in his lectures and clinics,
his approach was even more notable on patient rounds where he described meticulously the procedures planned in arriving at a diagnosis.

Martin Emil Rehfuss was born in Philadelphia, August 8, 1887, the son of Martin O. Rehfuss, an inventor, and his wife Louisa Allgaier Rehfuss. The inventive instinct and curiosity appears early with experiments in a chemical laboratory in his own home during his last years at Philadelphia's Central High School. Prior to that he examined specimens of urine for doctors practicing in his neighborhood. He went on to the Medical School of the University of Pennsylvania where as a student he worked in the laboratory of experimental pathology and became interested in gastrointestinal function. He studied the effects on the stomach of the venom of the gila monster and before graduation in 1909 presented a report to the Undergraduate Medical Association on The Experimental Production of Acute Toxic Ulcer of the Stomach, subsequently published in the Bulletin of the University of Pennsylvania.

Internship followed at the University Hospital where Rehfuss was described as pursuing his duties “with his customary enthusiasm” and where he developed a friendship with Dr. John H. Musser, Clinical Professor of Medicine. Dr. Truman G. Schnabel, Sr., in a memoir recalls that Rehfuss “helped to make John H. Musser’s live clinics more than interesting and instructive for me and my classmates.” Dr. Musser was largely responsible for Rehfuss' continuation of his medical education in Europe from 1911 to early 1914, first in Paris as resident at the American Hospital and later in Berlin, Munich and Vienna. Patients at the American Hospital were described as “forever swallowing tubes” indicating his early preoccupation with gastrointestinal physiology. He also came under the influence of many of the great continental scientists and clinicians further whetting his appetite for exploration of the mysteries of digestion.

During his European tour, he acquired a practical knowledge of the French and German languages which served him well throughout his life.

While in Paris he developed or invented the Rehfuss tube which represented a refinement of earlier efforts to sample gastric secretion during digestion. He designed a slotted capsule attached to No. 8 French tubing which he found could be readily swallowed and retained in the stomach throughout gastric digestion with very little discomfort to the patients. This was a great improvement over the more crude devices previously used.

Dr. Rehfuss returned to Philadelphia early in 1914. No doubt it had been Musser’s purpose to have him join the medical staff of the University Hospital but Musser died in 1913. Instead he was appointed to Jefferson’s medical staff as an Instructor in Medicine in 1914 and promptly established a reputation for careful clinical investigation, diagnostic skill and teaching ability. He immediately published a paper in the American Journal of the Medical Sciences entitled A New Method of Gastric Testing with a Description of a Method for Fractional Testing of the Gastric Juices (147, 848-855, 1914). In addition to describing the Rehfuss tube, he outlined a procedure for gastric analysis which, with further refinement, became standard for many years. (For a generation, Jefferson students in the chemistry laboratory paired off during the first year, one swallowing the Rehfuss tube and the other performing fractional analysis of the aspirated gastric secretions.) Almost at once he became well recognized as a gastroenterologist and in 1916 at the age of twenty-nine was elected to membership in the American Gastroenterological Associa-

Fig. 2. Rehfuss (right) shown with lifelong friend, Percival E. Foerderer, Chairman of Jefferson Board of Trustees (1950-1962).
tion. The same year he published "The Normal Gastric Secretion in the Proceedings of the American Philosophical Society.

During the early years of his Jefferson experience, Rehfuß pursued vigorously the course he had begun for investigation of the chemical aspects of digestion. A fortunate association evolved between him and Dr. Philip B. Hawk, Professor of Physiological Chemistry (1912-1922) whose skill and interests complemented Rehfuß' clinical concerns in the study of gastric contents. Numerous publications followed including an article after Hawk's departure entitled The Response of the Normal Human Stomach to Various Standard Foods (Am. J. Med. Sc., N.S. 172,359-369,1926). A major series of 13 articles was also published in the American Journal of Physiology on the same subject (1919/20).

All the while pursuing his private practice and teaching during the 1920s, Rehfuß' investigations continued but broadened into other aspects of gastrointestinal physiology and chemistry. He published a textbook in 1927 entitled The Diagnosis and Treatment of Diseases of the Stomach (W.B. Saunders Co.) which was well received. In 1935 he published Medical Treatment of Gall Bladder Disease with Guy M. Nelson (Saunders) and dedicated it to Percival Foerderer. This was followed in 1943 by Indigestion: Its Diagnosis and Management (Saunders). His career total of published papers was almost two hundred.

With academic successes, Dr. Rehfuß also developed a reputation among his peers and patients for his astute medical care. His careful dress and dignified deportment have been alluded to. Although at times students and residents suspected his "bedside manner" as a posture to impress his patients, it usually became clear that his purpose was good communication. He frequently resorted to expressions like "we will evaluate the erythrocytes and leukocytes, study the numbers and types of blood cells, study the urine chemically and bacteriologically, and use X-ray findings as carefully as possible." Whether or not the purpose was to inform or impress, patients appreciated the openness of his manner and his explanations at a time when medical paternalism was the general rule.

Dr. Rehfuß' academic progress was uninterrupted. Beginning as Instructor in Medicine in 1914, he was elevated through the ranks to Clinical Professor in 1933 and Professor of Clinical Medicine in 1936. His interests came to include general therapeutics but the Department of Therapeutics had been incorporated into Medicine in 1940, so in 1941 he was named Sutherland M. Prevost Lecturer in Therapeutics. This also carried with it the status of Director of Therapeutics in the Department of Medicine. With his partial retirement in 1956 he was granted the title of Professor Emeritus and he continued teaching on a limited scale until 1962.

Rehfuß' teaching techniques were distinctive although at times the contents of his lectures were less specific than the students may have wished. Many, however, recalled his ability to illustrate the lectures with drawings of the stomach and upper abdominal structures. These often approached the artistic rather than merely the diagrammatic. His student activities included service as Faculty Adviser to the Hare Society.

During his last two decades, his book on Practical Therapeutics (Williams & Wilkins) was published and went through three editions (1948, 1951, 1956). It was described by Schnabel as an excellent work. He was joined by Alison H. Price and F. Kenneth Albrecht in its publication. He also published essays with titles like "Idle Words", "Bedside Manner", "Why Do You Want To Be A Physician", "Don't Give Up!". The January, 1944, graduating class presented his portrait to the college (Fig. 1). In 1954, Jefferson conferred on him the honorary degree of Doctor of Laws.

Having experienced two gastrointestinal illnesses, peptic ulcer and Meckel's diverticulum, during his lifetime he encountered a third one in 1955 when carcinoma of the rectum was discovered. A Miles resection with permanent colostomy followed which caused him to withdraw almost totally to his home for the remaining nine years of his life since his fastidious personality could not tolerate the risk of embarrassment with public contacts. He died July 29, 1964.
Rehfuss' medical accomplishments were widely recognized and he was active in many medical societies. During World War I, he was Chairman of the Joint Committee on Gastroenterology of the American Medical Association and the American Gastroenterological Association as well as serving in the U.S. Army with the rank of Captain. In a memoir, W. Paul Havens described his clinical skills as combining "a strange alchemy of human capabilities, just the right proportions of art and science. Both intellectually and physically he brought a meticulous elegance to the bedside. He was astute, intuitive, and resourceful. His energetic enthusiasm never flagged, and the problem of every patient was an intensely personal one to him."

Apart from his medical accomplishments, Rehfuss was also an amateur painter and was awarded a medal of merit by the Physician's Art Association. He played the piano, worked in ceramics and enjoyed fishing.

Rehfuss' friendship with Percival E. Foerderer was a long and intimate one (Fig. 2). Having been at least partially responsible for Foerderer's commitment to Jefferson, including Presidency of the Board of Trustees, Rehfuss was the Foerderer physician for many years. In 1964, the Foerderer Foundation established the Martin E. Rehfuss Lectureship in Internal Medicine as an annual event (Fig. 3). At the first lecture, organ music was used for the first time at the request of Mrs. Foerderer. This began a tradition which has become well established at Jefferson's academic events.

Dr. Rehfuss upon his death, perpetuated his interest in teaching with the bequest of $250,000 to supplement the salary of the chief medical resident "as a key individual in the teaching program."

Martin E. Rehfuss is mainly remembered for his contributions to the understanding of gastrointestinal chemistry and physiology. His inquiring mind, stimulated by the European pattern of medical research, led to therapeutic applications and firmly established his reputation as a skilled clinician. Jefferson remembers him with respect and affection.

Fig. 3. Inauguration of the first Martin E. Rehfuss lecture, January 9, 1964; (left to right) Dr. William A. Sodeman, Dean and Vice-President for Medical Affairs, Dr. John H. Gibbon, Jr., Samuel D. Gross Professor of Surgery and Head of the Department, Mr. Percival E. Foerderer, for 35 years a devoted Trustee, and Dr. Alton Ochsner, the Lecturer.
The death of Professor Thomas A. Shallow in 1955 marked the end of an era at Jefferson. His strong personality had dominated much of the policy of the Medical College and Hospital since his appointment as Gross Professor of Surgery in 1939. Indeed, he was commonly referred to as "the boss" and "the last of the Geheimrats." This is not to infer that Jefferson was at his mercy for good or ill, but certainly some of its good or ill was ascribed to him by his friends or enemies of which he had many of both. His counterpart in Philadelphia was Dr. Isidore S. Ravdin at the University of Pennsylvania. In the preceding generation, the surgery dictators had been John Chalmers DaCosta (Jefferson), John B. Deaver (University of Pennsylvania) and Wayne W. Babcock (Temple University). These men were strongly clinically oriented with huge practices who usually accomplished their dictates single-handedly without the backing of a committee. They devoted their lives to what they believed was the welfare of their respective institutions while satisfying the drive of their super egos. Shallow inherited this tradition from his mentor, Professor John Chalmers DaCosta, and followed it to his end. There is no intent to demean the forceful character of Dr. Shallow who commanded the highest respect for his teaching and surgical skill. Aware of his own virtues and faults, his advice was: "Follow what you see best in me and forget the rest." Some of the events and anecdotes in his colorful life are worthy of recount.

Thomas Aloysius Shallow (Fig. 1) was born on November 26, 1886, at 39th and Hamilton Streets in West Philadelphia. Of Irish and Scotch-English descent, he was sixth in a family of seven children. His father, Edward Shallow, a millwright, and his mother, Elizabeth MacQuillan Shallow, were both from Pennsylvania. Young Thomas was the bright star of the family, exhibiting high scholastic aptitude and acquitting himself well in the fights among the youth of his neighborhood. His competitive rough and tumble nature persisted throughout his life.

At Central High School in Philadelphia he was a brilliant student and recognized as an outstanding athlete, especially in track. In those days Central High School was the best in the City and its diploma was regarded by many as equivalent to that of most colleges. Unfortunately for Shallow's later academic responsibilities, his entrance into Jefferson Medical College in 1907 without a formal liberal arts education denied him the literary polish that distinguished his fellow Jefferson professors such as Edward Klopp and Thomas McCrae. Shallow remained throughout life a diamond in the rough and frequently exposed his rough edge. John B. Deaver, Professor of Surgery at the University of Pennsylvania, also regretted the same literary defect in his own educational background. Shallow, nevertheless, was at the head of his 1911 Jefferson Class, a member of Alpha Omega Alpha, won the Alumni Prize for highest four-year average, served as Class Historian, and was on the 1908 track team.

At the age of 15, Shallow's interest in medicine
was such that he would cut classes at Central High School to attend surreptitiously some of the postmortem examinations and teaching clinics at the old Medico-Chi Hospital located at 18th and Cherry Streets. In 1907 he was ready to enter medical college. He recalled standing at the corner of Tenth and Walnut Streets deliberating whether to matriculate at Jefferson (the 1898 Medical College located there) or the University of Pennsylvania. At that time one could enter the Dean's office of either Medical College and sign up. He chose Jefferson because of the reputation of its professors.

Shallow was a serious student and is credited by his classmates as having a photographic memory. Legend asserts that he had memorized Radasch's textbook of histology from cover to cover. His 1911 Yearbook, The Neurone, lists him as a "jolly student. Always takes his textbook with him when he goes to call on his lady friend."

As class historian (in 1911 Yearbook) he stated that "there were 168 freshmen representing all the states of the Union, composed of college men, school teachers, schoolboys, musicians and business men." Preceding the opening address by Professor William Joseph Hearn in the College amphitheater, he first witnessed "Passing Up." This was a custom in which someone in the front or second row would be singled out with "Pass him up;" whereupon the victim would be lifted into the air and passed up successive rows to the top of the lecture room or amphitheater. This tradition persisted until the amphitheater in the Thompson Auditorium was dismantled in 1966.

Shortly after the start of classes, some of the freshmen were made to traverse the streets playing a hand organ and leading a monkey, while others collected pennies and tacked up signs. Another ritual was the crowning of the elected class president with a light soft hat which floated around the lecture rooms the whole four years.

Shallow in his freshman year class history relates a pitched battle in the rivalry between members of the first and second classes. It was occasioned by an attempt of the sophomores to kidnap one of the freshmen and took place outside the east lecture room. "At the beginning of the conflict a sophomore was knocked through the glass door; he was quickly carried to the rear and their line again reinforced, but to no avail. Slowly but surely they were driven back into the hall. Here reinforced by over ripe hen fruit from the histology laboratory, they made their last stand, which was of short duration." Shallow surely must have delighted in this skirmish and added to the freshman victory.

The history of his sophomore year reported a number of new faces and an absence of old ones. The ranks had suffered a great loss "due to the promotion standard from sixty to seventy-five percent." The sophomores directed a procession of their class with freshmen members to Fairmount Park. "Here in our efforts to give them physical torture, we incurred the wrath of the park guards which resulted in the arrest of Posey and Zuck.

"Coplin always drew the largest attendance, not because his subject (pathology) was more popular

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Fig. 2. Captain Shallow in World War I (1917-19).
than the others, but he had a peculiar way of having those present leave their name on a slip of paper as they passed out. Thomas and James, rather than run the risk of being caught absent, did all their sleeping on lantern days, and it was no uncommon occurrence to hear Coplin ask: 'Will someone give that fellow up there a kick and wake him up.'

'The course in medical jurisprudence always drew a large audience from upper classes. This necessitated passing up some of the unwanted guests. While this was going on Chapman appeared on the scene with the remarks: 'Kings and Queens serve illustrious reigns and die; Presidents are elected, serve their terms, live illustrious lives and die; everything in nature changes. But not since the days of Galen has the medical student ever changed.'

'The evening following the game (football with Medico-Chi), we met the freshmen in the annual class fight at Tenth and Walnut Streets. The conflict raged furiously for more than an hour, blocking trolley cars and putting an end to all traffic. Finally, reinforcements for the freshmen in the form of bluecoats from the Fifteenth and Locust Street police station arrived.' You may be sure that Shallow was deeply in the fray. On the serious side, he served that year as president of the Spitzka Anatomic League.

Shallow reports that in the third year a classmate surprised everyone by getting married during the Christmas holidays. "We congratulated him (in chorus) at every lecture for the next month."

The big event of the senior year was in being free of laboratory work for the first time, with replacement by work in the hospital. The sections were divided in such a way as to provide two months in surgery, two months in medicine, and one month in each of the minors. This apparently was an opportunity not offered by any other medical college at the time.

After internship at Jefferson Hospital (1911-13), Shallow was chosen as Chief Resident (1914). In the latter capacity he also worked with Professor Hobart A. Hare in experimental pharmacology and with Professor Brubaker as a quiz master in physiology. Several senior staff members made overtures to take him on as their assistant, but the offer from Professor John Chalmers DaCosta was the one he could not resist. Except for military duty (1917-19) he worked closely with his surgical idol until 1925.

In World War I, Shallow served as a Captain in the Medical Corps (Fig. 2). He was assigned to the Rockefeller Institute in New York, and subsequently as Surgeon to Evacuation Hospital Center #25 in France. His "trick knee," resulting from his previous athletic activities, had served him well until he was walking down the gangplank while debarking at the end of the War, at which time it "locked." Curiously, it never caused him any further trouble.

Miss Myrtle Lumen, Dr. J. C. DaCosta's operating room nurse, was at the dock to meet him. They were married in 1920. Shallow acknowledged his disappointment at not having children, but his marriage was a happy one. Mrs. Shallow was a scrupulous housekeeper and took care of her busy husband's every creature comfort. Her good cooking led to his becoming corpulent. By the 1940s the trim athlete of 1911, now with a round face, double chin, and protuberant abdomen, began to look more like a Santa Claus.

Mrs. Shallow had grown up on a farm and could ride a horse well. In the 1940s she rode horseback almost daily in Fairmount Park. There, both she and Dr. Shallow enjoyed the friendship of the park guards, many of whom he cared for both medically and surgically.

By 1921, Dr. John Chalmers DaCosta, the Gross Professor of Surgery, began to experience the crippling symptoms of rheumatoid arthritis. This placed increasing responsibility on Dr. Shallow to aid his chief at the operating table. Indeed, at this time, Dr. Shallow became "DaCosta's hands," at first taking over if problems arose and soon thereafter actually operating for Dr. DaCosta on all his cases. In the latter situation, Shallow is believed to have relinquished the fees to his chief.

DaCosta, however, continued his Wednesday afternoon surgical diagnostic clinics in the Thomp-
son Auditorium “pit” until 1931. Dr. Shallow, along with Drs. Harvey Righter (JMC, 1896) and Henry Seelaus (JMC, '18), saw to it that the eminent Professor DaCosta was safely transported back and forth from his home to the clinic. Needless to say, the bond between DaCosta and Shallow became crucial. Dr. Frederick Keller (JMC, '17), who edited Poems of John Chalmers DaCosta and Trials and Triumphs of the Surgeon referred to Dr. Shallow as DaCosta’s “last straw,” meaning that Shallow’s support could be counted upon to the very end.

In 1931 the resignation of Dr. DaCosta as the Gross Professor of Surgery was accepted by the Board of Trustees. He, nevertheless, was charged to oversee the running of the Surgery Department in which Dr. Shallow and Dr. Edward Klopp would be equal and coordinate professors. Dr. Klopp was placed in charge of the junior class and assigned to give the first Grace Revere Osler Lectures on tumors in honor of Lady Osler’s first husband, Professor Samuel W. Gross (son of Samuel D. Gross). Dr. Shallow was assigned the teaching of the fourth year students in surgery. When Dr. DaCosta died in 1933, the Trustees did not award the Gross Professorship to either Shallow or Klopp. Neither had the stature of DaCosta and neither outshone the other. When Dr. Klopp died in 1936, Dr. George P. Muller was appointed in his place but the Gross Professorship remained unassigned. In 1939 Dr. Muller was named the Grace Revere Osler Professor and Dr. Shallow the Samuel D. Gross Professor. At this point, Shallow had fully “arrived” and he promptly made his influence felt.

It is necessary to trace how Shallow obtained his surgical training. There were no residencies as such when he completed his internship. The prevailing method was to enter general practice, become the assistant to a surgeon, give anesthesia, and work in the outpatient surgical clinic. He did all this under the auspices of Dr. DaCosta and Jefferson Hospital. Probably no one ever worked harder to build a private practice than did Dr. Thomas Shallow. His nature was charismatic, his diagnostic skill uncanny, and his fees modest. Referred cases for surgery were few and successful surgeons drew their operative cases mainly from their own large private practice. By the mid 1930s, Shallow had moved his practice from West Philadelphia to a fashionable address at 1611 Spruce Street. The twinkle of his blue eyes, the touch of his warm hand, and the dynamism of his energetic nature earned for him the confidence and affection of his patients. Although the surgical tradition of W.W. Keen had passed to DaCosta and then to Shallow, it was through Shallow’s own boldness and eagerness to tackle unsolved problems that his true surgical stature was developed. Rich and poor alike sought his care and to all he gave the same level of skill and devotion.

In 1937, when the American Board of Surgery was established, Shallow was elected a founding member by reason of his professorship, and thus automatically board certified. When he became a full professor in 1931, he took on Dr. William T. Lemmon (JMC, '21) as his assistant at the operating table, followed by Milton Harrison (JMC, '29),

![Fig. 3. Characteristic pose of Dr. Shallow in the Thompson Auditorium “Pit” (ca. 1950).](image-url)
Kenneth E. Fry (JMC, '31), and Sherman A. Eger (JMC, '29). His last and longest private assistant was Frederick B. Wagner, Jr. (JMC, '41) who served from 1946 until Shallow’s death on December 26, 1955. Wagner had served his surgical residency and fellowship under Shallow on the “A” service (1942-46) and was thrilled when asked by the Chief to become his assistant. Little did Wagner know what he was getting into.

Wagner’s working relationship with Shallow was based entirely in the Hospital and College. He was given operating privileges and allowed his own private office. In the Hospital, however, he was responsible for the pre- and postoperative care of Shallow’s inpatient service of 35 to 50 patients. Rounds had to be made on these patients twice daily and the resident and intern kept under close supervision. Surgery started sharply at 12:30 daily, Monday through Friday. For nearly ten years, Wagner was not once late or absent at any one of the Professor’s operations. This could be credited to Shallow himself, however, since he was faithful to his part of the agreement by practically never being late or at least phoning from his office if something unusual had occurred. The assistant was scrubbed and ready to insert the needle for spinal anesthesia upon the Chief’s arrival. If general anesthesia were to be employed, the patient and anesthetist would be ready to start as soon as Shallow assured the patient of his presence by a compassionate “O.K. ginger blue” or “O.K. big boy.”

Shallow was a rapid operator without any evidence of haste or tension. Once when asked what his favorite operation was, he retorted: “The one I happen to be doing.” An operation had the effect
of a shot of adrenalin.

Toward the end of his life, when dying from cancer but still operating, he admitted that he only felt well while operating. Shallow’s apparent speed in surgery was enhanced by a team composed of the same assistants and nurses. He commanded his own operating room, had the same operating room supervisor, the same suture nurse, the same first assistant and the only change was the intern who rotated on and off his service. The first year surgical resident stood by to observe, adjust the light, and administer the intravenous fluids or blood. His operative technique was consistent for each operation, so that one could predict what he would do at each stage of a procedure. He mandated that his particular technique and size of suture material be uniform on his surgical “A” service.

Once Dr. Shallow had finished operating and completed private rounds, usually by 5:00 p.m., he would go to his private office on Spruce Street. After arranging his schedule for the following day, he would down a slug of Scotch whiskey and be driven home.

It was Dr. Wagner’s duty to handle any and all night and weekend emergencies referred to Dr. Shallow. In ten years of their relationship, Dr. Shallow never once came in at night or weekends, not even for his own brother. Dr. Wagner operated on this brother for a ruptured duodenal ulcer and the brother died from pulmonary complications. Dr. Shallow consoled him by saying, “Don’t worry. He drank too much.” On the first occasion that a patient of Dr. Shallow operated on by Dr. Wagner died, Dr. Shallow pontificated: “You can’t save them all. Remember you are not Jesus Christ.” On another occasion the son of the President of the Board of Trustees from a neighboring hospital was referred because of appendicitis on a Sunday afternoon. The referring doctor said to Dr. Wagner: “If you are not Dr. Shallow, you had better look very much like him.” Dr. Shallow’s trust was implicit and he never rebuked Dr. Wagner for a decision made when he was not present. When Dr. Shallow was asked whom he would have operate upon himself, he remarked: “Fred, of course, I taught him everything I know.” Who would not be committed to a trust such as this?

Dr. Shallow’s forte was in the operating room. Although in earlier years, while climbing the academic ladder, he had written amply on diverse subjects in surgery, it became his custom to assign the literary work to his assistant, Dr. Wagner. After performing an operation on an unusual case, he would request that an article be written with a review of the literature, sometimes the world literature. At a meeting in which he was scheduled as the speaker, he would rise and say: “Dr. Wagner will make the presentation.” This custom was once criticized at a meeting of the Philadelphia Academy of Surgery by a surgeon from a rival institution. Dr. Shallow angrily retorted: “How do you expect a young man to progress if you do not give him these opportunities?” Shallow thus became a controversial figure at surgical meetings, often quoting anecdotal evidence from his large experience, backed sometimes more by emotion than scientific fact.

At one State meeting the Chairman signaled Shallow that his time was up. Shallow quipped: “I will not have the likes of you tell me when to stop.” This was followed by mixed applause and hissing. Of course, this kind of conduct would be unheard of today. It still existed in his era, but the traditional power of the Geheimrat (German for privy counselor) was fading.

On one occasion, one of the top administrators had written a speech which he handed over to Shallow for criticism. Shallow gave the speech to Wagner with a remark to the effect: “That speech is poorly written. Go over it tonight and bring me a fresh typed copy. Also, start out the introduction in the style of DaCosta as he would list what was going on at the time in politics, industry and science.” Wagner worked well into the early hours and delivered a revised typed copy to his Chief the following midday. Shallow took it without a word of thanks. At the operating table Wagner was sluggish in his reflexes in picking up bleeding vessels. “What’s the matter with you today,” he asked? Wagner replied: “Dr. Shallow I was working late on that speech you handed me.” “Fred,” he said, “I want you to know that the operating table is just
as important as your literary work.” Such hurts were forgiven when at promotion time a rise in academic rank was awarded. Shallow was heard to say: “It is necessary now and then to toss the dog a bone.” He stated that the deserving assistant could be rewarded by a rise in academic rank or an increase in salary. He preferred the former. Shallow occasionally referred to the $1,800 a year he paid Wagner from his professional salary. This salary was never increased in ten years. After hearing Shallow refer to this parsimonious salary once too often, he could not restrain himself. He said: “Dr. Shallow, that is the best money you ever spent.” Shallow did not blink an eye and Wagner got away with it. It was a big risk and accomplished nothing.

In spite of Shallow’s austere demeanor and hard line, he had a soft spot. His immediate response to those who did not carry out his orders was: “Pack up and leave” or “You are fired.” This would evoke a feeling of terror to which he would respond: “You have one more chance, but never do that again.” The unfortunate victim felt a sword over his or her head thereafter. Shallow rarely, if ever, would apologize, but did admit to feelings of remorse. Gerald Marks (JMC, ’49) relates that he heard Shallow say to Wagner one day: “Fred, I could get a thousand like you any time I want.” To which Wagner is claimed to have naively remarked while closing the abdominal wound while his chief started out on rounds. “I wonder if he could even get a hundred.”

During Wagner’s internship at Jefferson Hospital in 1941/42, it was a common practical joke to call a fellow intern and say that Dr. Shallow was waiting to meet him in a certain private room to carry out his instructions on a patient. Wagner got such a call one night and responded by saying: “You can’t fool me. This is not Dr. Shallow’s voice and I’m not coming.” After hanging up, he decided it might have been Dr. Shallow after all, so he hurried to the private room in the Thompson Annex. There was Dr. Shallow, indeed, who smiled and said: “Don’t worry, I know they do this a lot.”

Shallow was an inveterate smoker and this habit was eventually to cost him his life. He switched from cigarettes to cigars and in later years would simply chew on a cold cigar in the surgical dressing room between cases. He developed very extensive leukoplakia on the inside of his mouth. One of these lesions became as large as a fifty cent piece. He asked Wagner to remove it, who demurred by saying: “Dr. Shallow, that lesion is so large you will need a plastic surgeon. How about asking Dr. Reese?” Dr. John D. Reese (JMC, ’25) had become famous for his invention of the Reese Dermatome, but this machine would not have been helpful in this case. At any rate, after Reese removed the lesion it was not possible to close the defect. Shallow developed massive ecchymosis on the side of his face from chin to eye. He was unable to operate for two weeks and when Wagner visited him at home he said: “Fred, you should have done this. Jack hit me with a tomahawk.” Wagner was fortunate to have evaded this situation.

Shallow’s Wednesday afternoon clinics were popular and fashioned after his mentor, Dr. John Chalmers DaCosta (Fig. 3). At the moment of 3:00 p.m. he would enter the “pit” of the Thompson Auditorium accompanied by an entourage of staff members and residents. The staff took seats on the front row. The amphitheater was packed by the members of the junior and senior classes, as well as by curious onlookers from the lower classes (Fig. 4). The resident would then read from the roll book the names of four seniors who were summoned to stand in the “pit.” The resident would then read a carefully prepared history of the patient being presented. The first student was invariably asked: “Doctor, repeat the salient points in the history just given.” It always seemed remarkable to the lower classmates how well the history was summarized. Instead of appearing terrorized, the student’s memory seemed to become stimulated. Dr. Shallow gave the feeling of talking to a colleague by flattering the student with the title of “Doctor.”

The next student “Doctor” was then asked to examine the patient and report the significant findings. Shallow never demeaned the students for their history or physical findings and this engendered a feeling of group participation as the facts
of the case unfolded. Shallow, through a series of questions, would try to lead the next student to a correct diagnosis. For example, he would ask: “Doctor, is this an inflammatory or neoplastic lesion? If inflammatory, is it acute or chronic? If neoplastic, is it benign or malignant?” At the end of the queries a likely diagnosis was entertained. Laboratory studies would be asked for and x-rays would be shown. With the diagnosis finally declared, a staff consultant might be called upon to bring the subject up to date. Two to four cases might be shown and at 4:00 p.m. one of them would be operated upon in the amphitheater.

There was a surgical clinic of Dr. Shallow’s in which one breast case was shown as benign and the other malignant. Both were operated upon in front of the classes. The benign case turned out to be malignant and vice versa for the other. Dr. Shallow turned to the class and said humbly: “Well, I could not have been more wrong if I tried.”

When Dr. Wagner was a sophomore in 1939, he was sitting on the top row of the Thompson Amphitheater next to a lady who was nervously puffing on a cigarette. Dr. Shallow had just finished a hip joint amputation on a man with sarcoma. He looked upward and said authoritatively: “Gentlemen, this patient is doomed.” The lady turned to Wagner and gasped: “That man is my husband!”

The last operation in the Thompson “pit” was performed by Dr. Shallow in 1945. These operations had consisted of thigh amputation, intestinal and rectal resection, cholecystectomy, mastectomy, thyroidectomy, etc. From the amphitheater practically nothing could be seen and little learned, but it was an introduction to the mysterious art of surgery and some contact with clinical reality. Students dreaded the thought of the day when they would eventually be called into the “pit” for examination in front of their peers. Lectures and demonstrations continued until May, 1966, when this third and last “pit” (continued after Dr. Shallow’s death) was replaced by an emergency room and a Thompson Auditorium.

On May 10, the Class of 1950 presented the portrait of Dr. Shallow to the College in the “pit” of the Thompson Building (Fig. 5). The ceremony took place at the usual time of Dr. Shallow’s surgical clinic, 3:00 p.m. on a Wednesday, before the entire junior and senior classes, augmented by the presence of surgical staff and other faculty members. The student chairman of the portrait committee introduced Admiral James Kauffman, President of the College, who made a few introductory remarks. Dr. James Martin, Chairman of Orthopaedics, then gave a biographical sketch accompanied by warm personal remarks about his friendship and admiration for Dr. Shallow. The artist, Roy Nuse, followed with short remarks about the cooperation he had received from Dr. Shallow in patience, time, and provision of working space for the execution of the portrait. Dr. Shallow responded with the message that application and hard work were available to all members of the class and were the surest road to success. He brought laughter with his quip: “Seldom does one have an opportunity to hear his own obituary,” referring to Dr. Martin’s remarks. Dean William Perkins concluded with appreciation of the portrait on behalf of the College.

The entire program took about one half hour. Immediately thereafter, Dr. Shallow presented a case to complete the surgical clinic time. An audio tape recording was made by Dr. Wagner which is preserved in Jefferson’s Historical Archives. The 1950 Yearbook states: “But more than all of these, he is a friend, a man, a teacher. He is a symbol of the very finest at Jefferson and we, the class of 1950, gratefully offer this portrait as a small token of our admiration and warm affection.” This simple portrait event was in contrast to those of today which are held in McClellan Hall preceded by organ music, an elaborate program with multiple speakers, showing of slides, video taping of the ceremony, and followed by an elegant reception in the Eakins Lounge.

At the commencement exercises of the Jefferson Medical College on June 12, 1952, Dr. Shallow was awarded an honorary Doctor of Laws degree. At that time he was nearing the age of 66 and had already passed the mandatory retirement age of 65. Through some special arrangement not available to other Chairmen, he was able to
Fig. 5. Class portrait of Dr. Shallow (1950) unveiled in Thompson "Pit" by President Admiral Kauffman.

keep his academic position active until his death three years later.

Dr. Shallow belonged to the prestigious medical and surgical societies of his profession. In addition, he was a past President of the Jefferson Alumni Association, the Philadelphia Academy of Surgery, and the United States Chapter of the International College of Surgeons, Consulting Surgeon to the Philadelphia General Hospital (where in earlier years he performed neurosurgery), Montgomery County Hospital, Sacred Heart Hospital in Norristown, and Grand View Hospital in Sellersville, Pennsylvania.

Among his civic activities, Dr. Shallow was a member of the Board of City Trusts, the Board of Directors of the Philadelphia House of Detention, and the Advisory Board of the Municipal Courts of Philadelphia. He personally knew many of the judges on the bench. On the occasion of his portrait presentation, mention was made of his membership in the Racquet Club of Philadelphia. This brought laughter to the audience, because it sounded as if he were a racketeer, a possibility suggested by his known association with some of the corrupt politicians of the City.

Dr. Shallow’s main hobby was deep sea fishing off the coast of Cape May, New Jersey. He owned a small boat for this purpose and was joined on the summer weekends by his brother, Frank, a lawyer. Occasionally, he would meet up with Dr. Martin Reffrus on these excursions. His only consistent vacation was during the last two weeks in August at Cape May. Mrs. Shallow tolerated but did not share his interest in fishing and preferred to remain at home. Occasionally, Dr. Shallow would visit friends for a week in Florida during the winter, again without Mrs. Shallow. Mrs. Shallow preferred a sequestered home life and Dr. Shallow did his entertaining at the Union League and Racquet Club. Like Dr. DaCosta before him, Dr. Shallow behaved like a married bachelor.

Dr. Shallow endured his terminal illness and faced death with a heroism typical of his stoical nature. For several years he had coped with pharyngeal cancer that at first responded to radiation,
but which later became radioresistant. In an attempt to conceal the nature of his ailment, he complained of a “painful tooth.” For many months he made 7:00 a.m. visits to the private office of Dr. Bernard Widmann for the treatments. He often referred to the hyperemia on the side of his face as “sunburn,” but his associates were not misled, and would have been interested to see what was going on inside his mouth. He gradually lost 70 pounds due to difficulty in swallowing, and would break out into a cold sweat at the operating table. He persisted in conducting full operating schedules but became exhausted at the end of the cases, too weak to make rounds. One day toward the end of October, 1955, he called Dr. Wagner at 10:00 a.m. There were four operative cases on his afternoon schedule. He simply said: “I have to be admitted to the hospital. You take over the operative cases today.” Later that day in the hospital he said: “I have done many a gastrostomy in my time. I guess it’s my turn to have one now.” Fortunately, Dr. Floyd Putney (JMC, ’34) of the Otolaryngology Staff was able to pass a soft feeding tube through the nose into his stomach and thus avoid the gastrostomy. Since the lesion was inoperable, radiation therapy having already been given to the limit, and chemotherapy not appropriate, the only recourse was to witness the slow demise of this once powerful man. Although aware of impending death, he never referred to it or made complaints. When asked how he felt, he would reply: “Not so hot,” but that was all. After several weeks he began to lapse into semiconsciousness. At times he would lift his arms into the air and go through the motion of tying sutures. Confiding to Dr. Wagner, he said: “Watch out for my bad ticker,” but his heart remained faithful to the end on December 26, 1955. Wagner was at the bedside during the last ten hours of his life. Mrs. Shallow knew what to expect, but on getting the final news from Dr. Wagner pleaded: “Please don’t tell me my darling Thomas has died.” He was just one month past his 69th birthday. Three Gross Professors of Surgery in succession, - DaCosta, Shallow, and Gibbon, Jr., all died just months short of their 70th birthdays.

In retrospect, it is justifiable to state that Dr. Shallow’s 16 years as the second Samuel D. Gross Professor of Surgery were controversial. He did not assume or leave the Chair with the accolades of his predecessor, Dr. John Chalmers DaCosta. It took eight years after DaCosta’s death for him to receive the title. On the other hand, Shallow had been DaCosta’s protege, and in 1939 he was the dominant contender for the Chair. As a surgeon, his skill was unsurpassed, and enhanced by scholarly knowledge of anatomy and the soundest judgment. He knew what to do in all the usual operative difficulties and was innovative in the unusual ones, which often resulted in scientific articles. His mind was brilliant, decisive and retentive. He could be tolerant or unyielding, kind or vindictive, jolly or angry on short notice. He made friends by use of his authority to recommend appointments, but acquired enemies of those who felt their careers were being manipulated by him. In truth, he was a fair person, and he rewarded those who worked hard, especially if their work benefited him, his Department or the College. Shallow was generous in charitable giving, but frugal in his personal economy. His surgical fees were so modest that some surgeons accused him of unfair competition. His services were the same to rich and poor alike. He delighted in filling the beds of the wards and private rooms with his patients. It was as if this large burden excused him from doing literary work or research.

Toward the end of Shallow’s life, chairmanships throughout the country were becoming fulltime and salaried. In this transitional period he chose to keep his outside private office and to work in what was essentially a volunteer status. The management of a surgical research laboratory was unknown to him. Dr. John H. Gibbon, Jr. filled this void in the Department in 1946 when brought in as Professor of Surgery and Director of Surgical Research.

Shallow was a strong and practical teacher. His clinics were well attended both for the case presentations and for the surgery that followed. He was a master in relating the details of the patient’s history to the pathologic stage of the disease pro-
cess. No one palpated an abdomen with a more experienced hand. He loved his work so much and achieved so much authority that he was able to bypass the mandatory retirement age of 65. Other Chairmen expressed resentment at having to follow this rule.

Many opinions have been expressed regarding Dr. Shallow’s Chairmanship. His enduring legacy, however, was the excellent surgical training and academic opportunities for young men.

Louis H. Clerf (JMC, ’12): Another “Mr. Jefferson”

The term “Mr. Jefferson” is applied from time to time to that individual who becomes generally acknowledged as having contributed service, devotion, and enhancement of Jefferson’s welfare in unique and prolonged ways. Such a man was Louis H. Clerf (JMC, ’12), Professor Emeritus of Bronchoesophagology and Laryngology, who died on October 24, 1989, nine months past his one hundredth birthday (Fig. 1).

Dr. Clerf’s father was an immigrant from Luxembourg in the mid-19th century who raised cattle in Washington State. By the age of ten, Dr. Clerf performed many chores on the ranch, including participation in the spring round-up. He attended the public schools and then studied at Saint Martin’s College in Lacey, Washington, for two years. As a “born doctor” he spent two years in medicine at the University of Oregon Medical School and then transferred to Jefferson Medical College, from which he graduated in 1912. After two years of internship at Jefferson Hospital, he was chosen to be the Chief Resident Physician.

During and beyond World War I, Dr. Clerf served for five years in the Navy, part of which time was on duty with the Marines in France. This service also included two years in the New York Eye and Ear Infirmary. He continued his association with the Navy in which he attained the rank of Captain in the Reserves.

In 1922, Dr. Clerf returned to Jefferson as Assistant to Chevalier Jackson (JMC, 1886), internationally known as the inventor of the bronchoscope and esophagoscope and without peer in the removal of foreign bodies from the air and food passages. In 1930, when Dr. Jackson reached retirement age, Dr. Clerf was offered an Associate Professorship. He demanded a full Professorship on the basis that the responsibility required that title, or he would leave. His stand was respected by award of full Professor, in which he served Jefferson with great distinction for the next twenty-five years.

It is remarkable that Jackson and Clerf who contributed so much to the development and perfection of bronchoesophagology were both Jefferson Alumni, a generation apart. The first Bronchoscopic Clinic in the United States was started at Jefferson by Dr. Jackson. When Dr. Clerf suc-

Fig. 1. Louis H. Clerf (JMC, ’12), Chairman of Bronchoesophagology (1930-54) and Laryngology (1936-54), a “Mr. Jefferson.”
ceeded him in 1930, he built up the Clinic to its recognition not only nationally but world wide. In 1936, following the retirement of Dr. Fielding O. Lewis (JMC, ’06), Dr. Clerf was appointed Professor of Laryngology. At the time of Dr. Clerf’s retirement in 1954, he had lectured in every State in the Union, and was proclaimed the outstanding laryngologist in the Americas.

While the major part of Dr. Clerf’s clinical work was in bronchoesophagology, his contributions were most outstanding in surgery for malignancy of the larynx. Some of his many honors outside of Jefferson may be mentioned. He held all of the offices of the American Bronchoesophageal Association, and Presidency of the following: American Laryngological Association; The American Laryngological, Rhinological and Otological Society; the Pennsylvanian State Medical Society; and the Philadelphia County Medical Society. He received honorary degrees from Villanova, St. Martin’s, and Jefferson. In 1950, during the recurring illness of Dr. William Harvey Perkins, he served as Interim Dean.

Dr. Clerf was President of the Jefferson Medical College Alumni Association in 1934, and he was chosen in 1949 for the class portrait. He was Chairman of the Alumni Association Annual giving fund for its first three years, 1949-51 (Fig. 2), and was rumored to be as skillful in extracting contributions from the pockets of Alumni as he was in removing foreign bodies from the food and air passages (Fig. 3 and 4). He headed the alumni contributions to the Foerderer Pavilion in 1952 and received the first Alumni Achievement Award in 1964.

Dr. Clerf was a prodigious writer, and his output of more than 200 articles are contained in three volumes stored in the Jefferson Archives. He also contributed Chapters in five different books. Like William Osler and John Chalmers DaCosta, he carried pencil stubs in his vest pocket to jot down ideas during odd moments.

The skill of Dr. Clerf in medical photography became so well known that he received requests from throughout the country for his medical films. His interest extended to photography also of wild life in its natural habitat. He was a trustee of the Philadelphia Zoological Gardens, which allowed expression for his love of birds and animal life. This detailed knowledge was a spin off from the time he spent in boyhood on his father’s cattle ranch. He could spot a nest in a tree as well as identify and imitate many bird calls. As an admirer also of the plant kingdom, he knew the botanical names of flowers and plants, and was expert in naming trees and shrubs from their leaves.

Not only were his lectures clearly organized, but delivered in the most interesting manner, often with an anecdote to add color. His speaking ability and tendency to philosophic reflection gave him popularity as an after dinner speaker, somewhat in the vein of Will Rogers.

For many years, Dr. Clerf seldom missed a meeting of the Meigs Medical Association, the oldest
surviving physician social/scientific dinner club in the United States. During the prohibition era he and another member saw to it that there was no absence of spirits for the cocktail hour. He also delivered a scholarly history of this Association at one of the anniversary meetings. Dr. Clerf was always generous to the interns and residents of Jefferson Hospital, subsidizing their attendance to various meetings and banquets. Each Christmas morning, with his greetings there were boxes of cigars and bottles of liquor to be found on a table in the intern's dining room. This custom was never copied or perpetuated by other staff members.

Fatal Fire Kills Patient and Burns Dr. Clerf and His Anesthetist

Ether is a highly flammable liquid that vaporizes and is combustible with a proper mixture of oxygen or nitrous oxide when ignited by a flame or a spark. Under these conditions it burns but does not explode. Although uncommon, ether fires did occur sporadically in operating rooms from time to time around the country. Even the tearing of adhesive tape could cause enough spark to start such a fire. Operating rooms became equipped with conductive floors, and operating room personnel were required to wear conductive shoes to ground sparks. By the end of the 1960s the use of ether and cyclopropane (which could explode) were abandoned in favor of non-combustible inhalation agents and intravenous drugs. It thus became no longer necessary to construct spark-proof operating rooms.

On at least one occasion, Jefferson Hospital was the site of a serious ether fire. It occurred on January 24, 1939, in the 14th floor operating room of the Thompson Annex while Drs. Clerf and Shallow were performing their operation of pharyngeal diverticulectomy. A one-stage procedure, employing the combined teamwork of esophagogastroduodenoscope and surgeon had been devised by Dr. Chevalier Jackson, and his first report, in conjunction with Dr. Thomas A. Shallow, was published in 1926. Dr. Clerf had continued this work along with Dr. Shallow, and they accumulated the largest series in the country. By 1938, they had already operated on seventy-six such patients.

On the day of the fire, at approximately 2 P.M., numerous observers consisting of outside physicians, other staff surgeons, some interns, and a naval officer were in the operating room. Dr. Shallow was being assisted by Dr. Kenneth E. Fry and an intern. Dr. Clerf, at the head of the table, had inserted the esophagoscope to locate the sac and had kept the scope in place during repair of the pharyngoesophageal defect. While the incision was being closed, there suddenly was a burst of flames at the head of the table and a splattering of glass from the container that contained the ether mixture. Dr. Clerf was burned about the face and hands, while the uniform of the anesthetist, Mrs. Charles Garver ("Mickey"), caught on fire and pieces of glass made multiple cuts on her arm. Dr.
Fry rolled her on the floor to extinguish the flames, but she received third degree burns of her lower extremities. It was hoped that the patient was uninjured, but unfortunately this proved not to be the case. Dr. Clerf was admitted to the hospital for five days and Mrs. Garver, after emergency care by the visiting naval officer, was admitted for approximately ten days.

The patient died the following day and a litigation followed. Dr. Fry represented the hospital, and the affair was settled out of court. The cause was ascribed to a spark of unknown origin for which the hospital was not declared negligent. By 1948, Dr. Shallow and Clerf had collected 186 cases without a single complication of mediastinitis, and happily no fires.

Dr. Clerf spent his retirement years in Florida rather than his native Washington State. He bequeathed a strong Department and the memory of a true "Mr. Jefferson."

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Thomas McCrae: His Career and Strange Terminal Illness

When Mr. William Potter Wear, a Trustee at Jefferson (1941-85), was nine years old he crossed the Atlantic in the company of his grandfather, Mr. William Potter, President of the Board (1896-1926). The year was 1912. The boy remembered overhearing a conversation at deck chairs between his grandfather and a certain Sir William Osler, the Regius Professor of Medicine at Oxford University. What stuck in his memory were the words of Sir William, "The man you should have at Jefferson is Thomas McCrae."

Thomas McCrae served as Professor of Medicine at Jefferson from 1912 until his death in 1935 (Fig. 1). In a faculty that could boast of DaCosta in surgery, Hare in therapeutics, Dercum in neurology, and Schaeffer in anatomy, he stood as tall as any. This modest man was the epitome of the medical scholar, the dedicated teacher, and the skilled physician. Revered by the students of his time, honored in portraits and by for a conference room named after him (Fig. 2), a recounting of his career, with the strange details of his final illness, is indicated.

McCrae was born in Guelph, Ontario, on December 16, 1870. His father was Lieutenant Colonel David McCrae and his mother Janet Eckford - both Scottish. The McCrae family was of "Old Galloway, fighting stock." The father, Colonel McCrae, during World War I when he was 70 years of age recruited and trained a field battery in Scotland which he subsequently took to England. Because of his age he was not permitted to accompany his battery to France, which caused him considerable chagrin.

Mrs. McCrae, characterized as a "rare woman", raised both her sons, John and Thomas, to become physicians. Dr. John McCrae died in France during World War I of pneumonia complicated by meningitis. To English speaking people on both

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Fig. 1. Thomas McCrae, M.D., Chairman, Department of Medicine (1912-35) and First Magee Professor (1917-35).
Thomas McCrae attended the University of Toronto from which he received his A.B. degree in 1891. Continuing as a Fellow in Biology from 1892 to 1894 he received his M.B. in 1895 and his M.D. in 1903. In 1927 an honorary D.Sc. was awarded him by his Alma Mater. In 1901 he became a member of the Royal College of Physicians of London and in 1907 a Fellow. These Royal College degrees were achieved only after thorough academic preparation and by passing strict examinations.

After graduating in medicine he served an internship in the Toronto General Hospital. In 1899 he studied at the University of Göttingen in Germany. On his return he went to Johns Hopkins, like a succession of other later distinguished Toronto graduates such as Barker, Cullen, Parsons, Futcher, MacCallum, and his brother John. In those days one Toronto graduate a year usually had the opportunity of an appointment on the House Staff of the Hopkins Hospital.

After McCrae’s first position as Resident Medical Officer in 1900, he became an Instructor in Medicine in 1901 and Associate Professor of Medicine in 1906. It was in Baltimore that he became an intimate associate of William Osler, a professional connection and friendship that lasted until Sir William’s death in 1919.

Early and throughout his career, McCrae revealed an interest in the history of medicine. Examples of his articles in this field were: History of the Gold-Headed Cane; Benjamin Jesty; A Pre-Jennerian Vaccinator; The History of St. Bartholomew’s Hospital; Life of George Cheyne; Influence of William Osler on Medicine in America; John and William Hunter; The Early History of the Association of American Physicians; and Memoir of Sir William Osler. He also served as an Associate Editor of the Annals of Medical History.

Although he was a warm and friendly person, McCrae indulged in few social activities in order to spare time for reading and writing on clinical
subjects. His interest was not in basic research, but he wrote more than 110 articles on a wide spectrum of clinical subjects almost entirely under his sole authorship. Osler was aware of McCrae's talent and industry in medical writing and enlisted his help in editing later editions of his Principles and Practice of Medicine. After Osler's death he became a co-editor of the 1922 revised edition in which Lady Osler received one half of the royalties. Thereafter he was the sole editor for the revised tenth edition in 1925, the eleventh in 1930 and the twelfth in 1935, the year of his death.

In July, 1904, Osler wrote in a letter: "I have been beguiled into editing a seven (!!) volume System of Medicine (McCrae to do the dirty work)." The actual title of this monumental work was Modern Medicine: Its Theory and Practice. Although Osler carried out the lion's share in planning and writing, in which none of the credit can be denied him, McCrae was of vital help in the very first edition, with Volumes 1-7 appearing between 1907 and 1910. He was a co-editor with Osler in the second edition in which Volumes 1-5 appeared between 1913-1915. The third edition was re-edited by McCrae in Volumes 1-6 which appeared during 1925 and 1928.

In 1908 McCrae married Osler's niece, Amy Gwyn, who survived him after 27 years of congenial married life. They had no children, and since his brother John never married, Thomas was the last of the American McCraes.

Although successfully and contentedly entrenched in Baltimore, there arose in 1912 a turning point in McCrae's career. In that year he was elected Professor of Medicine at Jefferson Medical College, succeeding James Cornelius Wilson. In 1913 he was elected an Attending Physician to the Pennsylvania Hospital, where excellent use could be made of the wealth of material for teaching students in the wards. He came to Philadelphia as an alien and comparative stranger, but his sterling qualities soon won for him many devoted friends and admiring acquaintances. His ability as a teacher and his practical sense in application of his medical knowledge and experiences were soon recognized. In 1917 he was named the first Magee Professor of Medicine.

In his weekly clinics in the hospital amphitheater he strove to demonstrate the average type of cases a physician might encounter in his daily practice (Fig. 3). He used x-ray and laboratory reports sparingly, insisting that the student use his eyes, ears and hands in the exercise of his mind. Dr. Stiles D. Ezell, a Jefferson graduate in the class of 1932, kept a record of McCrae's presentations of cases in the session of 1930/31. There were sixteen of lung infections, six of syphilitic lesions of the cardiovascular system, three of liver cirrhosis, three of peptic ulcer, two of myeloid leukemia, two of carcinoma of the stomach, one of carcinoma of the head of the pancreas, one carcinoma of the bronchus, one of dementia praecox, one of malaria, two of acute nephritis, one of spondylitis, one of tabes dorsalis, one of exophthalmic goiter and three of diabetes mellitus. Many of the pulmonary cases involved pleuritis with effusion, as well as pneumonia. He also showed acute rheumatic fever, endocarditis and aneurysms. On the wards McCrae demonstrated an even greater variety of cases.

In the Clinic Yearbook for 1931 the students quoted some of his characteristic sayings:

"The outlook is none too rosy."
"Oh, good Lord, no."
"Yes, yes, but what else?"
"You ought to have an axe behind your ear."
"You have been associating with the fourth year students."
"The lazy devil of an interne."
"What would you do for this patient?"
"Gently, gently, Mr. Fisher! You must have been associating with surgeons."
"Aye, aye, there are some snags for you (to a student who was examining a patient's decayed teeth)."
"The Curse of Renoulfs on you — of course you have read that. Ah, it's a gem."
"Surely you all know of Sergeant Mulvaney?"

A distinct honor came to McCrae in 1924 when he delivered the Lumleian Lectures at the Royal College of Physicians of London on Foreign Bodies.
In The Bronchi. The following year the Jefferson Class of 1925 presented his portrait to the College. In 1934 he was made an Honorary Foreign Member of the Association of Physicians of Great Britain and Ireland. The only other previous foreign recipients had been Chauffard, Widal, Thayer and Van den Bergh. Although not a "joiner" in the ordinary sense of the word, he kept an active interest in all the societies to which he belonged. In the College of Physicians of Philadelphia he was for years a member of the Library Committee and was elected several times to the Council. He was Chairman of the Section of Practice of Medicine in the American Medical Association 1914/15 and from 1916 to 1925 Secretary of the Association of American Physicians as well as its President in 1930. He also belonged to the American Philosophical Society and the Charaka Club of New York City composed of physician bibliophiles.

McCrae was a slave to duty all of his academic life and rarely indulged in extraneous relaxation. He never permitted anything, however alluring, to distract him from his work. His vacations were spent in travel, reading and writing. Recreations for him were distinctly intellectual. He possessed a thoughtfulness and compassion for others which were revealed in his notes of congratulation or condolence. The Jefferson Archives contains a series of 20 letters he wrote between 1932 and 1934 to Dr. Robert Charr (JMC, '31) who was stricken with pulmonary tuberculosis. Charr was a Korean of brilliant teaching ability, unusual charisma and fine humor. The letters revealed that McCrae repeatedly sent small amounts of money to Charr with the usual comment "to keep things going." He also sent books to Charr while he was in White Haven Sanatorium. When Charr returned the books, McCrae wrote that he should have kept them since "Mrs. McCrae is always glad to reduce the number of books in the house." Also, when Charr later tried to repay McCrae for his checks, the latter deposited them to Charr's account in a Savings Bank. After McCrae's death Mrs. McCrae answered
Charr's letter of sympathy with the remark that "I think he would rather be remembered for his kindness than his skill." Dr. Charr, who was artistic, fashioned a plaster bust of McCrae that now resides in the Jefferson Archives.

Near the end of May, 1935, Professor McCrae completed his last ward round in Jefferson Hospital. On that occasion he was in a wheelchair and pushed toward the Annex where he usually left the hospital by the Sansom Street door. After a short conference with his two interns, he waved a casual goodbye. It was little realized or even suspected that this would be his last presence in the hospital. For many months he had used a wheelchair (Fig. 4) and it was generally known that he had instability in his legs (Fig. 5). Details of this last illness have been described by his brother-in-law, Dr. Norman Gwyn. "For the last two years Dr. McCrae had been suffering from symptoms which baffled the best clinical brains in the country. He had first noticed mild sensations on the outer side of both feet. These changes at the time seemed trivial, amounting to nothing more than a slight feeling of coldness. At times they might completely disappear. At times under stress of work or particularly when the atmospheric pressure was high, these sensations would become more marked. Following these early symptoms he noted more particularly heaviness of both legs and a feeling as if the tissues of the legs were being distended, and very quickly after this a marked loss of power from the hips down began to assert itself.

"As time went on, other sensory manifestations appeared, such as dulling of the tactile senses in irregular areas of both legs, disturbance of muscle sense, and loss of the proper perception of heat and cold. Vibration sense was interfered with but at no time was there any sensation of pain which he could call distressing. Power of the legs gradually failed and was associated with some degree of atrophy of the muscles below the knees and a general flaccidity rather than rigidity. At no time until within the last two weeks were there any very positive changes in the reflexes: the knee jerks, however disappeared toward the end and at one time an examiner reported a positive Babinski sign."

Without detailing the course of the illness further, one can say that the general opinion of all examiners was that the symptoms were due to a neuritis, the origin of which remained obscure.

Fig. 4. McCrae in declining years teaching at bedside from wheelchair.

Fig. 5. Gold-headed walking stick of Dr. McCrae. (Courtesy of College of Physicians of Philadelphia.)
So suggestive of a peripheral neuritis was the course of the disease that three months before his demise Dr. McCrae submitted himself to a deleading treatment.

With the failure of all methods of treatment to attain any results, with loss of power in the legs becoming increasingly evident, and with the cause of the symptoms completely hidden, it was deemed wise to explore the spinal canal looking more particularly for tumor or something giving rise to pressure in the region of the cauda equina. In the carrying out of this procedure, Dr. Mohler and attending physicians had the concurrence of Dr. McCrae's neurological consultants in Philadelphia: Dr. Burns, of Jefferson, Dr. Strecker of the University of Pennsylvania, and Dr. C.P. Frazier, the neurological surgeon at the Hospital of the University of Pennsylvania. Dr. Harvey Cushing of Yale, Dr. Tilney, and Dr. Foster Kennedy of New York had also agreed that an exploratory operation should be carried out. A lipiodol injection revealed some hesitation of the drug in the lower dorsal and upper lumbar area. This portion of the spinal canal was accordingly exposed. All that could be said after a most careful operative examination was that the strands of the cauda equina showed a curiously beaded appearance as if, perhaps, they had been constricted here and there by some inflammatory process.

McCrae’s postoperative course was complicated by meningitis which resulted in death after several days. Postmortem examination of the spinal cord revealed a large collection of varicosities beginning at the level of the second and third dorsal vertebrae and stretching downward for several inches inside the dura. From the extent and nature of these dilated veins, which could be found penetrating deeply into the spinal cord, it was hypothesized that hemorrhages might have occurred from time to time and resulted in a progression of the symptoms.

In 1937, two years after his death, a portrait depicting his characteristic teaching at the bedside was presented by friends and students (Fig. 6). This great physician, teacher and author is remembered for his dignity, humor, humility, and dedication to his profession. His ability to impart to the students his own knowledge of medicine and care for the patient created in them respect and admiration which lasted a lifetime.
New facts in the field of medicine tend to be discovered by those who have unusual powers of observation. Some have the additional ability to test hypotheses in a conclusive manner, and to present the theories to the scientific world in a thesis which is logical and clear. Hobart Ansteth Reimann (Fig. 1) had these capabilities as were evident in his roles as teacher, researcher and physician.

Born October 31, 1897, in Buffalo, New York, the son of Otilla Ansteth and George Reimann, he started to follow in his father’s footsteps but, after a year of Pharmacy, he changed to Pre-Med and subsequently (1921) received his M.D. degree from the University of Buffalo. Following successive years of internship and residency at the Buffalo General Hospital, he was invited by Dr. Rufus Cole to be an assistant physician at the Hospital of the Rockefeller Institute, an early recognition of his inquisitiveness and brilliance. He studied bacteria and established a life-long interest in pneumonia during the three years at Rockefeller where he worked principally with the pneumococcus under the direction of Dr. Oswald Avery. Subsequently he published three books on The Pneumoniae and in 1938 described “Atypical Pneumonia Probably Due to a Filterable Virus,” the first straightforward description of Virus Pneumonia. This was republished in 1985 as one of the Landmark Articles in Medicine. Death at the age of 88 (January 18, 1986) was attributed to pneumonia which was a complication of five years of a subacute illness and a recent hip fracture.

Throughout Doctor Reimann’s life it was travel, particularly travel abroad, which seemed to be his best tonic. He studied as a Fellow in Pathology at the Anton Ghon Institute in Prague (1926/27) and then served for two years as Associate Professor of Medicine at Peking Union Medical College. Bacteriological research was continued through these years. The appointment as Associate Professor of Medicine at the University of Minnesota brought him back to the States in 1930. At Minnesota he advanced to Professor of Medicine and Chief of the Hospital Department of Medicine (1935).

His first medical paper was published while in medical school and throughout his career his bibliography included over three hundred articles in scientific journals, textbooks, book chapters, contributions to encyclopedias, etc. Many of his papers were on bacterial topics but while at Minnesota he started to expand to such subjects as periarteritis, amyloidosis, blood proteins and unexplained febrile illnesses. The latter work led to the description of a group of conditions summarized by him in the book Periodic Diseases. Treatment in General Medicine was first published in 1936 and his tremendous knowledge of infectious diseases was evidenced by the fact that he was called upon to write A Review of Infectious Diseases each
year for forty consecutive years (1935-1975).

The appointment as Magee Professor of Medicine and Chairman of the Department at Jefferson Medical College brought him to Philadelphia in 1936 where he established his residence. This was to be his permanent home for the remainder of his life (Wynnewood, Pennsylvania). He greatly expanded Jefferson’s Medical Department and established its first Residency Program. An exacting teacher, he demanded correctness in the student’s reports and would correct grammar when it was indicated. His personal ability as a speaker and linguist brought him numerous engagements to present scientific papers both locally and throughout the world. The importance of teaching, in his life, was evident in the statement he made in 1985, “I am pleased to have been an efficient pedagogue.”

Doctor Reimann spent two months in Chungking, China, with a cholera team in 1945, under the auspices of the UNRRA and reported on the successful reduction of mortality by the adequate replacement of body fluid. The same year, studies of an epidemic of acute diarrhea, nausea and vomiting in Philadelphia demonstrated for the first time the virus nature of this particular illness.

He resigned his Chairmanship at Jefferson late in 1951 in the midst of administrative problems. This started a nine-year saga of a geographical variety of teaching assignments, first at the American University in Beirut and subsequently at the University of Indonesia, Djakarta, and later at the University of Shiraz, Iran, with a final return to Philadelphia as Professor of Medicine and Preventive Medicine at Hahmemann University (1960) and a reappointment at Jefferson as Visiting Professor of Medicine (1979).

Doctor Reimann insisted upon taking a firm stand in support of his beliefs as shown by his statements against the overemphasis of the theory of focal infection and his cautions against the improper use of antibiotics. He firmly believed that physicians should have a broad general knowledge in addition to the field of medicine and followed this belief in his own life. He was an accomplished artist, particularly in pastels, and saw one of his works adorn the cover of the J.A.M.A. He cared for the grounds, trees and shrubs at his home where he grew many flowers and vegetables in an aura of horticultural knowledge.

Awards and honors included the Charles V. Chapin Medal of the Rhode Island Medical Society; Citation for Distinguished Service in Medical Education, University of Buffalo; Order of Cedars, Lebanon; Shaffrey Award, Alumni Association of St. Joseph’s University; and from Thomas Jefferson University the Portrait Presentation by the Class of ’51; the dedication of the Reimann Room in the Kellow Conference Center; and the Honorary Degree of Doctor of Science. He was a member of numerous local and national societies ranging from Alpha Omega Alpha to the Association of American Physicians.

“Strong and gentle, wise and honest, stimulating and serving, inventive and productive, he evidenced a greatness which will ever endure.”
Kenneth Goodner:
The Irascible "KG"
by Harry L. Smith, Ph.D. (Jefferson, '57)

Kenneth Goodner, Ph.D. (Fig. 1), arrived at Jefferson Medical College in 1946 to assume the Chairmanship of the Department of Bacteriology and Immunology. From the onset, he saw his mission as providing the best possible course for the medical students. During his 20 years, he left his mark on over 3000 students. One yearbook captured the essence of the man with the statement that "students either loved the man or hated his guts." There was no in-between, but you learned. "KG", as he was known to the students, said that a "teacher should do anything to make the students remember him and then maybe they might remember some of the material taught by that person." He succeeded.

As a teacher, KG used methods he felt would provide a basis for subsequent years in clinical practice. His unannounced 10 to 15-minute quizzes at the start of the laboratory session were an example of this concept. He felt that the physician must be ready at all times to answer questions from any source. Students attending lectures in the auditorium were expected to be in their seats in the laboratory on the sixth floor as quickly as possible. If you were late, that reduced the time you had to answer the quiz. The problem was that there were only two elevators operative in the building, and when "Mad Mike" was running one of them, the number was reduced to one. The students had a class understanding that those going to bacteriology had first shot at riding the elevator(s). You rushed like mad, sat on your laboratory stool and waited for the door from KG's office to open. In the early days, before mimeograph, blue examination books were distributed. Then KG, with deliberate force, would raise the blank black board at the front of the laboratory to reveal the questions for the day on the hidden board behind. It mattered not whether you sat facing the board or your back was to it. The questions were usually of a subjective nature and could cover any material from the laboratory or the lecture. Questions such as "compare and contrast tuberculosis and histoplasmosis in all important aspects" were not uncommon. You wrote like mad for 10-15 minutes until KG, in his inimitable fashion, would intone "Gentlemen, you have two minutes" (recall that women were not admitted to Jefferson until 1961). When time was called, you stopped instantly, else you could get a zero for that quiz. The books or papers were collected and KG would disappear for 30 to 60 minutes into his office. When he emerged, he handed back the quiz, with his comments and a grade on it. The comments indicated that he had read the paper but we always wondered how he was able to correct 80+ subjective examinations in such a short time.

There were usually 26 "shotgun quizzes" during the 18 weeks of the course. These counted for 75% of the final grade after the lowest mark was dropped. Dr. Goodner felt that this allowed for a
"bad day" or two, rather than basing the grade on fewer and longer interim examinations.

One year, KG decided that students should compete with themselves rather than with each other. By some magic formula, he determined what grade each individual should achieve. During this time, when the graded examinations were returned, they had a "+" or a "-" at the top of the page. "+" meant that you achieved your goal and "-" you did not. Some found two red marks on their paper and they had "-" and others had five red marks and got "+". Needless to say, there was much anxiety that year.

Another example of K.G.'s teaching method was known as the "trauma sessions." Groups of eight to twelve students were taken to a conference room where Dr. Goodner sat at the head of the table. He would ask rapid-fire questions and move quickly from one student to another for answers. The idea was to prepare the students to think on their feet and to articulate their answers, similar to what they would be doing when they were on the floor in the hospital and making rounds with residents and attendings. On one occasion, KG asked for an objective description of a coffee cup. His comment afterwards was that students must learn to describe in simple terms what they will see in their patients.

Periodically, KG would patrol the laboratory with his infamous black book in which grades were recorded. Those in trouble were warned and the mark-fighters could ask for their grades.

Final examinations in K.G.'s course generally counted about 25% of the final grade. In the week prior to the test, the wall on the sixth floor of the College (outside the laboratory) was covered with copies of old examinations. Students stood and copied these as study aids. When they entered McClellan Hall for the three-hour ordeal, there was no question as to the seriousness of the event. Proctoring was strictly enforced to the point where one was escorted to the facility when nature called. Examinations consisted of objective questions, essay questions, matching and true-false. In one examination, an entire page of the latter was to be answered by putting an "x" for false and no marks for true statements. There were no false statements on the page! Imagine the consternation of the student when he saw an entire page of the final examination without a mark on it. K.G.'s comment: "Let's see who has the courage of his convictions."

It was K.G.'s tradition that the final examination was to be marked and the final grades calculated before any of the faculty left on the day of the examination. This tradition was never broken, and often the students could get their final grades early on the morning after the examination. KG never curved grades nor negotiated the passing or failing of a student. You got what you earned. This paid off when National Boards were required at the end of the sophomore year. Jefferson was always in the top ten of the medical schools in bacteriology.

From years of observation of the man, one gets the feeling that the medical students were K.G.'s kids. For reasons unknown to all, he never married, devoting his life to science and teaching. Dr. Goodner made a deliberate effort to know each student by name and face. It shocked many on the first day of laboratory to be greeted at the door by name, for KG had been studying the student pictures for at least a week prior to the start of class.

Students were always referred to as "Mr. Brown", never by their first name or "Dr. Brown". KG believed in treating the students as professionals at all encounters. A frequent custom he followed was his four times a week tea party. Eight students were invited to each. Tea and cookies were provided and an hour of discussion about any subject followed. Some of the exotic topics included the geographic location of God and "do colors denote emotion?" These were command performances on the part of the students although a few brave souls declined the invitation.

The majority of students did not know the other side of KG. Just as he got to know the names and faces of the students, he also tried to learn about them as individuals. Dr. Goodner was concerned about the size of the classes at Jefferson and he did his best to make each person feel that he was not just a number. Often, students with academic difficulties were called privately to his office. If there were personal or family problems, KG would either advise or send them to someone he felt could
help. Many students were sent to talk to clergy of their faith. This might seem strange, for Dr. Goodner was not a religious man. In fact, when the mother of one of his graduate students encountered him in the laboratory on a Sunday (graduate students worked strange hours), and asked him if he had been to church, KG told her “I am in my church.” Father Cox (later Monsignor) at St. John’s was one of the main counselors. If there were money problems, KG often reached into his own pocket to help someone through a temporary financial embarrassment. KG would also ask other students to quietly help classmates with studies or just plain friendship. He referred to these people as “John Howards” after a group that anonymously helped others.

KG, the confirmed bachelor, was one of the driving forces in changing the policy of the Medical College to admit women. Apparently, it was his standard practice to propose admission of women at the June meeting of the Executive Council. When this was finally taken seriously and women were admitted, there was a need for additional plumbing facilities. When these were constructed just outside McClellan Hall, the name proposed was “The Goodner Lounge.” An odd thing followed the appearance of women in classes. Lectures on venereal diseases, formerly given by KG, were then assigned to the junior member of the department faculty.

When he was not teaching, KG conducted an active research program. His early work at Rockefeller Institute was concerned with antiserum therapy of pneumococcal pneumonia. Later he worked on yellow fever in Uganda for several years. When he came to Jefferson, initially he worked on plague and plague toxin. He made several trips to Madagascar for field work in this disease. Later, he worked on cholera and helped to establish the program that has led to the understanding of the molecular basis of this disease. He was one of the early instigators for the establishment of a graduate school at Jefferson.

When Dr. Goodner retired in 1967, he planned to move to his hometown in Kansas. He had built his first home, bought a new car and a dog. Ten weeks after leaving Jefferson, KG died suddenly of a ruptured abdominal aortic aneurysm. His portrait was painted posthumously, for KG would never allow this to be done. He said he wanted to be remembered as a person, not as a picture hanging on some wall.

KG always began and ended the course in bacteriology with the same quote: “In the Spring and in the Fall the wind comes from a new direction and on that wind there is the breath of wilderness.”

**William G. Sawitz, M.D.: Unique Parasitologist**

by Harry L. Smith, Ph.D. (Jefferson, ’57)

William George Sawitz (Fig. 1), Associate Professor of Parasitology in the Department of Bacteriology and Immunology, was an example of the old-fashioned Germanic professors, such as were seen in the motion pictures of the late thirties. Rather short and rotund, with sparse hair neatly combed, richness of accent colored his speech but never clouded it. He taught about the protozoa, “za worms” and arthropods in lectures that reflected many hours of preparation and included digressions into the derivation of words. The real beauty of these lectures was that his jewel of a textbook, Medical Parasitology, covered the same material but from another viewpoint which enriched the spoken word of the lecture.

Dr. Sawitz and his wife escaped from Germany in the 1930s and went to New Orleans where he studied under Dr. Ernest C. Faust at Tulane. It was here that Dr. Sawitz devised the zinc sulfate flotation method for concentrating the eggs and cysts
of parasites in the human stool. Urged by a fellow tropical medicine person and Dean, Dr. William Harvey Perkins, he came to Philadelphia in 1943 to teach Tropical Medicine and Parasitology at Jefferson.

All lectures in parasitology were given by Dr. Sawitz. He talked of each organism as though describing an old acquaintance. How the Latin name rolled off his tongue followed by its derivation! He was always present in the laboratory. Each student had his set of prepared slides that were to be examined and discussed with Dr. Sawitz. How many of us made the mistake of referring to an organism as “histolytica” or “E.histolytica” in his presence. We were gently corrected by his simple statement: “One does not call a young lady by her first name on the first date.” We were to use the full and proper name and were encouraged to say it so as to learn.

A memorable laboratory exercise for most students was one in which a small metal salve tin was issued to each with instructions to bring a stool sample in the following week for examination. The first question was “How do you hit that small container?” Then, when these were opened in the laboratory, a number of different comments were made, none of which can be repeated here. Dr. Sawitz and his graduate assistant, Eileen Randall, would take us through the process and help with the microscopic examination. The film of feces that covers the world seemed a little thicker that day.

The laboratory exercises were always supplemented with a large number of demonstrations. For microscopic demonstrations, there were beautifully lettered plates, encased in glass, to explain what the specimen was and with additional information such as geographic distribution of the parasite. Gross specimens included everything from a jar of amebic liver abscess aspirate beside one of anchovy paste for comparison, a Taenia saginata adult wrapped round and round a glass cylinder in a museum jar, live Latrodectus mactans (black widow spider, in case you forgot), and anything else that would help. Remember the stuffed armadillo and the fecal pellets made of clay that some wise guy put under the animal’s tail!

Dr. Sawitz was very active in the early days of the graduate program at Jefferson. He served as the secretary of the Board for the Regulation of Graduate Studies, the predecessor of the College of Graduate Studies, until his sudden death in 1957.

Dr. Sawitz was one of those people who, in his quiet way and without fanfare, made learning a pleasure. Sure, we seemed to spend a lot of time on “exotic” diseases such as kala azar, chiclero disease, espundia, etc. but his way of taking us to far away places made the lecture an adventure. He made the mundane special. One of the most memorable lines from his lecture on pinworms (Enterobius vermicularis) was: “Und you can find za eggs on za chandelier.”