Responding to a growing need to provide post-hospital care for patients following acute illnesses, the Social Service Department in 1916 initiated efforts to acquire a rural facility both to diminish the duration of hospital stay and to teach principles of physical and occupational recovery. Accordingly, the Social Service Committee of the Women’s Auxiliary arranged to rent a cottage in the Pine Woods at Hammonton Lake, New Jersey. Only a few men could be accommodated but the effort proved satisfactory and was received with enthusiasm by the patients. Plans were then made to develop a more permanent facility. Mr. & Mrs. Alba B. Johnson, were instrumental in identifying and purchasing a 20-acre farm with a large house on a hill one mile north of Wayne, Pennsylvania (Fig. 1). The site was named Ivycroft Farm and was opened May 13, 1917, with suitable ceremonies, the address delivered by Dr. Frederick Brush, Medical Director of the Burke Foundation, White Plains, New York. Dr. Brush emphasized the desire to encourage an atmosphere of “self-help, self-respect, and self-mastery and the urge to return to a normal life.” Ivycroft was the first “scientifically conducted institution” of its time in the Philadelphia area.

The Farm was promptly fully occupied. It admitted men and boys over age 14 for convalescent care following acute illnesses, who would benefit from a reasonable length of stay. Applicants were accepted when space permitted from hospitals.

**Fig. 1. Ivycroft Farm Convalescent Home for Men, Wayne, Pennsylvania (1917-1948).**
other than Jefferson. Patients with chronic illnesses were not admitted. Fees were modest and those unable to afford the care were admitted free. During the first years, Mrs. J. Priestley Button was Ivycroft Chairman for the Social Service Committee of the Women’s Auxiliary (Women’s Board), visits to the Farm being carried out regularly.

The annual Hospital reports indicate great satisfaction regarding the success of the operation. Morale was high and the census filled most of the time. Thirteen were accommodated early and in a few years the capacity increased to fifteen. On several occasions, the Committee eyed with envy a house on the property which if funds had been available could have accommodated twenty more patients but the money was not forthcoming. The average number of patients served annually was about 150.

From the beginning occupational therapy was emphasized. During the first year, Mr. Ralph Johnson of Girard College served as an instructor one day weekly. Outdoor work was desirable but also available were rug weaving, chair caning, basketry and the manufacture of flower boxes. In some years the income from sale of the products covered the costs of production. In 1923, Miss Alice Campbell was hired as a part time instructor. A shop and adjoining game room were built in 1922 at which time stencil making and wood carving among other crafts were added.

As time went on the needs of patients for post-hospital treatment gradually changed and the type of program provided at Ivycroft was no longer applicable. The facility was closed in December, 1948, a victim of medical progress with increasing demand for more rapid convalescence for hospital patients and the gradual development of methods to realize such a goal.

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**The Tuberculosis Story:**

**Pine Street, Barton, White Haven**

Tuberculosis, otherwise known as phthisis or consumption and sometimes as tubercle, was a leading cause of death until the early twentieth century when public health measures initiated a few decades earlier began to take effect. Not only was the mortality high among young adults but many children were affected with its early manifestations leading to active disease later in life. As an infectious disease to some degree dependent upon environmental conditions, especially nutritional and poverty factors, little progress had been made before the establishment of its specific etiology by Koch’s demonstration of the tubercle bacillus in 1882.

During the nineteenth century the disease achieved some romantic associations especially with literary descriptions of the appearance and behavior of the patients and their slow death. Many writers, musicians and people in public life were its victims, often identified by the “hectic flush” of the cheeks on the pale facial background. John Keats was a classic example having died at age 25 following fever, fatigue and pulmonary hemorrhage. He had been exposed to his brother who died in a similar fashion earlier. Frederic Chopin, with a more chronic type of pulmonary tuberculosis, died at age 39 after numerous efforts at diagnosis and treatment. Rene T.H. Laennec who contributed so much to physical diagnosis and pathology died at age 46 of progressive tuberculosis. These are merely examples.

The disease was widespread and devastating. At the turn of the century the Sanatorium movement, perceived as a vital factor for isolation and treatment, was just getting under way with the government accepting responsibility for care of chronically ill persons. Thomas Mann’s *The Magic Mountain* portrayed sanatorium life and many of the manifestations of tuberculosis as perceived from a literary viewpoint.
Sanatorium residence provided only a part of the tuberculosis treatment process. There was a need for case finding, diagnosis, outpatient care, social services, home nursing care, and research. Several medical schools had developed clinics for tuberculosis patients but there was no organized program at Jefferson until 1911 when Dr. J.C. Wilson opened a clinic in the Outpatient Department. The interest of the Board of Trustees was aroused and upon the succession of Dr. Thomas McCrae to the Magee Chair of Medicine, he actively promoted a tuberculosis facility both for teaching and patient care. Much credit for the initiative, however, goes to Dr. Lawrence F. Flick (JMC, 1879), who was an aggressive leader of the tuberculosis control movement in Pennsylvania, having formed the Pennsylvania Tuberculosis Society in 1892 (Fig. 1). Dr. Flick was the organizer and first Medical Director, in 1903, of the Henry Phipps Institute for the Study and Treatment of Tuberculosis following his founding of the White Haven Sanatorium in 1901.

The Phipps Institute had recently vacated its first hospital at 236-238 Pine Street with its move to a new building and Dr. Flick suggested to the Trustees that Jefferson acquire the property. He offered funds from the White Haven assets to share with Jefferson the costs of patient care and maintenance.

Fig. 1. Lawrence F. Flick, M.D. (JMC, 1879), pioneer in treatment and prevention of tuberculosis.

Fig. 2. Jefferson’s Department for Diseases of the Chest (Pine Street), 1913-1946.
The purchase was agreed upon in 1913 and the first patients accepted in 1914 after renovations. The offer from White Haven to share costs could not be fulfilled on more than a token basis, so before long Jefferson was solely responsible for operation.

Dr. Elmer H. Funk (JMC, ’08) was appointed Medical Director and Physician in Charge of the new “Department for Diseases of the Chest” which promptly became known as “Pine Street” (Fig. 2). Rotation of nurses, interns and medical students through the new facility provided excellent teaching facilities and the patients received excellent care. Many had already been cared for in sanatoriums and appreciated the intimate relationships in a teaching hospital. Gradually treatment shifted from the old rest routine to more active methods including collapse therapy, and after some years Pine Street was used mainly for those patients requiring regular active treatment while those for rest only were sent to sanatoriums. Outpatient Clinics were also organized.

Tuberculosis was a serious problem for medical personnel. Jefferson professors who had personal experiences with its hazards included Professor and Dean Benjamin Rush Rheses, who died in 1831 at age 33; John Kearsley Mitchell, Chairman of Medicine (1841-58) whose need to interrupt his practice twice during his active years probably related to tuberculosis. Professor Samuel Henry Dickson, Chairman of Medicine, had a lifelong problem with the disease and lost several of his children to tuberculosis; Francis F. Maury, a rising star in surgery who performed the first operation in the new 1877 Hospital, died of tuberculosis in 1879 at age 39 (the patient was the son of the speaker of the Pennsylvania House of Representatives and Dr. Maury had successfully solicited the House for funds for construction); Professor Elmer H. Funk who required interruption of his career in 1915 because of early tuberculosis; Professor Chevalier Jackson, who survived three occurrences; and Robert Charr, whose experiences with recurrent tuberculosis modified his career. During the first half of the twentieth century, physicians, medical students and nurses had a relatively high incidence of tuberculosis. Dr. Lawrence F. Flick (previously mentioned) had this illness which led to his commitment to combat it. Dr. H. R. M. Landis (JMC, 1897) became a national leader in the tuberculosis control movement along with Dr. Flick, and died of progressive disease in 1937. These are only a few Jeffersonians whose personal experiences reflected the ravages of tuberculosis.

It may be of interest to review briefly the methods of treatment of tuberculosis during the first half of the twentieth century. For years climatic treatment had had a vogue and dietary advice of all kinds were freely given. Environmental change, exercise in various forms and open air living were popular. Medicines from gold to vitamins were tried. Asses’ milk had periods of popularity from Avicenna to Laennec. Sir Hans Sloane promoted milk chocolate for tuberculosis in the eighteenth century. By 1900, the principle of rest was fairly commonly accepted and soon the sanatorium movement incorporated rest in its program of isolation and diet. The merits of milk and eggs for nutritional enhancement were widely touted and a number of sanatoriums had a routine of 12 glasses of milk, six eggs and one meal daily. The high caloric diet was effective in restoring lost weight and feeling of well being but the monotony of milk and eggs was commonly a problem. Outpatients were often provided with supplementary milk by social services especially where poverty was a factor. In the third decade of the twentieth century the use of collapse measures including artificial pneumothorax and phrenic nerve surgery became increasingly frequent, supplemented later by thoracoplasty. With satisfactory air collapse with pneumothorax, outpatient treatment could be given and patients often could return to work. This treatment program was implemented in modified form at Pine Street. The earliest actual surgery was done at the main Jefferson Hospital until 1938 when a surgical unit was developed at Pine Street. It was equipped for pneumolysis (thorascopic division of intrapleural adhesions to improve collapse of the diseased areas), phrenic nerve surgery, and thoracoplasty for permanent collapse. Lung resection was not yet adapted to tuberculosis treatment during the Pine Street era.
Dr. Funk (Fig. 3) proved a capable administrator. His academic advancement in the Department of Medicine was only slightly delayed by his own bout with early tuberculosis which required an interruption of his career during 1915/1916. His clinical skills were acknowledged by students and patients alike. The faculty acquired a reputation for warm, intimate care, so the demand for beds was always brisk. Dr. McCrae as Magee Professor supported Dr. Funk’s program as he instituted bronchoscopy with Robert M. Lukens (JMC, ’12) and supportive laboratory studies, mainly for detection of tubercle bacilli.

Pine Street experienced new initiatives in the 1930s as Dr. Burgess Gordon (JMC, ’19) succeeded Dr. Funk as Medical Director and Physician in Charge in 1927. Relationships with other tuberculosis facilities were extended and a biweekly clinical conference attracted local and outside physicians. The conference was later a weekly one with medical students included and formed a popular teaching medium. In spite of the depression of the early 1930s, Dr. Gordon was able to make physical improvements, largely through the Women’s Board committee which became quite active. Research programs were begun both in clinical areas: Drs. Gordon, Robert Charr (JMC, ’31), Peter A. Theodos (JMC, ’34), J.J. Kirshner (JMC, ’33), and J.W. Savacool (JMC, ’38), and in laboratory studies with a chemist, Dr. Proskuriakoff. Progress in surgery followed the appointment of Drs. Howard A. Bradshaw (JMC, ’27) and George J. Willauer (JMC, ’23).

The wartime program at Pine Street was remarkably well maintained under the direction of Dr. Martin J. Sokoloff (JMC, ’20) who was acting Director during Dr. Gordon’s absence in army service. Surgery was continued by Dr. Willauer. The nursing service under Miss Thelma Showers was a model of care under adverse circumstances. The Department in 1945 was ready for expansion, having established a strong base.

With the 1945 return of the absent staff members a new spirit of enthusiasm was notable. At the same time the White Haven Sanatorium, long served by Jefferson consultants, required new directions and after much debate was taken over by the Jefferson Board of Trustees in 1946.

The Barton bequest, in the pipe line since the death of Emily Barton Pendleton in 1940, became operative and the old Broad Street Hospital was acquired. After extensive renovations the Department for Diseases of the Chest moved to its new quarters in January, 1947 at Broad and Fitzwater Streets where capacity increased to 90 beds (Fig. 4). The Department was then poised for active treatment and surgery at the new Barton Memorial Division and for chronic sanatorium care at White Haven.

As a part of the organization of a modern chest department, a new facility for study of pulmonary function was needed. This was accomplished by the development of the Laboratory for Pulmonary Physiology in the Barton Division under the direction of Dr. Hurley L. Motley, a former Research Associate with Drs. Dickinson Richards and Andre Cournand at Bellevue Hospital in New York and with extensive experience during World War II in aviation physiology at Wright Field, Dayton, Ohio. Dr. Burgess Gordon, having returned in late 1945, was thus able to organize the new chest service with great promise for new initiatives.

A word should be added about the history of White Haven Sanatorium (Fig. 5), previously noted

Fig. 3. Elmer H. Funk, M.D. (JMC, ’08), first Medical Director of Pine Street Chest Department.

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to have been founded in 1901 by Dr. Lawrence F. Flick (Fig. 1). Originally known as the Free Hospital for Poor Consumptives, it developed rapidly into a well known facility for chronic tuberculosis care. During the 1930s and early '40s, however, a need for more active care including surgery developed and the desirability of association with a teaching faculty was perceived. The Jefferson-White Haven merger was thus ultimately consummated in 1946. Actually, members of Jefferson's medical staff had been consultants and attendings at White Haven since its founding. Dr. John B. Flick (JMC, '13) son of the founder, had been surgical consultant; Drs. Elmer H. Funk, Burgess Gordon, Martin J. Sokoloff and Robert Charr, Attending Physicians.

It is a triumph of modern medicine that tuberculosis, only recently a major scourge, was now coming under control. Mortality, roughly 200 per 100,000 in 1900 had dropped to 40 per 100,000 in 1940, providing evidence that the public health measures, instituted when the tubercle bacillus was discovered by Koch in 1882, were dramatically effective. The Jefferson program now under way was ready to pursue the goal to its conclusion. In addition to the more sophisticated surgery which could now be added, patient selection by pulmonary physiological evaluation, modern X-ray techniques and the promise of effective medications combined to make very promising the immediate future of Jefferson's chest facilities. In addition, the increasing incidence of lung cancer and emphysema could now be addressed with improving diagnostic and therapeutic techniques.

The attending staffs of Barton Division were expanded. Drs. Gordon, Sokoloff, Charr, Theodos and a number of volunteer teaching associates represented the Department of Medicine. Drs. Leonard Lang and Joseph Tomashefski, the first
fellows in Pulmonary Physiology went on to prominence in pulmonary medicine. Surgery was in charge of Dr. Francis F. Albritten with Dr. George Willauer continuing as Visiting Surgeon. A major program, developed with the cooperation of the United Mine Worker's Union for research in miners' diseases, especially anthracosilicosis, challenged the pulmonary physiology unit, and correlated treatment with facilities in the coal regions of Pennsylvania. Social services were also expanded. For a decade this arrangement functioned well.

Some understanding of the impact of tuberculosis on individual lives during the years when sanatorium treatment was usual, may be gained by a brief description of the facilities at White Haven Sanatorium and the patients admitted. For many years the number of Sanatorium beds available was too small to permit admission of all patients with active tuberculosis especially since the period of stay would extend to months and years. Efforts were made early on to favor admission of persons "for whom some benefit could result," rather than people with far advanced disease whose outlook was poor. White Haven as a private non-profit institution favored the former but could not always be strictly discriminating. There were thus facilities within White Haven for stratifying the patients according to the degree of advancement of the disease. For very ill patients there were infirmaries, for less seriously ill ones the "pavilions," and for those regarded as ambulatory, the cottages and "shacks," the latter the successor to the earlier tents. The treatment included virtually continuous exposure to open air and the cottages were so designed. The fact that many patients were later admitted from the counties in the anthracite regions made it necessary to provide long-term care for many whose outlook was only for a slow death. Thus the "lodge" was built and occupied mainly by miners with anthracosilicosis and tuberculosis in whom the mortality was high.

The lodge was so located that the road to the main building was in full view of patients in the men's cottages. It was commonplace for the deceased to be carried past the cottages on the way to the morgue. That this was not as psychologically traumatic as would be expected related to the long suggested observation that tuberculosis patients were more optimistic than their collective status warranted. A slight further insight into attitude toward death was provided by Nathan H. Heiligman (JMC, '33), during his residency. At the time of his last visit to a 33 year-old mother of two who was dying, his own feelings of helplessness were betrayed by a tear coursing down his cheek. The patient remarked "Don't cry, Doctor. It isn't so bad," and died a few hours later.

Many changes occurred during the late 1950s. The need for long term chronic facilities for tuberculosis treatment disappeared rapidly as antimicrobial therapy became dramatically effective following the release of isoniazid in 1952. Tuberculosis could then be treated with only brief hospitalization. Anthracite mining diminished greatly in the Pennsylvania coal fields, lessening the threat of miners' diseases. Cancer and emphysema, ostensibly diseases of cigarette smoking, were increasing in incidence and mortality. Jefferson's administrators and faculty concluded that the new status called for a change in strategy. White Haven was closed in 1956 and the Barton Memorial Division was moved to newly renovated quarters on the second floor of the main hospital building where all of Jefferson's departments were readily available for consulting services.

The principles of care applied over almost a half of a century in the Pine Street - Barton Memorial Division may well be looked upon as guides in our present day problems of provision of medical service. While the public recognizes and demands the benefits of the multiple phases of technical medical care with its impersonal associations, there is still awareness of need for humanity and caring among medical and nursing personnel. These attributes were clearly manifested in the Chest Department. Perhaps our legacy is to keep them alive.

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For many Jefferson physicians, the most vivid memory of medical school is of the first patient they attended alone, being called on to act no longer as a student, but as a doctor. Such an opportunity most often came in a call to a fourth year student to attend a home delivery as an envoy of the Outdoor Service of the Department of Obstetrics. The practice of sending seniors on such medical missions was instituted at Jefferson by Edward P. Davis (JMC, 1888), first Chairman of Obstetrics (1898-1925), and a diverse and active teacher.

With the turn of the twentieth century, Pennsylvania regulations changed to require that all medical students attend twelve obstetric deliveries before graduation. Dr. Davis saw a unique opportunity in this mandate, and set the requirements at Jefferson to include six deliveries witnessed at the Hospital's Central Maternity, and six attended solo at patients' homes. These Outdoor Services, believed Davis, offered the students an opportunity to gain insight into the practical phase of obstetrics that could not be acquired elsewhere.

The Service proved a challenge not only for students, but for the Department of Obstetrics as well. Keeping the program running meant providing over 800 full-term maternity patients each academic year. The Central Maternity Home at 224 West Washington Square could not meet the demand, and plans were drawn up for a second, more fruitful location. The bustling neighborhoods of Southwest Philadelphia were chosen as an area where large numbers of expecting mothers would welcome the availability of an outpatient service. Property was acquired just South of Grays Ferry at 2545 Wharton Street, opening to the public May 15, 1910, as the Wharton Street Dispensary (Fig. 1).

The Dispensary rose immediately to the challenge of its task, matching the needs of the surrounding community with the services of the students' clinical requirements. The Dispensary itself housed facilities for postpartum care, as well as an antenatal clinic (Figs. 2, 3, and 4), providing services which became increasingly emphasized by the Department as the key to a healthy mother and child. Students not on call participated in the work of the clinics and were provided with beds themselves should their duties require them to be on call through the night.

Activity at the Wharton Street Dispensary boomed. By 1928, it had served over 6000 women in confinement. Thousands of Jefferson students had been dispatched to attend to deliveries with a remarkable record of medical service. Dr. P. Brooke Bland, who took over as second Chairman of Obstetrics in 1925, reported the results of student work to "compare most favorably with private obstetrical practice in general." As a result of the zealous antenatal attention offered by the clinic, three years had passed without a single case of convulsive toxemia being admitted to Central Maternity. On a meager 1928 budget of $5000, sponsored by the Board of Trustees and the Women's Board, the Dispensary provided remarkable service to patients and students alike. To be dispatched from Wharton Street was a unique experience. Leaving the Dispensary as just another fourth-year student, one followed the directions on the dispatch sheet and arrived at the patient's home as a physician, a welcome and needed presence. Students, of course, could offer but limited services. All serious cases required a call back to the Hospital for a staff obstetrician, who would take over at the home, or supervise relocation of both patient and doctor to the Central Maternity. However, the majority of deliveries attended required no more assistance than the students could ably offer, trained as they were by the comprehensive lectures and texts of Drs. Davis and Bland.

Attending students left the Dispensary ex-
Wertex Presents
R. O. POSTERIOR
in
"A Howling Success"

Note:—The leading man holds this unusual position for a limited engagement

The Call: 2:00 A.M.

Just Ten Blocks North

There—at last

That Long First Stage

Bi-Temporal: 8 cm.

Nine Pounds!

Back in the Hay

The Report

Discharged
tremely well equipped. “With the view of impressing the student,” wrote Bland, “with the importance of proper apparatus to practice obstetrics in a modern fashion, bags completely equipped with

modern materials of all kinds are provided for both intra and postpartum care.” Reports vary, but the outpatient obstetrical bag, over two feet in length, weighed in at between sixty and seventy-five pounds. A list compiled by Dr. Bland suggests some ninety-six items to be carried to a home delivery, and no doubt most of these were supplied.

Obsolete Jefferson Buildings

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From sterile sheets, to 1% silver nitrate, to a birth certificate book, little was left out. P. Brooke Bland prescribed careful directions for home deliveries in his 1923 book of *Practical Obstetrics for Students and Practitioners*. Floor plans for the home delivery room clearly marked the positions of mother, doctor, and the numerous contents of the obstetrical bag, all awaiting the arrival of the newborn. Students, no doubt, learned quickly the extent to which they were willing or able to follow the directions, and proceeded with the deliveries as best they could.

Above all else, floor plans included, Dr. Bland recommended a “Modified Garden of Eden” plan of conducting labor, a policy of watchful waiting. It was this policy that students were often best able to follow. Having been raised from bed in the early morning hours, dispatched from Wharton Street to venture many miles with a heavy bag, they often arrived at their destinations able to give little more than what was truly needed of them: watchful attention and reassurance. Delivering mothers often gave the attending students more in the way of practical obstetrical knowledge than they received in medical intervention, but both parties benefitted well from the service.

The Wharton Street Dispensary continued to supply students the opportunity for this important clinical experience for thirty-six years. By December of 1946, the number of home deliveries had declined to a point where the Dispensary’s services were no longer needed by the community. Deliveries in the Hospital had become the standard of care. Shortly before his retirement in 1925, Dr. E. P. Davis had supervised the construction and equipment of the Maternity Ward on the third floor of the Thompson Annex. From this ward, the foresight and planning of the first Chairman continued to give students a most significant lesson in the practice of obstetrics.

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**The Daniel Baugh Institute of Anatomy**

Fig. 1. Andrew J. Ramsay, Ph.D., Sc.D., Chairman of the Department of Anatomy and Director of the Daniel Baugh Institute (1958-1972).

The gift of the Daniel Baugh Institute of Anatomy was one of the most important events in the history of Jefferson. On September 26, 1911, the trustees, faculty and students assembled shortly before noon at the Medical College, the one built in 1898 at the corner of Tenth and Walnut, and proceeded in a body to the new Institute at the northeast corner of Eleventh and Clinton Streets. At least three hundred persons, as many as could gain admittance, witnessed the dedication ceremonies. Mr. William Potter, President of the Board of Trustees, said:

“Mr. Baugh purchased and remodeled this property, and equipped it so scientifically and thoroughly that it is second to none other like institute in the country... The trustees of Jefferson College have, as a token of their appreciation of this magnificent gift, named it in perpetuity, ‘The Daniel Baugh Institute of Anatomy of the

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Jefferson Medical College."

The building at Eleventh and Clinton was the home of the Department of Anatomy from 1911 until mid-1968, when it moved to Jefferson Hall at Eleventh and Locust Streets. Almost six decades of Jefferson graduates were taught in these venerable halls, the memories of which are fast disappearing into legend and lore.

Andrew J. Ramsay, Ph.D., Sc.D. (Fig. 1), Chairman of the Department of Anatomy and Director of the Daniel Baugh Institute (1958-72), upon his retirement in 1972 left an account of its past history along with his experiences. His chronicle is worth recording in detail because the era, the author and the building itself were all remarkable. An example of the regard that Jefferson students had for Dr. Ramsay as a teacher may be appreciated by this anonymous letter.

"Dear Dr. Ramsay:

I suppose that deep in my subconscious somewhere, I would like to be an instructor. I say this because as I have progressed through grade school into the high schools, I have tried to evaluate my teachers and have examined very carefully those few who really excelled at their work. Some teachers, of course, teach because they can't do anything else. And even in college, there seemed to be a few of these teachers whose attitude toward students was, in the least, distinctly unwholesome. At this moment I am reminded of Enrico Fermi, the great physicist who insisted on teaching freshman physics classes because it was they, not the graduate students, who needed the greatest share of guidance, careful explanation and inspiration. And I can also remember that in August of this year I tried to picture what my professors would be like at Jefferson. I could not imagine.

"Our very first day came as quite a surprise to me, and in each succeeding day I began to realize, more and more, that perhaps never again in my life would I have such distinguished gentlemen working so hard for my benefit. Although all those associated with instructing us in these basic lectures have been ideal, perhaps no one has expended more time, energy and forethought than yourself. It is evident in every lecture. I cannot enumerate the qualities that make your lectures so comprehensive. I can only imagine that it is the result of much self-analysis, experience and forethought embodied in a gentleman who has real ability to teach - and I should think that such a man does not come along very often. I can only say that the continuity, careful organization and delineation of similar and hence oftentimes confusing concepts make your lectures ideal in every way. In addition is your thoughtfulness to the individual student. Few can realize the uncertainty and pressure that haunt a medical student. After waiting for many years to come to D.B.I., one carries with him the hopes for a successful future. On the other hand, one also is aware of the tremendous failure one would be if something should happen to his grades. Although you joke about our 'trauma', it is there, more or less, in each one of us, and that you are aware of it makes our stay here a little bit easier. I once read a study that showed why psychopaths have, as a group, such excellent and retentive memories. The study explained that this was due to their inability to experience anxiety reactions. I wonder if this has any implications for the medical student.

"You have mentioned to us that this year has brought with it some innovations in the lecture schedule. From what I can gather from the general attitude and from my friends, the reaction is very favorable. The idea of presenting something to the student in the Histology lecture a day before his experience with it in the gross anatomy laboratory is an excellent one. To have the idea first, then to see and reinforce that idea really works. A picture is truly worth a thousand words when you have been told just what that picture represents and how it came to be there. It was also mentioned that we now spend less time in the gross anatomy laboratory. If this is true, then I can only applaud it. One can not only become 'stale' there, but a few more hours of sleep here and there, or more likely, a few more hours of study is likely to raise the overall efficiency to the extent of bettering the older schedule. I have cudged my brains.
in order to think of some constructive criticism. The only thing I could possibly offer would be the question of having two examinations on one Saturday when there are other days available. But there might be some very good reason for this, and I hesitate to mention it.

"Lastly, I hope you won't mind my closing this letter anonymously. I'd like this letter to be taken in the spirit in which it is given. Besides, what I am saying could be said by virtually every student here and really Sir, there just isn't room for a hundred and seventy-odd signatures.

"Again my humble appreciation.

A Freshman Student"

The Ramsay Account

"The last moving van had just pulled away from the Institute (Fig. 2) and was lumbering down Clinton Street en route to Anatomy's new quarters in Jefferson Hall. Pausing while locking the Clinton Street entrance door, reluctantly, since this was to be for the last time, waves of memories telescoped the years. Only the marble steps, deeply worn by the anxious and determined feet of over 9,000 Jefferson students, mutely testified that fifty-seven years had passed since Mr. Baugh's gift to Jefferson was opened.

"While standing beneath the huge marble slab that loudly proclaimed The Daniel Baugh Institute of Anatomy of The Jefferson Medical College it seemed but yesterday to me, although it was really thirty-three years since Professor J. Parsons Schaeffer, with his proud and impressive dignity, had shown me through the aging but immaculately kept Institute and then to see Dean Ross V. Patterson who signaled the beginning of my career at Jefferson (now rapidly drawing to a close) by a nod of approval to Dr. Schaeffer as we turned to leave his office.

"Across the street, A.K.K.'s rebuilt red brick wall recalled watching as unheralded hurricane winds had toppled their huge backyard poplar tree crushing the wall and, roaring across Clinton Street, had ripped away the Institute's cornices, broken the sky lights, and opening holes in the roof resulting in the flooding of the dissecting room below. Across Eleventh Street the Gladstone Hotel - respectable in those days, where Dr. H.E. Radasch and many of our students lived - brought memories of the early paper bag water bomb fights between students at Alpha Kappa Kappa and those at the Gladstone, and of being called at night (I had come to expect it) by the Desk Sergeant at the 13th and Pine Street Police Station (since discontinued) to vouch for students picked up for transgressing boyishly while relaxing from the rigors of their studentships, and to obtain their release. Looking down uniquely quiet, clean, proud little Clinton Street one could see again the color and gaiety of the annual Colonial Pageants, gone since 1938, with their platoons of foot soldiers in bright colonial uniforms, the two and four horse-drawn coaches, the ladies in their long ground-sweeping dresses and tiny parasols, the gentlemen in knee britches, bright buckled shoes, canes and high hats. One

Fig. 2. Daniel Baugh Institute of Anatomy, Eleventh and Clinton Streets (1911-1968).

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could see again the squad of Philadelphia’s mounted policemen sitting proudly erect on their carefully groomed, white-footed quarter horses, in front of our door, in formation, prior to assuming their daily patrol duties. (Mounted police have recently returned, in limited numbers, to Philadelphia.)

"It seemed that the little Italian with his ancient hurdy-gurdy and miniature monkey, who came daily many years ago to the Institute for coins from the students, stood there again grinding out the familiar snatches from famous Italian operas. One must smile anew recalling the enterprising prankishness of those students who arranged for the hurdy-gurdy to be stationed in the alley (Cypress Street) outside the windows of the Lower Amphitheater in order to accompany (or to compete with) the lecturer during those trying 12 noon - 1 P.M. Saturday lecture hours, usually assigned to me as junior faculty member.

"Looking east down Clinton Street the smaller apartment house built at the site of the old Clinton Hotel, at 10th Street, brought memories of that unforgettable night fate had chosen to burn it to the ground—the very night before the final examinations in Anatomy—and I felt again my deep sympathy for the great number of students who had been routed by the police from their beds in the middle of the night (together with all other residents within a two-block radius of the conflagration) but who had dutifully reported at the Institute for their examination at 9 A.M. the next morning with red-rimmed, sleepless eyes, and reeking with smoke.

"The smell of smoke drifting over from a neighboring backyard incinerator brought memories of still another fire, the one that gutted the Colonial Hotel (at Eleventh and Spruce Streets) and that had also interfered with student sleep before an Anatomy examination.

"I checked the lock again, recalling the many responsibilities of Director, and thought of faithful, loyal, gentle old "Gene" Sweeney, our night watchman, who for so many years had worked six 12-hour shifts each week and of my feeling of deep personal loss at his death. His death had been fol-

lowed by such an unbelievably unsatisfactory period of extraordinarily unreliable watchmen—mostly alcoholics, due to our low salaries and long working hours—that I had found it necessary to act as night watchman myself, either all or part of the nights on forty-one occasions counted within one period of 90 days. (All of this, however, happily changed totally with the coming of Frank Lachman, in 1959, as the Institute’s building superintendent.)

"It seemed that I could also see ‘Isaac’ (Fig. 3), our embalmer of so many years (likened by some to Jerry Cruncher of Dickens) and who had slyly responded quite regularly—so the grapevine had informed me—to students’ requests for skulls, and I was amused anew by the memory of his innocently naive attempts to hide his surreptitious compliances with these requests.

"I could hear myself saying again, and with a feeling of great and genuine pride as I addressed

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**Fig. 3. Mr. Isaac Cordner, embalmer at the Institute for over 30 years, repairing one of his charges.**
each incoming class, at their first lecture meeting in the tradition-filled Upper Amphitheater (Fig. 4), 'Gentlemen, you are sitting in the places where have sat more students who are now physicians and who are providing medical care to people of America than those who sat in any other medical schoolroom in our Country.'

'I recall, also, our consternation upon realizing the need to provide 'facilities' in the Institute for the women medical students (Jeff had been an all male institution, in philosophy as in its plumbing, since its origin in 1824). The only space available was in the Anatomy Museum (Fig. 5) which was forthwith altered, resulting unfortunately in displacement of our graduate students to the Fourth Floor, in the revamped Applied and Surgical Anatomy Laboratory. I overheard an aged Alumnus who, visiting us during the space conversion, muttered, 'Well, if we must have women and a women's washroom and lounge, I suppose it's best to put them in the museum, together with our other odd and unusual anatomic specimens.'

'I felt again the tug of the many struggles and trials in the old Institute: the lack of effective ventilation, the arteriosclerotic plumbing; the inadequacies of the electrical and gas services as we developed research laboratories and offices for required and arriving new faculty; the bursting of water pipes and the distress of those located beneath the leaks due to falling plaster and water; the interruption of classes due to rupture of the steam boiler during bitterly cold spells; my struggle to hold our Department together, and apart, from the unfortunate infighting that threatened to divide Jefferson's faculty and harm her National image during the fifties.'

'The 57 years during which the Daniel Baugh Institute had served Jefferson as a separate building spanned an historic era in Jefferson's history. It was characterized by an early established and unusually strong esprit in students (and faculty, alike) with reverence and respect for tradition and pride in studentship; by Chevalier Jackson's bronchoscope; by Jefferson's struggle to remain independent; by the winning designation as an A+
medical college: by a great increase in our faculty and a remarkable acceleration in creative faculty scholarship through their research activity; by John H. Gibbon, Jr.'s heart-lung machine; the acceptance of women students; the tenure of five Jefferson Deans and three Presidents; the recognition of the leadership of Jefferson Anatomy and of Jefferson Medical College as the leading independent medical school in the Nation; and recently by the establishment of our College of Graduate Studies and another of Allied Health Sciences; and the phasing over to University status. (Since 1838 our state charter enabled university status.)"

**Mr. Baugh And His Gift**

"Mr. Daniel Baugh (Fig. 6), a member of Jefferson's Board of Trustees, was born in Chester County, Pennsylvania. Very early in his strikingly productive career he demonstrated compelling interest in the development and promotion of numerous civic, educational and cultural activities in Metropolitan Philadelphia (Fig. 7). A highly successful businessman, his natural abilities and executive acumen, his extraordinary energy, and his sincerity and devotion brought unusual success to all his enterprises. The Board of Trustees recognized these unusual qualities in Mr. Baugh and elected him to the Board in 1896.

"Mr. Baugh immediately became thoroughly involved in the College, Hospital, and Finance Committees of the Board. He visited regularly all areas of the institution to gain first hand knowledge of functions and of problems that may have existed. While visiting the Medical Hall and the Laboratory Buildings located at 10th and Walnut Streets (erected in 1898) he could easily see that the quarters occupied by the Department of Anatomy were inadequate as judged by his knowledge gained from other first class institutions, and he decided to provide facilities for Jefferson Anatomy that would exceed those of any other medical school and that would permit Jefferson to establish rightful leadership in American Anatomy.

"Searching for a location appropriately near Jefferson's cluster of Main buildings at 10th and Walnut Streets, Mr. Baugh decided upon a site and a building at 11th and Clinton, vacated by the former Pennsylvania Dental College (or School of Dental Surgery) a heavily mortgaged property that Jefferson wisely purchased. Board minutes of April 7, 1910 record:

'On motion it was
RESOLVED That the President of the Board of Trustees be authorized to sign a contract in the name of this Corporation to purchase the property of the Pennsylvania Dental College at the Northeast corner of Eleventh and Clinton Streets, Philadelphia, at a price not exceeding forty-eight thousand dollars ($48,000) and that whatsoever sum it may be necessary to pay at the time of the execution of such contract, shall be paid from the College Contingent Fund.'
Daniel Baugh residence, 16th and Locust Streets, northwest corner. Externally and internally one of the finest of Philadelphia residences was that of Daniel Baugh, manufacturer of chemicals and fertilizers, director of many financial and philanthropic institutions, ex-president of the Art Club, ex-president of the Girard National Bank, director Commercial Museum, etc.

On May 9, 1910, action by the Board was taken as follows:

'On motion of Mr. Purves, it was RESOLVED, That the Treasurer be directed to advance from the College Account the amount of cash required to complete the purchase of the property of the Pennsylvania Dental College at the Northeast corner of Eleventh and Clinton Streets.'

Mr. Baugh’s enthusiasm was heightened as revealed by the Board’s minutes of October 13, 1910:

'Mr. Daniel Baugh, as a donation to the College, has paid off the mortgage upon premises Eleventh and Clinton Streets recently purchased by the College.'

Not one to let grass grow beneath his feet Mr. Baugh forthwith wrote to the Board on October 31, 1910, as follows:

‘Hon. William Potter, President
Dear Sir:

In addition to my pledge given you in a recent letter, to pay to the Jefferson Medical College the sum of fifty thousand dollars, for the purchase of the Building at the corner of Eleventh and Clinton Streets, I hereby pledge the sum of forty thousand dollars ($40,000) to be paid the said Corporation for the purpose of remodeling the premises in question to fit the place for occupancy by a Department of Anatomy as contemplated. The said sum hereby pledged is that which is named as a maximum by Mr. Windrim, Architect, to complete the changes and improvements to the property. Signed/Daniel Baugh.”

The Board, in return, unanimously passed the following gesture of recognition and thanks to Mr. Baugh:

“WHEREAS, Mr. Daniel Baugh, a member of this Board, has most generously given to the College, the building at the North East corner of 11th and Clinton Streets, formerly owned and occupied by The Pennsylvania Dental College and
has further offered to defray the entire cost of fitting the building for thorough instruction in Anatomy, Therefore RESOLVED, that this building shall be known as 'The Daniel Baugh Institute of Anatomy of The Jefferson Medical College of Philadelphia' and shall be so designated by an appropriate external tablet or inscription. "Having acquired the services of an architect and general contractor and having supplied the necessary funds for reconstructing the building so as to provide the finest facilities available for a teaching and research department of human anatomy and wishing that progress would not be slowed during his temporary absence from Philadelphia, Mr. Baugh made the following arrangements:

February 2, 1911

'Benjamin H. Brewster, Esquire
Vice President, Baugh & Sons Company
Dear Sir:

In addition to my gift to the Jefferson Medical College of the property at the corner of Eleventh and Clinton Streets, I have engaged to pay for the reconstruction, improvement and equipment of the premises to fit it for College purposes as the 'Daniel Baugh Institute of Anatomy of Jefferson Medical College of Philadelphia.'

'I have signed a contract for the reconstruction and building improvement, on behalf of the College, with Messrs. Jacob Myers and Sons, drawn by the architect in charge of the plans and work, Mr. John H. Windrim. During the progress of this reconstruction, payments usual in such cases will be demanded of me during my absence. I therefore authorize you, my Attorney-in-fact, to pay all orders issued by Mr. John H. Windrim, Architect, and countersigned by Mr. William Potter and Mr. Simon Gratz, or either of them, on presentation at my office, No. 20 South Delaware Avenue.

'The contract in question with Messrs. Myers is something less than Thirty-nine Thousand Dollars ($39,000), but there may be unforeseen and desirable changes deemed necessary by Messrs Potter and Gratz, so that I place the limit of the architect's drafts upon you at forty-five thousand dollars ($45,000).

'Regarding the payment of my pledge to the College to equip the Institute, as these payments will not be required until my return I do not ask you to take any direction or action.

I have placed copies of this letter with Messrs. Potter, Gratz, and Windrim.

Yours very truly,

/s/ Daniel Baugh.'

'On April 6, 1911, Mr. Simon Gratz, on behalf of the College Committee of the Board, offered the following unanimously adopted resolution as further evidence of Mr. Baugh's unselfish devotion to the interest of the College:

'RESOLVED, the College Committee will heartily approve of placing a suitable tablet in The Daniel Baugh Institute of Anatomy to Commemorate Mr. Baugh's munificence in giving the College this splendid opportunity to carry on its work in Anatomy.' (Note: This handsome marble slab with its message spelled out in raised bronze letters is now mounted on the wall of the Anatomy Department now in Jefferson Alumni Hall.)

'Reconstruction of the Institute building was essentially completed by the following September, furnished and equipped by additional funds supplied by Mr. Baugh. The logical selection of the first Director of the Institute was Dr. Edward Anthony Spitzka (Fig. 8), who had been appointed Professor of General Anatomy and Head of the Department of Anatomy in 1905. An elaborate dedication ceremony was celebrated on September 26, 1911 attended by Jefferson dignitaries and representatives from significant American medical, cultural and educational institutions and societies. On that date the Institute's 'Visitors Record' was started, recording those present at the ceremony. (This book, now in its sixty-third year, continues to record signatures of visitors to the Institute).

'Those attending the dedication were rightfully impressed by the Institute's most modern facilities in the Nation for teaching and research in Anatomy. Professor George A. Piersol, Chairman of the Department of Anatomy of the Uni-
University of Pennsylvania School of Medicine, spoke as follows:

'Jefferson is certainly to be congratulated on having an institution for the study of one of the most important fundamental branches of medicine, but if we may take a broader view, this occasion is an important event, not only for Philadelphia, but for American Anatomy. As many of you know, we have for many years, as a matter of fact, been compelled to turn to the old country for the study of the purely scientific phases of medicine and surgery, but the time is coming, if it is not already here, when the old world must turn to America and an occasion like this, the establishing of a magnificent institute devoted to the study of Anatomy certainly marks a stride and a step forward.

'I thank you, gentlemen, for the honor of having the opportunity of expressing these sentiments which I know are those of every farseeing physician.'

Professor Piersol, author of the famous 5-inch thick Anatomy, also remarked that this new Institute firmly established Philadelphia as the leader in American Anatomy.

'Professor Spitzka, who had worked very closely with Mr. Baugh and was rightfully appreciative of Mr. Baugh as a man, and of his gift to

Jefferson remarked:

'I merely wish to add that Mr. Potter has fittingly dedicated this Institute, but I would like, if I may, to further dedicate the building to all human kind, to the entire medical profession that its knowledge and skill may be added to, to all anatomists of the country who must feel encouraged at its magnificent capacity, to all students who are going to profit by the splendid equipment here made available, but above all I would dedicate this Institute — not to a man who is dead, but who may have many years of health and happiness—I would dedicate it as a memorial to Mr. Daniel Baugh as a man who is true, generous, sympathetic and a prince among men.'

Dr. Spitzka also recalled the —

'Anatomy at Jefferson Medical College has always flourished and kept abreast of the times from the time of Nathan Smith, first Professor of Anatomy, the two McClellans, George and Samuel, Granville Sharp Pattison, the renowned Joseph Pancoast, his son, William Pancoast, and lastly in that of my predecessor, William S. Forbes, a martyr to the cause of the promotion of the science of Anatomy, but successful in achieving that great boon to the medical schools of this state, the Anatomy Act of 1883.'

‘The Faculty roster in Anatomy in 1911 listed Doctors E.A. Spitzka, H.E. Radasch, Howard Dehoney, W.C. Pritchard, U.J. Roe, Robert W. Brace, Charles W. Bonney, J.F. Little, Clarence Hoffman, D.G. Metheny, F.C. Abbott, E.E. Phillips, J. Leslie Davis, George W. Miller, and three medical students - Thomas F. Mullin, William Ford, and Edward P. Dennis as assistants. Dr. McClellan and members of the Department of Surgery taught Operative Surgery on the Cadaver. Only Dr. Spitzka was full-time; all others gave varying amounts of time to teaching with only a few receiving any salary or honoraria whatsoever, it being customary and necessary for faculty to engage in outside activities, including practice, for their livelihood.

'Anatomy in 1911 occupied a generous portion
of the curriculum, extending through the first two years and into the first half of the third. The first year course began with the dissection of lower animals, principally cats and dogs, 'in order that the general morphological features of mammalian anatomy may be understood by the student before beginning the dissection of the human cadaver.' (Recall that most medical schools at that time required for admission only a high school or academy diploma or a certificate attesting to equivalent courses.) A detailed course in osteology paralleled the course in dissection which required two hours per week throughout the first year but, for students who found leisure, additional dissection was permitted at any time after 10 A.M. Lectures, demonstrations, and recitations assured proper progress.

"Visceral anatomy was taught as a separate segment concentrating on the study of the gross and microscopic structure, the development, and the relational anatomy of the viscera. The course in histology and embryology consisted mainly of instruction and practice in using the current technical procedures for preparing materials for microscopic study. Slides of tissues, organs, and embryos were prepared by the students for their own use, in review for later courses. Special emphasis was given to normal structure and development and to the analysis of factors involved in malformations.

"In the Second Year the Anatomy course was composed of lectures, demonstrations, dissections, and laboratory study of the head, thorax, and abdomen with particular attention being given to the general anatomy of the head and neck, the brain, eye, ear, larynx, pharynx, lungs, heart, peritoneum and abdominal organs, the anatomy of the hernias, the genito-urinary tract and the perineum.

"Third Year instruction (Applied Anatomy) under Professor McClellan (Fig. 9), was 'taught so as to impress the facts of Anatomy to their application to both Surgery and Medicine. The nude model is constantly made use of as a means of illustrating topographical or surface Anatomy so necessary for diagnosis in clinical work....A special feature of this course is the systematic free-hand drawings in colored chalks made by the Professor before the Class.' Third year students were required, also, to take Operative Surgery on the cadaver, under the Department of Surgery, permitting (and requiring) each student to perform on the cadaver (at D.B.I.), under careful supervision, the proper procedures for amputations, resections, ligations of arteries, trephining, tracheotomy, nerve resections, perineal section and the various operations of abdominal and genito-urinary surgery.

"The death of Dr. McClellan, on March 29, 1913, vacated The Chair of Applied Anatomy. Wisely the Board of Trustees, realizing the need to unify all teaching of Anatomy, abolished that Chair by their action on June 23, 1913, bringing Applied and Topographic Anatomy under Dr. Spitzka's Chair of General Anatomy.

"Jefferson Medical College, solidly established as one of America's finest medical schools, realized early the need for better and more thorough preparation for the study of the basic medical sciences and, again expressing obvious leadership in medical education, announced in 1912 a one-year Medical Preparatory Course to begin with the 1913-14 session. This program was composed primarily of instruction in biology, chemistry, physics and foreign language. Each of the three sciences received 189 hours of lecture, recitation and labora-

Fig. 9. George McClellan, M.D. (1849-1913), grandson of Jefferson's founder, Chairman of Applied and Topographic Anatomy (1905-1913).
tory work, while 160 hours were assigned to scientific German (a reading knowledge of which was one of the requirements for admission to Jefferson at that time). The biology course was taught at the Daniel Baugh Institute by Professor H.E. Radasch and Dr. John I. Franz. The New York State Board of Regents, and Departments of Education of other states, immediately acknowledged and accepted Jefferson's Medical Preparatory Course. The inclusion of Biology in Jefferson's curriculum stimulated the change in name of the Institute, by Board action, on January 26, 1914, to read The Daniel Baugh Institute of Anatomy and Biology but after the Preparatory Course was discontinued the 'and Biology' was dropped.

"Unfortunately, in but two years after the new Anatomy Institute was occupied it began to become apparent that all was not well with the leadership at the Institute and that a new Professor and Director would need to be sought. Dr. Spitzka, a graduate of Columbia University's College of Physicians and Surgeons and a noted physician, scientist and educator, began to show the strain of the many additional responsibilities and the many challenges of complex types that fell to him and to all future 'Directors' of the Institute.

"A widely recognized researcher in neuroanatomical topics, Dr. Spitzka had been assigned, while in New York, to conduct autopsies on the convicted criminals electrocuted at Sing Sing prison, thus permitting his well known study of the effects of electrocution on the central nervous system. It is said that gangland friends of those electrocuted (and subsequently autopsied by Dr. Spitzka), frustrated in attempts to manipulate by devious means the strength of the current during the electrocution process (and thereby to save their pals from death and from verification of death by Dr. Spitzka), began to follow him day and night and to threaten bodily harm both to him and to members of his family. They are said to have continued to plague Dr. Spitzka after his coming to Philadelphia and surely these continuing threats provided additional irritation to his deteriorating mental condition.

"There were local problems of yet a different sort (but seemingly characteristic of any medical faculty including that at Jefferson). Several of the faculty, as well as outsiders, had aspired to the Chair of Anatomy as the career of Dr. William Smith Forbes (Professor of General, Descriptive and Surgical Anatomy) had drawn to a close. Apparently there were the usual behind the scenes maneuvering together with some natural jealousies and desires for recognition for many years of teaching at Jefferson. These may have influenced the resultant action by the Board of Trustees in dividing the Chair held by Forbes: Spitzka to be Professor of General Anatomy (including histology and embryology) and George McClellan to be Professor of Applied Anatomy. There then developed, of course, some re-alignments among the faculty with obvious loyalties to the one or the other. McClellan is said to have remained somewhat aloof to Spitzka, and Spitzka to McClellan. McClellan's interest and activities extended to include surgical and regional anatomy and anatomy in its relation to art and, like all other members of the Anatomy Faculty at that time, except Dr. Spitzka, McClellan held positions also at other hospitals and medical institutions and conducted private practice as well. In addition to his position at Jefferson, McClellan had been Professor of Anatomy at The Pennsylvania School of Anatomy and Surgery which he had founded in 1879 and, also, was Professor of Anatomy at the Pennsylvania Academy of Fine Arts.

"Despite his continuing and increasing problems, Spitzka contributed significantly to anatomic literature while at Jefferson, being also the Editor of the 1908 to 1913 American editions of famous Gray's Anatomy. (Other American edition editors were Richard Dungalson, W.W. Keen, and J. Chalmers DaCosta, all being Jeffersonians.)

"Older graduates recall Dr. Spitzka entering the Upper Amphitheater and, after furtively looking behind himself, announce to the assembled Class, as he removed two large pistols from beneath his coat and deposited them on the lectern, 'I'm being followed.' His stresses and problems finally resulted, it is said, in his turning to alcohol for release and escape. Whether or not it was due to
the latter or in combination with increasing emotional stress, eventually it became obvious to colleagues and to the Board of Trustees that Dr. Spitzka was unable to continue and that a replacement was necessary.

"Dr. W.M.L. Coplin, Professor of Pathology, was appointed Chairman of the Anatomy Search Committee and, knowing of the meteoric career of a young man at Yale, traveled to New Haven to visit him. This young man was J. Parsons Schaeffer, Professor of Anatomy on Yale's medical school faculty (Fig. 10).

"A graduate in medicine from the University of Pennsylvania and with a newly won Ph.D. (in Anatomy) from Cornell, Dr. Schaeffer had been at Yale barely four years after receiving his Ph.D., until he was advanced to full professor, and was in the process of having a new home built in New Haven. Upon his return to Philadelphia Dr. Coplin wrote to Dr. Schaeffer on June 5, 1914, as follows, '"...Several members of the faculty would like your consent to submit your name for election by the Board to the combined positions of Professor of Anatomy and Director of The Daniel Baugh Institute of Anatomy and Biology....' (note 'and Biology'). So impressed was Dr. Schaeffer upon subsequently visiting Philadelphia and meeting Trustees, faculty, and above all, Mr. Baugh, that it took only one more event to set his mind. On the occasion of the Centennial Celebration of the founding of Yale, Professor W.W. Keen was a guest at that University in New Haven where following a conference with Dr. Keen, Dr. Schaeffer accepted Jefferson's offer. On July 18, 1914, he was elected by the Board to the post he occupied with singular distinction for thirty-four years.

"The residence building immediately adjoining the Institute on its east side was purchased by Mr. Baugh as a buffer (there was some thought that the functions of the Institute would interfere with the happiness of Clinton Street residents and the value of nearby houses). Dr. Schaeffer was convinced that merely purveying or transmitting information was only one of the functions of viable and stimulating teachers, the other being the discovery of new information and the testing of the old through research. Therefore, upon Dr. Schaeffer's arrival and at his request Mr. Baugh supplied the money to make such alterations as were required to convert the old residence into offices and research laboratory spaces for present and future faculty. This portion of the Institute became known as The Annex.

"In addition to the curricular and admissions revisions, deaths, faculty changes, and the like, 1914 was notable for other significant events in Jefferson's growth and maturity. The faculty, students and alumni received a jolt which threatened Jefferson tradition and equanimity. (The early Annual Announcements of the College clearly stated 'Only men are admitted to the College.') The September 28, 1914, Faculty Meeting Minutes record:

'It was RESOLVED, that as far as the matter concerning instruction, the Faculty of Jefferson Medical College sees no insuperable objection to the Medical co-education of the sexes, and considers it feasible to arrange for such a plan of instruction in Jefferson Medical College'....and 'The Dean made announcement of a committee appointed by the Board of Trustees composed of two members of the Board, himself and Professor Coplin, to consider with a committee from Woman's Medical College, the question of some arrangement for the joint con-

duct of a Medical Co-educational Course.'

"Imagine the consternation. What about plumbing facilities, about the tradition of 'story-telling' at the beginnings of lectures; about the teaching of urology, obstetrics and gynecology; and especially about the dissection of the male body by female students? Of all of these only the plumbing limitations at the Baugh Institute worried Dr. Schaeffer (who had taught women at both Cornell and Yale). Fortunately, nothing untoward eventuated and the proposal was abandoned.

"A significant 1914 milestone brought just pride to all Jeffersonians, especially since it came to Jefferson so soon after the 'Flexner Report' and its questioning of the respectability (?) of non-university affiliated medical schools. It was announced to the faculty on March 30, 1914, that the Association of American Medical Colleges had classified Jefferson as an A+ medical college. This was the highest rating possible, and justly recognized Jefferson's fine programs and reputation. The impact of Mr. Baugh's gift to the College on the gaining of A+ status is recorded in the minutes of the Board on October 8:

On October 8, 1914
The following minute, presented by Mr. Potter, was adopted: The Jefferson Medical College has finally received tardy justice from the American Medical Association in being placed, the early part of this year, in the A+ Class of American Medical Colleges.

This is largely due to the wise and munificent benefactions to this College by our colleague, Mr. Daniel Baugh. The creation of the Daniel Baugh Institute of Anatomy, making vacant in the College Building much needed space for required new and enlargement of old departments, has enabled the Trustees to possess at the present time adequate teaching facilities to meet all the exacting requirements now insisted upon in modern medical education.

This minute is an expression of the appreciation, affection and respect for Mr. Baugh entertained by every one connected with The Jefferson Medical College.'

"Jefferson students and alumni and the Anatomy faculty had their hackles raised again on May 29, 1916, when Mr. William Potter, President of the Board of Trustees and Mr. Alba B. Johnson presented: 'On behalf of the Conference Committee of the Board, a plan for the establishment of the union of the Medical School of the University of Pennsylvania and Jefferson Medical College.' The various steps in the negotiations and the terms of the proposed agreement were presented and discussed. At the conclusion of the conference, it was voted as the sense of the Faculty that the plan was in every way desirable and heartily endorsed. (Faculty present at this meeting were Professors Montgomery, Coplin, Davis, Dercum, DaCosta, Hansell, Wilson, Smith, Cohen, Brubaker, Gibbon, Rosenberger, Stewart, McCrae, Loux, Hawk, Schaeffer, and Patterson.)

'There arose immediately a groundswell of objection. Mr. Baugh is said to have added the full force of his persuasive influence and to have 'pledged his fortune to keep Jefferson independent.' Faculty at the Baugh Institute were especially relieved when the proposal was finally turned down. (It had become clear that Jefferson's reputation as well as her new facilities for Anatomy were to have been two of the prize plums sought by the University under the merger plan which really would have been an 'absorption.')

"Mr. Baugh's munificence to Jefferson extended to many areas within both College and Hospital in addition to this continuing support of Anatomy. Dr. Schaeffer related, following Mr. Baugh's death, that he and Mr. Baugh had several conferences on the matter of Mr. Baugh providing additional and very substantive support for the functions of the Institute. Mr. Baugh died, however, before arrangements were completed but he did designate a considerable sum for the College which, it is said, was subsequently sharply reduced due to family objections to his philanthropic dedication to Jefferson.

"Mr. Baugh was a remarkably perceptive and wisely generous man. During his visits to the Institute he invariably asked Dr. Schaeffer, 'Now, is there anything you need?' and, then, as he removed his checkbook from his pocket, 'How much will this cost?' The total value of Mr.
Baugh's contributions to Jefferson can probably never be determined.

"As soon as feasible after he came to Jefferson, Dr. Schaeffer moved all of General Anatomy, except Applied and Neuroanatomy, into the First Year curriculum. Neuroanatomy remained in the Second Year until 1947; Applied and Topographic Anatomy and Operative Surgery on the cadaver remained in the Third Year and was continued until the acute shortage of cadavers in the early Sixties resulted in the necessary but reluctant suspension of the courses. The Anatomy Department then urged the Curriculum and Roster Committee to use the hours, thus freed, for the introduction of sorely needed elective courses in any subject (this would have been a Jefferson innovation in medical education but the time was appropriated wholly by the Department of Surgery which already enjoyed some sixty percent more curriculum hours than the average at other first class schools). The rationale was said to be that even Gross Anatomy need not be taught in medical school (tsk!). Happily, the subsequent slight increase in the number of willed bodies made it possible to offer, starting in 1966, advanced courses in applied and surgical anatomy, on an elective basis.

"Alumni will recall more vividly certain of the many personalities who taught at The Daniel Baugh Institute and who helped to build and maintain Jefferson's eminence in American Anatomy. Only a few can be mentioned here, within the scope of this article but, of course, the Alumni remember all of their teachers.

"Dr. Spitzka was the first professionally trained anatomist (teacher-researcher) at Jefferson. With interest in anthropology as well as anatomy, he was especially interested in the nervous system. Although a polished and erudite speaker, his lectures were not always the type that medical students of the early years of the Twentieth Century expected, extending into fields of concern to the general and scientific anatomist but not always of interest to the students. It remained for Doctors Dehoney, Metheny and, especially, Hoffman to clarify topics and prepare the students for their examinations.

"Dr. Clarence Hoffman (Fig. 11) was a superb teacher at the dissecting table. His small group demonstrations made life much easier for Jefferson students. He was a well known collector of clocks and, following his untimely death, Mrs. Hoffman presented to the Library of the Institute, inscribed in his memory, the handsome clock still to be seen in the new Daniel Baugh Institute Library on the Fifth Floor of Jefferson Alumni Hall. Mrs. Hoffman also provided the Hoffman Fund, the income from which was to be used only for the purchase of books for the Institute Library. Dr. Hoffman, not given to investigative activities, was not fully recognized for his unusual abilities as a teacher, holding but the rank of Associate at the time of his death.

"Dr. Henry Erdman Radasch (Fig. 12), Professor of Histology and Embryology, known as "Rad" and a favorite with the students, was known also for his succinct little textbook Histology. He was a philatelist of great note, known country and worldwide. Specializing in balloon, rocket, and air mail stamps and covers, his was one of the most complete collections in existence. Older Alumni will recall especially 'Rad's' green eyeshade and thick glasses (he was extremely nearsighted); the large diamond ring, worn on his little finger, that sparkled with authority in the beam of the lantern slide projector; for his insistence that students buy their microscopes through him (a red mark was entered in his little black book aside the name of

Fig. 11. Clarence Hoffman, M.D. (JMC, 1906).
each purchase); and for the scramble at Leary's Book Store for copies of his *Histology*, many years out of print but almost a 'must' to pass the course until 1937. Dr. Radasch retired in June, 1942, but was unfortunately not permitted to enjoy his richly earned retirement, dying of a heart ailment in October of that same year.

"Dr. Charles W. Bonney (Fig. 13) joined the Anatomy Faculty in 1911, teaching Applied and Topographic Anatomy for 36 years. Dr. Bonney was a perfect gentlemen, patient, kind and considerate, modest, and unusually competent. One recalls his immaculate attire and his white hair parted in the middle, his slight lateral lingual lisp, and his waxed mustache (Dr. Leo Reed also sported a waxed mustache). A graduate of Dartmouth, Dr. Bonney possessed a distinct gift for learning and speaking foreign languages. Dr. Leandro Tocantins (late Director of the Cardeza Foundation) related that Dr. Bonney always attempted to converse with his patients in their native tongue and had several times met with "Toc" for lunches so that he could practice Portuguese because he had a new patient, fresh from Portugal, who could speak no English and Dr. Bonney wanted to place him at ease with personal linguistic communications.

"A most important Jeffersonian, over forty years, the Secretary and Librarian at the Institute, efficient and loyal Miss Myrtle Bremerman (Fig. 14) was transferred from the Dean's Office when the Institute opened in 1911.

"Following Dr. Schaeffer's retirement in 1948 we arranged for her to spend half of her time with him to assist in his continuing editorships and authorships of Morris' *Human Anatomy* and, with Doctors Pendergrass and Hodes, of *The Head And Neck In Roentgen Diagnosis*.

"Dr. Raymond B. Moore (Fig. 15), a Penn graduate, became a staunch and colorful Jeffersonian, refusing bids from Penn to join them while chiding Dr. Isidore Ravdin about the inadequacies of Penn Anatomy. Third Year students enjoyed his rapid-fire briefing on the areas to be considered, delivered with the fervor of a football coach. In admiration, the Class of 1949 dedicated their Clinic to 'Coach Moore.' A great many residents were
prepared successfully for Board examinations by his post-graduate course at the Institute, the effectiveness of his presentations drawing young physicians from sister medical schools throughout northeastern United States. He continued his dynamic instruction at the Wilmington Medical Center following his retirement from Jefferson.

"Dr. J. Parsons Schaeffer, truly a Jefferson legend, was known affectionately to his older colleagues as 'Jake' and, respectfully but fearfully, as 'the Great White Father' and 'the Silver Fox' to his thousands of students (Fig. 16). Alumni relate many incidents which, although mellowed and embellished by the passing years, combined facts with their love and respect. Many a student, not well prepared to answer questions, furtively sought to hide behind the convenient columns in the amphitheaters. It was Dr. Schaeffer's practice to turn from one student to another with lightning speed (prohibiting escape even by casting one's eyes aside to avert his piercing gaze) and, touching them with the end of his ever present pointer, to demand a quick answer. So traumatic, so some say (tsk!), was this procedure that the point of the pointer at times became red with blood from startled students 'poked' with the pointer, and some students couldn't remember even their names. It is said that occasionally a student would lose temporary control of his more ventrally located perineal sphincter. Consequently, the vulnerability of first row seats caused them to be shunned by all but the better prepared. The tradition of 'passing-him-up' was commonly practiced on those whose eager-beaver tendencies brought them too frequently to the front row (Fig. 17).

"Dr. Schaeffer's blackboard pointer became a cherished symbol to Alumni (Fig. 18). The Class of 1927, on the occasion of their 25th Anniversary, presented to Dr. Schaeffer his old pointer encased in a custom made transparent case inscribed as follows:

This pointer was used by J. Parsons Schaeffer, M.D., Ph.D., Sc.D., LL.D., LITT.D., The Distinguished And Beloved Professor of Anatomy and the Director Of the Daniel Baugh

Institute of Anatomy Jefferson Medical College, 1914-1948 Presented To The College By The Class of 1927 on June 11, 1952

"Dr. Schaeffer was a mighty proud and happy man on that day.

"The Class of 1943 proudly admit to learning in their Freshmen year a lesson to be cherished all their lives. An over-exuberant student who had just finished the dissection of the male perineum and after freeing the copulatory organ from its moorings, spontaneously (or on challenge) fixed his eye on an open window at the Eleventh Street
end of the Clinton Street dissecting room wall, and threw a perfect strike, the missile landing outside at the feet of an elderly lady, a resident of Clinton Street who, of course, made the matter known to Dr. Schaeffer.

"The Class was immediately assembled in the Amphitheater. An air of stunned and unbelievable silence prevailed as Dr. Schaeffer appeared, slowly and deliberately surveying the face of every person, in every seat. It required only a few of his carefully chosen words, ringing with professional dignity and deep personal conviction, to remind the students of their new responsibilities as members of the great and proud profession of Medicine, and of what it requires of all of its members, students, academicians and practitioners alike. This was a sobering, maturing, and emotion packed experience for all.

"Another year, a student took aim with a gastrocnemius muscle which also sailed cleanly through a window and landed on the Clinton Street. At the next lecture he appeared before the Class and in a magnificent and manly manner apologized to his classmates. Personal character development and maturity received a clearly recognizable acceleration on such days.

"Dr. Schaeffer was justly proud of his students, and they of him. He lived to be ninety-two; on February 5, 1970, he passed on to rejoin those of his beloved students and colleagues who had preceded him.

"Dr. Nicholas Aloysius Michels (Fig. 19) came to Jefferson in 1929, having studied hematology at Louvain and, also, in Italy with Ferrata. 'Nick' had been well along the road to becoming a priest, deciding only at the last step to leave the priesthood. About the time he reached his sixtieth birthday Jefferson adopted a pension plan. Previously, only full-time department chairman qualified, and at $6,000 per year. However, those Faculty members near sixty needed to stay a certain number of years after reaching sixty-five in order to qualify for full pension benefits. So Dr. Michels was reappointed annually until his seventy-first year, but he couldn't lay aside his research on the varied blood supply of the abdominal organs, continuing to come regularly to the Institute for study and writing until illness prohibited. Pancreatic malignancy with widespread metastases and liver damage took his life in October, 1969. (Bishop Fulton J. Sheen, an acquaintance and classmate of their student days, hearing of Dr. Michels' illness came to Philadel-
phia and to Jefferson Hospital to visit and to attempt to induce him to return to Catholicism but to no avail. Dr. Michels was adamant to the end.) Nick-named affectionately by his students ‘The Bull,’ Dr. Michels’ gruff, blustering manner influenced many thousands of Jefferson men (Fig. 20). No Jefferson student can forget his lectures, delivered with the priest/minister’s touch (perhaps he never did leave the Church, after all), and his seeming boldness as he helped a student search for the thoracic duct, ripping away all the organs that got in the way (how many carefully and proudly dissected thoracic and abdominal fields bit the dust in Dr. Michels’ enthusiasm to find a part). Student interpretation of Dr. Michels at the dissecting table was recorded in cartoons for posterity in the 1947 Clinic. His lecture on the rotation of the gut and the peritoneal reflections, using various hoses, funnels and balloons was a masterpiece of showmanship and pedagogy, annually filling the amphitheater past capacity. Scholarly, kind and gentle beneath his gruff exterior, Dr. Michels left an indelible impression on his students and made a major impact on American Anatomy, both basic and in its relation to surgery. His scholarly works on the mast cell and on vasculature became known through the medical and scientific worlds.

“I recall meeting Dr. Michels, in 1936, when I first came to Jefferson, and his quizzical ‘Why don’t you go into medicine, and leave Anatomy?’ I almost thought he was right when I abruptly discovered, to my dismay that it would be necessary for me to build, almost from scratch, an effective teaching collection of modern lantern slides, charts, models and teaching aids. The loan study sets of histology slides needed extensive if not complete revision, some actually being mislabeled by the aged lady who tried without much success to be a ‘technician.’ (Actually, Isaac, the embalmer, had made some of these slides, also.) This rebuilding task demanded, temporarily, foregoing my research program established while at Cornell, and spending my summer vacations for several years in making histology and embryology slides. Dr. Radasch had suffered a severe coronary occlusion two years before and was able to do but very little teaching, and none in the laboratory. Consequently, it was necessary for several years for me to repeat each lecture for the two (A and B) Sections and, alone, to handle the two rotating laboratory sessions, each numbering from 68 to 75 students, throughout the entire nine-month school year. (What would faculty and students, these days, say to that?) Nevertheless, the students responded with serious dedication and cooperation to the necessary method of ‘Collaborative’ laboratory exercises and it can be most seriously and honestly doubted whether present day students learn more histology and embryology and develop a higher degree related of skills without teacher student ratio of at least 1 to 25. Their response and
Fig. 20. Dr. Michels ("The Bull") teaching.

Fig. 21. Dr. Andrew J. Ramsay teaching embryology in the lower amphitheater.
achievements made me mightily proud to be their teacher, and that they were my students.

"In those early days, in order to save time while making blackboard drawings, I would draw with both hands at the same time (Fig. 21). This did save time but I stopped it when I realized the students seemed to be more interested in how I did it than what I meant to portray. The nickname 'The Velvet Harpoon' came when I tried to dull the recurring blows to student equanimity by announcing, with an intentional 'soft-sell' approach, the dates of forthcoming examinations; 'The Ram' came more naturally.

"Upon my arrival in 1936 the Anatomy Faculty roll listed J. Parsons Schaeffer, H.E. Radasch, N. A. Michels, Charles W. Bonney, Benjamin Lipshutz, John DeCarlo, George W. Miller, Thomas E. Shea, William B. Swartley, Maxwell Chermer, A.J. Ramsay, Leo B. Reed, P.A. McCarthy, George I. Israel, William T. Lemmon, Eli R. Saleeby, Herbert A. Widning, Frank J. Ciliberti, John T. Farrell, J. Leslie Davis, William J. Tourish, Leon L. Berns, William J. Walsh, and Kelvin A. Kasper. Of these only two remain today in the Department of Anatomy, Leon L. Berns (who was appointed in 1935) and myself. Only four of us were 'full time', the others needed to turn to practice and other pursuits to earn a living (for example, Dr. Shea—'Dinny'—was a Pennsylvania State Senator). Dr. David Soliday had moved to Temple at the end of the 1935/36 Session.

"Dr. Lipshutz ('Barney') taught neuroanatomy to Second Year students (Fig. 22). His gentlemanly and friendly manner, his modesty, his ability to clarify complex neuroanatomical 'circuirty' (enriched with his clinical experiences) resulted in his scholarly and effective presentation of one of the most difficult of all medical courses, whether to take or to teach. The Library of the Institute contains many of his published investigations on anatomical subjects.

"Dr. William T. Lemmon (Fig. 23) came to the Institute to teach Third Year Anatomy for many years, bringing his inimitable methods of instructing, demonstrating, and stimulating every student and, also, leading many superior students into the surgical specialties. He became known for his 'Lemmonisms,' such as 'If a surgeon doesn't get into trouble occasionally, he isn't doing anything' and 'Son, a sliding hernia is one that slides.' 'Bill' Lemmon's thorough and detailed knowledge of the anatomy of the human body, and of its limitless variations, permitted characteristic enviable dispatch in his operative procedures, of great scope, performed with the confidence of the anatomist coupled with the judgement and skill of the master surgeon. To be sure, our Third Year Anatomy courses, from the last Century to this day,
have brought to Jefferson students guidance and instruction unequalled anywhere, and by a succession of surgeon-anatomists unparalleled in knowledge and experience.

"Examinations in Anatomy were 'essay' type, one being given at the end of each block of work in gross anatomy, and at intervals in histology/embryology and in neuro-anatomy. Almost all of the grading fell to the full time men. When Dr. George A. Bennett joined the Institute in 1939 he was ushered into his room on the second floor of the Institute Annex where the desk top was all but covered with stacks and stacks of ungraded examination books. What an introduction to one's new position.

"Dr. Bennett (Fig. 24) had just returned from Germany and postgraduate work in surgery, after having received the M.D. degree from Munich (where he was classmate of Dr. Franz X. Hausberger). Graduated from Wabash College at age 18 he had gone to the University of Wisconsin on a Ben Hur Scholarship, then to Europe to study history and philosophy. His studies in philosophy kindled his interest in psychology but he soon found psychology not to be firmly based on detailed knowledge of the structure and function of the nervous system; consequently, neuro-anatomy then led him into the study of medicine. Following his graduation from Munich as a physician (the equivalent of our M.D.) he had returned to the United States, to Harvard and Baylor, then at age 28 to Georgetown as Professor of Histology and Embryology and, two years later, to the Chairmanship of the Anatomy Department. Faculty administration problems at Georgetown soon discouraged him, so he returned to Munich to complete the German M.D. degree.

"Dr. Bennett threw immense energy into his teaching duties at Jefferson and soon won student admiration and respect (Fig. 25). After having been on the staff but a month or so he was asked to 'take the roll' at a preliminary examination in gross anatomy held in the Upper Amphitheater. Instead of reading the names aloud he identified each student by his face! His almost unbelievable memory for students rivaled that of Dr. Randle Rosenberger.
"Jefferson Alumni who took Anatomy during the ‘Forties’ recall Dr. Bennett’s inimitable approaches usually highly successful by urging, cajoling and, at times, shaming students into learning more, keeping up to date, being punctual, and looking professional. Among his favorite rejoinders, proclaimed stentorially for the entire class to hear, when students couldn’t answer questions were: ‘You don’t know, Doctah? — Why don’t you know?’ ‘Doctah, that’s the worst guess you could possibly make.’ ‘That’s the biggest wad of bunk I evah heard, Doctah.’ — ‘You went to bed at 2 A.M.? You should have studied until 4!’ When he had noticed some students had loosened their ties — ‘Button your collars and pull up those ties! If you want to be doctahs today, I’m going to call you mistah, and I’m going to ask you the same question I asked you yesterday!’

“Dr. Bennett was ambitious, aggressive, and capable. When Professor J. Parsons Schaeffer retired in 1948 Dr. Bennett was appointed to succeed him. Dr. William Harvey Perkins, then Dean of Jefferson Medical College and, ailing in health, soon asked Dr. Bennett to help out in the Dean’s Office, where he was apparently so helpful that he was appointed to the Deanship in 1950 upon the withdrawal of Dr. Perkins for health reasons.

“Subsequent events resulted in Dr. Bennett becoming a controversial figure. The Fifties were difficult times for him and for Jefferson. Faculty factions arose and squabbled; important decisions were arrived at by those not representative of the most responsible sector; Communism and McCarthyism reared their ugly heads; faculty infighting increased; a few faculty left and made mighty but abortive attempts to hurt Jefferson instead of trying to build; and Jefferson was put on their black-list by the American Association of University Professors for not catering to known Communists on our faculty. (Under Pennsylvania Law no public money could be used to support the salary of anyone not loyal to the United States, and all medical schools in the Commonwealth received a significant State appropriation without which no school could exist.)

“At that time College rules required that the Dean be also a department chairman, necessitating that Dr. Bennett retain the title of the Chair in Anatomy although it was humanly impossible for him after 1950 to give more time to the department than affixing his signature to required papers and sitting in Executive Faculty Meetings. His combined stresses increased in the middle Fifties, finally resulting in his fatal heart attack suffered while on College business, in Chicago early in 1958, at the meetings of the Association of American Medical Colleges and the Council on Medical Education of the American Medical Association. A month later the combined Board of Trustees-Faculty Search Committee recommended my appointment as Professor of Anatomy, Head of the Department and Director of The Daniel Baugh Institute of Anatomy.

“Changing requirements in subject matter to be taught, and recommended (by the A.A.M.C. and the A.M.A.) faculty structure, have resulted in a gradual decrease in the number of volunteer and part-time teachers on the Anatomy roster. But it would be humanly impossible to estimate the total value of the contributions made by these dedicated physicians to Jefferson and to Jefferson students and who, through the years received, in turn, little if anything (usually only most modest ‘honoria’).

“As occurred in World War II medical officers were sent to certain selected medical schools to receive specialized and advanced instruction relating to their specialties. Surgeons were assigned to Jefferson, receiving instruction in surgical anatomy, mostly from Dr. Bennett but assisted by one or two of us. Impressed not only with our advanced course but with the basic medical student courses these men freely condemned the anatomy instruction gained in their various Alma Maters, including the basic anatomy courses for all students and those for the specialties, alike.

“With the increase in full-time faculty and the need to provide offices and research quarters for them, as well as the gradual increase in size of incoming classes, the Institute building was becoming inadequate. Foreseeing severe space problems...
we began planning for new quarters - a new anatomy building, in 1940. Dr. Henry K. Mohler had been appointed Dean, succeeding Dr. Ross V. Patterson, and upon visiting the Institute agreed that something must be done. An influential alumnus, Dr. Mohler gained the interest of the Alumni body (and the Board of Trustees-?). An architect was requested to consider present and future needs of the Anatomy Department and to submit plans. At several conferences with the architect we viewed two successive sets of plans depicting a building with four full floors and two partial floors, with laboratories for teaching and for research, two auditoria, animal quarters, ample space for a future institutional audio-visual aids and learning resources production facility, and all other auxiliary services peculiar to a modern anatomy department. The proposed site was at the southeast corner of Eleventh and Walnut Streets, extending south along Eleventh on the exact spot subsequently occupied by the James R. Martin Nurses' Residence building. The project was interrupted by the sudden death of Dean Mohler and was shortly abandoned and lost in Jefferson's preoccupation with World War II, the acceleration of Classes, and the critical shortage of hospital facilities, the latter immediately gaining prime priority.

"The final twenty years at the aging Institute building were most trying, for faculty and students alike. The laboratories were too small for the enlarged classes, faculty managed with unbelievably inadequate space (the butler's pantry and the kitchen of the Institute Annex became improvised into shamefully cramped animal quarters), home-bases for graduate students had to be improvised, and a lounge for women students was required."

[Editor's note: At this juncture it is appropriate to include additional biographical information on later Anatomy Department faculty members submitted by Ronald P. Jensh, Professor of Anatomy.]

"James O. Brown (Ph.D., Michigan), taught gross anatomy and neuroanatomy for many years (Fig. 26). His research embraced topics in both of these disciplines, stressing basic, experimental, and applied aspects. Known affectionately by students as 'green gloves,' he was admired by his colleagues and students alike for his well organized and clearly illustrated lectures. Students recall the required brain-stem charts and the rather frantic last minute (but highly instructive) stringing-in of the ascending and descending tracts, his insistence on punctuality, and the erasure of blackboard drawings immediately at the end of his neuro-anatomy lectures.

"Kenneth P. Chepenik (Ph.D., University of Florida), Professor of Anatomy, teaches embryology and histology. His research interest concerns molecular mechanisms involved in the regulation and production of bioactive lipids. The goal of his studies is to elucidate the mechanisms related to lipid production under normal and pathologic conditions.

"Jing-May Chen (Ph.D., University of Virginia..."
School of Medicine), Assistant Professor of Anatomy, teaches gross anatomy. Her research concerns the elucidation of mechanisms involved in cellular activity and metabolism, including the study of regulation of collagen metabolism and of selected proteases in embryonic cells and tissues.

“Savino A. D’Angelo (Ph.D., New York University), a recognized leader in neuro-endocrine research, was known by all Jefferson students for his dynamic lectures on the endocrine and reproductive organs, and his weaving structure and function together in his inimitable fashion (Fig. 27). He held a coveted Public Health Service Research Career Award for many years, an honor won only by those researchers of great note. Jefferson students have shown their admiration of Dr. D’Angelo by voting to him the coveted Lindback Award for Distinguished Teaching. Alumni recall his forceful delivery and his expressive hands. The Class of 1970 recall vividly their sitting in the lower Amphitheater and watching, unable to react, as the heavy housing of the projection screen came crashing down on Dr. D’Angelo’s head, and his being carried out, unconscious, to the Hospital.

“Leonard M. Eisenman (Ph.D., Duke University), is a Professor of Anatomy and teaches neuroanatomy. His particular research interests concern the development of the central nervous system, with specific emphasis on the organization and development of an afferent system. He makes use of mutant mouse strains in an effort to better understand the development migration, and cellular interactions of Purkinje cells.

“Dr. August Epple (Ph.D., Frankfurt), Professor of Anatomy, joined our faculty just before we moved from D.B.I. (Fig. 28). A specialist on the comparative structure and function of pancreatic island cells, he is recognized as in the forefront in this area of research. Teaching histology and embryology, he was the primary author of a plan aimed to reorganize and revitalize the M.S. and Ph.D. program of graduate studies in Anatomy during the 1960s and early 70s.

“Dr. Barbara Frederick Forbes (Ph.D., Jefferson), was the third woman to receive appointment to the Anatomy Faculty. Dr. Forbes taught gross and

Fig. 27. Savino A. D’Angelo, M.D., Professor of Anatomy (Histology and embryology), a leader in neuro-endocrine research.

neuro-anatomy, and investigated the auditory system and its cortical areas (Fig. 29). (It is interesting to note that Dr. Forbes, nee Frederick, was married to William I. Forbes III, the great-grandson of Dr. William Smith Forbes, our Professor of General Anatomy from 1886 to 1905 and whose portrait was painted by the famous artist, Thomas Eakins. William I. Forbes III received the Ph.D. degree from Jefferson in 1972 and the M.D., also from Jefferson, in 1973.)

“Robert M. Greene (Ph.D., University of Virginia, School of Medicine), Professor of Anatomy, teaches gross anatomy. His research centers on the biochemical aspects of palatal development and differentiation. As part of his interests concerning orofacial development, his investigations have concerned signal transduction during craniofacial development as well as growth factors regulating craniofacial cell differentiation.

“Gerald B. Grunwald (Ph.D., University of Wisconsin) is Associate Professor of Anatomy. His teaching area is in neuroanatomy and he has been a recipient of the Lindback Award for Distinguished Teaching. As a developmental neurobi-
Fig. 28. August Epple, Ph.D., (Histology and Embryology), forefront researcher on pancreatic cells.

Fig. 29. Barbara Frederick Forbes, Ph.D., taught gross and neuroanatomy, while researching the auditory system.

ologist, his research activities include studying the role of cell surface adhesion molecules in development with special reference to adhesion proteins during retinal development.

"Franz X. Hausberger (M.D., Munich), Professor Emeritus of Anatomy and Head of the Division of Gross Anatomy, combined excellence in teaching and research in extraordinary fashion (Fig. 30). Alumni fortunate to have had him as a teacher recognized his contribution to their education by not only choosing him recipient of the Lindback Award for Distinguished Teaching but honored him, also, as the subject of the traditional Senior Class 1967 Portrait Project. His research on adipose tissue, since his student days in Germany, occasioned in 1965 the dedication to him of the Yearbook of Physiology, naming him 'Father of Adipose Tissue Research.' His basic researches on carbohydrate and fat metabolism, and related fields, are classic.

"Ronald P. Jensh (Ph. D., Jefferson) is a Profes-
sor of Anatomy and Vice-Chairman of the Department and Associate Professor of Pediatrics (Fig. 31). He is course coordinator of histology and has received the Lindback Award for Distinguished Teaching and the Burlington Northern Award for outstanding education and research, as well as numerous other educational awards. His research interest is in teratology with emphasis on postnatal behavior modifications due to prenatal exposure to a variety of substances, but primarily to various types of ionizing and non-ionizing radiation. He is also actively doing research concerning the use of computer assisted instruction in biomedical education.

"Devendra M. Kochhar (Ph.D., University of Florida) Professor of Anatomy, teaches gross anatomy. He is internationally known for his seminal work concerning the role of Vitamin A, and its natural and synthetic analogs (retinoids) in cellular growth and differentiation. He is particularly interested in the role these substances may play in..."
pathophysiologic processes. His studies include the use of tissue culture techniques to elucidate cellular interactions and active metabolites which interact with embryonic cells.

'Thomas B. Knudsen (Ph.D., Jefferson), Assistant Professor of Anatomy, teaches gross anatomy and conducts research technology. His major interest is in the cellular and molecular basis of abnormal embryonic development with special emphasis on nucleoside metabolism and programmed cell death.

'Edwin M. Masters (Ph.D., Minnesota), Assistant Professor of Anatomy, taught in histology and embryology, gross anatomy, and neuro-anatomy while his investigations included brown fat tissue, using tissue culture and other cytological techniques (Fig. 32).

'Kirk M. McHugh (Ph.D., University of Cincinnati), is an Assistant Professor of Anatomy and teaches gross anatomy. Smooth muscle cell differentiation during maturation is his research interest. He is using techniques involving actin gene expression to examine the molecular mechanism by which smooth muscle cells develop to maturity. His laboratory was the first to isolate and characterize DNAs for the alpha-smooth muscle and gamma-smooth muscle isoactins in mammals.

'Honorary Professor of Anatomy Robert J. Merklin (Ph.D., Rutgers) taught gross anatomy and investigated topics ranging from the experimental analysis of endocrine control of reproductive functions, including delayed implantation, to gross anatomic problems of the neonate and the adult (Fig. 33).

'Norman Moskowitz (Ph.D., Pennsylvania), Honorary Professor of Anatomy, early established himself as a resourceful and unusually reliable teacher and researcher in neuroanatomy. The latter centers about the auditory system of primates, starting with the monkey and eventually to man (Fig. 34). Also, an ultrastructural study in collaboration with Dr. Sedar (infra) identified catecholamines in synaptic junctions. He demanded excellence of himself, he sought it in his students, and expected it in his colleagues.

'Associate Professor of Anatomy, Wesley W.
Parke (Ph.D., Connecticut) taught in gross anatomy and medical genetics (Fig. 35). His broad background was reflected in the breadth of his research interests, from comparative anatomy, evolution, and genetics to gross anatomic topics. He is employing his photographic skill in the compilation of an anatomic atlas of fetal and neonatal human specimens.

"Dr. Ramsay received his Ph.D. from Cornell, and taught histology, embryology (Fig. 36 and 37), and neuro-anatomy, and, when the duties of Chairman and Director permitted, conducted research on embryologic topics, including transplantation of embryonic antigen (teeth, pancreatic islets, etc.) and in experimental histology. Earlier work concerned development of photomicrographic methods in medical education. Later, the first successful television microscopy apparatus was developed to enhance teaching procedures.

"The portrait of Dr. Ramsay was presented to the College by the Class of 1966. At his retirement in 1972 he was awarded Emeritus Status and the Honorary Degree of Doctor of Science. In 1981 he was the first recipient of the title of Daniel Baugh Professor Emeritus of Anatomy. Even after retirement he continued active in the Department by teaching basic and advanced photomicroscopy to both medical and graduate students. The closed circuit T.V. apparatus he designed and largely built himself was used as a valuable teaching aid by medical students for over a decade after his retirement. He died on December 16, 1991, at the age of 84 after a long illness.

"Michele M. Pisano (Ph.D., Jefferson) is an As-
sistant Professor of Anatomy and teaches gross anatomy. Her research interest concerns developmentally regulated gene expression during normal and abnormal craniofacial morphogenesis. She is particularly interested in developmental processes occurring in the orofacial and eye regions and, specifically, mechanisms related to dysmorphogenesis occurring in fetal alcohol syndrome.

"Charles G. Rosa (Ph.D., Harvard), Professor of Anatomy, (Fig. 38) was a cyto- and histochemist, widely known for his researches on the female genital tract, the hypophysis, and on mitochondria. One of his studies, done in collaboration with Dr. Sedar (below) was chosen by the National Institutes of Health for use in their presentation to the U.S. Congress in support of their annual request for funds.

"Richard R. Schmidt (Ph.D. The Medical College of Wisconsin), teaches and is course coordinator of gross anatomy and teaches in numerous other courses. Dr. Schmidt is a recipient of the Lindback Award for Distinguished Teaching. He has authored and co-authored several books con-
cerning human anatomy. His research interests are in gross anatomy education, descriptive gross anatomy, and arachidonic acid metabolism. He is particularly interested in the biochemical characterization of developing pre- and postnatal murine thymic cells, utilizing organ culture techniques.

“Albert W. Sedar, Professor of Anatomy (Ph.D., Iowa) teaches in our histology and embryology courses, coming to us from the Rockefeller Institute to take charge of our ultrastructural research facilities (Fig. 39). He is recognized especially for his advances in the knowledge of cilia and ciliary action, mitochondria, gastric glands and on the effects of laser injury to the retina.

“John Raymond Shea, Jr. (Ph.D., McGill), Associate Professor of Anatomy, brought the Canadian tradition of thoroughness to his teaching in gross anatomy (Fig. 40). Alumni recall his extra-ordinary effectiveness in the dissecting room not only in scheduled meetings but evenings, on weekends and holidays, whenever students need his special way of clarification and his dedication to student needs. In return, Dr. Shea has been a recipient, by student selection, of the Lindback Award for Distinguished Teaching. His research interests extend from cytological (nuclear) topics to gross anatomical problems.

“Diane E. Smith (Ph.D., Pennsylvania) brought to the Anatomy Department expertise in neuroanatomical research, especially on ascending sensory systems utilizing not only traditional
but more modern electron microscopic analytic methods. She was an able and effective teacher, participating in both gross anatomy and neuroanatomy courses.

"Nancy L. Trotter (Ph.D, Brown) left Columbia to join our faculty in 1968, teaching Histology and Embryology. Her ultrastructural studies on the liver are widely known. Within months after joining us, the diagnosis of multiple sclerosis was made, necessitating her present status of leave of absence for reasons of health.

"Anatomy faculty who gave or continue to give part-time include Dr. Leon L. Berns (gross anatomy), Dr. Cameron Beohme (gross and neuroanatomy), Dr. Robert L. Brent (graduate studies), Dr. Christopher Leung, (paramedical anatomy), and Dr. Bernard J. Miller. Dr. Miller taught our advanced courses in Applied and Surgical Anatomy in addition to conducting research projects for many years both at the Institute and at Germantown Hospital where he held the position of Chief of "B" Surgical Services and Director of The Tumor Clinic. His research activities at the Institute included cancer chemotherapy, tissue culture, tobacco and lung cancer, segmental isolation and perfusion procedures, and the use of infrared optical techniques to visualize intracardiac structures without the usual open-heart approach (Fig. 41).

"Leon L. Berns (Class of 1930) was appointed by Dr. Schaeffer in 1935 and contributed over 50 years of instruction in basic anatomy and its relation to clinical practice. He also furnished critically needed financial support to be used for the Department at the discretion of the Chairman (Fig. 42).

"Alumni cannot forget two anatomists who, although not now members of the Anatomy Faculty at present, left indelible impressions, J. Lawrence Angel (Ph.D Harvard), widely known as a superb physical anthropologist-gross anatomist; and R. Cranford Hutchinson (Ph.D., Yale) who formerly was Resident Biologist at the Wistar Institute Farm. Dr. Angel, who left for a position at the Smithsonian Institution in Washington, brilliant and scholarly productive, was considered by students to be in orbit at least two cuts above the ordinary earth-
lings (Fig. 43). Dr. Hutchinson, kindly and deeply dedicated, was known for his mnemonics devised to aid student memories of anatomical structures and relations (Fig. 44). His early research was on experimental embryology, followed by studies on control of cartilage growth and gross anatomic problems. Dr. Hutchinson retired and, with his wife, the well known Dr. Dorothy Hutchinson (also Ph. D. Yale), lived for many years in the South, at Sewanee, Tennessee.”

[Ramsay account continues]

“Alumni have expressed, without exception known to me, their relief and their satisfaction, upon learning that the Administration decided to continue the name ‘Daniel Baugh Institute of Anatomy’ when the department moved to Jefferson Alumni Hall, and, also, that the title of the Chairman of the Anatomy Department will continue to include ‘...and Director of the Daniel Baugh Institute of Anatomy.’ It is fitting that this should be, for to do otherwise would be to deny the spirit of Mr. Daniel Baugh, Jefferson’s former trustee whose generosity and devotion to Jefferson has not been exceeded in all our history, and whose extraordinary role during a critical period in the evolution of our fine old Institution aided in the shaping of her destiny and her unusual vigor of today.

“Shortly after the Institute building was vacated it was sold to the Philadelphia Redevelopment Authority whose first intention was to renovate much of the First Floor for use as their offices. Upon discovering the extent of alterations necessary, the sad state of the heating plant, plumbing and, I strongly suspect, the characteristic odor, required its complete renovation. Some time after 1972 it was converted into private apartments and being named ‘The Clinton’. It then became ‘a certified historic structure as designated by the U.S. Department of the Interior.’ The spirit of Mr. Baugh, Dr. Schaeffer, Dr. Bennett, and all who have come after continues to live on in Anatomy’s new quarters on the Fifth Floor of Jefferson Alumni Hall. Alumni can be assured that the new Chairman and Director, Dr. E. Marshall Johnson (Fig. 45) (who left the Chair of Anatomy at the University of California College of Medicine at Irvine to join us) is acquainted with our distinguished heritage and, also, that he has plans to realize, even more fully, Mr. Baugh’s dream of establishing and continuing the traditional leadership of Jefferson Anatomy in the medical world.”

**The New Daniel Baugh Institute**

“Anatomy’s facilities in Jefferson Alumni Hall were planned thoughtfully and are characterized by unusual functional flexibility (Fig. 46 and 47). The philosophy of pedagogy in medical education...
goes in cycles, each with specific architectural requirements. Those of us with memories spanning the last forty years have experienced two complete cycles and, in some aspects of medical education and their architectural requirements, three cycles. Realizing this, and with our charge to plan departmental facilities which ‘could be converted to multiple disciplinary use in the future if required’ the Anatomy area of Jefferson Alumni Hall was devised with some interesting and innovative approaches.

“Instead of the traditional dissecting room, with massive stationary tables, small walled-off cubicles, and the like, characteristic of the current concept, ours exhibits easily removable tables, folding partitions for immediate conversion to cubicles (six) when desired, closed circuit television with pickup from any table in the entire laboratory. When the dissection area is not being used for gross anatomy, as many as six different classes can be
accommodated at once by moving the tables out and by use of the folding (hinged) partitions which are of surprisingly low sound transmission construction. The histology-neuroanatomy-embryology laboratory also is divisible into smaller areas by folding partitions, each cubicle being either independent of the others or combined into one large or any combination of intermediate sized rooms. The teaching laboratories also contain state-of-the-art audiovisual facilities which will augment more traditional methodologies for the next several decades. The preparation rooms, storage areas, conference, and demonstration areas (except the embalming and crematory area) are fitted with the necessary cabinet work, plumbing facilities and, in some cases, with chemical fume hoods for conversion to accommodate expanding faculty requirements.

"Anatomy, as the other departments, has animal quarters on its floor, including operating sterilization, recovery, food and bedding storage, and small cage washing rooms. A cool room for fish, amphibia, and reptiles completes the suite.

"Cadavers, following embalming, are stored until used on stainless steel, pull-out trays in the refrigerated vault. A bank of deep freeze compartments provided temporary storage of another required type. Since the air conditioning for the cadaver areas, the animal quarters, and the dissecting rooms is separate from the main system, the air is never reconditioned or reused and odors are not carried elsewhere.

"Each faculty member's office and research laboratory area is planned to accommodate a faculty member, one or more graduate students and one or more technicians, and the specific equipment and apparatus required in research. The electron microscope suite contains electron microscopes and the essential facilities for preparation, microtomy, vacuum evaporating and molecular coating, and for processing the electron exposed emulsions for recording and conversion from electron energy images to visible photographic prints.

"Since Anatomy is generally considered to be
the most 'visual' of the medical sciences, our facilities reflect the requirements of providing charts as well as photographic projection (still and motion), and television images and illustrations. At Jefferson, as at many other medical schools, the audiovisual requirements of the Anatomy Department, its facilities, equipment, and its expertise, have provided the base for the further development of a centralized service. Ms. Theresa Powers served for many years as the audiovisual coordinator and became the first Coordinator of the Jefferson Medical College Office of Audio-Visual Services, which is based, appropriately, where the required expertise in these functions originated — on the same floor as the Department of Anatomy (Fig. 48). Earl Spangenberg, photographic assistant to Ms. Powers, was also transferred to the new facility."

The main thrust of this article has been to record the sensitive reminiscences of Dr. Ramsay of the
57 years of the Old Daniel Baugh Institute, 32 years of which he personally experienced. The transition to the New Daniel Baugh Institute has been detailed with no intent to keep its activity up to date, but certainly to indicate the shift from volunteer practicing physicians to fulltime faculty, all with specific research interests.

As of July 1, 1995, the Departments of Anatomy and Pathology were reorganized into an integrated Department of Pathology, Anatomy and Cell Biology. Despite the inevitable changes in buildings and administration, the name of Daniel Baugh remains in perpetuity within the Institute that bears his name.

**Dean's Barber Shop: McClellan's Last Residence**

The present building at 912 Walnut Street, because of its many renovations during more than a century and a half, gives no hint of two former occupants that are a part of Jefferson history.

Who would remember today that this was the location of the last residence of the Founder, George McClellan, who moved there in 1832 and died there abruptly in 1847? This fact was recently brought to light by the research of Mr. Dan Flanagan, the archivist technician at Jefferson.

The second occupant of historic significance was Mr. J. Monroe Dean who ran a barber shop in the basement of this building from 1910 into the early 1950s (Fig. 1). Over 40 years the price of a haircut rose from 20 cents to just over a dollar. He cut the hair of most of the Jefferson professors and was a confidant of many of the students.

On one occasion, Mr. Dean had Dr. J. Chalmers DaCosta (JMC, 1885, and first Samuel D. Gross Professor of Surgery) for a haircut. The latter brought along a patient who needed a shave. The charge was 20 cents but DaCosta handed Mr. Dean a dollar with the comment: "I wouldn't shave a face like that for less."

Mr. Dean considered it "an honor and a privilege" to serve Jeffersonians through whom he met many well known professionals from near and far. Among these was the famous film star Frederick March.

The entire block of Walnut Street between Ninth and Tenth (south side) is currently occupied by Wills Eye Hospital and commercial buildings, leaving no trace of this now obsolete historic residence.

**Fig. 1. Dean's Barber Shop.**
Last residence (912 Walnut St.) from 1832 to 1847 of George McClellan, demolished in 1972, and now the site of Wills Eye Hospital.