



Annual Oration For 1979

The Founding Fathers and Centennial History of the Philadelphia Academy of Surgery

FREDERICK B. WAGNER, JR., M.D.

From the Department of Surgery, Thomas Jefferson Medical College, Philadelphia, Pennsylvania

Samuel D. Gross, the acknowledged "Emperor of American Surgery of the 19th Century," founded the Philadelphia Academy of Surgery, the oldest surgical society in the United States, in 1879. He wrote the constitution and by-laws, became its first president, gave the first Annual Oration, bequeathed his library of 4,000 books, and endowed the "Gross Prize" which has been awarded 17 times between 1895 and 1977. Biographic highlights of Gross and the nine other Founding Fathers are sketched. The College of Physicians of Philadelphia, also the oldest institution of its kind, has been the only home of the Academy in a symbiotic relationship. Honorary Fellowships have been bestowed at various times since 1881 on 73 outstanding surgeons from the U.S. and abroad, the last nine at a gala Centennial Dinner Dance in November, 1979. Memorabilia relating to the Charter Members are housed in the Mutter Museum of The College of Physicians and were put on special exhibit for the Centennial Oration in December, 1979. Many of the pioneer and enduring scientific contributions of the members are recorded in the handwritten minutes of the first 25 years, the 32 volumes of *Transactions* and *Annals of Surgery* which has served as its official publication.

ON APRIL 10, 1879, 11 days before the founding of the Philadelphia Academy of Surgery, a dinner was held for Dr. Samuel D. Gross at the St. George Hotel, later to become the Bellevue Stratford. Gross was 74 years old and the occasion was the 51st anniversary of his entrance into medical practice. D. Hays Agnew, the distinguished Professor of Surgery at the

University of Pennsylvania who presided, pinned a jeweled badge, now in the Mutter Museum, on the lapel of Gross as a testimonial of esteem of the 105 subscribers. One sentence from Gross' response reflects the ideals he had cherished for so many years: "Oh, for a glance at the profession half a century hence when man, enlightened and refined by education shall reflect more perfectly the image of his Maker!" What if he had been given a whole century, as we most fortunately have, and what would have been his astonishment?

Gross states in his "Autobiography" that he had long seen the necessity for both a local and a national surgical association. When he formally broached the matter to some of his surgical friends, they at once offered their cooperation. This culminated in the Philadelphia Academy of Surgery and the American Surgical Association, in both of which he was the founder and first president, and in which the certificates of membership are identical.

Organization of the Academy

The following surgeons met at the home of Professor Samuel D. Gross at 11th and Walnut Streets in Philadelphia on Monday evening, April 21, 1879: Drs. D. Hays Agnew, Richard J. Levis, Addinell Hewson, Thomas G. Morton, William H. Pancoast,

Read before the Philadelphia Academy of Surgery, December 3, 1979.

Reprint requests: Frederick B. Wagner, Jr., M.D., 255 S. 17th Street, Philadelphia, Pennsylvania 19103.

Submitted for publication: January 15, 1980.

John H. Packard, John H. Brinton, Samuel W. Gross, and J. Ewing Mears. Professor Gross reiterated that the purpose of the meeting was the formation of an Association of the Surgeons of Philadelphia to be known as the Academy of Surgery. He had painstakingly prepared a Constitution and By-laws which he submitted for action by those present. The first Article relating to the name of the Society was adopted on the motion of Dr. Packard. Those present thus formed themselves into the Philadelphia Academy of Surgery and constituted our Founding Fathers.

The Founders

A review of the lives of the ten founders should be fascinating to Fellows of this Academy, since we are all in similar pursuits; and if what is portrayed should prove uninteresting, it is only the fault of the writer, for not only did they gain success and honor in surgery, but possessed other qualities that make study of their lives worthwhile. The sketches will be given in the order in which their names are signed on the Charter.

Samuel D. Gross (1805–1884)

The founder of the Philadelphia Academy of Surgery was born near Easton, Pennsylvania, on a farm in the Pennsylvania Dutch country. His education started in a rural log cabin. After a desultory course to high school level and an unsatisfactory preceptorship in Easton with a country practitioner, he studied in Philadelphia under Dr. George McClellan, the Founder of Jefferson Medical College, and graduated from that institution in 1828. Unlike his founding cohorts, he lacked the advantage of a prominent father, a broad college background, and foreign travel after medical graduation. Despite these initial handicaps, he eventually towered as the "Emperor of Surgery of the Nineteenth Century" and was acknowledged in Garrison's History as the "Greatest Surgeon of His Time." He pioneered to combine clinical surgery, teaching, and research in an academic setting, and succeeded eminently. He accepted his first Professorship of Surgery at the University of Louisville in 1840, which he served for 16 years, and then took the Chair at his Jefferson Alma Mater in 1856 for the last 26 years of his long academic life. His literary output was prodigious, including 14 books translated, edited, or written by him on diseases of bones and joints, pathologic anatomy, wounds of the intestines, genitourinary diseases, foreign bodies in the air passages, military surgery (used by both North and South during the Civil War), his herculean two-volume *System of Surgery*, lives of eminent physicians and surgeons, and his ex-

tensive autobiography. In addition to being founder and first president of the Philadelphia Academy of Surgery, he took the same role in the Jefferson Alumni Association and Philadelphia Pathological Society. He was also president of the Kentucky and Pennsylvania State Medical Societies and Philadelphia County Medical Society. On the National level, he was founder and first president of the American Surgical Association, president of the American Medical Association, the American Philosophical Society, the American Academy of Sciences, and the Teacher's Medical Convention in Washington, D.C. in 1870. He was president of the World Medical Congress in 1876, twice a delegate to the British Medical Association, and belonged to numerous prestigious European societies. He was awarded honorary degrees from Jefferson College at Canonsburg, Oxford, Cambridge, Edinburgh, and the University of Pennsylvania. In 1897, the United States Congress supplied the granite base for a bronze statue of Gross that stood in the Smithsonian Park, Washington, D.C., opposite the Army Medical Museum. This statue was removed to its more parochial home on the campus of Thomas Jefferson University in 1970. The name of Gross appears in mosaic on the ceiling of the Library of Congress, an honor usually reserved for a military man. His portrait by Thomas Eakins, known as the "Gross Clinic" is considered by many critics as the finest example of American art. Copies appear frequently in books on art and the frontispiece of medical texts. In the fitting words of Academy Fellow, Dr. J. Chalmers DaCosta, the first Samuel D. Gross Professor at Jefferson Medical College: "I beheld the mighty leader a great many times, heard him lecture frequently, and watched him operate, and in him always saw the embodiment of surgical learning, dignity, and distinction, and felt that 50 years of American surgery were speaking through his lips."

D. Hays Agnew (1818–1892)

Agnew, of Scottish lineage, was reared in Lancaster County, Pennsylvania, and had an inclination toward the surgical profession of his father. At age 21, he graduated from the Medical College of the University of Pennsylvania, Class of 1838. He attained prominence as one of the finest surgeons in Philadelphia, with subsequent achievements as Head of the Philadelphia School of Anatomy, military hospital service during the Civil War, culminating in his becoming an authority on gunshot wounds; co-founder of the Orthopedic Hospital; full Professor of Surgery at the University of Pennsylvania; recipient of an LL.D. degree from Princeton; and author of *Principles and Practice of Surgery*, three volumes which appreciated Listerian

antiseptis. Dr. Agnew's personality and force of character established him as a chief justice in medicine.

Addinell Hewson (1828–1889)

Hewson, a native Philadelphian was reared among the best medical surroundings, graduating from the University of Pennsylvania in Arts and from Jefferson Medical College in 1850. After postgraduate study in Paris and Dublin, he served a residency in the Pennsylvania Hospital. He started a most successful surgical practice, with hospital positions at Episcopal, Pennsylvania, and Wills Eye. He was the private physician to General Meade, and just before the battle of Gettysburg, removed a bullet from his side when army surgeons had failed to get the ball. He edited works on otologic and ophthalmic surgery, published *The Use of Earth in Surgery* for wounds and tumors, invented a fracture bed, and was interested in the influence of weather over the results of surgical operations. As a fourth generation physician, he brought honor to his father who had been president of the College of Physicians, and sired a son who also became prominent in the medical profession.

John H. Brinton (1832–1907)

A native Philadelphian, Brinton received his Bachelor of Arts from the University of Pennsylvania and doctor's degree from Jefferson Medical College in 1852. He then spent a year in the medical schools of Paris and Vienna. On returning, he entered general practice and lectured on operative surgery at Jefferson Medical College under Mutter and Gross. In the Civil War, he attained great prominence as Medical Director of the Army of Cumberland; served on various examining boards in Washington; estimated losses and casualties for the government; was one of the founders of the Army Medical Museum; acted as personal physician to Generals Grant, Rosecrans, Sheridan, and McPherson. He wrote *Medical and Surgical History of the War of the Rebellion* and *Personal Memoirs of the Civil War*. He then resumed his lectureship at Jefferson, practiced as Surgeon to the Philadelphia General and St. Joseph's Hospitals, assumed Chairmanship of the Mutter Museum, and aided Gross in the founding of societies. In 1882, at the retirement of Professor Samuel D. Gross, he shared the divided Chair of Surgery of Jefferson Medical College with his boon companion, Samuel W. Gross. He received an LL.D. degree from the University of Pennsylvania in 1901. Brinton contributed important papers on a variety of surgical topics, was the American editor of *Erichsen's Surgery*, and retained respect as a fluent lecturer and polished gentleman.

J. Ewing Mears (1838–1919)

Mears was born in Indianapolis, Indiana. He was the son of a Jefferson Medical College graduate. He received the degree of A.B. and B.S. from Trinity College, Hartford, Connecticut, and graduated from his father's medical Alma Mater in 1865. He then served a one-year term as resident physician at Philadelphia General Hospital. His clinical practice of surgery was highly successful at Jefferson, St. Mary's, St. Agnes' and his own private hospital on South Broad Street where he did mostly general abdominal and gynecologic work. Mears, along with charter member of the Academy, William W. Keen, pioneered in Listerian methods. As a teacher, he was Professor of Anatomy at the Philadelphia College of Dental Surgery and Demonstrator of Surgery and Lecturer in Gynecology at Jefferson Medical College. He achieved notice for his preparation of medical men for the U.S. Naval Service, for it was said that no pupil of his failed to pass. Along with numerous articles, he published a *Practical Surgery* and *Surgery of the Abdomen*. In later life, he was interested in eugenics and advocated the sterilization of criminals. As a charter member of the American Surgical Association, he served as its president in 1894. He was the youngest (41 years) of the Founding Fathers of the Philadelphia Academy and lived through the first 40 years of its progress, having survived the longest of the original ten (81 years).

Thomas G. Morton (1835–1903)

Morton was a native Philadelphian and son of a physician. His literary and medical education was obtained at the University of Pennsylvania, Class of 1856. He was a resident physician in the St. Joseph's, Wills Eye, and Pennsylvania Hospitals. He was Professor of Orthopedic Surgery to the Philadelphia Polyclinic and College for Graduates in Medicine and founder of the Philadelphia Orthopedic Hospital in 1867. In the Pennsylvania Hospital, over a period of 43 years, he was a pathological curator, Chief of Surgery, President of the medical staff, and author of *The History of the Pennsylvania Hospital*. In 1875, Morton described the painful disorder of the foot since then known as "Morton's Toe" or "Morton's Neuralgia." He devised many mechanical devices for diagnosis and treatment of surgical disorders which he exhibited in his scientific presentations before the Academy of Surgery. In membership of many of the surgical, scientific, and social societies both here and abroad, he spent a "life in intelligent devotion to the interests of humanity."

Samuel W. Gross (1837–1889)

Samuel W. Gross was born in Cincinnati, the eldest son of the Founder of the Philadelphia Academy of Surgery, and inherited in fullest measure the intellectual prowess of his world renowned father. He was educated at Shelby College, Kentucky, the Medical College in Louisville and Jefferson Medical College (1857). He entered private practice, devoting much time to teaching in his father's surgical department, doing research in pathology, and aiding in editing the *North American Medico-Chirurgical Review*. His Civil War service extended over a period of nearly four years as Medical Director in various military departments of the country. He then returned to surgical activity at Jefferson, Howard, and Philadelphia General Hospitals. He lectured on genitourinary diseases, edited the elder Gross' book on *Diseases, Injuries, etc. of the Urinary Bladder*, wrote a *Treatise on Impotence, Sterility, and Disorders of the Male Sexual Organs*, and became one of the founders of the American Genito-Urinary Association. Other literary activities consisted of aiding his father in various editions of the monumental *System of Surgery*, an authoritative treatise on *Tumors of the Mammary Gland*, and editorial articles in *Medical News*. In 1882, at the retirement of his father, he shared the divided Chair of Surgery at Jefferson with Dr. John H. Brinton. Pneumonia claimed his life at the age of 52 while he was at the zenith of his powers. His widow married his close friend, Dr. William Osler, three years later and as Lady Grace Revere Gross Osler endowed a lectureship and titled Professorship in Surgery at Jefferson Medical College in honor of his special interest in tumors.

John H. Packard (1832–1907)

A Philadelphian, Packard came from a distinguished family of Puritan descent, his father being a prominent lawyer. He graduated in the Department of Fine Arts of the University of Pennsylvania and continued his medical studies there under the preceptorship of the eminent Joseph Leidy, graduating in 1853. After two years of postgraduate work in Paris, he returned to a coveted residency in the Pennsylvania Hospital for an additional 18 months. He next secured a teaching position as Demonstrator of Anatomy at the University of Pennsylvania. In addition to a large private practice as surgeon to the Episcopal and Pennsylvania Hospitals, he published a *Handbook of Minor Surgery*, *Handbook of Operative Surgery*, and a *Philadelphia Medical Directory*. He was an original Fellow and Treasurer of the American Surgical Association. Besides his interest in art, music, and travel, he was admired for his humorous reminiscences and amusing

pencil sketches. His recently restored portrait now hangs on permanent display in Thompson Hall of the College of Physicians.

Richard J. Levis (1827–1890)

Richard Levis was a native Philadelphian and son of a physician, was an office student of Professor Thomas D. Mutter and graduated from Jefferson Medical College in 1848. He became prominent as a surgeon, with appointments at Philadelphia, Jefferson, Pennsylvania, Jewish, and Wills Eye Hospitals. Besides lecturing on ophthalmic and otologic surgery at Jefferson Medical College, he was the first president of the Board of Trustees of the Philadelphia Polyclinic and College for Graduates in Medicine, president of the Philadelphia County and Pennsylvania State Medical Societies, and original Member of the American Surgical Association. He modified numerous operative procedures and invented surgical instruments and orthopedic appliances. Always especially considerate of younger physicians, he claimed he could learn more from them than from older men.

William H. Pancoast (1835–1897)

Pancoast, a Philadelphian, was the son of the illustrious surgeon-anatomist, Joseph Pancoast. He graduated from Haverford College and subsequently from Jefferson Medical College in 1856. As was customary, he did postgraduate work in London, Paris, Vienna, and Berlin. He served for many years as Demonstrator of Anatomy in his father's department at Jefferson Medical College and succeeded him in that Chairmanship in 1874. He was Surgeon-in-Chief of a military hospital in Philadelphia throughout the Civil War and helped found the Medico-Chirurgical College of Philadelphia in 1888, in which he served as Chairman of Anatomy. In 1874, along with Dr. Harrison Allen in a commission appointed by the College of Physicians, he performed an autopsy on the original Bunker Siamese twins in regard to the propriety of an operation for their separation. It is historically significant that Academy Fellow, Dr. C. Everett Koop has successfully separated three different sets of Siamese twins, the last in 1977, in which the attachments were much more complex.

Philadelphia Academy and New York Surgical Society

Philadelphia, the seat of the oldest Medical College (University of Pennsylvania, 1765), could now lay claim to the oldest Surgical Society. New York followed as a close second with founding of the New York Surgical Society on October 30, 1879, just six months after

the Philadelphia Academy. Joint meetings with the New York Society, in Philadelphia or New York on alternating years, are held with an excellent scientific program and banquet. A most gratifying relationship between the members of the two organizations has always existed.

Book for Constitution and By-laws

At a second meeting in the home of Professor Gross on April 29, it was authorized to purchase a suitable book in which the Constitution and By-laws, just adopted with slight alterations, should be copied and for the signatures of the Fellows. J. Ewing Mears, the temporary secretary, had the book custom-made. It remains in active use and as of April 2, 1979, there are 413 signatures, starting with Samuel D. Gross. The list is an impressive galaxy of Philadelphia's finest surgeons of the past century. The book is stored for safe keeping in the fire-proof vault of the College of Physicians and the quality of the paper promises to last beyond another century.

Home for Academy in College of Physicians

On the evening of May 5, a third meeting was held at the home of Professor Agnew, 1611 Chestnut Street, at which time a committee was appointed to secure a room in the College of Physicians for the purpose of meetings. The final organization meeting was held June 2 at the Hall of the College, which had been engaged at a rental of \$50.00 per year. Thus the College of Physicians has been the one and only home for the Academy. At that time, the building which had been erected in 1863 was located on the northeast corner of 13th and Locust Streets, now a parking lot. In 1909, the College moved to its present location at 19 S. 22nd Street, and the handsome furniture on the podium of the former building was transferred to Mitchell Hall. Through the years, the Academy and College have enjoyed a symbiotic relationship.

The Scientific Meetings

The first scientific meeting was held October 6, 1879, with Dr. Addinell Hewson as temporary chairman and 11 Fellows present. The speakers were Drs. Samuel D. Gross and Samuel W. Gross on treatment of sarcomas, and Dr. Thomas Morton on fracture of the acetabulum, with remarks by the others in attendance. From then until now, the typical scientific session has consisted of three papers with discussion. Regularly patients were exhibited as well as specimens, models, apparatus, and new instruments. With the advent of slides, this practice has virtually disappeared during the past 25 years.

An original custom which has persisted is the black tie formal attire of the president and secretary at all scientific meetings.

The Charter

At the meeting of December 1, 1879, all necessary steps were authorized to procure a charter, with the designation of A. Haller Gross, the younger son of Samuel D. Gross, to act as attorney. It was signed on December 24 by 19 Original Fellows, consisting of the ten founders and nine additional Charter Members. It was printed and signed on parchment which, except for some fading of the ink, appears not a day old one hundred years later.

The Seal

At the same December 1 meeting, the committee on obtaining a charter was charged to obtain designs for a seal. It now appears on the front cover of the *Transactions of the Philadelphia Academy of Surgery*, starting with Volume III, 1901, and is stamped on the certificates of membership. Within a 4 cm circle is inscribed in Latin "Academy of Surgery of Philadelphia, to the Art and Principles of Surgery, Founded 1879."

First President and Officers

At the meeting of January 5, 1880, Dr. Samuel D. Gross was elected the first president. The other duly elected officers were: vice presidents, D. Hays Agnew and Richard J. Levis; secretary, J. Ewing Mears; treasurer, William Hunt; recorder, John B. Roberts; librarian, Oscar H. Allis; corresponding secretary, Thomas G. Morton; council, John Ashhurst and John H. Brinton; pathological histologist, Samuel W. Gross. William W. Keen and John H. Packard were elected to the Committee on Publication. It seems curious that Addinell Hewson, who was the temporary chairman and so active in obtaining the charter, never served in any subsequent office of the Academy. The reason becomes likely in the fact that for the previous 11 years, he had been suffering from a progressive neurologic disorder that was to prove fatal. Mrs. Hewson attributed his first epileptic seizure in 1868 to a head injury sustained in a horse and carriage accident. In 1889, at age 61, he fell on the stairs and died one hour later without recovering consciousness.

Records of the Academy

The minutes for the first 30 years of the Academy are well preserved in a book of 442 pages, stored with the other historic documents in the fire-proof vault of the College. For the first 25 years they were hand-

written and thereafter have appeared in type. The easy legibility and detail of all the proceedings from the very first meeting at the home of Gross make this volume not only a treasure but delightful reading.

The *Transactions of the Philadelphia Academy of Surgery* first appeared in 1899, with Volume XXXII as the latest in 1976. They come out at roughly five-year intervals and are edited by the recorder. While these volumes reflect only the top of the iceberg with respect to the accomplishments of Philadelphia Surgery, many pioneer and enduring contributions from illustrious Fellows may be found among their pages.

The *Annals of Surgery*, in existence since 1885, has been the official publication of the Philadelphia Academy as well as for our fraternal New York Surgical Society. Dr. John H. Gibbon, Jr., one of the Academy's past presidents, served for many years as chairman of the editorial board of this prestigious journal in which many of the articles presented before this Society appear.

Annual Orations

The first Annual Oration was given by Founder Samuel D. Gross on January 7, 1881, entitled "John Hunter and His Pupils" which he subsequently published as a treatise. They have been given yearly with but three exceptions. The first missed year was 1900. During the year 1918, the meetings of the Academy were more or less irregular owing to the absence of many of the Fellows in military service, and for this reason, the Orations were not given in 1918 and 1919. Thereafter, they have been given without interruption for a total of 96.

Gross Room and Endowed Library in College of Physicians

Gross, at the time of his move from Louisville to Jefferson Medical College in 1856, received the sad news that 2,000 of his most treasured books, supposedly in safe storage, had been totally destroyed in a fire at Louisville. In the ensuing years, he increased his library once more to approximately 4,000 volumes, leaving them in his will to the Academy with the proviso that they be housed in the library of the College. A special room was created in the present building of the College, maintained by an endowment from the children of Dr. Gross. J. Ewing Mears presented the bookcases and mantel. The chairs, table, and rugs were ordered to the College's specifications and presented by members of the Gross family. In 1946, Mr. Orville H. Bullitt, the great-grandson, presented Gross' gold-headed cane to adorn the mantelpiece. The

Gross Library is housed partially in this room, the remainder in the stacks of the College building.

A portrait of J. Ewing Mears and one of Samuel W. Gross hang on the west wall of the Gross Room. It is thought, but not authenticated, that some attempt was made to simulate Gross' own library at home. The Gross Room continues its original use for council meetings of the College and Academy.

The marble bust of Gross has recently been moved from the entrance hall of the College to a more appropriate location just outside the Gross Room.

The Gross Prize

Gross, after founding the Academy, writing the original constitution and by-laws, serving as first president, giving the first Annual Oration, involving his children and daughter-in-law in benefactions to the Academy, and bequeathing his large library, provided \$5,000 in his will of January 23, 1884, for a prize, since then known as the "Gross Prize." This is a permanent fund, the accumulated income therefrom to be paid every five years to the writer of the best original essay, not exceeding 150 printed pages on some subject in surgical pathology or surgical practice, founded on original investigation, the candidates to be American citizens. The prize has been awarded 17 times, first in 1895 and last in 1977. Some of the well known winners were Evarts Graham, Emile Holman, Owen Wangensteen, Robert Elman, and Lester Dragstedt.

Honorary Fellowships

Since founding of the Academy, Honorary Fellowship has been conferred on 73 noteworthy surgeons on both sides of the Atlantic. Fifty-two are from 14 U.S. states and Washington, D.C., while 21 are from nine other countries (England, France, Germany, Switzerland, Austria, Belgium, Denmark, Sweden, and Canada). Samuel D. Gross championed the idea and in 1881, only two years after the birth of the Academy, 13 Honorary Fellows were all elected from his suggested list. The awards since then have been made somewhat sporadically, including 19 at the 50th and eight at the 75th Anniversaries. After a lapse of twenty-five years, nine honorary fellows were elected for the centennial celebration.

Anniversary Celebrations

In 1904, there was no recognition given to the 25th anniversary of the Academy. It was a routine year without any award of Honorary Fellowships.

In 1929, a special semicentennial celebration was



FIG. 1. Recipients of Honorary Fellowship were Drs. William P. Longmire (upper left), Francis D. Moore (upper right), David C. Sabiston (lower left), Owen H. Wangensteen (center), and Robert M. Zollinger (lower right). Dr. J. Englebert Dunphy and the three foreign recipients, Drs. Clarence Crafoord, John C. Goligher, and Lord Rodney Smith (K.B.E.) were unable to attend.

held on April 22, at 3 p.m. in Mitchell Hall of the College. Nineteen Honorary Fellows were elected, of which ten were from the United States and nine from foreign countries. Dr. Edward Archibald, Dr. John Finney, and Dr. Evarts Graham gave scientific presentations. A banquet was held that evening at the Bellevue-Stratford Hotel. Subscription was \$5.00 per plate in contrast to the assessment of \$100.00 for Fellow and spouse at the Centennial.

In 1954, the 75th Anniversary was held on November 20 at the Barclay Hotel. Dr. John Gibbon, Jr. presided in the absence of Dr. L. Kraer Ferguson who was ill. A brief history of the Academy was read by Dr. Calvin Smyth. Honorary Fellowships were conferred on eight distinguished surgeons, five from the United States and

three from abroad. Representatives from 15 outstanding surgical organizations were recognized from the floor. A paper by Dr. Detlow Bronk entitled "Discoveries of New Knowledge" concluded the evening.

In 1979, the Centennial year, a black tie dinner-dance was held on the third of November at the Union League of Philadelphia, with the President of the Academy, Dr. Donald R. Cooper presiding. This gala occasion was attended by Fellows, their spouses, and honored guests, totaling 227. Honorary Fellowships were bestowed on Drs. William P. Longmire, Francis D. Moore, David C. Sabiston, Owen H. Wangensteen, and Robert M. Zollinger (Fig. 1). Dr. J. Englebert Dunphy and the three foreign recipients, Drs. Clarence Crafoord, John C. Goligher, and Lord Rodney Smith

(K.B.E.), who also received honorary fellowships, were unable to attend. A Centennial Celebration Award in the form of a plaque was presented to Academy Fellow, Dr. Herbert R. Hawthorne, in honor of his "devotion to the ideals of the Philadelphia Academy of Surgery." On December 3, in conjunction with the Annual Oration, there was an exhibit of memorabilia relating to the founders and history of the Academy, in the Mutter Museum.

Heritage and Challenge

To trace the progress and contributions of Philadelphia Surgery through the past 100 years is not the object of this oration. Suffice it to say that in wielding the scalpel; teaching in surgical amphitheatres, classrooms, and bedside; and in carrying out clinical and laboratory research, the Fellows of this Academy have continued to distinguish themselves.

It has been the honor of six Fellows to aid in the care of presidents of the United States. Gross was consulted by Andrew Johnson for ankylosis of the left elbow. Dr. D. Hays Agnew, as an authority on gunshot wounds, was a consultant for President Garfield, victim of an assassin's bullet. John H. Brinton was the personal physician to Ulysses S. Grant. William W. Keen was a member of the team that successfully removed a tumor of the jaw from President Cleveland in the famous secret operation aboard a yacht in New York Harbor in 1893. John Chalmers DaCosta as a Naval Commander in World War I cared for President Wilson while crossing the Atlantic for the European Peace Treaty and negotiations for the League of Nations. Many Fellows will recall that Isidore S. Ravdin was a member of the team that operated upon President Eisenhower for Crohn's disease.

Just as Samuel D. Gross could not have imagined or believed possible what has transpired surgically in the last century, it is impractical to envisage what surgery will be like in a future century. Rather it is for us to continue the same challenge laid down by our Founding Fathers, namely, the "Cultivation and improvement of science and art of surgery, the elevation of the medical profession, the promotion of the public health, and such other matters as may come legitimately within its sphere."

The era covered in this oration has extended from Edison's invention of the incandescent bulb in 1879 to Cormack and Hounsfield's computer-assisted

tomography for which they won the Nobel Prize in 1979. For the rewarding assignment to study the Academy's history during these years, I am indebted to our President, Dr. Donald R. Cooper. With all the privilege that giving the Centennial Oration confers, I wish the Philadelphia Academy of Surgery continued success and honor in its progressive work, both ahead and with respectful regard for the past,—that ladder by which we all climb, adding but a step each year.

References

1. Atkinson, WB. *The Physicians and Surgeons of the United States*. Chas. Robinson, Philadelphia, 1878.
2. Bauer, EL. *Doctors Made in America*. Philadelphia, J. B. Lippincott Co. 1963.
3. *Book for Constitution and By-Laws of Philadelphia Academy of Surgery*.
4. Bordley J, Harvey AM. *Two Centuries of American Medicine*. Philadelphia, W. B. Saunders Co. 1976.
5. Brinton, JH. *Personal Memoirs*. New York, Neale Co. 1914.
6. *Complimentary Dinner Given to Professor S.D. Gross, April 10, 1879*. Philadelphia, Lindsay and Blakiston Co.
7. Garrison FH. *An Introduction to the History of Medicine*. Fourth Edition, Philadelphia, W. B. Saunders Co. 1929.
8. Gibbon JH. *Memoir of John Hooker Packard, M.D.* *Trans. Coll. Phys. Phila.*, Vol. XXXI, 1909. pp. IV-IX.
9. Gould GN. *History of the Jefferson Medical College*. New York, Lewis Co. 1904.
10. Gross, SD. *Autobiography of Samuel D. Gross, M.D., with Sketches of His Contemporaries*. Vol. I and II. New York, Arno Press and The New York Times 1972.
11. Harte RH. *Memoir of J. Ewing Mears, M.D.* *Trans. Coll. Phys. Philadelphia*, Vol. XLIII, 1921. pp. LXI-LXVIII.
12. Hays IM. *Memoir of Samuel D. Gross*. *Trans. Coll. Phys. Philadelphia*, Vol. VII, 1884. pp. XCV-CXXI.
13. Konkle BH, Henry FP. *Standard History of the Medical Profession of Philadelphia*. Second Edition, New York, AMS Press. 1977.
14. Lewis MJ. *Memoir of Thomas G. Morton, M.D.* *Trans. Coll. Phys. Phila.*, Vol. XXXVI, 1914. pp. LXVII-LXXII.
15. *Minutes of the Philadelphia Academy of Surgery, 1879-1909* (442 pages).
16. Morris MC. *Memoir of Addinell Hewson*. *Trans. Coll. Phys. Phila.*, Vol. XII, 1890. pp. XXXIII-XLIV.
17. *Obituary of Samuel W. Gross, M.D.* *Medical News*. 1889. pp. 474-476.
18. Pancoast WH. *Report on the Surgical Considerations in Regard to the Propriety of an Operation for the Separation of Eng and Chang Bunker, Commonly Known as the Siamese Twins*. *Trans. Coll. Surg. Phila.*, Vol. I, 1875. pp. 149-169.
19. *Report of the Committee on Necrology: Samuel Weissel Gross, M.D.* *Trans. Am. Surg. Assoc.* Vol. VII, 1889. pp. XXI-XXIII.
20. *Report of the Committee on Necrology: Richard J. Levis, M.D.* *Trans. Am. Surg. Assoc.* Vol. IX, 1891. pp. XXIV-XXV.
21. *Transactions of the Philadelphia Academy of Surgery*, Vol. I (1899) to Vol. XXXII (1976).
22. White JW. *Memoir of D. Hays Agnew, M.D., LL.D.* *Trans. Coll. Phys. Philadelphia*, Vol. XV, 1893. pp. XXIX-LXV.