

Transactions of the
Philadelphia
Academy of Surgery

VOLUME XXIX

1951 – 1956

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Philadelphia

1958

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NOTICE

The twenty-ninth volume of the TRANSACTIONS OF THE PHILADELPHIA ACADEMY OF SURGERY covers the 6 years from 1951 to 1956, inclusive. A tape recording was made of the proceedings of the 75th Anniversary which occurred on November 20, 1954. These recordings have been edited and are included in this publication.

FREDERICK A. BOTHE
Recorder

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Amendments to the Constitution and the By-Laws of the Philadelphia Academy of Surgery

*To be presented by the Ad Hoc Committee at the October 1
meeting for possible action at the November 5 meeting.*

Constitution

ARTICLE I

The name of the Society shall be "THE PHILADELPHIA ACADEMY OF SURGERY."

ARTICLE II

The objects of the Academy shall be the Cultivation and Improvement of the 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.

ARTICLE III

Section 1. The Society shall consist of Active, Senior, Nonresident, Government Service, and Honorary Fellows.

Section 2. The Active Membership shall be limited to one hundred (100) Fellows.

Section 3. Active Fellows shall automatically become Senior Fellows of the Academy after they have been members for twenty (20) years or have reached the age of sixty (60). Senior Members shall have all the privileges of Active Fellows.

Section 4. Upon request, any Fellow in good standing, who may remove from the City of Philadelphia, to reside at a distance exceeding thirty (30) miles from the City Hall, may be made a Nonresident Fellow of the Academy, by recommendation of the Council and a two-thirds vote of the Fellows present at any regular meeting of the Academy. Nonresident Fellows shall have all the privileges of Active Fellows.

Section 5. Officers of the Government Services stationed in Philadelphia may be elected as Government Fellows of the Philadelphia Academy of Surgery for the period of their stay in Philadelphia. Such Fellows shall have all the rights and privileges of Active Fellows but shall be ineligible to vote or hold office.

Section 6. Honorary Fellows, to the number of thirty (30), may from time to time be elected. They shall not be eligible for election as Officers.

ARTICLE IV

The Officers of the Academy shall consist of the President, the First Vice-President, the Second Vice-President, the Secretary, the Treasurer, the Recorder, and the Chairman of the Committee on Scientific Business.

ARTICLE V

These Officers shall be elected by a ballot each year and shall be eligible for re-election. A Fellow may serve as President for only two (2) terms.

ARTICLE VI

There shall be a standing Committee on Scientific Business and a standing Committee in charge of the *Bulletin of Surgical Clinics*.

The Committee on Scientific Business shall consist of a Chairman, who is an elected Officer of the Society, the Recorder, and one (1) Fellow appointed by the President. The duties of this Committee shall be to organize the Scientific Programs of the Society.

The Committee on the *Bulletin of Surgical Clinics* shall consist of a Chairman, a Treasurer, and a Fellow-at-large appointed annually by the President of the Academy. The Members of this Committee are authorized to serve until their successors are appointed. The duties of this Committee shall be to operate the *Bulletin of Surgical Clinics* in accordance with policy set by the Council of the Academy of Surgery or the Academy in full session.

ARTICLE VII

A Council shall be established consisting of the President, the Vice-Presidents, the Secretary, the Treasurer, the Chairman of the Business Committee, and two (2) Fellows-at-large elected by the Society annually, one (1) of whom will whenever possible be a previous President. The President of the Academy shall act as Chairman of the Council. The duties of the Council shall be three:

1. To act as an Executive Committee for the Academy between meetings,
2. To receive all nominations for Fellowship and to report names for election to the Academy after due investigation,
3. To act as a Board of Censors as required by the Academy.

ARTICLE VIII

At the stated meeting in February every fifth year, three (3) Fellows shall be appointed by the President to serve for five (5) years, or until their successors are appointed, as Trustees of the S. D. Gross Prize Fund and Library. It shall be the duty of the Trustees to keep charge of the Fund, to attend to its safe investment, and to submit a report to each annual meeting of the Academy of their work during the year, which shall be entered upon the minutes of the Academy. The Trustees shall have, on behalf of the Academy, charge of the S. D. Gross Library, which is, in accordance with the will of the Testator, in the custody of the College of Physicians of

Philadelphia. They shall each year make such additions to the collection of Surgical Books in the Library as may be deemed advisable, and as the funds contributed to the care and support of the Library may permit. They shall have charge of the distribution of the S. D. Gross Prize. It shall be their duty to publish in the medical journals the conditions on which the Prize is offered, to receive all essays submitted for competition, and upon approval of their decision by the Academy, to make award of the Prize to the successful competitor.

ARTICLE IX

To become a Fellow of the Academy, a physician must be a Doctor of Medicine who has graduated from a reputable School of Medicine at least ten (10) years before he is proposed. He must be proposed by at least three (3) Fellows of the Academy, who shall write letters to the secretary in support of the proposal. The candidate for Fellowship must receive the approval of the Council before his name may be presented to the Academy as a candidate for election. He must meet such other requirements as are from time to time stipulated in the By-Laws and must be elected by the Fellows in accordance with the By-Laws.

ARTICLE X

Any Fellow having complied with the requirements of the Constitution and By-Laws may resign his Fellowship by presenting at a stated meeting a communication to that effect, with the Treasurer's certificate that he is not indebted to the Academy, and such resignation shall become valid on acceptance by the Academy.

Any violation of the regulations of the Academy, and of the Code of Medical Ethics adopted by it, shall be punished by reprimand, suspension, or expulsion after a full hearing by the Council of the Academy or upon the request of the Fellow in question by the Academy itself.

ARTICLE XI

This Constitution may be amended by a two-thirds vote of the Fellows, after such amendment has been presented in writing to the Secretary and read at the two previous meetings of the Academy, and circulated with the call to the meeting at which action is to be taken.

By-Laws

SECTION I

MEETINGS

The stated meetings of the Academy shall be held at eight-fifteen o'clock P.M., on the first Monday of each month, except June, July, August and September. The date of any stated meeting may be changed at the discretion of the Council by giving notice to the Fellows at least two (2) weeks before the meeting.

SECTION II

SPECIAL MEETINGS

A special meeting may be called at any time by the President, and it shall be his duty to do so upon the requisition, in writing, of any ten (10) Fellows.

SECTION III

QUORUM

For the transaction of ordinary business any number of Fellows shall, at any meeting, constitute a quorum. For all elections, for changes in the Constitution and By-Laws, for ordering assessments, or for the appropriation or expenditure of any sum of money exceeding one hundred dollars (\$100.00), or for any other business affecting the interests of the Academy, or of its individual Fellows, fifteen (15) shall be required to be present.

SECTION IV

DUTIES OF OFFICERS—PRESIDENT AND VICE-PRESIDENTS

The President shall preside at the meetings, regulate debates, sign Certificates of Fellowship, appoint committees not otherwise provided for, announce the results of elections, and perform all other duties pertaining to his office. The Vice-Presidents shall assist the President in the discharge of his functions, and in his absence preside in the order of seniority.

SECTION V

SECRETARY

The Secretary shall keep the minutes of the meetings of the Academy, one copy of which he shall send to the Recorder. He shall notify the Fellows of the meetings, announcing on the notices the business to be transacted, with the names of candidates for Fellowship to be balloted upon by the Academy, attest all official acts requiring certificates in connection with, or independently of, the President, notify the Officers and Fellows of their election, acquaint newly elected Fellows with the requirements of the By-Laws concerning admission, receive the signatures of newly elected Fellows, take charge of papers not otherwise provided for, shall keep in his custody the seal of the Academy, and affix it to any documents or papers that the Academy may direct.

SECTION VI

TREASURER

It shall be the duty of the Treasurer to receive all moneys and funds belonging to the Academy, unless otherwise provided for; he shall pay bills for all expenses properly incurred by the Academy; collect all dues and assessments as promptly as possible, and present an annual account for audit, which shall include the accounts of the Treasurer of the *Bulletin of Surgical Clinics*. Two auditors shall be appointed by the President at the Annual Meeting to audit these accounts.

At the December meeting, the Treasurer shall propose suitable honoraria for the secretaries of the following officers: the Secretary, the Treasurer, the Recorder, the Chairman of the Committee on Scientific Business, the Treasurer of the *Bulletin of Surgical Clinics*, and upon affirmative vote of the Fellows shall send such honoraria before Christmas.

SECTION VII

RECORDER

The Recorder shall serve as a Member of the Committee on Scientific Business. He shall receive copies of the Annual Oration. He shall maintain the archives of the Academy, including copies of the minutes, and he shall consult with Fellows who present Annual Orations and Memoirs before the Academy in regard to publication. He shall maintain the material required for publication of the *Transactions of the Philadelphia Academy of Surgery*, and shall act as Editor for the *Transactions*, arranging for their publication at intervals of approximately four (4) years as required by the Academy.

SECTION VIII

COUNCIL

The Council of the Academy shall hold meetings for the transaction of routine business upon notice from the Secretary and special meetings shall be held on call of the President or on the call of any two (2) of its own number. A quorum shall consist of not less than four (4) of its members, and notice of any unusual business or any routine business having unusual significance for the Academy shall be sent to members at least five (5) days prior to a meeting.

SECTION IX

THE COMMITTEE ON SCIENTIFIC BUSINESS

The Committee on Scientific Business shall consist of three (3) Fellows, a Chairman elected by the Academy, the Recorder, and one (1) additional Fellow appointed by the President. It shall have charge of the scientific business of the meetings, it shall be its duty to provide for the presentation of papers and discussions of subjects for each meeting, it shall arrange, at such times as it may deem proper, for the discussion of scientific subjects by the Fellows of the Academy, and it shall, when authorized by the Academy, invite members of the profession, resident or nonresident, to read papers before the Academy, or to present topics for discussion. It shall act as a committee on publication, and shall present at the annual meeting a report of the work done during the year, which shall be entered upon the minutes of the Academy.

SECTION X

ANNUAL ORATION

There shall be appointed by the President at the stated meeting in February in each year, a Fellow whose duty it shall be to deliver at a stated meeting, usually December, of that year, an address in Surgery. This address

shall be delivered to the Recorder in writing at the time of its presentation, and it shall be published in the *Transactions* of the Academy. After consultation with the Recorder, it may be published in any other reputable scientific journal so long as it is identified as the Annual Oration of the Philadelphia Academy of Surgery, and so long as permission is obtained for its subsequent publication in the *Transactions* of the Academy.

SECTION XI

ELECTION OF OFFICERS

At the November meeting of the Academy, the President shall nominate three (3) Fellows to act as a Nominating Committee. Insofar as possible, these shall be previous Presidents of the Academy. This Committee shall report at the December meeting of each year. Additional Fellows may be nominated for any office from the floor. The Officers of the Academy shall be elected at the January meeting. The election shall be by ballot whenever more than one (1) candidate has been nominated for any office, and a majority of all those present shall be necessary to a choice. Where there is no contest, election may be by acclamation.

SECTION XII

PROPOSALS FOR FELLOWSHIP

Proposals for Fellowship shall be in writing signed by three (3) Fellows with a letter from each vouching for the character of the candidate. Completed nominations shall be considered by the Council at its next meeting. In the event action is deferred for more than three (3) meetings of Council, the President shall communicate with one or more of the candidate's sponsors.

No candidate may be proposed for Fellowship who has not made at least one (1) presentation before the Academy. The names of candidates who are to be recommended by the Council shall be published with the notices of the meeting immediately preceding consideration by the Fellows. Certification by the candidate's specialty board is not a requirement, but the case for an individual who is not certified must be especially strong to justify his election. It is expected that a candidate proposed for Fellowship will have attained some reputation in surgical practice, research and/or teaching.

SECTION XIII

ELECTION OF FELLOWS

The names of candidates proposed for Fellowship, who are approved by Council, shall be read with supporting letters from each of the three (3) proposers at a stated meeting of the Academy. Their names shall be read at a second meeting, and sent out with the call to the following meeting at which the election shall be held. Election of candidates for Fellowship who have been reported upon by the Council may take place at any stated meeting and shall be by ballot. A two-thirds vote of those present shall be necessary to elect the candidate to Fellowship.

A candidate for Fellowship failing to obtain the requisite number of votes in his favor may not again be nominated before the expiration of two (2) years.

SECTION XIV

SIGNING THE CONSTITUTION

Every person elected to be a Fellow shall pay the initiation fee and shall sign the Constitution and By-Laws. No person shall acquire the rights of Fellowship unless he makes payment of the initiation fee and signs the Constitution and By-Laws by the third meeting following his election.

SECTION XV

INITIATION FEE

Every Fellow shall, on admission, pay an initiation fee of twenty-five dollars (\$25.00).

SECTION XVI

ANNUAL DUES

There shall be an annual assessment of fifteen dollars (\$15.00), to be paid within four (4) months after the meeting in January. Fellows elected in November or December shall not be subject to the annual assessment for that year. The annual assessment for Nonresident Fellows shall be five dollars (\$5.00). The dues for Senior Fellows who have retired from practice may be reduced or permanently remitted by a two-thirds vote of Council. No dues shall be assessed against Government Fellows. Dues of Active Fellows who go on active duty with the government may be remitted temporarily by action of Council.

Any Fellow who requests relief from the payment of dues and assessments may, at the discretion of the Council, be relieved of such dues and assessments, without loss of his Fellowship or other rights.

SECTION XVII

Any Fellow in arrears for one (1) year, being notified of the fact by the Treasurer, in writing, and not paying his dues within two (2) months thereafter, shall forfeit his Fellowship; and it shall be the duty of the Treasurer to notify the Academy of such forfeiture, which shall be entered on the minutes, and the name stricken from the list of Fellows. The notice aforesaid shall contain a copy of this section.

SECTION XVIII

GUESTS

The Scientific Programs of the Society shall be open to any members of the medical profession and individuals in ancillary fields, including medical students and graduate students in the medical sciences, unless attendance is specifically restricted by vote of the Academy. Any Fellow may invite any

medical man in good standing to a meeting of the Academy as an official guest. Such an official guest shall be introduced to the President, and to the Academy by the President, and his name entered upon the minutes. The President may invite any such person to participate in the discussion.

Business meetings shall be limited to Fellows of the Academy, except when a Nonfellow shall be invited to attend some portion of a business meeting for a particular purpose at the request of the President, who shall make known the presence of such an individual at the beginning of the meeting.

SECTION XIX

SEAL AND CERTIFICATE OF FELLOWSHIP

The Academy shall have a distinct seal, as well as a Certificate of Fellowship, to a copy of which, signed by the President and Secretary, every Fellow shall be entitled.

SECTION XX

ORDER OF BUSINESS

The order of business shall be as follows unless modified by the President.

I. Scientific Proceedings:

1. Call to order.
2. Introduction of guests.
3. Introduction of new Fellows.
4. Reading of scientific papers, including the discussion of each.

II. Business Session:

1. Reading of the minutes of the last meeting.
2. Reports of committees.
3. Unfinished business.
4. New business.
5. Election of officers.
6. Election of Fellows.
7. Adjournment.

SECTION XXI

RULES OF ORDER

The proceedings of the Academy shall be conducted according to *Robert's Rules of Order*.

SECTION XXII

ALTERATIONS OF THE BY-LAWS

Amendments to the By-Laws may be made at any stated meeting at which a quorum is present, providing that notice of the proposed amendment shall have been sent to the members with the call to the meeting at least five (5) days in advance. A majority vote shall suffice for amendment to the By-Laws.

Founders

Founded April 21, 1879

Incorporated December 27, 1879

*SAMUEL D. GROSS, M.D., LL.D., D.C.L., Oxon.

*D. HAYES AGNEW, M.D., LL.D.

*ADDINELL HEWSON, M.D.

*RICHARD J. LEVIS, M.D.

*THOMAS G. MORTON, M.D.

*JOHN H. PACKARD, M.D.

*JOHN H. BRINTON, M.D.

*WILLIAM H. PANCOAST, M.D.

*J. EWING MEARS, M.D.

*SAMUEL W. GROSS, M.D., LL.D.

* Deceased.

List of Officers, 1957

President

DR. JOHN H. GIBBON, JR.

1st Vice-President

DR. ADOLPH A. WALKLING

2nd Vice-President

DR. W. EMORY BURNETT

Secretary

DR. J. MONTGOMERY DEAVER

Treasurer

DR. S. DANA WEEDER

Recorder

DR. FREDERICK A. BOTHE

Council

DR. FREDERICK ROSS ROBBINS

DR. L. K. FERGUSON

*With the President, First and Second Vice-Presidents,
Secretary, Treasurer, Chairman of the Business Committee*

Business Committee

DR. JONATHAN E. RHOADS (Chr.)

DR. EDWIN W. SHEABURN

With the Recorder

Philadelphia Academy of Surgery

Founded April 21, 1879

Incorporated December 27, 1879

Officers

1879

Temporary ChairmanADDINELL HEWSON
 Temporary Secretary.....J. EWING MEARS
 Temporary Treasurer.....WILLIAM HUNT
 Temporary RecorderJOHN B. ROBERTS

PRESIDENT

ELECTED	ELECTED
1880 SAMUEL D. GROSS	1924 EDWARD B. HODGE
1884 D. HAYES AGNEW	1926 CHARLES F. MITCHELL
1891 WILLIAM HUNT	1928 ASTLEY P. C. ASHHURST
1895 THOMAS G. MORTON	1930 GEORGE P. MULLER
1898 DEFOREST WILLARD	1932 JOHN SPEESE
1902 RICHARD H. HARTE	1934 WALTER ESTELL LEE
1904 HENRY R. WHARTON	1936 DAMON B. PFEIFFER
1906 JOHN B. ROBERTS	1938 J. STEWART RODMAN
1908 WILLIAM J. TAYLOR	1940 ELDRIDGE L. ELIASON
1910 ROBERT G. LECONTE	1942 ROBERT H. IVY
1912 GWILYM G. DAVIS	1944 HUBLEY R. OWEN
1914 JOHN H. GIBBON	1946 JOHN B. FLICK
1916 CHARLES H. FRAZIER	1948 THOMAS A. SHALLOW
1918 EDWARD MARTIN	1950 CALVIN M. SMYTH
1920 GEORGE G. ROSS	1952 I. S. RAVDIN
1922 JOHN H. JOPSON	1954 L. K. FERGUSON
	1956 JOHN GIBBON, JR.

VICE-PRESIDENTS

ELECTED	ELECTED
1880 D. HAYES AGNEW	1906 ROBERT G. LECONTE
1880 R. J. LEVIS	1908 G. G. DAVIS
1884 SAMUEL W. GROSS	1910 JOHN H. GIBBON
1898 JOHN ASHHURST, JR.	1912 CHARLES H. FRAZIER
1900 RICHARD H. HARTE	1914 EDWARD MARTIN
1900 HENRY R. WHARTON	1916 GEORGE G. ROSS
1902 JOHN B. DEEVER	1918 JOHN H. JOPSON
1904 JOHN B. ROBERTS	1919 H. C. DEEVER
1905 WILLIAM J. TAYLOR	1920 JOHN H. JOPSON

OFFICERS

ELECTED	ELECTED
1889 JOHN H. PACKARD	1936 E. J. KLOPP
1891 WILLIAM W. KEEN	1938 ELDRIDGE L. ELIASON
1891 J. EWING MEARS	1938 ROBERT H. IVY
1920 EDWARD B. HODGE	1940 HUBLEY R. OWEN
1922 CHARLES F. MITCHELL	1942 JOHN B. FLICK
1924 ASTLEY P. C. ASHHURST	1943 THOMAS A. SHALLOW
1926 ASTLEY P. C. ASHHURST	1945 CALVIN M. SMYTH
1926 GEORGE P. MULLER	1948 L. KRAEER FERGUSON
1928 JOHN SPEESE	1950 I. S. RAVDIN
1930 WALTER ESTELL LEE	1952 L. K. FERGUSON
1932 DAMON B. PFEIFFER	1954 JOHN H. GIBBON, JR.
1934 J. STEWART RODMAN	1956 ADOLPH WALKLING

SECRETARY

ELECTED	ELECTED
1880 J. EWING MEARS	1922 HUBLEY R. OWEN
1885 J. HENRY C. SIMES	1930 DEFOREST P. WILLARD
1893 THOMAS R. NELSON	1935 HENRY P. BROWN, JR.
1896 WILLIAM J. TAYLOR	1940 JOHN B. FLICK
1905 JOHN H. GIBBON	1942 L. KRAEER FERGUSON
1909 CHARLES F. MITCHELL	1943 CALVIN M. SMYTH
1915 GEORGE P. MULLER	1945 L. KRAEER FERGUSON
1920 J. STEWART RODMAN	1948 J. MONTGOMERY DEEVER

TREASURER

ELECTED	ELECTED
1880 WILLIAM HUNT	1920 DUNCAN L. DESPARD
1891 WILLIAM G. PORTER	1922 WILLIAM B. SWARTLEY
1904 JAMES P. HUTCHINSON	1935 L. KRAEER FERGUSON
1911 EDWARD B. HODGE	1938 HARRY E. KNOX
	1947 S. DANA WEEDEE

RECORDER

ELECTED	ELECTED
1880 JOHN B. ROBERTS	1915 JOHN SPEESE
1881 DEFOREST WILLARD	1920 HENRY P. BROWN, JR.
1884 C. B. G. DEANCREDE	1922 J. WILLIAM BRANSFIELD
1884 J. EWING MEARS	1926 CALVIN M. SMYTH, JR.
1891 LEWIS W. STEINBACH	1937 ADOLPH A. WALKLING
1902 JOHN H. GIBBON	1950 JONATHAN E. RHOADS
1905 JOHN H. JOPSON	1952 W. EMORY BURNETT
	1956 FREDERICK A. BOTHE

OFFICERS
COUNCIL

ELECTED

1880 JOHN ASHHURST, JR.
1880 JOHN H. BRINTON
1894 WILLIAM B. HOPKINS
1895 HENRY R. WHARTON
1898 THOMAS R. NEILSON
1900 W. JOSEPH HEARN
1902 ROBERT G. LECONTE
1906 THOMAS R. NEILSON
1910 J. CHALMERS DACOSTA
1920 CHARLES F. MITCHELL
1922 GEORGE G. ROSS
1922 JAMES H. BALDWIN
1923 WILLIAM J. TAYLOR
1924 JOHN H. JOPSON
1924 JOHN SPEESE
1925 EDWARD B. HODGE
1926 DAMON B. PFEIFFER
1927 CHARLES F. MITCHELL
1930 ASTLEY P. C. ASHHURST
1930 HUBLEY R. OWEN

With President, Vice-President, Secretary and Treasurer

ELECTED

1932 GEORGE P. MULLER
1935 DEFOREST P. WILLARD
1936 WALTER ESTELL LEE
1936 ROBERT H. IVY
1940 J. STEWART RODMAN
1940 DAMON B. PFEIFFER
1941 EDWARD B. HODGE
1942 THOMAS A. SHALLOW
1942 ELDRIDGE L. ELIASON
1943 ROBERT H. IVY
1946 HUBLEY R. OWEN
1947 CHARLES F. MITCHELL
1948 FRANCIS C. GRANT
1950 THOMAS A. SHALLOW
1952 ADOLPH WALKLING
1952 CALVIN M. SMYTH
1954 I. S. RAVDIN
1954 FREDERICK A. BOTHE
1956 FREDERICK ROBBINS
1956 L. KRAEER FERGUSON

BUSINESS COMMITTEE

ELECTED

1895 WILLIAM J. TAYLOR
1895 DEFOREST WILLARD
1896 RICHARD H. HARTE
1897 ROBERT G. LECONTE
1900 G. G. DAVIS
1902 JOHN H. JOPSON
1905 GEORGE G. ROSS
1908 FRANCIS T. STEWART
1914 JOHN SPEESE
1916 WALTER ESTELL LEE
1916 MORRIS BOOTH MILLER
1917 DAMON B. PFEIFFER
1917 ASTLEY P. C. ASHHURST
1919 A. BRUCE GILL
1919 J. STEWART RODMAN
1920 ARTHUR BILLINGS
1922 DAMON B. PFEIFFER
1924 DEFOREST P. WILLARD

ELECTED

1928 WALTER ESTELL LEE
1930 EDWARD T. CROSSAN
1930 JOHN B. FLICK
1931 HENRY P. BROWN, JR.
1932 EDWARD T. CROSSAN
1935 B. FRANKLIN BUZBY
1936 JOHN B. FLICK
1938 L. KRAEER FERGUSON
1940 J. MONTGOMERY DEAVER
1942 CALVIN M. SMYTH
1943 FREDERICK A. BOTHE
1943 W. EMORY BURNETT
1944 ADOLPH A. WALKLING
1946 J. MONTGOMERY DEAVER
1950 JOHN H. GIBBON, JR.
1943-
1949 FREDERICK A. BOTHE
1950 JONATHAN E. RHOADS

With the Recorder

TRUSTEES OF THE SAMUEL D. GROSS PRIZE
FUND AND LIBRARY

1894

J. EWING MEARS
JOHN ASHHURST, JR.
WILLIAM W. KEEN

With Samuel Ashhurst and William Hunt to serve with them on distribution of prize.

1895-1899

J. EWING MEARS
JOHN ASHHURST, JR.
WILLIAM W. KEEN

1900-1901

WILLIAM W. KEEN
J. EWING MEARS
J. CHALMERS DACOSTA

1902-1904

WILLIAM J. TAYLOR
WILLIAM L. RODMAN
JOHN B. ROBERTS

1905

WILLIAM J. TAYLOR
RICHARD H. HARTE
DEFOREST WILLARD

1910

WILLIAM J. TAYLOR
RICHARD H. HARTE
JOHN H. GIBBON

1915

WILLIAM J. TAYLOR
JOHN H. JOPSON
EDWARD B. HODGE

1920

WILLIAM J. TAYLOR
JOHN H. JOPSON
EDWARD B. HODGE

1925

WILLIAM J. TAYLOR
JOHN H. JOPSON
EDWARD B. HODGE

1930

WILLIAM J. TAYLOR
JOHN H. JOPSON
EDWARD B. HODGE

1935

EDWARD B. HODGE
CHARLES F. MITCHELL
CALVIN M. SMYTH, JR.

1940

EDWARD B. HODGE
CHARLES F. MITCHELL
CALVIN M. SMYTH, JR.

1945

DAMON B. PFEIFFER
CHARLES F. MITCHELL
CALVIN M. SMYTH, JR.

1950

JOHN H. GIBBON, JR.
FRANCIS C. GRANT
CALVIN M. SMYTH, JR.

1955

CALVIN M. SMYTH
JOHN H. GIBBON, JR.
GEORGE ROSEMOND

Fellows

of The Philadelphia Academy of Surgery

- 1949 ALBRITTEN, FRANK F., JR., M.D., F.A.C.S., 1025 Walnut Street. Assistant Professor of Surgery, Jefferson Medical College; Assistant Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Assistant Surgeon, Jefferson Medical College Hospital; Surgeon, Pennsylvania Hospital; Surgical Director, Barton Memorial Division of Jefferson Hospital.
- 1956 AUSTIN, GEORGE M., M.D., 3400 Spruce Street. Department of Neurosurgery, University of Oregon Medical School, Portland, Oregon.
- 1952 BAILEY, CHARLES P., M.D., F.A.C.S., 249 North Broad Street. Professor and Head of Department of Thoracic Surgery, Hahnemann Hospital and Medical College; Director of Cardiopulmonary Department, Albert Einstein Medical Center; Head of Thoracic Surgery Department, West Jersey Hospital, Camden; Attending Physician, Veterans Administration Hospital.
- 1928 *BATES, WILLIAM, B. S., M.D., F.A.C.S., 2029 Pine Street. Professor of Surgery and Chairman of Department of Surgery, Graduate School of Medicine, University of Pennsylvania; Surgeon, Graduate Hospital, Presbyterian Hospital and Wills Eye Hospital.
- 1915 *BILLINGS, ARTHUR E., M.D., 2020 Spruce Street. Formerly Clinical Professor of Surgery, Jefferson Medical College; Formerly Surgeon-in-Chief, Bryn Mawr Hospital; Consulting Surgeon, Bryn Mawr Hospital.
- 1955 BEHREND, ALBERT, M.D., M.S., 255 South 17th Street. Attending Surgeon, Albert Einstein Medical Center, Northern Division; Attending Surgeon, Rush Hospital; Courtesy Staff, Germantown Hospital.
- 1934 †BIRDSALL, JOSEPH C., A.M., M.D., F.A.C.S., 1900 Spruce Street. Professor of Urology, Graduate School of Medicine, University of Pennsylvania; Urologist, Graduate Hospital of the University of Pennsylvania; Consulting Urologist, Presbyterian Hospital.
- 1957 BLAKEMORE, WILLIAM S., M.D., 110 Maloney Building, University Hospital. Assistant Professor of Surgery, University of Pennsylvania; Assistant Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Assistant Chief of Surgical Clinic, Hospital of the University of Pennsylvania; J. William White Assistant Professor of Surgical Research and Assistant to the Director of the Harrison Department of Surgical Research, University of Pennsylvania.

* Denotes Senior Fellow.
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- 1929 †*BOTHE, ALBERT E., A.B., M.D., M.S., M.Sc., D.Sc., 255 South 17th Street. Associate Professor of Urology, Graduate School of Medicine, University of Pennsylvania; Urologist, Jeanes Hospital, Misericordia Hospital and Fitzgerald-Mercy Hospital.
- 1928 *BOTHE, FREDERICK A., B.S., M.D., M.S., F.A.C.S., 255 South 17th Street. Associate Professor of Surgery, School of Medicine, University of Pennsylvania; Surgical Chief, Presbyterian Hospital; Chief of Department of Surgery, Jeanes Hospital; Consulting Surgeon, Philadelphia Home for Incurables.
- 1932 *BOWER, JOHN O., M.D., F.A.C.S., 2008 Walnut Street. Surgeon, Philadelphia General Hospital, St. Luke's and Children's Medical Center.
- 1921 *BOYKIN, IRVINE M., M.D., Boykin, South Carolina. Formerly Assistant Professor of Surgery, School of Medicine, University of Pennsylvania; and Formerly, Director of Surgery, Episcopal Hospital.
- 1921 *BRANSFIELD, J. W., M.D., 2101 Spruce Street. Surgeon in Chief to Doctor's Hospital; Surgeon and Medical Director of the American Oncologic Hospital; Professor (Emeritus) Graduate School, University of Pennsylvania, Oral Surgery.
- 1944 *BROOKE, JOHN A., A.M., Sc.D., F.A.C.S., F.A.A.O.S., 1431 Spruce Street. Professor Emeritus of Orthopaedic Surgery, Hahnemann College.
- 1954 BUCHER, ROBERT M., M.D., M.S., F.A.C.S., 3401 North Broad Street. Assistant Professor of Surgery, Temple University School of Medicine; Surgeon, Temple University Hospital; Assistant Visiting Surgeon, Philadelphia General Hospital; Attending Surgeon, U.S. Veterans Administration Hospital.
- 1938 BURNETT, W. EMORY, M.D., F.A.C.S., 3401 North Broad Street. Professor, Surgery and Head of Department, Temple University School of Medicine and Hospital; Chief of Surgery, Temple University Hospital; Active Consultant, Philadelphia General Hospital; Consulting Surgeon, Shriners Hospital for Crippled Children; Consultant in Surgery, Veterans Administration Hospital; Acting Attending Surgeon, St. Christopher's Hospital for Children; Consultant in General Surgery, Chester County Hospital; Consulting Surgeon, Moses Taylor Hospital, Scranton, Pennsylvania; Consultant in Surgery, Quakertown Community Hospital, Quakertown, Pennsylvania.
- 1956 BUYERS, ROBERT A., M.D., F.A.C.S., 1327 DeKalb Street, Norristown, Pennsylvania. Director, Department of Surgery, Sacred Heart Hospital, Norristown; Associate in Surgery, Montgomery Hospital, Norristown.

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- 1951 CARTY, JAMES B., M.D., 133 South 36th Street. Chief of Surgery, Delaware County Hospital; Assistant Surgeon, Presbyterian Hospital; Clinical Assistant, Jefferson Medical College Hospital, Instructor in Surgery, University of Pennsylvania and Jefferson Medical College.
- 1951 CASWELL, H. TAYLOR, M.D., 3401 North Broad Street. Surgeon, Temple University Hospital; Chief of Surgery, Philadelphia General Hospital; Clinical Professor of Surgery, Temple University School of Medicine and Hospital.
- 1949 CHODOFF, RICHARD J., A.B., M.D., F.A.C.S., 255 South 17th Street. Instructor of Surgery, Jefferson Medical College; Associate Surgeon, Mount Sinai Hospital; Assistant Surgeon, Jefferson Medical College Hospital; Chief Surgeon, Kensington Hospital.
- 1943 COLONNA, PAUL C., A.B., M.D., F.A.C.S., 3400 Spruce Street. Professor Orthopaedic Surgery, University of Pennsylvania School of Medicine; Chief of Orthopaedic Surgery at Children's Seashore House, Atlantic City, New Jersey; Consulting Surgeon at Presbyterian Hospital, Children's Hospital, Rush Hospital, Valley Forge Army Hospital, Phoenixville, Pennsylvania; DuPont Institute, Wilmington, Delaware.
- 1952 COOPER, DONALD R., M.D., 133 South 36th Street. Associate Professor in Surgery, Woman's Medical College of Pennsylvania; Associate Professor of Surgery, Graduate School of the University of Pennsylvania; Surgeon, Graduate Hospital, Woman's Medical College Hospital, Philadelphia General Hospital.
- 1953 COOPER, ROBERT A., M.D., 538 Cooper Street, Camden 2, New Jersey. Associate Surgeon at Cooper Hospital, Camden, New Jersey; Assistant Surgeon at Zurbrugg Memorial Hospital, Riverside, New Jersey; Consulting Surgeon of the Bancroft School, Haddonfield, New Jersey.
- 1955 CRESSON, SAMUEL L., M.D., F.A.C.A., 2699 North Lawrence Street, Philadelphia. Attending Surgeon, St. Christopher's Hospital for Children; Assistant Surgeon, Surgical Service "A," Lankenau Hospital; Assistant Professor of Surgery, Temple University Medical School.
- 1919 *CROSSAN, EDWARD T., M.D., Conshohocken, R.F.D. 1, Pennsylvania. Resident Surgeon, Lumberman's Mutual Casualty Company; Assistant Professor of Surgery, School of Medicine, University of Pennsylvania.
- 1932 CURTIS, LAWRENCE C., A.B., D.D.S., M.D., F.A.C.S., 535 Cornell Avenue, Swarthmore, Pennsylvania. Consultant of Plastic Surgery, Presbyterian Hospital; Professor Emeritus, University of Pennsylvania Dental School.

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- 1955 D'ALONZO, WALTER A., M.D., 1647 South 15th Street. Surgical Chief, St. Joseph Hospital; Associate in Surgery, Philadelphia General Hospital; Associate in Surgery, Woman's Medical College Hospital; Associate in Surgery, Frankford Hospital; Associate in Surgery, Roxborough Hospital; Associate in Surgery, Woman's Medical College.
- 1939 *DAVIS, DAVID M., B.S., M.D., 255 South 17th Street. Professor Emeritus of Urology, Jefferson Medical College; Visiting Urologist, Jefferson Medical College Hospital.
- 1934 DEEVER, J. MONTGOMERY, B.S., M.D., F.A.C.S., Suite 306, Lankenau Medical Building. Instructor in Surgery, University of Pennsylvania Medical School; Professor of Clinical Surgery, Graduate School of Medicine, University of Pennsylvania; Associate Professor of Surgery, Jefferson Medical College; Chief, Surgical Service "A," Lankenau Hospital.
- 1930 *DEIBERT, IRVIN E., B.A., M.D., F.A.C.S., 538 Cooper Street, Camden, New Jersey. Senior Surgeon, Cooper Hospital, Camden, New Jersey; Consulting Surgeon to the Zurbrugg Memorial Hospital, Riverside, New Jersey; Consulting Surgeon to the Bancroft School, Haddonfield, New Jersey; Lecturer in Surgery, Graduate School of Medicine, University of Pennsylvania.
- 1949 DEPALMA, ANTHONY F., M.D., 248 South 21st Street. Chief Orthopaedic Surgeon, Jefferson Medical College Hospital; Methodist Episcopal Hospital; Orthopaedic Surgeon Rotating Service, Philadelphia General Hospital; Attending Orthopaedic Surgeon, Fitzgerald-Mercy Hospital; Consultant Orthopaedic Surgeon, Veterans Administration Hospital and New Jersey Orthopaedic Hospital, Orange, N. J.; James Edwards Professor of Orthopaedic Surgery, Jefferson Medical College Hospital.
- 1951 DETUERK, JOHN J., M.D., 1930 Chestnut Street. Associate in Surgery, Jefferson Medical College; Attending Surgeon, Methodist Episcopal Hospital.
- 1928 *DOWNS, T. MCKEAN, M.D., 921 Mt. Pleasant Road, Bryn Mawr, Pennsylvania. Formerly, Assistant Surgeon, Pennsylvania Hospital, Bryn Mawr Hospital and Germantown Hospital.
- 1944 EGER, SHERMAN A., B.A., M.D., F.A.C.S., 2029 Delancey Street. Assistant Surgeon, Jefferson Hospital; Consulting Surgeon, Girard College and North Penn Hospital; Clinical Professor of Surgery, Jefferson Medical College.

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- 1909 *ELMER, WALTER G., B.S., M.D., F.A.C.S., 1801 Pine Street. Emeritus Professor of Orthopaedic Surgery, Graduate School of Medicine, University of Pennsylvania, and Woman's Medical College of Pennsylvania.
- 1934 *ENGEL, GILSON COLBY, A.D., M.D., F.A.C.S., Suite 406, Lankenau Medical Building. Chief of Surgical Service "B," Lankenau Hospital; Professor of Clinical Surgery, Graduate School of Medicine, University of Pennsylvania; Associate Professor of Surgery, Jefferson Medical College.
- 1941 ERB, WILLIAM H., A.B., M.D., F.A.C.S., 133 South 36th Street. Professor of Clinical Surgery, School of Medicine, University of Pennsylvania; Surgeon, Philadelphia General Hospital and Hospital of the University of Pennsylvania; Chief of Surgery, Taylor Hospital, Ridley Park, Pennsylvania.
- 1931 *FERGUSON, LEWIS K., A.B., M.D., F.A.C.S., 133 South 36th Street. Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Professor of Surgery, Woman's Medical College of Pennsylvania; Chief Surgeon, Graduate Hospital and Woman's Medical College Hospital.
- 1950 FITTS, WILLIAM T., A.B., M.D., 3400 Spruce Street. Professor of Surgery, University of Pennsylvania School of Medicine; Associate Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Chief of the Surgical Ward Service, Division II, Hospital of the University of Pennsylvania.
- 1926 *FLICK, JOHN B., M.D., F.A.C.S., 225 South 15th Street. Secretary-Treasurer of the American Board of Surgery; Consulting Surgeon to the Pennsylvania Hospital, Bryn Mawr Hospital and Valley Forge Army Hospital.
- 1952 FROBES, ALFRED S., M.D., 255 South 17th Street. Associate Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Associate Surgeon, Graduate Hospital of the University of Pennsylvania; Civilian Surgical Consultant to the United States Naval Hospital.
- 1941 FRY, KENNETH E., B.S., M.D., F.A.C.S., 1719 Rittenhouse Square. Clinical Professor of Surgery, Jefferson Medical College; Consultant in Surgery, Valley Forge Army Hospital and Girard College Infirmary.
- 1942 †GAMON, ROBERT S., A.B., M.D., F.A.C.S., 514 Cooper Street, Camden, New Jersey. Surgeon, Cooper Hospital, Camden, New Jersey; Consulting Surgeon, Zurbrugg Memorial Hospital, Riverside, New Jersey.

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- 1939 GEIST, DONALD C., A.B., M.D., F.A.C.S., 1930 Chestnut Street. Chief of Surgical Service, Misericordia Hospital and Fitzgerald-Mercy Hospital; Consulting Surgeon, Jeanes Hospital; Surgeon on Courtesy Staff, Woman's Hospital.
- 1933 *GIBBON, JOHN H., JR., M.D., F.A.C.S., 1025 Walnut Street. Samuel D. Gross Professor of Surgery and Head of the Department of Surgery, Jefferson Medical College and Hospital; Consulting Surgeon, Pennsylvania Hospital; Consultant in General Surgery, Veterans Administration Hospital.
- 1899 †*GIBBON, JOHN H., M.D., D.Sc., Lynnefield Farm, Media, Pennsylvania. Emeritus Professor of Surgery, Jefferson Medical College; Consulting Surgeon, Pennsylvania Hospital, Bryn Mawr Hospital and Jefferson Medical College Hospital.
- 1914 *GILL, A. BRUCE, A.B., M.D., D.Sc., 1603 Normandie Drive, Mt. Dora, Florida. Emeritus Professor of Surgery, Jefferson Medical College.
- 1928 *GILMOUR, WILLIAM R., M.A., M.D., F.A.C.S., 1616 Woodland Avenue. Visiting Surgeon, Methodist Episcopal Hospital; Surgeon, Northeastern Hospital.
- 1954 GLOVER, ROBERT P., M.D., 269 South 19th Street. Assistant Professor of Clinical Surgery, University of Pennsylvania Medical School; Chief, Department of Thoracic and Cardiac Surgery, Presbyterian Hospital; Director, the Thoracic and Cardiovascular Research Laboratory, Presbyterian Hospital; Chief of Thoracic Surgery, Episcopal and Fitzgerald-Mercy Hospitals; Thoracic and Cardiac Surgery, St. Christopher's Hospital for Children and Lankenau Hospital; Attending Thoracic Surgeon, Coatesville Veterans Hospital; Consulting Cardiac and Thoracic Surgeon, Valley Forge Army Hospital.
- 1932 *GOLDSMITH, RALPH N., M.D., F.A.C.S., 1351 Tabor Road. Assistant Professor of Surgery, Temple University Medical School; Senior Attending Surgeon, Albert Einstein Medical Center, Northern Division; Courtesy Staff, Germantown Hospital.
- 1925 *GRANT, FRANCIS C., A.B., M.D., F.A.C.S., 3400 Spruce Street. Professor of Neurosurgery, School of Medicine, University of Pennsylvania; Professor of Neurosurgery, Graduate School of Medicine, University of Pennsylvania; Chief, Neurosurgical Service, Hospital of the University of Pennsylvania and Graduate Hospital of the University of Pennsylvania.
- 1934 *GREENE, LLOYD B., M.D., Medical Arts Building. Chief of Urological Service, Pennsylvania Hospital, Bryn Mawr Hospital and Burlington County Hospital.

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- 1939 GROFF, ROBERT ARMAND, A.B., M.D., F.A.C.S., 1930 Chestnut Street. Professor of Neurosurgery, Graduate School of Medicine, University of Pennsylvania; Chief, Neurosurgical Department, Graduate Hospital, University of Pennsylvania; Neurosurgeon to Presbyterian Hospital, Pennsylvania Hospital, Abington Memorial Hospital, Jeanes Hospital, Cooper Hospital, Camden, New Jersey; Our Lady of Lourdes Hospital, Camden, New Jersey; Burlington County Hospital, Mt. Holly, New Jersey; Consulting Neurosurgeon to Misericordia Hospital, Fitzgerald-Mercy Hospital, Woman's Hospital, Germantown Hospital, Valley Forge Army Hospital.
- 1956 GROTZINGER, PAUL J., B.S., M.D., Hahnemann Hospital. Associate Professor of Surgery, Hahnemann Medical College; Senior Attending Surgeon, Hahnemann Medical College and Hospital; Assistant Attending Surgeon, Jeanes Hospital; Assistant Chief of Surgery, Philadelphia General Hospital; Attending Surgeon, Veterans Administration Hospital.
- 1953 HARRIS, JAMES S. C., M.D., 5401 Wayne Avenue. Associate in Surgery, Graduate School of Medicine, University of Pennsylvania; Surgeon, Germantown Hospital; Assistant Visiting Thoracic Surgeon, Philadelphia General Hospital; Consultant in Thoracic Surgery, Philadelphia General Hospital, Northern Division; Associate in Thoracic Surgery, Episcopal Hospital; Assistant Chief in Surgery, Roxborough Memorial Hospital; Assistant Surgeon, Thoracic Surgery, Abington Memorial Hospital.
- 1950 HATFIELD, C. ALEXANDER, M.D., 330 South 9th Street. Associate in Surgery, University of Pennsylvania School of Medicine; Assistant Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Surgeon to the Pennsylvania Hospital; Surgeon, North Penn Hospital.
- 1945 *HAWTHORNE, HERBERT R., M.D., F.A.C.S., 255 South 17th Street. Professor of Surgery and Chairman Department of Surgery, Graduate School of Medicine, University of Pennsylvania; Chief of Surgery, Graduate Hospital, University of Pennsylvania.
- 1913 *HEARN, WILLIAM P., B.S., M.D., F.A.C.S., 227 South 42nd Street. Assistant Professor of Surgery, Jefferson Medical College; Assistant Surgeon, Jefferson Hospital.
- 1922 *HERMAN, LEON, B.S., M.D., F.A.C.S., 740 Beacom Lane, Merion, Pennsylvania. Professor of Urology, Graduate School of Medicine, University of Pennsylvania; Chief, Urology Service, Pennsylvania and Bryn Mawr Hospitals.
- 1925 *HINTON, DRURY, M.D., F.A.C.S., F.I.C.S., 4501 Cedar Lane, Drexel Hill, Pennsylvania. Director of Surgery, Delaware County Hospital; Associate Surgeon, Fitzgerald-Mercy Hospital; Consultant Surgeon, Woman's Hospital.

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- 1955 HOFFEL, JOSEPH M., M.D., F.A.C.S., 330 South 9th Street. Associate in Surgery, Graduate School of Medicine, University of Pennsylvania; Instructor in Surgery, School of Medicine, University of Pennsylvania; Assistant Surgeon, Pennsylvania Hospital and Abington Memorial Hospital.
- 1956 HOPKINS, JOHN E., M.D., Lankenau Medical Building. Assistant to Dr. Deaver, Lankenau Hospital.
- 1934 HOWELL, JOHN CARNETT, M.D., F.A.C.S., 326 South 19th Street. Professor of Clinical Surgery, Graduate School of Medicine, University of Pennsylvania; Associate in Surgery, Graduate Hospital of the University of Pennsylvania and Presbyterian Hospital; Visiting Chief in Surgery, Radiological Division, Philadelphia General Hospital.
- 1948 IVERSON, PRESTON C., A.B., M.D., 1930 Chestnut Street. Associate Professor of Plastic Surgery, Graduate School of Medicine, University of Pennsylvania; Instructor of Plastic Surgery, Cornell University Medical Center, New York City; Chief, Plastic Surgery, Radiology Division, Philadelphia General Hospital; Associate Surgeon in Plastic Surgery, Pennsylvania Hospital; Assistant Attending Surgeon and Chief of Plastic Surgery, Bryn Mawr Hospital; Assistant Plastic Surgeon, Graduate Hospital of the University of Pennsylvania; Chief, Maxillofacial Surgery, Delaware County Hospital and Walter Reed General Hospital, Washington, D. C.; Plastic Surgeon, Head and Neck Service, Memorial Hospital, New York City.
- 1915 *IVY, ROBERT HENRY, M.D., 104 Dalton Road, Paoli, Pennsylvania. Professor Emeritus of Plastic Surgery, School of Medicine and Graduate School of Medicine, University of Pennsylvania; Consultant in Plastic Surgery, University, Graduate, Presbyterian, Children's and U. S. Naval Hospitals.
- 1946 JAEGER, J. RUDOLPH, A.B., M.D., F.A.C.S., 1025 Walnut Street. Professor of Neurological Surgery, Jefferson Medical College; Chief of the Department of Neurosurgery, Jefferson Hospital, Wills Eye Hospital; Consulting Neurosurgeon, Veterans Administration Hospitals, Coatesville and Philadelphia.
- 1922 *JOHN, RUTHERFORD, B.S., M.D., 256 South 21st Street. Associate in Orthopedic Surgery, School of Medicine, University of Pennsylvania; Consulting Orthopedic Surgeon, Episcopal Hospital, St. Christopher's Hospital and Fitzgerald-Mercy Hospital.
- 1942 JOHNSON, JULIAN, M.D., Sc.D.(Med.), F.A.C.S., 3400 Spruce Street. Professor of Surgery, School of Medicine and Graduate School of Medicine, University of Pennsylvania; Chief, Surgical Division I, Hospital of the University of Pennsylvania; Senior Surgeon, Children's Hospital; Associate Surgeon, Philadelphia General Hospital; Consulting Thoracic Surgeon, Valley Forge Army Hospital.

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- 1947 KAPLAN, LOUIS, A.B., M.D., F.A.C.S., 2040 Pine Street. Chief of Surgical Service, Albert Einstein Medical Center, Southern Division, and Clinical Professor of Surgery, Hahnemann Medical College; Courtesy Staff, Woman's Hospital.
- 1938 KING, ORVILLE C., A.B., M.D., F.A.C.S., 330 South 9th Street. Assistant Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Associate in Surgery, Medical School of the University of Pennsylvania; Surgeon to the Presbyterian and Pennsylvania Hospitals; Courtesy Staff, Chestnut Hill Hospital.
- 1953 KIRBY, CHARLES K., M.D., University Hospital. Assistant Professor of Surgery, School of Medicine and Graduate School of Medicine, University of Pennsylvania; Assistant Surgeon, Hospital of the University of Pennsylvania; Assistant Thoracic Surgeon, Philadelphia General Hospital; Consultant in Thoracic Surgery, Veterans Administration Hospital, Philadelphia.
- 1930 *KNOX, HARRY E., M.D., 409 Cambridge Apartments. Chief Surgeon, Germantown Hospital.
- 1953 KOOP, C. EVERETT, M.D., 1740 Bainbridge Street. Surgeon-in-Chief, Children's Hospital; Associate Professor, Pediatric Surgery, University of Pennsylvania School of Medicine; Associate Professor, Pediatric Surgery, Graduate School of Medicine, University of Pennsylvania.
- 1914 *LAWS, GEORGE M., B.S., M.D., 1907 Spruce Street. Consulting Gynecologist, Presbyterian Hospital.
- 1916 †LEE, WALTER ESTELL, M.D., F.A.C.S., 1833 Pine Street. Emeritus Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Consulting Surgeon, Pennsylvania Hospital, Graduate Hospital of the University of Pennsylvania, Bryn Mawr Hospital, Germantown Hospital and Burlington County Hospital.
- 1938 LEHMAN, JAMES A., M.D., F.A.C.S., 255 South 17th Street. Surgical Chief, Chestnut Hill Hospital; Director of Department of Surgery, Memorial Hospital, Roxborough; Director of Department of Surgery, St. Joseph's Hospital; Surgical Chief, Fitzgerald-Mercy Hospital; Courtesy Staff Surgical Department, Woman's Medical College; Instructor of Medical Students, Woman's Medical College.
- 1932 *LEMMON, WILLIAM T., B.S., M.D., F.A.C.S., 133 South 36th Street. Professor of Surgery, Jefferson Medical College; Attending Surgeon, Jefferson Medical College Hospital; Attending Surgeon, Philadelphia General Hospital.
- 1934 *LEVERING, J. WALTER, M.D., F.A.C.S., Abington Memorial Hospital, Abington, Pennsylvania. Visiting Surgeon at Abington Memorial Hospital and Consulting Surgeon, Children's Seashore House, Atlantic City, New Jersey.

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- 1926 *LIPSHUTZ, BENJAMIN, A.B., M.D., F.A.C.S., 2031 Locust Street. Assistant Professor of Neuroanatomy, Jefferson Medical College; Surgeon, Mount Sinai Hospital.
- 1929 *MC CARTHY, PATRICK A., M.D., F.A.C.S., 229 East Price Street. Assistant in Surgery and Instructor in Anatomy, Jefferson Medical College; Surgeon, Philadelphia General and St. Mary's Hospitals.
- 1933 †McCLOSKEY, JOHN F., M.D., F.A.C.S., 8720 Germantown Avenue. Consulting Surgeon, Chestnut Hill Hospital; Emeritus Professor of Surgery, Woman's Medical College Hospital.
- 1943 †McLAUGHLIN, EDWARD FRANCIS, A.B., M.D., F.A.C.S., 4116 North Broad Street. Associate in Surgery, Graduate School of Medicine, University of Pennsylvania; Clinical Associate in Surgery, Woman's Medical College; Chief of Surgical Service, Germantown Hospital and Nazareth Hospital; Senior Associate in Surgery, Chestnut Hill Hospital; Clinical Associate in Surgery, Woman's Medical College Hospital.
- 1946 MANGES, LEWIS C., JR., A.B., M.D., F.A.C.S., 2001 Delancey Place. Assistant Demonstrator of Surgery, Jefferson Medical College; Assistant Clinical Professor of Surgery, Woman's Medical College; Attending Surgeon, Philadelphia General Hospital; Medical Director and Surgeon, Philadelphia Employees Welfare Fund Association; Chairman, Surgical Department, Mercy-Douglass Hospital.
- 1953 MARTIN, WILLIAM L., M.D., F.A.C.S., 1737 Chestnut Street. Professor and Head of the Division of Surgery, Hahnemann Hospital; Chief Surgeon, Hahnemann Hospital; Courtesy Staff, Misericordia, Bryn Mawr, St. Agnes and Abington Hospitals.
- 1940 MAY, HANS, M.D., F.A.C.S., 255 South 17th Street. Chief of Division of Plastic and Reconstructive Surgery in Lankenau, Germantown and St. Christopher's Hospital for Children; Consulting Plastic Surgeon, Abington Memorial Hospital; Associate Professor of Surgery, Graduate School of Medicine, University of Pennsylvania.
- 1931 †MECRAY, PAUL M., M.D., F.A.C.S., 405 Cooper Street, Camden, New Jersey. Vice-President, Board of Managers, and Honorary Chief of Staff, Cooper Hospital, Camden, New Jersey; Vice-President, Board of Managers, New Jersey State Hospital, Trenton, New Jersey.
- 1950 MEDINGER, FREDERICK G., M.D., F.A.C.S., 255 South 17th Street. Director of Tumor Clinic and Associate Surgeon, Abington Memorial Hospital; Associate Surgeon, Presbyterian Hospital; Chief of Surgery and Oncologist, Underwood Hospital, Woodbury, New Jersey; Consultant in Oncology, U. S. Veterans Hospital, Coatesville, Pennsylvania.

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- 1904 *MITCHELL, CHARLES FRANKLIN, M.D., 2003 Pine Street. Consulting Surgeon, Pennsylvania Hospital, Bryn Mawr Hospital, Germantown and Chestnut Hill Hospitals.
- 1934 †MOGAVERO, FRANCESCO, M.D., F.A.C.S., 1930 Chestnut Street. Clinical Associate, Woman's Medical College of Pennsylvania; Chief Surgeon, Misericordia Hospital.
- 1938 MOORE, JOHN R., A.B., M.D., F.A.C.S., 3401 North Broad Street. Professor of Orthopedic Surgery, Temple University School of Medicine; Visiting Professor of Orthopedic Surgery, Graduate School of Medicine, University of Pennsylvania; Chief Surgeon, Temple University Hospital and Shriner's Hospital for Crippled Children; Orthopedic Surgeon, Philadelphia General Hospital.
- 1921 *MURPHY, EUGENE C., M.D., F.A.C.S., 1841 South Broad Street. Surgeon, Doctor's Hospital; Attending Surgeon, United States Public Health Service.
- 1955 NEMIR, PAUL, JR., M.D., 255 South 17th Street. Associate Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Assistant Professor of Research Surgery, School of Medicine, University of Pennsylvania.
- 1956 NICHOLS, WILLIAM G., M.D., Veterans Administration Hospital, University and Woodland Avenues. Chief of the Surgical Service, Veterans Administration Hospital.
- 1938 NICHOLSON, JESSE T., B.S., M.D., F.A.C.S., 1740 Bainbridge Street. Chairman, Department of Orthopaedics, Graduate School of Medicine, University of Pennsylvania; Professor of Orthopaedics, Graduate School of Medicine, University of Pennsylvania; Chief of Orthopaedics, Children's, Graduate, Lankenau and Pennsylvania Hospitals; Orthopaedic Surgeon, Children's Seashore House, Atlantic City, New Jersey; Consultant Orthopaedic Surgeon, United States Naval Hospital.
- 1953 OAKEY, RICHARD S., M.D., Lankenau Hospital, Associate in Surgery, Temple University; University of Pennsylvania Graduate School; Associate with Dr. Hans May, Lankenau Hospital; Attending Plastic Surgeon, St. Christopher's Hospital; Chief, Hand Surgery, Pennsylvania Hospital; Surgeon to Germantown and Chestnut Hill Hospitals.
- 1954 O'NEILL, JAMES F., M.D., 6833 Castor Avenue. Chairman of Department of Surgery, Director of one Surgical Service, Director of Thoracic Surgery, Nazareth Hospital; Assistant Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Attending Surgeon in General and Thoracic Surgery, Lower Bucks County Hospital, Bristol, Pennsylvania.

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- 1956 O'NEILL, THOMAS J. E., M.D., 269 South 19th Street. Co-Chief, Thoracic Surgery, Episcopal Hospital; Associate, Thoracic Surgery, Abington Memorial Hospital; Associate, Thoracic and Cardiac Surgery, Presbyterian Hospital; Clinical Assistant Professor in Surgery, Woman's College and Hospital; Associate, Thoracic Surgery, Fitzgerald-Mercy Hospital; Associate Visiting Surgeon, Thoracic Surgery, Philadelphia General Hospital; Consultant, Thoracic and Cardiac Surgery, Frankford Hospital; Woman's Hospital of Philadelphia; and St. Mary's Hospital; Consultant, Thoracic Surgery, Veterans Administration Hospital, Coatesville, Pennsylvania; Attending in Thoracic Surgery, Veterans Administration Hospital, Philadelphia; Associate in Surgery, Graduate School of Medicine, University of Pennsylvania.
- 1938 *ORR, THEODORE E., B.S., M.D., 1930 Chestnut Street. Chief of Orthopedic Surgery, Presbyterian Hospital; Consultant, United States Naval Hospital; Chief Orthopedist, Crippled Children's Society in Schuylkill and Carbon Counties.
- 1915 †*OWEN, HUBLEY R., M.D., LL.D., F.A.C.S., 1505 Walnut Street. Emeritus Professor of Clinical Surgery, Woman's Medical College of Pennsylvania; Instructor in Surgery, Jefferson Medical College; Consultant Surgeon, Philadelphia General Hospital.
- 1939 PARKER, ALAN P., B.A., M.D., F.A.C.S., Bryn Mawr Medical Building. Instructor in Surgery, Jefferson Medical College; Surgeon, Pennsylvania Hospital; Attending Surgeon, Bryn Mawr Hospital.
- 1947 PARKER, WILLIAM STURGES, B.A., M.D., Bryn Mawr Medical Building. Associate Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Associate in Surgery, School of Medicine, University of Pennsylvania; Assistant Surgeon, Bryn Mawr Hospital; Surgical Consultant, Valley Forge Army Hospital.
- 1912 *PFEIFFER, DAMON B., B.A., M.D., F.A.C.S., Valley Road, Meadowbrook, Pennsylvania. Acting Consultant, Pfeiffer Surgical Clinic, Abington Memorial Hospital and Lankenau Hospital; Associate Professor of Surgery, Emeritus, Graduate School of Medicine, University of Pennsylvania.
- 1955 RAKER, JOHN W., M.D., Pennsylvania Hospital, 8th and Spruce Streets. Director of the Division of Surgery, Pennsylvania Hospital.
- 1916 †RANDALL, ALEXANDER, B.A., M.A., M.D., F.A.C.S., Laughlin Lane, Chestnut Hill, Pennsylvania. Formerly, Professor of Urology, School of Medicine, University of Pennsylvania; Urologist, Abington Memorial Hospital, Hospital of the University of Pennsylvania and Chestnut Hill Hospital.

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- 1951 RANIERI, TITO A., M.D., M.Sc., Methodist Hospital, Philadelphia, Pennsylvania. Associate in Surgery, University of Pennsylvania Graduate School of Medicine; Instructor in Surgery, Jefferson Medical College; Attending Surgeon, Methodist Hospital; Courtesy Staff in Surgery, Woman's Hospital and Bryn Mawr Hospital.
- 1938 *RANKIN, LYNN M., A.B., M.D., M.Sc., F.A.C.S., 200 Long Lane, Upper Darby, Pennsylvania. Assistant Surgeon, Jefferson Hospital; Associate Chief of Surgery, Presbyterian Hospital; Co-Director of Surgery, Delaware County Hospital; Instructor of Surgery, Medical Department, University of Pennsylvania.
- 1924 *RAVDIN, I. S., B.S., M.D., F.A.C.S., 3400 Spruce Street. John Rhea Barton Professor of Surgery, School of Medicine, University of Pennsylvania; Director, Harrison Department of Surgical Research, Schools of Medicine, University of Pennsylvania; Surgeon-in-Chief, Hospital of the University of Pennsylvania.
- 1956 RAVDIN, ROBERT GLENN, M.D., 3400 Spruce Street. Assistant Professor in Surgery, University of Pennsylvania Medical School; Associate in Surgery, Graduate School of Medicine, University of Pennsylvania; Associate in Surgery, University of Pennsylvania Hospital; Attendant in Surgery, Veterans Hospital.
- 1953 REAGAN, LINDLEY B., M.D., 330 South 9th Street. Assistant Surgeon, Pennsylvania Hospital; Associate Surgeon, Burlington County Hospital, Mt. Holly, New Jersey; Instructor in Surgery, School of Medicine and Graduate School of Medicine, University of Pennsylvania.
- 1949 REESE, JOHN D., M.D., 2037 Locust Street. Clinical Professor of Plastic Surgery, Jefferson Medical College; Assistant Surgeon, Jefferson Medical College Hospital; Consultant in Plastic Surgery, Veterans Hospital; Chief of Plastic Surgery, Philadelphia General Hospital; Consultant in Plastic Surgery, Montgomery Hospital, Norristown, Pennsylvania.
- 1943 RHODS, JONATHAN, B.A., M.D., Sc.D.(Med.), F.A.C.S., 3400 Spruce Street. Professor of Surgery and Surgical Research, School of Medicine, University of Pennsylvania; Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Assistant Director, Harrison Department of Surgical Research, University of Pennsylvania; Senior Surgeon, Children's Hospital.
- 1941 RISTINE, EDWIN R., A.B., M.D., F.A.C.S., Broadway Stevens Building, Camden 3, New Jersey. Chief Attending Surgeon and Head of Department General Surgery, Cooper Hospital, Camden, New Jersey; Assistant Professor of Surgery, Cooper Hospital, Jefferson Medical College.

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† Deceased since 1951.

- 1928 *ROBBINS, FREDERICK R., B.S., M.D., F.A.C.S., Byrn Mawr Medical Building. Surgeon-in-Chief, Byrn Mawr Hospital; Attending Surgeon, Pennsylvania Hospital; Consulting Surgeon, Valley Forge Army Hospital; Associate Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Assistant Professor of Clinical Surgery, School of Medicine, University of Pennsylvania.
- 1954 ROBERTS, BROOKE, M.D., 3600 Spruce Street. Assistant Professor of Surgery, School of Medicine, University of Pennsylvania; Associate in Surgery, Graduate School of Medicine, University of Pennsylvania; Associate, Surgical Staff, Hospital of the University of Pennsylvania; Attendant in Surgery, Veterans Administration Hospital.
- 1913 *RODMAN, JOHN STEWART, M.D., F.A.C.S., 524 Manor Road, Wynnewood, Pennsylvania. Emeritus Professor of Surgery, Woman's College of Pennsylvania; Consulting Surgeon, Woman's Medical College Hospital, Byrn Mawr Hospital and Presbyterian Hospital; Secretary-Treasurer, American Board of Surgery; Medical Secretary, National Board of Medical Examiners.
- 1945 ROSEMOND, GEORGE P., M.D., M.S., F.A.C.S., 3401 North Broad Street. Surgeon, Temple University Hospital; Chief of Surgery, Philadelphia General Hospital; Associate Attending Surgeon, St. Christopher's Hospital for Children; Surgeon, Episcopal Hospital; Professor of Clinical Surgery, Temple University School of Medicine and Hospital; Teaching Chief, Department of Surgery, Episcopal Hospital.
- 1928 †*ROTHSCHILD, NORMAN STANLEY, M.D., 245 South 16th Street. Surgeon, Albert Einstein Medical Center.
- 1950 ROYSTER, HENRY P., M.D., 3400 Spruce Street. Professor of Surgery, Schools of Medicine, University of Pennsylvania; Chief of Plastic Surgery Service, University Hospital; Consultant in Plastic Surgery, Alfred I. DuPont Institute, Wilmington, Delaware; Consultant in Plastic Surgery, Veterans Administration Hospital; Associate Surgeon, Children's Hospital.
- 1930 *RYAN, THOMAS J., M.D., F.A.C.S., Presidential Apartments, Philadelphia. Surgeon to Misericordia and Fitzgerald-Mercy Hospitals.
- 1951 SCHWEGMEN, CLETUS, M.D., 3600 Spruce Street. Assistant Professor of Clinical Surgery, University of Pennsylvania; Assistant Professor of Clinical Surgery, Graduate School of Medicine, University of Pennsylvania; Lecturer in Surgery, Graduate School of Nursing, University of Pennsylvania.
- 1953 SCOTT, MICHAEL, M.D., Temple University Hospital, Broad and Ontario Streets. Clinical Professor and Head of Department of Neurosurgery, Temple University Hospital and Medical School.

* Denotes Senior Fellow.

† Deceased since 1951.

- 1922 †*SHALLOW, THOMAS A., M.D., F.A.C.S., 1611 Spruce Street. Samuel D. Gross Professor, Professor of Surgery, Jefferson Medical College; Attending Surgeon, Jefferson Hospital; Consulting Surgeon, Philadelphia General Hospital; Montgomery County Hospital, Sacred Heart Hospital, Norristown, Pennsylvania, and Grand View Hospital, Sellersville, Pennsylvania.
- 1953 SHANDS, ALFRED R., JR., M.D., Alfred I. DuPont Institute, Wilmington, Delaware. Visiting Professor of Orthopaedic Surgery, University of Pennsylvania School of Medicine and University of Pennsylvania Graduate School of Medicine; Surgeon-in-Chief, Alfred I. DuPont Institute, Wilmington, Delaware; Medical Director, Nemours Foundation, Wilmington, Delaware; Consultant in Orthopaedic Surgery, Delaware Hospital, Memorial Hospital and Wilmington General Hospital, Wilmington, Delaware; Consultant, Children's Seashore House, Atlantic City, New Jersey.
- 1947 SHEARBURN, EDWIN W., A.B., M.D., M.S., F.A.C.S., Lankenau Medical Building. Associate in Surgery, University of Pennsylvania School of Medicine; Associate in Surgery, Jefferson Medical College; Associate Surgeon, Lankenau Hospital; Consultant in Surgery, Valley Forge Army Hospital.
- 1924 *SMYTH, CALVIN M., B.S., M.D., F.A.C.S., Abington Memorial Hospital, Abington, Pennsylvania. Surgeon-in-Chief and Director of the Surgical Division, Abington Memorial Hospital; Professor of Surgery, University of Pennsylvania Graduate School of Medicine.
- 1954 SPITZ, EUGENE B., M.D., 1740 Bainbridge Street. Associate Professor in charge of Pediatric Neurosurgery, School of Medicine, University of Pennsylvania; Neurosurgeon, Children's Hospital; Neurosurgeon in Charge of Pediatric Neurosurgery, Lankenau Hospital; Neurosurgical Consultant, Camden Municipal Hospital, Coatesville Hospital and J. C. Blair Hospital.
- 1957 STAINBACK, WILLIAM S., M.D., Byrn Mawr Medical Building. Surgeon to the Outpatient Department, Byrn Mawr Hospital; Assistant Surgeon to the Outpatient Department, Pennsylvania Hospital; Instructor in Surgery, Graduate School of Medicine, University of Pennsylvania.
- 1950 STAYMAN, JOSEPH W., JR., M.D., 350 Rumford Road. Surgeon, Germantown Hospital; Senior Associate Surgeon, Chestnut Hill Hospital; Chief Surgeon, Philadelphia General Hospital, Northern Division; Instructor in Surgery, Jefferson Medical College.
- 1945 †STEINER, CHARLES A., M.D., F.A.C.S., Upper Darby National Bank Building, Upper Darby, Pennsylvania. Clinical Assistant Professor of Surgery, Woman's Medical College of Pennsylvania; Chief of Surgical Service and Chief of Vascular Surgery, Delaware County Hospital; Assistant Attending Surgeon, Byrn Mawr Hospital.

* Denotes Senior Fellow.

† Deceased since 1951.

- 1954 STERLING, JULIAN, M.D., 1008 Sharpless Road. Assistant Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Instructor in Surgery, Temple University School of Medicine.
- 1948 STEVENS, LLOYD W., A.B., M.D., F.A.C.S., 133 South 36th Street. Surgical Chief, Philadelphia General Hospital; Surgical Chief, Presbyterian Hospital; Associate Professor of Clinical Surgery, School of Medicine, University of Pennsylvania.
- 1956 STRONG, GEORGE H., M.D., 255 South 17th Street. Associate Professor of Urology, Jefferson Medical College; Assistant Urologist, Jefferson Medical College and Hospital; Associate Urologist, Episcopal Hospital.
- 1935 *SUMMEY, THOMAS J., M.D., F.A.C.S., 330 South 9th Street. Surgeon-in-Chief, Burlington County Hospital, Mt. Holly, New Jersey; Consulting Surgeon, Pennsylvania Hospital.
- 1919 †*SWARTLEY, WILLIAM BLAINE, M.D., F.A.C.S., 6002 Greene Street. Demonstrator in Anatomy, Jefferson Medical College; Consulting Surgeon, Germantown Hospital, Chestnut Hill Hospital, Philadelphia Hospital for Contagious Diseases and Jefferson Medical College Hospital.
- 1954 TEMPLETON, JOHN Y., 3RD, M.D., 311 Airdale Road, Rosemont, Pennsylvania. Associate Professor of Surgery, Jefferson Medical College; Adjunct in Surgery, Jefferson Hospital; Assistant Surgeon, Pennsylvania Hospital; Surgical Consultant, Henry R. Landis State Tuberculosis Sanatorium; Consultant in Thoracic Surgery, Veterans Administration Hospital, United States Naval Hospital and Valley Forge Army Hospital.
- 1915 †*THOMAS, W. HERSEY, A.B., M.D., F.A.C.S., 145 East Gorgas Lane. Emeritus Professor of Urology, Temple University School of Medicine; Visiting Staff, Temple Hospital and Philadelphia General Hospital.
- 1954 TYSON, R. ROBERT, M.D., F.A.C.S., 3401 North Broad Street. Assistant Professor of Surgery, Temple University School of Medicine; Surgeon, Temple University Hospital; Assistant Visiting Surgeon, Philadelphia General Hospital; Attending Surgeon, U. S. Veterans Administration Hospital; Assistant Attending Surgeon, St. Christopher's Hospital.
- 1955 ULIN, ALEX W., A.B., M.D., 6700 Wayne Avenue. Associate Professor in Surgery, Hahnemann Medical College and Hospital; Director of Surgical Research, Hahnemann Medical College and Hospital; Senior Attending Surgeon, Hahnemann Hospital; Attending Surgeon, Veterans Administration Hospital; Chief of Surgery, Albert Einstein Medical Center, Southern Division, and Philadelphia General Hospital.

* Denotes Senior Fellow.

† Deceased since 1951.

- 1956 VONDEILEN, ARTHUR, A.B., M.D., 3722 Chestnut Street. Assistant Professor of Maxillo-Facial, Plastic and Reconstructive Surgery, Graduate School of Medicine, University of Pennsylvania; Chief of Plastic and Reconstructive Surgery, Graduate Hospital, Presbyterian Hospital, St. Agnes Hospital, Lower Bucks County Hospital, Bristol, Pennsylvania; West Jersey Hospital, Camden, New Jersey; Our Lady of Lourdes, Camden, New Jersey; Burlington County Hospital, Mt. Holly, New Jersey; Consultant in Plastic Surgery, Memorial Hospital, Morristown, New Jersey; Chester County Hospital, West Chester, Pennsylvania; and Cooper Hospital, Camden, New Jersey.
- 1952 WAGNER, FREDERICK B., JR., M.D., 255 South 17th Street. Assistant Surgeon, Jefferson Hospital; Clinical Professor of Surgery, Jefferson Medical College.
- 1928 †*WAGONER, GEORGE, M.D., Byrn Mawr Medical Building. Professor of Orthopaedic Pathology, Graduate School of Medicine, University of Pennsylvania; Consulting Orthopaedic Surgeon, Pottstown Hospital, Woman's Hospital and Byrn Mawr College; Orthopaedic Surgeon, Byrn Mawr Hospital, Graduate Hospital; Commander, Medical Corps, United States Naval Reserve.
- 1928 *WALKLING, ADOLPH, M.D., F.A.C.S., Medical Arts Building. Clinical Professor of Surgery, Jefferson Medical College; Chief of Surgical Division A, Pennsylvania Hospital; Surgeon to the Benjamin Franklin Clinic; Assistant Surgeon, Jefferson Medical College Hospital; Consulting Surgeon, Pottstown Hospital.
- 1928 *WEEDER, S. DANA, M.D., 250 West Tulpehocken Street. Clinical Professor of Surgery, Jefferson Medical College; Director of Surgery, Germantown Hospital; Chief Surgeon, Chestnut Hill Hospital.
- 1919 †*WILLARD, DEFOREST T., B.S., M.D., Cottage 85, Sea Island, Georgia. Emeritus Professor of Orthopaedics, Graduate School of Medicine, University of Pennsylvania; Formerly, Consultant, Graduate Hospital, Pennsylvania Hospital, Abington Memorial Hospital, Byrn Mawr Hospital, Babies Hospital and Home of the Merciful Saviour.
- 1939 *WILLAUER, GEORGE, B.S., M.D., F.A.C.S., 1930 Chestnut Street. Clinical Professor of Surgery, Jefferson Medical College Hospital; Chief of Surgery, Methodist Episcopal Hospital; Chief of Surgery, Eagleville Sanatorium, Eagleville, Pennsylvania.
- 1927 *WILLIAMSON, ERNEST G., M.D., F.A.C.S., 6353 Woodbine Avenue. Assistant Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Instructor in Surgery, School of Medicine, University of Pennsylvania; Surgeon, Presbyterian Hospital, Graduate Hospital.

* Denotes Senior Fellow.

† Deceased since 1951.

- 1898 *WOOD, ALFRED C., M.D., Ph.G., F.A.C.S., 2035 Chestnut Street. Formerly, Consulting Surgeon, Norristown Hospital and State Hospital, Norristown; Honorary Consulting Surgeon, Philadelphia General Hospital.

NONRESIDENT FELLOWS

- 1955 ALBRITTEN, FRANK F., JR., M.D., University of Kansas Medical Center, Kansas City 3, Kansas. Professor of Surgery, Chairman of the Department, University of Kansas Medical Center; Consultant, Veterans Administration Hospital, Kansas City, Missouri; Consultant, Veterans Administration Hospital, Wichita, Kansas; Consultant, Fort Leavenworth Hospital, Leavenworth, Kansas.
- 1919 †BROWN, HENRY P., JR., B.S., M.D., F.A.C.S., "Brinkwood," West Willow Grove Avenue and Cherokee Street. Consultant Surgeon, Pennsylvania Hospital and Presbyterian Hospital; Consultant in Surgery, Children's Hospital.
- 1955 DASCH, FREDERICK W., M.D., 416 Market Street, Pottsville, Pennsylvania. Surgeon to the Pottsville Hospital; Courtesy Staff Surgeon, A. C. Milliken Hospital.
- 1931 FLEMING, BRUCE L., M.D., F.A.C.S., 450 Sutter Street, San Francisco, California.
- 1938 †FREEMAN, NORMAN E., B.A., M.D., F.A.C.S., 1435 Fourth Avenue, San Francisco, California. Associate Clinical Professor of Surgery, University of California School of Medicine; Director, Vascular Research Laboratory, Franklin Hospital; Consultant in Vascular Surgery, Letterman General Hospital and Veterans Administration.
- 1941 †HARNEY, CHARLES H., B.S., M.D., Veterans Administration Center, Mountain Home, Tennessee. Chief of Surgical Services, Veterans Administration Hospital, Mountain Home, Tennessee; Consulting Surgeon, Memorial Hospital, Johnson City, Tennessee.
- HOWELL, JOHN C., M.D., 1104 Logan Avenue, Tyrone, Pennsylvania.
- 1925 KEATING, PETER M., M.D., Route 13, P.O. Box 383, San Antonio 9, Texas. Active Staff Orthopedic Service, Santa Rosa Hospital, Baptist Memorial Hospital and Nix Hospital.
- 1933 MASON, JAMES BRYANT, A.B., M.D., F.A.C.S., c/o American College of Surgeons, 40 East Erie Street, Chicago 11, Illinois. Assistant Director, American College of Surgeons; Chairman, Committee of Medical Consultants to the Fifth U. S. Army Surgeon; Senior Consultant to the Surgeon General of the Army for Reserve Affairs (Brigadier General, USAR).

* Denotes Senior Fellow.

† Deceased since 1951.

- 1931 MEADE, RICHARD HARDAWAY, B.S., M.D., 750 San Jose Drive, S.E., Grand Rapids, Michigan. Consulting Thoracic Surgeon, Blodgett Memorial Hospital; Consulting Thoracic Surgeon (Courtesy Staff), St. Mary's Hospital; Senior Thoracic Surgeon, Butterworth Hospital.
- 1934 NORTH, JOHN PAUL, A.B., M.D., F.A.C.S., Building 104, Ashburn Veterans Hospital, McKinney, Texas. Chief, Surgical Services, Veterans Administration Hospitals, Dallas and McKinney, Texas; Clinical Professor of Surgery, University of Texas, Southwestern Medical School, Dallas, Texas.
- 1942 SCHELL, JAMES F., B.S., M.D., F.A.C.S., 139 West Maple Avenue, Langhorne, Pennsylvania. Associate in Surgery, Graduate School of Medicine, University of Pennsylvania.
- 1908 †SWEET, JOSHUA, A.M., M.D., Sc.D., F.A.C.S., Unadella, New York. Emeritus Professor of Surgical Research, Cornell University Medical College; Honorary Chairman of the Board, The Hospital, Sidney, New York.
- 1934 WEBER, EDGAR H., B.S., M.D., F.A.C.S., 123 Southeast Second Street, Evansville, Indiana. Chief, Surgical Section, St. Mary's Hospital, Evansville, Indiana.
- 1923 WELLS, J. RALSTON, B.A., M.D., F.A.C.S., Veterans Administration Hospital, Grand Island, Nebraska. Manager, Veterans Administration Hospital, Grand Island, Nebraska; Director, Professional Services, Veterans Administration Hospital.
- ZINTEL, HAROLD A., M.D., St. Luke's Hospital, Morningside Heights, Amsterdam Avenue and 113th Street, New York, New York. Attending Surgeon and Director of the Surgical Services, St. Luke's Hospital, New York; Professor of Clinical Surgery, Columbia University College of Physicians and Surgeons, New York City.

ARMY AND NAVY MEMBERS

- 1948 BELL, LUTHER GEORGE, B.S., M.D., F.A.C.S., Captain, Medical Corps, United States Navy, United States Naval Hospital, Philadelphia.
- 1948 BROWN, HERBERT B., B.S., M.D., D.Sc.(Med.), F.A.C.S., Captain, Medical Corps, United States Navy, United States Naval Hospital, Bethesda, Maryland.
- 1948 CONRAD, HAROLD ALVIN, A.B., M.D., F.A.C.S., Colonel, Medical Corps, United States Army, Valley Forge Army Hospital, Phoenixville, Pennsylvania.
- 1952 COOPER, ROBERT, M.D., Captain, United States Naval Hospital, Philadelphia, Pennsylvania.

† Deceased since 1951.

- 1952 CLEGG, REAR ADM. COURTNEY, MC, U.S.N., District Medical Office, 1st Naval District, 495 Summer Street, Boston 10, Massachusetts.
- 1956 McNAMARA, CAPT. P. J., M.D., Chief of Surgery, United States Naval Hospital, Philadelphia, Pennsylvania.
- 1955 MATUSKA, COL. WALTER, Valley Forge Army Hospital, Phoenixville, Pennsylvania.
- 1956 SEELEY, BRIG. GEN. SAMUEL F., MC, Valley Forge Army Hospital, Phoenixville, Pennsylvania.
- 1952 YOUNG, CAPT. HAROLD, M.D., United States Naval Hospital, Philadelphia, Pennsylvania.

NEW FELLOWS

- | | |
|------------------------------|----------------------------|
| 1951 | 1954 |
| DR. WILLIAM T. FITTS, JR. | DR. EUGENE B. SPITZ |
| DR. C. ALEXANDER HATFIELD | DR. BROOKE ROBERTS |
| DR. H. WESLEY JACK | DR. JOHN Y. TEMPLETON, 3RD |
| DR. FRED G. MEDINGER | DR. JULIAN STERLING |
| DR. JOSEPH W. STAYMAN, JR. | DR. ROBERT P. GLOVER |
| DR. TITO AUGUSTINE RANIERI | DR. JAMES F. O'NEILL |
| DR. JOHN JACOB DETUERK | 1955 |
| DR. HORACE TAYLOR CASWELL | DR. PAUL NEMIR, JR. |
| DR. CLETUS W. SCHWEGMAN | DR. SAMUEL F. CRESSON |
| 1952 | DR. ALEX W. ULIN |
| DR. FREDERICK B. WAGNER, JR. | DR. WALTER A. D'ALONZO |
| DR. CHARLES P. BAILEY | DR. JOHN W. RAKER |
| DR. DONALD COOPER | DR. FREDERICK W. DASCH |
| DR. ALFRED S. FROBESSE | DR. ALBERT BEHREND |
| 1953 | DR. JOSEPH M. HOEFFELE |
| DR. CHARLES K. KIRBY | 1956 |
| DR. WILLIAM C. MARTIN | DR. ARTHUR VON DEILEN |
| DR. MICHAEL SCOTT | DR. GEORGE STRONG |
| DR. LINDLEY B. REEGAN | DR. ROBERT G. RAVDIN |
| DR. EVERETT KOOP | DR. THOMAS J. E. O'NEILL |
| DR. ROBERT A. COOPER | DR. ROBERT BUYERS |
| DR. RICHARD OAKEY | DR. PAUL GROTZINGER |
| DR. JAMES S. C. HARRIS | DR. JOHN E. HOPKINS |
| DR. ALFRED R. SHANDS, JR. | DR. GEORGE AUSTIN |
| | DR. WILLIAM NICHOLS |

Honorary Fellows

ELECTED	DIED
1881 SIR JAMES PAGET, London, England.....	December 30 1899
1881 THEODORE BILLROTH, Vienna, Austria.....	January 5, 1894
1881 BERNHARD VON LANGENBECK, Berlin, Germany..	September 30, 1887
1881 WILLARD PARKER, New York, N. Y.	April 25, 1884
1881 LEWIS A. SAYRE, New York, N. Y.	September 21, 1900
1881 MOSES GUNN, Chicago, Ill.	November 4, 1887
1881 JOHN T. HODGEN, St. Louis, Mo.	April 28, 1882
1881 W. W. DAWSON, Cincinnati, Ohio.....	February 16, 1893
1881 T. G. RICHARDSON, New Orleans, La.	May 26, 1892
1881 J. COLLINS WARREN, Boston, Mass.	1927
1881 W. T. BRIGGS, Nashville, Tenn.	June 13, 1894
1881 CHRISTOPHER JOHNSTON, Baltimore, Md.	October 11, 1891
1881 D. W. YANDELL, Louisville, Ky.	May 2, 1898
1898 MAURICE H. RICHARDSON, Boston, Mass.	July 31, 1912
1898 GEORGE M. STERNBERG, Washington, D. C.	November 3, 1915
1898 CHARLES W. MCBURNEY, New York, N. Y.	November 7, 1913
1898 NICHOLAS SENN, Chicago, Ill.	January 2, 1908
1898 THEODORE F. PREWITT, St. Louis, Mo.	October 17, 1904
1898 L. McLANE TIFFANY, Baltimore, Md.	October 23, 1916
1898 NATHANIEL P. DANDRIDGE, Cincinnati, Ohio.....	1910
1898 ROSWELL PARK, Buffalo, N. Y.	February 15, 1914
1898 ROBERT F. WEIR, New York, N. Y.	1927
1898 FREDERICK S. DENNIS, New York, N. Y.	March 8, 1934
1900 W. H. A. JACOBSON, London, England.....	July 27, 1917
1900 THEODORE KOCHER, Berne, Switzerland.....	October 3, 1916
1900 VINCENZ CZERNY, Heidelberg, Germany.....	October 3, 1916
1906 DUDLEY P. ALLEN, Cleveland, Ohio.....	January 6, 1915
1906 WILLIAM J. MAYO, Rochester, Minn.	July 28, 1939
1906 ROBERT ABBE, New York, N. Y.	March 7, 1928
1906 C. B. G. DE NANCREDE, Ann Arbor, Mich.	May 6, 1921
1907 JOHN C. MUNRO, Boston, Mass.	December 6, 1910
1908 J. EWING MEARS, Philadelphia, Pa.	May 28, 1919
1909 LEWIS STEPHEN PILCHER, Brooklyn, N. Y.	December 24, 1934
1916 W. W. KEEN, Philadelphia, Pa.	June 7, 1932
1920 HENRY R. WHARTON, Philadelphia, Pa.	December 3, 1925
1927 JOHN CHALMERS DACOSTA, Philadelphia, Pa.	May 16, 1933
1929 D'ARCY POWER, London, England.....	May 18, 1941

ELECTED	DIED
1929 ALBIN LAMBOTTE, Esneux, Belgium	
1929 HENRI HARTMANN, Paris, France	
1929 TH. TUFFER, Paris, France.....	October 27, 1929
1929 JOSEPH GUYOT, Bordeaux, France	
1929 GEORGES JEANNENEY, Bordeaux, France	
1929 F. DEQUERVAIN, Berne, Switzerland.....	January 23, 1940
1929 BERKELEY MOYNIHAN, Leeds, England.....	September 7, 1936
1929 HARVEY CUSHING, Boston, Mass.	October 7, 1939
1929 EDWARD W. ARCHIBALD, Montreal, Canada.....	1945
1929 JOHN M. T. FINNEY, Baltimore, Md.	May 30, 1942
1929 EVARTS GRAHAM, St. Louis, Mo.	
1929 ELLISWORTH ELIOT, Jr., New York, N. Y.	
1929 RUDOLPH MATAS, New Orleans, La.	
1929 DEAN D. LEWIS, Baltimore, Md.	1941
1929 EUGENE H. POOL, New York, N. Y.	1949
1929 GEORGE W. CRILE, Cleveland, Ohio.....	January 7, 1943
1929 EDWARD STARR JUDD, Rochester, Minn.	November 30, 1935
1929 DALLAS B. PHEMISTER, Chicago, Ill.	1951
1933 JOHN H. JOPSON, Mills, N. C.	
1954 HAROLD FOSS, Danville, Pa.	
1954 DIGBY CHAMBERLAIN, Leeds, England	
1954 FREDERICK COLLIER, Ann Arbor, Mich.	
1954 HOWARD NAFZIGER, San Francisco, Cal.	
1954 ARTHUR ALLEN, Boston, Mass.	
1954 ERIK HUSFELDT, Copenhagen, Denmark	
1954 ALLEN WHIPPLE, New York, N. Y.	
1954 SIR JAMES PATTERSON ROSS, London, England	

Fellows Deceased

Since Last Publication

- DR. JOSEPH C. BIRDSALL
1955 DR. ALBERT E. BOTHE
1955 DR. HENRY P. BROWN, JR.
1953 DR. ROBERT S. GAMON
1956 DR. JOHN H. GIBBON, SR.
1954 DR. JOHN JOPSON
1956 DR. CHARLES K. HARNEY
1956 DR. PAUL M. MECRAY
1954 DR. EDWARD F. McLAUGHLIN
DR. FRANCESCO MOGAVERO
1955 DR. HUBLEY R. OWEN
1954 DR. NORMAN S. ROTHSCHILD
1955 DR. THOMAS A. SHALLOW
1953 DR. CHARLES A. STEINER
1955 DR. WILLIAM B. SWARTLEY
1955 DR. H. WESLEY JACK
1951 DR. JOHN F. McCLOSKEY
1951 DR. ALEXANDER RANDALL

Memoirs

- May 3, 1954 Dr. Frederick R. Robbins on Dr. Charles A. Steiner
January 3, 1955 Dr. S. Dana Weeder on Dr. Edward F. McLaughlin
Dr. Ralph Goldsmith on Dr. Norman S. Rothschild
April 4, 1955 Dr. Irvin E. Deibert on Dr. Robert S. Gamon
May 2, 1955 Dr. Frederick A. Bothe on Dr. John Jopson
Dr. Orville C. King on Dr. Henry P. Brown, Jr.
Dr. Lewis C. Manges on Dr. Hubley R. Owen
January 9, 1956 Dr. S. Dana Weeder on Dr. William B. Swartley
February 6, 1956 Dr. Frederick B. Wagner, Jr., on Dr. Thomas A. Shallow
November 1956 Dr. John B. Flick on Dr. John H. Gibbon, Sr.
Dr. Frederick R. Robbins on Dr. Charles K. Harney

Charles Albert Steiner

Charles Albert Steiner was born on July 19, 1910, at Altoona, Pennsylvania, the son of Charles R. and Lulu Noe Steiner.

He was graduated from Pennsylvania State College in 1931 and received his degree of Doctor of Medicine at Temple University in 1935. His internship was served in the Bryn Mawr Hospital in 1935-1936. He received graduate training at the Massachusetts General Hospital, Lahey Clinic, Mayo Clinic and the Barnes Institute.

He remained on the surgical staff of the Bryn Mawr Hospital after his internship and, at the time of his death, he was Attending Surgeon in charge of one of the surgical services in that hospital. At the Delaware County Hospital, he was Chief of Service in the Department of Surgery and Chief in the Department of Vascular Surgery. He was Clinical Assistant Professor of Surgery at Women's Medical College of Pennsylvania. Several articles written by him have been published in the surgical journals.

He was a member of several medical societies, including the Academy of Surgery, the College of Physicians of Philadelphia, American College of Surgeons, the International College of Surgeons and the American Association for the Surgery of Trauma. He was a diplomate of the American Board of Surgery.

He was a member of the Union League of Philadelphia and the Merion Golf Club.

During his professional career, he was closely associated with Dr. Drury Hinton and Dr. J. Stewart Rodman, who selected him as his surgeon when he had a serious operation performed on himself.

Dr. Steiner was seized with acute pain in his chest while completing an operation at the Bryn Mawr Hospital on August 5, 1953. He was taken to the Barton Division of the Jefferson Hospital, where he seemed to be improving until he had massive hemorrhages from a bleeding duodenal ulcer which caused his death on September 4, 1953.

He is survived by his wife, the former Doris Harrison; a son, Ronald Craig, and a sister, Mrs. Frank C. Masterson.

Dr. Steiner, who died at the age of 43, was an excellent surgeon who was admired and liked by his associates. He was kind, thoughtful, capable and industrious and will be missed greatly by me and his many friends.

FREDERICK R. ROBBINS

Edward Francis McLaughlin

Edward Francis McLaughlin was born June 27, 1903, in Philadelphia. His early education was in the public schools: the Asa Packer Elementary School and the Northeast High School for Boys.

In 1925 he was graduated from the University of Pennsylvania with a degree of A.B. During his time at the University of Pennsylvania, he played on the soccer team and was selected as an All-American. He finished his medical training at the University of Pennsylvania and was graduated with the Class of 1928. While he was a medical student, he joined the Alpha Mu Pi Omega Fraternity.

Internship followed at the Germantown Hospital, where he served from June, 1928, to January, 1930.

Following his internship he was appointed to the Germantown and the Chestnut Hill Hospitals as an Associate in Surgery. He was also appointed Clinical Instructor in Gynecology in the clinic of the University of Pennsylvania, and an Associate in Surgery at the Municipal Hospital. In January, 1941, he was appointed Chief of Service in Surgery to the Nazareth Hospital.

Certification by the American Board of Surgery was received in 1942.

In November, 1932, he married Margaret C. Long. They had 7 children: Louise, William, Frances, Margaret, Mary, Edward and James.

His work was interrupted by World War II. He enlisted in the United States Army Air Force, in which he served from August 23, 1942, to February 15, 1946. He attained the rank of Lieutenant Colonel during his tour of duty. He served as Director of Surgery in Station Hospitals at Gowen Field, Boise, Ida., and Lincoln Army Air Field, Lincoln, Neb., and served on the Officers' Retirement Board of the United States Army Air Force.

After returning from his service with the Armed Forces, he was appointed Chief of Service in Surgery at the Nazareth Hospital, Associate in Surgery at the Chestnut Hill Hospital, Instructor in Surgery at the Graduate School of Medicine of the University of Pennsylvania and lecturer for the Pennsylvania State Medical Society Graduate Courses in 1949.

He was elevated to the position of Chief of Service, Germantown Hospital, 1949; Assistant Professor of Surgery at the Graduate School, University of Pennsylvania, in 1951, and Assistant Professor of Surgery in the Woman's Medical College in 1952.

He also bore his share of responsibility in contributing several monographs and other articles to the surgical literature.

In the various organizations to which he belonged he was an active member. He was Director of Surgical Services of the Nazareth Hospital, Vice-President of the Staff of Nazareth Hospital 1953 to 1954, member of the Board of Directors of the Philadelphia County Medical Society from 1951 to 1953 and a Director of the Board of the Class of 1925 of the Uni-

versity of Pennsylvania. In 1952, he represented the American Medical Association at a joint meeting of the Irish Medical Society and the British Medical Society held at Dublin, Ireland.

He was a Fellow of the American College of Surgeons, Philadelphia Academy of Surgery, a member of the College of Physicians of Philadelphia, The Philadelphia County Medical Society, the Pennsylvania State Medical Society, the American Medical Association, the Industrial Medical Association, the Society of Sts. Luke, Cosmos and Damian, the Medical Society of St. Rene Goupil, and the Alumni Association of the University of Pennsylvania. He was also a member of the following clubs: The Friendly Sons of St. Patrick, The Catholic Philopatrian Society, the Varsity Club of the University of Pennsylvania, the Philadelphia Doctors' Golf Association and the Philadelphia Cricket Club.

Dr. McLaughlin's outstanding characteristic was that of integrity. This was demonstrated not only in his daily life and association with his friends but also in his practice and teaching. It was a great pleasure to be with him, either at work or at play, because of his very fine sense of humor and his great wit.

In spite of his serious interest in his work, he thoroughly enjoyed playing. Fishing was his greatest hobby, and golf a close second.

It was not until a routine physical examination of the members of the Staff of Germantown Hospital in March, 1953, that Dr. McLaughlin learned he had leukemia. In spite of the knowledge of this death-dealing disease, he continued his work and his associations with others, with an attitude that was not only stoical, but also without any semblance of self-pity or depression. He continued work up to within a few weeks of his death, which occurred on May 31, 1954.

In the death of Dr. McLaughlin, Surgery has lost a fine practitioner; and his friends, a great companion.

S. DANA WEEDER

Philadelphia College of Physicians and of the American Medical Association, a member of the Philadelphia County Medical Society, the Zeta Beta Tau Fraternity and the Philmont Country Club. He made a number of significant contributions to surgical literature.

On July 4, 1951, while playing golf, Dr. Rothschild suffered a left hemiplegia from which he never entirely recovered. This calamity, one of the most grievous which can afflict a surgeon, was borne, as the writer can attest, with the most extraordinary gallantry. He never was heard to bemoan his ill-fortune. His optimism and faith in his ultimate recovery were unshakable and he evinced the utmost cheerfulness and good humor at all times. None could fail to admire his courage and fortitude. Death came to him with merciful rapidity, apparently from a coronary occlusion, on February 20, 1954. He leaves a heritage of an honorable and distinguished career—one in which his family and multitude of friends may take a deep and justifiable pride.

RALPH GOLDSMITH

Norman S. Rothschild

Norman Stanley Rothschild was born in Philadelphia on December 11, 1889, the youngest of the 3 children of Meyer and Millie (Berman) Rothschild. He received his preliminary education at the William Penn Charter School, from which he was graduated in 1907. Of massive and powerful physique, he was a fine athlete. He was catcher on the baseball team and center on the football team at Penn Charter, and was chosen all-Philadelphia center in his senior year. At the University of Pennsylvania, where he received his M.D. degree in 1912, he played goal-tender on the Water Polo team and was the All-American selection for his position. His internship was served at Jewish Hospital from 1912 to 1914. He then became a Resident at Lying-In Hospital in New York.

Dr. Rothschild became assistant to the late Dr. Solomon Solis-Cohen in 1914. This association with an eminent internist and clinician, which lasted for 6 years, was no doubt an important contributing factor to his broad knowledge and viewpoint in medical matters and to his exceptional concern with problems of pathology and diagnosis. The catholicity of his interests is shown by his many years of experience as instructor of Anatomy at the University of Pennsylvania and his incumbency as Surgical Pathologist at Jewish Hospital from 1917 to 1931 inclusive. His ability as a teacher is attested by the great popularity of his quiz class in Anatomy at the University of Pennsylvania.

Early in his career, Dr. Rothschild became associated with Dr. John Jopson at Graduate Hospital. The Fellows of this Academy need not be told that a man trained by our beloved "Joppy" was well-trained, indeed. This association lasted until Dr. Jopson's retirement and was succeeded by a similar one with Dr. Walter Estell Lee. Dr. Rothschild occupied a position of trust and esteem with both of these eminent men which endured throughout their professional lives.

In 1936 Dr. Rothschild was appointed Attending Surgeon at Jewish Hospital, which position he held until his death. There he was admired and honored for his impeccable honesty, his broad knowledge, his high ability in the operating room and at the bedside and his tireless energy and concern for his patients. His interest in, and aid to, his interns, residents and assistants endeared him to them. His relations with his colleagues were based upon the secure foundation of mutual friendliness and confidence. He also held a similar appointment at Northern Liberties Hospital for many years.

He was married in 1918 to Dorothy Jacobs, who survives him, as do his two sons, Norman and Morton.

Dr. Rothschild became a Fellow of the Academy of Surgery in 1928. He was a Diplomate of the American Board of Surgery, a Fellow of the

Robert S. Gamon

Robert Speer Gamon was born at Cedarville, N. J., on September 27, 1895. He was the son of the Rev. Robert I. and Marie Gamon.

He attended high school in Knoxville, Tenn., and was graduated with a B.S. degree from Maryville College in 1917. He then continued his medical education at the University of Pennsylvania Medical School, where he received his degree of Medicine in June, 1921.

He served his internship at the Cooper Hospital, Camden, N. J., during the years of 1921-22. Following this he was appointed to the Outpatient Surgical Staff of Cooper Hospital. He did a considerable amount of post-graduate work, both in Philadelphia and in Boston. As a result of this, he was made an Attending Surgeon at the Cooper Hospital. Unfortunately, because of cardiac disability, it was necessary for him to limit his work and he was given the title of Surgeon Emeritus. He held the position of Consulting Surgeon at the Zurbrugg Memorial Hospital at Riverside, N. J.

He was a Fellow of the American College of Surgeons and a Diplomate of the American Board of Surgery. He was a member of the Philadelphia Academy of Surgery and of the College of Physicians of Philadelphia. He was a member of the State and County Medical Societies, serving as Secretary and President, respectively, of the Camden County Medical Society. He belonged to the Philadelphia Doctors Golf Association and was a member of the Seaview Country Club in Absecon, N. J.

While attending a convention of the New Jersey State Medical Society in Atlantic City, as a delegate from Camden County, he was stricken with an acute coronary thrombosis and died on May 19, 1953.

Doctor Gamon was a very popular doctor and citizen of his community, taking a very active part in civic and medical affairs. He was also an ardent golfer. He was a surgeon of considerable ability and exceptional judgment. I was very fortunate to have him as an associate for many years. He was revered by all of his patients, who had a profound respect for him. His ever-ready willingness to help the younger men was outstanding.

He is survived by his wife, Marion S. Gamon; a son, Robert, and a daughter, Mrs. Nancy Brennan.

IRVIN E. DEIBERT

John Howard Jopson

Dr. John H. Jopson was born in Philadelphia on December 28, 1871. After receiving his elementary education in Philadelphia, he was graduated from the University of Pennsylvania School of Medicine in 1893. He served his internship at the Children's Hospital, and for many years was visiting surgeon to the Children's, the Presbyterian, the Graduate and the Bryn Mawr Hospitals. He was Professor of Surgery at the University of Pennsylvania Graduate School of Medicine from 1918 to 1937, at which time he was elected Emeritus Professor.

He was a member of the American Surgical Association, the Philadelphia Academy of Surgery, the International Surgical Society, the American Society of Clinical Surgeons, the American College of Surgeons, the Philadelphia College of Physicians, the Philadelphia Pediatric Society, the Pathological Society of Philadelphia, the Philadelphia County Medical Society, the Medical Society of the State of Pennsylvania, and the American Medical Association. He took a prominent part in the activities of the Philadelphia Academy of Surgery, serving as its President from January 1, 1922, to January 1, 1924.

During World War I he served in France with the Army Medical Corps and was discharged with the rank of Lieutenant Colonel. During the war he became very much interested in the use of Dakin's solution, particularly in empyema, and followed this interest upon his return. He was always an ardent student in the treatment of fractures. He was the author of many contributions to the medical literature in a wide scope of conditions which he encountered in his practice of general surgery. He was an interesting and inspiring teacher. He always had time to discuss problems with his students, either in the operating room or in the wards. In the University of Pennsylvania Graduate School of Medicine, he conducted a refresher course in operative surgery for many years. This was well attended, and the manner in which he taught this course was most inspiring to these younger surgeons. Many of the prominent surgeons in the Navy returned to take this course.

As a rule, Dr. Jopson was a rather quiet person but a most interesting conversationalist. He was a learned English scholar, an excellent after-dinner speaker, and was widely known for his ability to quote both prose and poetry when serving in that capacity. One of his greatest hobbies was fishing and he often related stories of his experiences at the Swiftwater Club in the Poconos. He had many friends in the University Club and spent many hours with them. He retired from practice in 1930 and moved to Pawleys Island, S. C. Later he moved to Rutherford, N. C. During the later years of his life he visited Philadelphia every year, particularly in the winter months, and at times attended the joint meetings of the Philadelphia Academy of Surgery

with the New York Surgical Society in Philadelphia. He attended the joint meeting held in Philadelphia in 1954, at which time he addressed the combined societies after dinner.

He died in Rutherford, N. C., on December 5, 1954. Dr. Jopson will always be remembered as a most inspiring teacher, deliberate in his actions, and these characteristics were transmitted in his surgery.

FREDERICK A. BOTHE

Henry Paul Brown, Jr.

Doctor Henry Paul Brown, Jr., the son of Henry Paul and Annie Taylor Brown, was born in Germantown, Philadelphia, on February 13, 1888. His preliminary education was obtained at the Germantown Academy and the University of Pennsylvania. He received his medical degree from the Medical School of that University in 1912. He then served as an intern in the Pennsylvania Hospital in Philadelphia.

Following the completion of his internship, Doctor Brown became associated with such outstanding teachers and surgeons as Drs. Francis D. Stewart, Robert G. LeConte and Edward B. Hodge. His clinical activities were carried out in the Pennsylvania, the Presbyterian, Jefferson, and Children's Hospitals in this city. Later he was surgeon to all of these hospitals. Following his retirement in 1947, he was made a consultant both at the Presbyterian and the Pennsylvania Hospitals.

Henry Brown was a member of the American Medical Association, the Philadelphia Academy of Surgery (recorder, 1920-1922; secretary, 1935-1941); a Fellow of the College of Physicians of Philadelphia, and of the Eastern Surgical Society and the American College of Surgeons; and a member of La Société Internationale de Chirurgie and the American Surgical Association. He was also a Diplomate of the American Board of Surgery (Founders' Group).

Doctor Brown served his country in two World Wars. He was instrumental in organizing a hospital unit for the Presbyterian Hospital in World War I, but later he joined the 77th Division. However, prior to overseas duty he suffered a fractured femur. This accident ended his active duty, and he was discharged in 1919 with the rank of Major. In 1940, Doctor Brown aided in organizing a unit at the Pennsylvania Hospital. He accompanied this unit to the Pacific Theater, first as Chief of the Surgical Section and later as its Commanding Officer, retiring as a Colonel in 1946.

The teaching of medical students was always one of this man's interests. During his entire professional life, he was dedicated to this cause. For many years he taught both medical students and graduate students as Professor of Clinical Surgery at the School of Medicine of the University of Pennsylvania, and at its Graduate School of Medicine. Previously, Doctor Brown taught anatomy at the same University. During his active teaching career, he received many tributes from these students. Doctor Brown's entire professional life was devoted to teaching. His aim in this life, as he expressed it, was to teach medical students to be capable surgeons and to develop them as leaders in their respective fields. To those who knew Henry Brown, he was unselfish in this desire. Every opportunity was given to the younger men with whom he was associated to develop their surgical knowledge. His entire life was one of giving.

Doctor Brown found time to give to other interests. For many years he was Secretary of the Philadelphia Aid Association, in which he was keenly interested. He was faculty advisor for the A.M.P.O. Medical Fraternity. He gave unstintingly of his time to these organizations and many more.

While not a prolific writer, Doctor Brown did make a number of contributions to the medical literature. His method of the "Reduction of Intussusception in Infants" brought considerable attention. In 1936, in delivering the Annual Oration before this Academy, he presented as his subject the modern concept of the treatment of "Acute Hematogenous Osteomyelitis of the Long Bones," a controversial subject at that time.

In 1947, Doctor Brown retired from his Philadelphia practice and his hospital positions to accept a "call." This call again was one of "giving," in order to help those who were in a less fortunate position than he himself, so characteristic of the man. He went to China, under the auspices of the Episcopal Church, to teach in the hospitals of that country. He remained in China for 3 years, leaving there with the advent of Communism. Again he returned to Philadelphia, but for only a short time. Still interested in the unfortunate, he went to Formosa, in a professional capacity, where he remained until 1952. His return was due to the terminal illness of his father-in-law.

From the time of his return from Formosa until his death, Doctor Brown continued to be interested in his profession. Much of his time was devoted to the Red Cross in the capacity of an advisory physician.

In 1914, Doctor Brown married Edith C. Houston. Of this union, there were born 3 sons and 3 daughters. One son is a physician, and another a medical student.

Sickness had been no part of this man's life. However, in the fall of 1954 he began to notice marked fatigue. This increased with no cause being found. He was hospitalized in February, 1955, and during hospitalization succumbed, February 20, to an unrecognized malady, which pathologic study showed to be Hodgkin's disease.

He will be remembered by all who knew him not only as a surgeon and a teacher but also as one who had a total disregard for self-aggrandizement and a thoughtful consideration of those with whom he was associated. He found his profession an excellent field through which to serve his fellows, and he earnestly employed his talents in the most useful manner, neglecting personal gain.

ORVILLE C. KING

Hubley R. Owen

Dr. Hubley R. Owen was born in Pensacola, Fla., May 8, 1883, the son of Capt. Alfred Owen, a naval surgeon, and Mary Hubley Owen. His parents died of a contagious disease before he was a year old.

He studied in the Friends School in Washington, D. C., Episcopal High School in Alexandria, Va., and was graduated from the University of Pennsylvania School of Medicine in 1905.

He was appointed Chief Police and Fire Surgeon in Philadelphia in 1907 and served in this capacity until December, 1939. During his early work with the firemen, he became associated with Dr. J. Chalmers DeCosta and his co-workers at Jefferson Hospital and assisted in writing several editions of DeCosta's book, *Modern Surgery*. He was graduated from Jefferson Medical College in the Class of 1915, thus having the unusual distinction of being a graduate of both University of Pennsylvania and Jefferson Medical Schools.

He helped to organize the International Association of Police and Fire Surgeons, in 1921, and was elected three times as President of this organization.

Dr. Owen served in the armed forces during World War I and was attached to Base Hospital 38 in Nantes, France. After discharge, he joined the Army Officers Reserve Corps, in which he held the rank of Lieutenant Colonel.

The health and the welfare of the Philadelphia policemen and firemen, along with their families, became his primary interest. He established the Welfare Organization among these men in 1925, enabling this group to obtain specialized medical care at a time when it was available only to the rich or the poor.

During this time he became greatly interested in the treatment of trauma, was a member of the American College of Surgeons' Committee on Trauma and was one of the organizers of the American Association for the Surgery of Trauma. He directed the production of several motion picture films depicting the proper emergency treatment of fractures. These films were the basis for many first-aid courses throughout the country previous to World War II.

In January, 1940, he was appointed Director of Public Health and served until January, 1944. In 1941, he was named Chairman of the Philadelphia Council of Defense and served with distinction in preparing this city for civilian defense. He flew to England during the "blitz" to observe their defense and health programs.

In 1944, he was appointed Director of Medical Services of the Board of Education in Philadelphia and served in this capacity until 1949, when he was retired because of age.

Shortly after this retirement he was made Executive Director of the Heart Association of Southeastern Pennsylvania. He is responsible for the expansion of the heart program into Bucks, Delaware and Montgomery Counties and the reorganization of the Philadelphia Heart Association as the Heart Association of Southeastern Pennsylvania. He organized an independent campaign for funds which greatly increased the Association's potentialities, making it possible for educational and community service programs to be developed.

Dr. Owen was a member of the Staffs of Woman's Medical College, Philadelphia General, Jefferson, and Phoenixville Hospitals. He was Professor of Clinical Surgery at the Woman's Medical College and Instructor in Surgery at the Jefferson Medical College. He was a member of the Philadelphia College of Physicians, the Philadelphia County Medical Society, the American College of Surgeons and the American Board of Surgery. He was a past president of the Philadelphia Academy of Surgery and served for years as secretary to this organization.

Dr. Owen was an enthusiastic sportsman, being primarily interested in fox hunting. He was a member of the Pickering Hunt Club and was on its Board of Governors. He was a sincere Christian and churchman, serving as a vestryman at the Valley Forge Chapel.

He is survived by his wife, the former Miss Maude Smith; a son, Col. Edgar R. Owen, and two sisters, Mrs. Gordon Crawford and Miss Christine Q. Owen, both of Washington, D. C.

Dr. Owen's surgical career was dominated by an intense desire to seek out and pursue new thoughts and methods, particularly in the field of trauma, and to aid the young physician in finding clinical material and financial stability. He was known for his personal charm, vital, outstanding personality, professional honesty and highly ethical principles, and was endeared to his many friends, associates, patients and employees by his kindness and thoughtfulness.

LEWIS C. MANGES

William B. Swartley

Dr. William Blaine Swartley was born August 30, 1884, in Lansdale, Pa. He was graduated from the Lansdale High School in 1902 and entered Albright College, Reading, Pa., where he remained 2 years. He entered the University of Pennsylvania in 1905 as an undergraduate and was graduated from its Medical School June 16, 1909. He served an Internship at the Germantown Dispensary and Hospital from July, 1909, to October, 1910. From there he went to the Pennsylvania Hospital, where he served an Internship and became Assistant Chief Resident. He was at the Pennsylvania Hospital from October 1, 1910, until March 1, 1912. In April, 1912, he returned to the Germantown Hospital to complete the unfinished internship of Dr. Percy Shaw.

In 1912, he was made Assistant Surgeon on the Services of Dr. George G. Ross and Dr. Francis T. Stewart at the Germantown Hospital, and also the Chief of Surgical Dispensary.

Elevation to the rank of Clinical Assistant Surgeon, Surgical Dispensary of the Jefferson Hospital, Jefferson Medical College, on the service of Dr. Francis T. Stewart came in 1913, where he remained until 1920.

Dr. Stewart reposed great confidence in Dr. Swartley and made him Clinical Assistant Surgeon at the Jefferson Hospital and the Jefferson Medical College in 1913. He served with Dr. Stewart until Dr. Stewart's death in 1920. His interest in Jefferson was very great and, in addition to having served with Dr. Stewart, he served in the Anatomical Laboratory as a demonstrator of anatomy, beginning in 1920 and continuing until 1948. Aside from surgery, probably the greatest interest that Dr. Swartley had in the field of medicine was anatomy. It was his habit to quiz internes and surgical residents constantly about anatomy, as presented either in the operating room or on the wards, in making a diagnosis and its relationship to the diagnosis. He has been well known by most ex-Jefferson students because of his clear teaching of anatomy in their first year of medical training.

In 1913 and 1914, Dr. Swartley served as Assistant Dispensary Surgeon to the Children's Hospital on the service of Walter E. Lee.

In 1917, Dr. Hiram R. Loux appointed Dr. Swartley as Assistant Surgeon to the Philadelphia General Hospital. He continued in this capacity until 1926.

Further advancement came to him at the Germantown Hospital in 1922, when he was made Attending Surgeon to fill the vacancy caused by the death of Dr. George G. Ross. In 1934, in addition to his duties as Chief of Surgery at Germantown, he was made Chief of the Department of Anesthesia.

In 1939, he was elected to the Office of Director of Service, Department of Surgery, Germantown Dispensary and Hospital.

The Philadelphia Hospital for Contagious Diseases, in 1940, made him Chief Surgeon.

In 1930, he was made Surgeon to the Chestnut Hill Hospital.

Following an illness, in 1948 Dr. Swartley was made Consulting Surgeon to the Chestnut Hill Hospital and to the Germantown Hospital.

Dr. Swartley's military service began in 1915, when he was attached to the American Ambulance Hospital of Paris, where he served from October 1, 1915, to January 12, 1916, under the auspices of the Pennsylvania Hospital Unit, commanded by Dr. James P. Hutchinson. He was made a First Lieutenant in the United States Army Medical Corps in 1918. He served at the Rockefeller Institute in New York City, later transferred to the Walter Reed Hospital, for a course of study in the treatment of empyema, infected wounds and the use of Dakin's solution in the treatment of infected wounds. In 1924, he was appointed Captain in the Medical Officers Reserve Corps. He was granted the "Selective Service Medal" in 1946.

Dr. Swartley was a member of the Presbyterian Church, the Phi Alpha Beta Fraternity at the University of Pennsylvania; the H. C. Wood Medical Society; the Philadelphia County Medical Society; a Fellow of the Philadelphia College of Physicians, the Philadelphia Academy of Surgery, and the American College of Surgeons; and was certified by the American Board of Surgery in 1938, Founders group. He was made President of the Alumnae of the Interns of the Germantown Dispensary and Hospital in 1946, President of the Medical Staff of the Germantown Dispensary in 1947, President of the Inter-Hospital Bridge Whist Association 1946-47, President of the Doctors' Golf Association 1948 and Treasurer of the Philadelphia Academy of Surgery from 1922 to 1936. From 1922 to 1945, he was Treasurer of the Bulletin of Surgical Clinics of Philadelphia.

Dr. Swartley was always interested in sports. When he was in the Lansdale High School, he played second base on the baseball team and tackle on the football team. When he was at Albright, he played baseball, tackle on the football team and guard on the basketball team. While at Albright, he sang in the Glee Club and also sang in the University of Pennsylvania Glee Club his first year. One of his great interests was the basketball team of the Germantown Hospital Nurses and he coached them as assistant coach for many years. Later he became very much interested in golf and played frequently as a member of the Huntingdon Valley Golf Club. He was one of the regular attendants at the meetings of the Philadelphia Doctors' Golf Association. He was also interested in tennis and, for a while, squash. However, his preference was golf.

It is obvious that Dr. Swartley had many and varied interests. Surgery and the advancement of it came first. Certainly teaching played a very important part in his life. He was also active in other fields, particularly in sports,

the Philadelphia Doctors' Golf and the Philadelphia Doctors' Bridge League and other activities that were associated with doctors.

On September 10, 1955, he was struck down with apoplexy, which reduced him to complete invalidism and finally ended in his death on November 15, 1955.

S. DANA WEEDER

Thomas A. Shallow

Thomas A. Shallow was born on November 26, 1886, in Philadelphia, the city which remained his home and center of activities for his 69 years of life. Of Irish and Scotch-English descent, he was sixth in the family of 7 children of Edward F. Shallow, a millwright, and Elizabeth MacQuillan Shallow, both of Pennsylvania. His preliminary education was obtained in the Philadelphia public schools, in which he distinguished himself as a student and won recognition as an athlete. At the age of 15 his interest in medicine was already such that he would cut classes at Central High School to attend surreptitiously some of the postmortem examinations and teaching clinics at the old Medico-Chi Hospital. In 1907, he matriculated at Jefferson Medical College. During his sophomore year, he was president of the Spitzka Anatomic League and was class historian in his senior year. He also was a prominent member of the last track team and last football team of the institution. At graduation, in 1911, he received the Alumni Prize for highest general average of the 4 years, as well as several other awards.

Dr. Shallow remained at Jefferson for his internship during 1911 to 1913, and from 1913 to 1914 he served as Chief Resident Physician. In addition to the latter position, he also worked with Dr. Hobart A. Hare in the department of experimental pharmacology and with Dr. Albert Brubaker as a quiz master in physiology. At this time his outstanding ability was recognized by the senior staff members, several of whom offered him their association. However, for him the hero of that day was Dr. John Chalmers DaCosta, whom he prized to serve as personal assistant from 1914 to 1925. As a member of the faculty of the Jefferson Medical College, his career began as Clinical Assistant, with promotion through the ranks to Professor of Surgery in 1931. The peak of his career was reached in 1939, when he was made Samuel D. Gross Professor and Head of the Department.

During his earlier years, Dr. Shallow served on the staffs of other local hospitals, among which were Philadelphia General, St. Joseph's, Montgomery County, Delaware County, Sacred Heart, and Grand View in Sellersville, Pa. Later he restricted his operative work to Jefferson Hospital but remained influential in the affairs of the other institutions. He was a member and a former president of the Philadelphia Academy of Surgery, Fellow of the American College of Surgeons, International College of Surgeons, and founder member of the American Board of Surgery. He was also a member of the College of Physicians of Philadelphia; County, State and American Medical Associations; American Association of the History of Medicine; and

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American Medical Editors' and Authors' Association. Dr. Shallow was active in the Nu Sigma Nu medical fraternity and a member as well as faculty adviser for the Alpha Omega Alpha honorary fraternity. He served as president of the Alumni Association of Jefferson Medical College in 1938. His portrait was presented to the Jefferson Medical College by the Graduating Class of 1950. An LL.D. degree from Jefferson Medical College was awarded him in 1953.

During World War I, Dr. Shallow served as Captain in the Medical Corps, 1917 to 1919. Initially, he was assigned to the Rockefeller Institute, New York, and later served as Surgeon to Evacuation Hospital Center No. 25 in France. During World War II he remained a civilian and was active in the accelerated educational program of that period.

Dr. Shallow's extramural activities were many and varied. He belonged to the Union League of Philadelphia, the Philadelphia Racquet Club, the Art Club of Philadelphia, the Franklin Institute and the Pennsylvania Scotch-Irish Society. He found time to distinguish himself in civic affairs and was a member of the Board of City Trusts of Philadelphia, Board of Directors of Wills Eye Hospital, Board of Directors of the Philadelphia House of Detention, Advisory Board of Directors of the Municipal Court, Director on the Board of the Old Eagle School, a historical society, and Chairman of the Philadelphia Inquirer Hero Award Committee.

Hobbies played a very minor role in Dr. Shallow's life. He gave up golf during his later years and derived his main relaxation from fishing.

As a man, Dr. Shallow was constitutionally rugged, dynamic and indefatigable. On the executive faculty of the college his celerity of thought, coupled with his profound knowledge of college and hospital affairs, often aided in the rapid solution of intricate and vexing administrative problems. His advice was sought and followed by many. As a teacher, he placed great emphasis on the clinical history and its correlation with the evolution of the pathologic process. His weekly clinic was an academic highlight, prepared with care and enhanced by the participation of his entire staff. His principles of surgery as well as technic were so consistent that the younger men who trained under him knew exactly what he would do in each situation. As an operator, his dexterity and judgment commanded the respect of all who knew him. Dr. Shallow frequently stated that he had no favorite operation, but it was generally conceded that he excelled most in surgery of the gastrointestinal tract. As a writer, he made many contributions to the surgical literature. He pioneered in the operation of one-stage pharyngeal diverticulectomy, which combined the teamwork of surgeon and esophagoscopist. His private practice was huge, and he devoted much time and energy to individual patients, many of whom were referred for professorial opinion and care.

During his last illness, which was due to carcinoma of the pharynx, he chose to work despite great discomfort and failing strength. In these final

days he refused to discuss his illness or be coddled in any way and stoically maintained his ready wit and humor until his death on December 26, 1955. He is survived by his wife, the former Myrtle C. Luman, whom he married in 1920. With her, we mourn the loss of a counselor and friend, an extraordinary colleague and truly a man's man.

FREDERICK B. WAGNER, JR.

John Heysham Gibbon

Dr. John Heysham Gibbon, a past president of the Philadelphia Academy of Surgery, died March 13, 1956, at the age of 85.

Dr. Gibbon was born in Charlotte, N. C., the descendent of a distinctly medical family. His great-grandfather, grandfather, father and only brother were physicians. His great-grandfather, Dr. John H. Gibbons, was born in Chester County, Pa., in 1759, was graduated in medicine at Edinburgh and returned to this country to practice in Philadelphia. He was a Charter Fellow of the College of Physicians of Philadelphia. A son born in 1795, John H. Gibbons, graduated in medicine at the University of Pennsylvania but did not practice medicine. He devoted himself to scientific pursuits and became a well-known mineralogist. In 1834, he was appointed assayer of the United States Mint at Charlotte, N. C. With this generation, the "s" was dropped from the family name, and he became Dr. John H. Gibbon. His second son, Robert Gibbon, was graduated from Jefferson Medical College in 1847 and returned to Charlotte to practice, devoting himself particularly to surgery. Robert had two sons, Robert L. and John H., both of whom were graduated from Jefferson Medical College. Robert L. returned to Charlotte. John H., the subject of this memorial, remained in Philadelphia.

Dr. Gibbon received his early education in public and private schools and, in medicine, at Jefferson Medical College, where he was graduated in June, 1891. He served his internship at the Polyclinic Hospital and then spent 3 years as resident physician at the Pennsylvania Hospital.

Dr. Gibbon began the practice of medicine in Philadelphia in February, 1895. Always a lover of horses, he soon acquired a smart gig which he drove to and from the Pennsylvania Hospital. Shortly after commencing practice, he was appointed assistant demonstrator of anatomy at Jefferson Medical College and later demonstrator of osteology in the same institution, a position which he held for several years. His work in osteology may well have had something to do with an interest in fractures which was to come later and remain throughout his professional career. In 1896, he was elected Surgeon to the Out-Patient Department of the Pennsylvania Hospital; in 1899, Chief of the Surgical Clinic at the Jefferson Medical College Hospital under Dr. W. W. Keen, a position which he held until 1901, when he resigned to accept a Professorship of Surgery at the Philadelphia Polyclinic.

Already Dr. Gibbon was attracting attention as a teacher and a surgeon. By now he had contributed a number of articles to the surgical literature. In 1903, he was elected Surgeon to the Pennsylvania Hospital to succeed the late Dr. Thomas G. Morton. The same year he returned to the faculty of

the Jefferson Medical College as an associate professor of surgery, a position which he held until elected to full professorship in 1907. For some years Dr. Gibbon was Surgical Registrar at the Philadelphia Hospital; also, he held an appointment on the Surgical Dispensary Staff of the Children's Hospital. In 1900, he was elected Surgeon to the Bryn Mawr Hospital.

On September 2, 1901, Dr. Gibbon married Miss Marjorie G. Young, daughter of the late Lieutenant-General S. B. M. Young, of the United States Army.

In the field of military service, Dr. Gibbon's record was distinguished. During the Spanish-American War, he served as First Lieutenant and Assistant Surgeon in the Third U. S. Volunteer Engineers; when peace was declared he resigned to resume professional work in Philadelphia. On April 11, 1917, he was commissioned Major in the Medical Reserve Corps of the U. S. Army and was attached to Pennsylvania Base Hospital 10, which subsequently took over a British General Hospital at Le Treport, France. When this unit was activated and sailed for France on May 18, 1917, Major Gibbon was with it as Chief of Surgical Services. In October, 1917, he served on detached duty as surgeon in charge of a casualty clearing station team in a hospital situated a little above Poperinghe, a small corner of Belgium still held by the Allies. This hospital frequently was bombed and frequently was the scene of rewounding and killing of already wounded men. Dr. Gibbon remained there for 2 months, often going beyond the 12-hour period of operating expected of each surgeon. Shortly after his return to Base Hospital 10, in December, 1917, he was permanently detached from the Pennsylvania Hospital unit and assigned as Consultant in Surgery to the American Expeditionary Forces. He served in the Toul sector as consultant to the First, the Twenty-sixth and the Eighty-second Divisions and later to the Fourth Corps. In August, 1918, he was assigned as Surgical Consultant to the American Hospitals in England. He terminated his military service in January, 1919, with the rank of Colonel.

Dr. Gibbon was a past president of the American Surgical Association and the College of Physicians of Philadelphia, as well as the Philadelphia Academy of Surgery. He was an original member of the Society of Clinical Surgery.

Elected to Fellowship in the Philadelphia Academy of Surgery in 1899, Dr. Gibbon became recorder in 1902, secretary in 1905, vice-president in 1910 and president in 1914. He retained an active interest in the Academy throughout his professional career and was a frequent contributor to the scientific discussions on the floor of the Academy. His Southern stories, always in demand, usually in dialect, were part of the enjoyment of the joint dinners of the Philadelphia Academy and the New York Surgical Society.

Dr. Gibbon was the author of 60 or more articles covering a wide range of surgical subjects and several articles historical or philosophical in nature.

In 1902, he reported the fourth successful case of penetrating wound of the heart operated upon in this country. In 1903, he reported a case of painless amputation of the leg after the intraneural injection of cocaine. He was quick to seize that which appeared to be good in the newer surgery in an era of rapid surgical progress. He early became interested in aneurysms and wrote a number of papers on the subject. His last listed contribution to the literature, the Presidential Address of the American Surgical Association in 1926, was on "The Psychology of the Sick Man."

Dr. Gibbon was not only interested in the art and the science of medicine but also in the humanities as related to the practice of medicine. As an older and more experienced man, he never forgot his obligations to the younger generation coming on, and was the source of inspiration to all who came within the sphere of his influence. In his long association with Dr. Gibbon, the author of this memorial never ceased to be profoundly impressed by his attitude toward his fellow man, his kindness and consideration regardless of station in life. Dr. Gibbon radiated cheerfulness and always seemed to make his patients feel better by his mere presence.

In addition to clinics at Jefferson Hospital, Dr. Gibbon gave a weekly clinic at the Pennsylvania Hospital. Several times a year, he presented fractures. These clinics were well known, and the amphitheater at the Pennsylvania Hospital always was filled with students from the medical schools of Philadelphia. His lectures were clear, and he had the ability to drive home facts.

Dr. Gibbon was an excellent technician. He appreciated the importance of gentleness, the avoidance of trauma to tissues in surgical procedures. He urged his assistants to use local anesthesia in order to learn gentleness. He often said "horse hair" should be the only suture material provided in accident wards for the closure of skin wounds since "horse hair" broke if tied too tightly.

Beside the many papers published, Dr. Gibbon for a number of years edited the *Saunders Year Book of Surgery* with Dr. DaCosta. He wrote the section on "Compression of Arteries" in *Buck's Reference Handbook of the Medical Sciences* and contributed to the section on "Operative Techniques" in *Keen's Surgery*.

In 1948, Jefferson Medical College conferred the Honorary Degree of Doctor of Science on Dr. Gibbon because of his significant contributions to humanity, his country and the medical profession.

Dr. Gibbon suffered a coronary artery occlusion 21 years ago while in Boston for a meeting of the American Surgical Association. There he was attended by Dr. Paul Dudley White. He had a second coronary occlusion a few years later and a third early in December of 1955. Despite coronary artery disease, he led a happy and interested life and never was inactive for long periods of time.

Dr. Gibbon resigned from teaching positions at the age of 60, chiefly

because of a firm belief that he had held since early in his career that older men should not wait too long before making way for younger men. He continued with the private practice of surgery for a few years longer.

After retirement he devoted much time to carpentry and became a skilled craftsman. He was an avid reader and retained a keen interest in national and world affairs.

On March 13, 1956, he developed pulmonary edema which was sudden in onset. He soon lapsed into unconsciousness and died within a few hours.

Dr. Gibbon's wife survived him by only 7 days. To one who knew their devotion and dependence upon each other, this was not altogether unexpected. Surviving are a daughter, Mrs. Winthrop H. Battles, of Media; 3 sons, Dr. John H. Gibbon, Jr., Samuel D. Gross Professor of Surgery and Head of the Department of Surgery, The Jefferson Medical College; Samuel Y., of Jenkintown, and Robert, of Haverford; 9 grandchildren and 3 great-grandchildren.

JOHN B. FLICK

Charles Harrison Harney

Dr. Charles Harrison Harney was born in Lexington, Ky., on July 11, 1900—the son of Oswald Hood Harney and Mary Stewart Harney. He was descended from early American stock who held posts of responsibility in the Revolutionary days. He had one younger brother who died in 1944.

He attended Cornell University and obtained his Bachelor of Science degree from the University of Pittsburgh. He received his medical degree in 1929 from the College of Physicians and Surgeons, Columbia University. He served his internship in the Philadelphia General Hospital from 1929 to 1931. He was Chief Resident Physician of the Bryn Mawr Hospital from 1931 to 1933, and he remained on the Surgical Staff of the Bryn Mawr Hospital until he resigned in 1948 to become the Chief of Surgery at the Veterans Administration Hospital, Mountain Home, Tenn., where he remained until he resigned in 1953 because of ill health. He was an instructor in anatomy at the Jefferson Medical College from 1933 to 1937 and an instructor in surgery from 1937 to 1948. He was on active duty in the U. S. Navy from 1942 to 1945, serving as the Senior Surgeon or Flight Surgeon on the carrier *U.S.S. Sangamon* with the rank of Commander. He participated in the landing in Africa and had duty in the Pacific, including Guadalcanal, and had the following campaign ribbons and stars: European, African, Middle Eastern with 1 star, American Theater, Asiatic-Pacific with 2 stars, and the Presidential Unit Citation with ribbon and star. He was also on duty at the U. S. Naval Hospital, Philadelphia, Pa., and at the U. S. Naval Hospital, Norfolk, Va. He was a patriotic and loyal citizen.

Dr. Harney was a Diplomate of the National Board of Medical Examiners in 1931; Diplomate of the American Board of Surgery in 1937 and, in 1948, when he left this area, he became a nonresident Fellow of the Academy. He was also a member of the Southeastern Surgical Congress and a Fellow of the American College of Surgeons. He was a Consultant in Surgery at the Memorial Hospital, Johnson City, Tenn., and had been a Civilian Consultant at the Valley Forge Army Hospital. He was the author of several papers which have been published and was formerly on the staff of the Pennsylvania Hospital.

Dr. Harney was in Honolulu, on his way to rejoin his carrier, when, on physical examination, it was found that he had hypertension. He was returned to the States because of this condition, and his health never improved. His hypertension became more marked and finally disabled him. He had several episodes of coronary occlusion and, during the last few years of his

life, he was an invalid and was almost blind. He died at Sewickley, Pa., on July 6, 1956, at the age of 55. He is survived by his wife, Mrs. Helen Harney, and his mother. Dr. Harney was an excellent surgeon who was conscientious and kind in his treatment of patients. He was liked and admired by all of his associates. He was interested in aviation and that is probably the reason why he selected the Naval Aviation for his specialty during World War II.

FREDERICK R. ROBBINS

Winners of the Samuel D. Gross Prize

- 1895 "Inquiry into the Difficulties Encountered in the Reduction of Dislocations of the Hip."—Dr. Oscar H. Allis, Philadelphia, Pa.
- 1902 "Treatment of Certain Malignant Growths by Excision of the External Carotids."—Dr. Robert H. W. Dawbarn, New York, N. Y.
- 1905 "The Biology of the Micro-organisms of Actinomycosis."—Dr. James Homer Wright, Boston, Mass.
- 1910 "An Anatomical and Surgical Study of Fractures of the Lower End of the Humerus."—Dr. Astley P. C. Ashhurst, Philadelphia, Pa.
- 1915 "Surgery in the Treatment of Hodgkin's Disease."—Dr. John Lawrence Yates, Milwaukee, Wis.*
- 1920 "Some Fundamental Considerations in the Treatment of Empyema Thoracis."—Dr. Evarts A. Graham, St. Louis, Mo.
- 1925 "The Surgery of Pulmonary Tuberculosis."—Dr. John Alexander, Saranac Lake, N. Y.
- 1930 "Abnormal Arteriovenous Communications."—Dr. Emile Holman, Stanford University, San Francisco, California.
- 1935 "The Therapeutic Problems in Bowel Obstruction."—Dr. Owen H. Wangenstein, Minneapolis, Minn.
- 1940 "The Role of the Liver in Surgery."—Dr. Frederick Fitzherbert Boyce, New Orleans, La.
- 1945 "Parenteral Alimentation in Surgery with Special Reference to Protein and Amino Acids."—Dr. Robert Elman, St. Louis, Mo.
- 1950 "Localization of Brain Tumors with Radio-Active Agents."—Dr. George E. Moore, Minneapolis, Minn.
- 1955 "Liquid Plasma—Its Safety and Usefulness in Shock and Hypoproteinemia."—Dr. J. Garrott Allen, Chicago, Ill.

* This essay has never been published by the author as required under the terms of the award.

Fellows Who Have Delivered the Annual Oration

1881	S. D. GROSS	1919	NONE
1882	D. HAYES AGNEW	1920	JOHN G. CLARK
1883	WILLIAM HUNT	1921	J. TORRANCE RUGH
1884	JOHN H. BRINTON	1922	GEORGE P. MULLER
1885	JOHN H. PACKARD	1923	WALTER ESTELL LEE
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1887	J. EWING MEARS	1925	JOHN SPEESE
1888	C. B. G. DE NANCREDE	1926	DAMON B. PFEIFFER
1889	JOHN B. ROBERTS	1927	EMORY G. ALEXANDER
1890	DEFOREST P. WILLARD	1928	EDWARD J. KLOPP
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1892	T. G. MORTON	1930	J. STEWART RODMAN
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1895	JOHN B. DEEVER	1933	GEORGE M. DORRANCE
1896	JAMES M. BARTON	1934	DEFOREST P. WILLARD
1897	THOMAS R. NEILSON	1935	A. BRUCE GILL
1898	O. H. ALLIS	1936	ALEXANDER RANDALL
1899	WILLIAM J. TAYLOR	1937	HENRY P. BROWN, JR.
1900	NONE	1938	ISIDOR S. RAVDIN
1901	H. R. WHARTON	1939	JOHN B. FLICK
1902	J. M. SPELLISSY	1940	FRANCIS C. GRANT
1903	R. G. LECONTE	1941	WILLIAM BATES
1904	G. G. DAVIS	1942	S. DANA WEEDEE
1905	J. CHALMERS DACOSTA	1943	FREDERICK A. BOTHE
1906	RICHARD H. HARTE	1944	CALVIN M. SMYTH
1907	EDWARD MARTIN	1945	ADOLPH A. WALKLING
1908	CHARLES H. FRAZIER	1946	JOHN H. GIBBON, JR.
1909	JOHN H. GIBBON	1947	L. KRAEER FERGUSON
1910	ASTLEY P. C. ASHHURST	1948	JONATHAN E. RHODS
1911	JOHN H. JOPSON	1949	FRANCIS C. GRANT
1912	GEORGE C. ROSS	1950	W. EMORY BURNETT
1913	WILLIAM L. RODMAN	1951	J. MONTGOMERY DEEVER
1914	ALFRED C. WOOD	1952	HERBERT R. HAWTHORNE
1915	FRANCES T. STEWART	1953	JULIAN JOHNSON
1916	EDWARD B. HODGE	1954	GEORGE ROSEMOND
1917	J. EDWIN SWEET	1955	WILLIAM H. ERB
1918	NONE	1956	GEORGE WILLAUER

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Annual Oration for 1951

Acute Appendicitis in Children*

J. MONTGOMERY DEEVER, M.D.†

PHILADELPHIA

The purpose of this paper is to evaluate the role of chemotherapeutic drugs and antibiotic agents in the surgical treatment of acute appendicitis in children. The study is based upon 777 consecutive cases of acute appendicitis in children 14 years of age and under. The youngest child in this series was 18 months of age.

The diagnosis and treatment of appendicitis have been on a sound and established basis since 1886, when Reginald Fitz⁴ published his epochal paper "Perforating Ulcer of the Vermiform Appendix With Special Reference to Diagnosis and Treatment." Appendicitis is the most common lesion of the abdomen requiring surgical intervention in childhood. Many writers on this subject believe that appendicitis in children is quite different from appendicitis in adults. With this contention, I must disagree. The chain of pathologic events in children is essentially the same as that in adults. The progress of the disease is often more rapid in children than in adults and there is less chance of localization in children. As the disease develops, the symptoms and signs are similar in children and in adults. The difference between children and adults does not lie in a difference of pathology, signs and symptoms, but in the greater difficulties of making a diagnosis in children.

All writers agree that the mortality from appendicitis has decreased in the past two decades. An article in a Statistical Bulletin of the Metropolitan Life Insurance Company⁵ entitled "Appendicitis Mortality Near Vanishing Point" states: "The mortality from appendicitis has been cut by more than one half in the past five years and by almost three fourths in the past decade, among the industrial policyholders of the Metropolitan Life Insurance Company. The age-adjusted death rate in 1946 was 3.2 per 100,000, as compared with a rate of 7.1 in 1941. The improvement in mortality has extended to the entire range of ages in each sex. Marked advances in the medical care and the surgical treatment of patients have also played a large part in reducing

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† From the Two Surgical Services at the Children's Hospital of the Mary J. Drexel Home, Philadelphia.

the death toll from appendicitis. In very recent years, chemotherapy has probably been the outstanding factor in further reducing the mortality from the disease. There appears to be no evidence that the incidence of appendicitis is decreasing; in fact, the figures available seem to point the other way."

The Commission on Acute Appendicitis Mortality of the Medical Society of the State of Pennsylvania² has reported on the continuing decrease in mortality from 1937 till the present time. In 1937 the mortality reported was 3.39 per cent, and in 1947 it was .076 per cent.

Following the introduction of the chemotherapeutic drugs, numerous reports appeared in the literature discussing their use in appendicitis. Most of these reports advocated their use and stated that they had decreased the mortality in appendiceal peritonitis. Ravdin, Rhoads and Lockwood,¹⁰ in 1940, reported: "The mortality in a series of 809 consecutive cases of acute appendicitis has been reduced from 1.5 per cent in the first 552 cases to 0.4 per cent in the last 257 cases. The improvement is, we believe, the result of the employment of sulfanilamide in all severe cases in the latter group. No other known factor was changed." Penberthy, Benson and Weller,⁹ in 1942, stated: "Chemotherapy has proved of definite benefit in the treatment of appendicitis in infants and children." W. J. Norris,⁷ in 1946, stated: "the introduction of sulfa drugs has done more than any other single factor to reduce the mortality rate."

Likewise, following the introduction of penicillin and later the other antibiotic agents, articles appeared in the literature reporting lowered mortality in appendiceal peritonitis. Ochsner and Johnston,⁸ in 1945, reported 50 cases of spreading peritonitis treated with penicillin in which there was but one death. All masses resolved. In no case was it necessary to drain an intra-abdominal abscess and there was no spontaneous drainage into the bowel. Abel and Allen¹ likewise feel penicillin is a valuable adjunct in the treatment of appendicitis in children.

In 1940, we instituted the routine use of sulfanilamide in the treatment of appendiceal peritonitis. Since 1945, we have been using penicillin and the other antibiotics in all appendiceal peritonitis cases. We were anxious to determine as accurately as possible what part the chemotherapeutic drugs and antibiotic agents played in the reduction of mortality in appendicitis in infants and children. Therefore, we reviewed all the cases of acute appendicitis at the Children's Hospital of the Mary J. Drexel Home from 1930 to August 20, 1951, a total of 777 consecutive cases (Table 1). There was no mortality in the nonperforated group. The mortality for the entire series was 1.8 per cent. The mortality among patients in whom the appendix had perforated is also shown in Table 1. The perforated cases were divided into only two classifications, (a) perforated with peritonitis and (b) perforated with localized abscess. Tables 2 and 3 show the same statistics for patients five years and under, and three years and under, respectively. It may be significant that the mortality rate in the patients three years and under is twice that of the group of patients five years and under.

TABLE 1. ACUTE APPENDICITIS IN CHILDREN, MARY J. DREXEL HOSPITAL, 1930 TO AUGUST 20, 1951

	CASES	DEATHS	MORTALITY
Non-perforated, 599 (77.1%)	599	0	0
Perforated, 178 (22.9%)	—	14	8.00%
Perforations with abscess	48	1	2.08
Perforations with peritonitis	126	13	10.32
Perforations on removal	4	0	0
Total	777	14	1.8%

Eleven of the patients who died were operated upon and three were non-operative deaths.

TABLE 2. ACUTE APPENDICITIS IN CHILDREN, MARY J. DREXEL HOSPITAL, 1930 TO AUGUST 20, 1951

	PATIENTS FIVE YEARS AND UNDER		
	CASES	DEATHS	MORTALITY
Non-perforated, 30 (37.04%)	30	0	0
Perforated, 51 (62.96%)	—	10	19.60%
Perforations with abscess	13	0	0
Perforations with peritonitis	38	10	26.31%
Total	81	10	12.34%

Seven of the patients who died were operated upon and three were non-operative deaths.

TABLE 3. ACUTE APPENDICITIS IN CHILDREN, MARY J. DREXEL HOSPITAL, 1930 TO AUGUST 20, 1951

	PATIENTS THREE YEARS AND UNDER		
	CASES	DEATHS	MORTALITY
Non-perforated, 8 (28.53%)	8	0	0
Perforated, 20 (71.47%)	—	7	35.00%
Perforations with abscess	4	0	0
Perforations with peritonitis	16	7	43.75
Total	28	7	25.00%

Five of the patients who died were operated upon and two were non-operative deaths.

The cases have been divided into four groups, namely:

Group I	1930-1932
Group II	1932-1936
Group III	1937-1944
Group IV	1945-1950

TABLE 4. ACUTE APPENDICITIS IN CHILDREN, MARY J. DREXEL HOSPITAL, 1930 TO AUGUST 20, 1951. MORTALITY IN PERFORATED CASES

PERIOD	ENTIRE SERIES		
	NO. OF CASES	DEATHS	MORTALITY (PER CENT)
1930-1932	43	7	16.3
1933-1936	46	3 (1-not op.)	6.5
1937-1944	53	2 (1-not op.)	3.78
1945-1951	36	2 (1-not op.)	5.5

TABLE 5. ACUTE APPENDICITIS IN CHILDREN, MARY J. DREXEL HOSPITAL, 1930 TO AUGUST 20, 1951. MORTALITY IN PERFORATED CASES

PERIOD	PATIENTS FIVE YEARS AND UNDER		
	NO. OF CASES	DEATHS	MORTALITY (PER CENT)
1930-1932	6	3	50
1933-1936	17	3	17.6
1937-1944	19	2 (1-not op.)	10.53
1945-1951	10	2 (1-not op.)	20

The mortality in perforated cases, according to these groups, is shown in Table 4. Each group contains roughly the same number of cases. Group I represents an era in which fluid electrolyte therapy was not well understood. Group II represents an era in which (a) parenteral fluid administration was more frequently used and carefully controlled. (b) Intestinal decompression was used routinely in all peritonitis cases. (c) There was a marked increase in the use of the McBurney incision. Group III represents an era in which the chemotherapeutic drugs, especially sulfanilamide, were used, both locally in the abdomen and by hyperdermoclysis. Group IV represents the antibiotic era. All peritonitis cases received penicillin, streptomycin and various combinations of other antibiotic agents. Table 5 shows the same division into groups with mortality in patients five years and under. The reduction in mortality shows the same trend in both the entire group and the group of patients five years and under.

In our series the most striking improvement in mortality occurred in Group II (Fig. 1).

DIAGNOSIS

As stated previously, I believe the symptoms and signs of appendicitis in children are essentially the same as in adults, the main difference being a

greater difficulty in making the diagnosis in children. A general rule applicable for diagnosis: abdominal pain, vomiting and slight fever should always be considered as due to acute appendicitis unless proved otherwise. I have never been able to differentiate with any accuracy between acute appendicitis and mesenteric adenitis. Rectal examination deserves special mention. Since the pelvis of a child is smaller than in an adult, the area covered by rectal examination is correspondingly greater. Frequently, such an examination will provide the diagnosis in an otherwise obscure clinical picture. I agree with a statement by Morton and Kilby:⁶ "A laparotomy is mandatory if, after 24 hours' observation of a child with abdominal pain, there is any reasonable doubt in the mind of the clinician that one of these systemic diseases rather than acute appendicitis is the cause."

TREATMENT

Once the diagnosis of acute appendicitis has been made, early operation is the procedure of choice. In cases of acute appendicitis and acute appendicitis with peritonitis, operation is delayed no longer than necessary to restore hydration and electrolyte balance. Delayed operation for appendiceal peritonitis was practiced in only a few cases in this series. These cases were in the early groups, that is, before 1940. We feel that delayed operation in appendiceal peritonitis in children is definitely contraindicated. The appendix should always be removed. The only cases in which this rule is not followed is in the localized abscess group. Merely to drain in cases of appendiceal peritonitis is not logical, for what will prevent the continued pouring

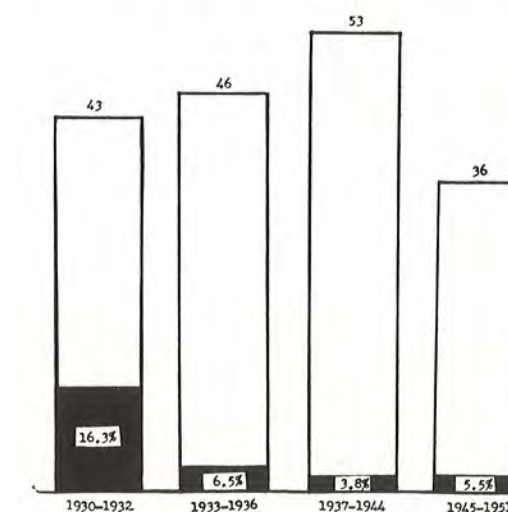


FIG. 1. Mortality in patients with appendiceal perforation.

TABLE 6. ACUTE APPENDICITIS IN CHILDREN, MARY J. DREXEL HOSPITAL, 1930 TO AUGUST 20, 1951.
REMOVAL OF APPENDIX

	APPENDIX REMOVED	APPENDIX NOT REMOVED	DEATH
Appendiceal Peritonitis	125	1	1
Appendiceal Abscess	42	6	1

out of septic material from the diseased organ into the free peritoneal cavity? There is only one case in this series in which the appendix was not removed in the presence of peritonitis; this patient died, as is usually the case (Table 6).

In the localized abscess group there is no urgency. When the abscess is palpable and the mass is lateral, the extraperitoneal approach is ideal. When the mass is not lateral, the extraperitoneal approach is not feasible, and then the incision is made over the presenting mass. The appendix should not be removed unless it is accessible and appendectomy can be accomplished without danger of contaminating uninvolved peritoneum. There was one death in the abscess group. In this case the appendix was removed with considerable difficulty, which we feel was an error in operative judgment, for following the operation the child developed a generalized peritonitis and died.

INCISION

Figure 2 shows the relative frequency of McBurney over right rectus incisions from year to year. There are four distinct advantages of the

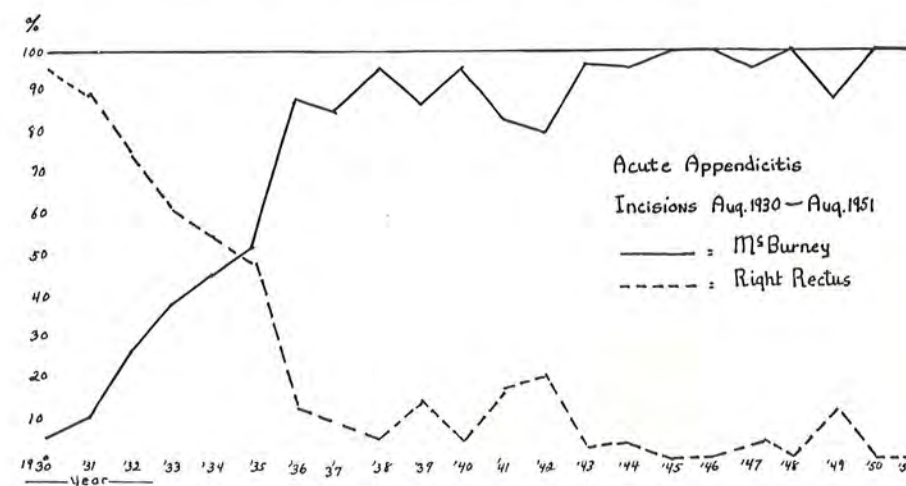


FIG. 2. Acute appendicitis incisions, August, 1930 to August, 1951.

McBurney incision over the right rectus incision. It permits easy, direct access to the site of the disease, minimizing any soiling of uninvolved peritoneum. Drains, when necessary, can be placed laterally. A McBurney incision can be closed loosely without risk of postoperative hernia, and such closure is very important when peritonitis is present. In the drainage cases, when the McBurney incision is employed, only the peritoneum need be sutured. Postoperative wound complications, such as infection or cellulitis of the abdominal wall, are rarely seen. Lastly, when a secondary operation for obstruction is necessary, it can be easily performed by the right rectus route through uncontaminated structures if the primary operation was performed by the McBurney approach. For these reasons the McBurney incision is now used almost exclusively.

DRAINAGE

Drainage is used only when gross septic or fecal soiling is present, or when considerable exudate exists on the cecum, terminal ileum, or parietal peritoneum. The presence of fluid, even cloudy fluid, is no indication for drainage. In recent years we have used drainage less frequently. Many of the patients with early peritonitis are not drained. In these cases, after closing the peritoneum, the rest of the abdominal wall is either left open or is closed loosely. The latter method has been used most since the use of antibiotics pre- and postoperatively. Postoperatively, in addition to the usual supportive measures such as intravenous fluids, oxygen and duodenal suction are employed as indicated.

ANESTHESIA

The advances in anesthesia in the past 15 years, we feel, have contributed to a decreased morbidity attending major and minor surgical procedures upon infants and children.

Among the changes in technics and general supportive methods can be listed:

1. The constant presence of intravenous infusions in the major cases. This not only allows immediate replacement of fluids lost, but provides quick access to the circulation for emergency medication and blood transfusions.
2. The recognition of the role of hyperthermia and increased arterial CO₂ tension in providing a background for so-called anesthetic convulsions. Fluid therapy plus rapidly acting intravenous barbiturate medication serve as aids in overcoming such occurrences.
3. The use of cyclopropane (including endotracheal intubation) has found wide acceptance in pediatric anesthesia. However, open drop ether still retains a foremost place.

4. Spinal anesthesia, even in infants, has become an accepted procedure, particularly in toxic cases.

5. The use of curare to give excellent relaxation with a light plane of anesthesia has diminished the length of the postanesthetic recovery period and its attendant pulmonary complications.

DISCUSSION OF DEATHS

There were 14 deaths, three were nonoperative (Table 7). As one would expect, peritonitis was the principal cause of death, both operative and nonoperative. Three deaths were due to postoperative intestinal obstruction. The obstruction in all these cases was secondary to peritonitis. There was one death from pneumonia. The deaths from obstruction and pneumonia occurred in Groups I and II, that is, before 1940. I would like to discuss further, in detail, the deaths that were theoretically avoidable.

Case 1. In this case the appendix was not removed in the presence of perforation and peritonitis.

Case 2. This was an appendiceal abscess and the appendix was removed with difficulty. The child died with peritonitis. We feel that this was an error in judgment. Removal of the appendix should not have been attempted in this case.

Case 3. This was a case where a Meckel's diverticulum which was not diseased was removed in the presence of appendiceal infection. We list this as an error in judgment.

Case 4. This was a perforated appendix with peritonitis, in 1947. The child patient was extremely ill and distended on admission; temperature 103°. He was operated upon 3 hours after admission. Preoperatively, he did not receive fluids. Intestinal decompression was not instituted, and antibiotics were not given. We feel that operation should have been delayed until proper fluid electrolyte therapy and intestinal decompression had been instituted.

Case 5. H. J., age 2 years 7 months, was admitted to the hospital with a temperature of 104°, and was treated on the Medical Service for bronchitis and gastro-enteritis. Four days after admission, a surgical consultation was requested, and at this time a mass was felt in the right lower quadrant and a diagnosis of perforated appendix was made. It was felt that the child was localizing his infection. At this time the child was in a state of alkalosis. In spite of chemotherapeutic

TABLE 7. CAUSES OF DEATH

	NO. OF CASES
Peritonitis	6
Peritonitis (non-operative)	3
Secondary abscess followed by peritonitis	1
Intestinal obstruction	2
Intestinal obstruction and peritonitis	1
Pneumonia	1
Total	14

measures, plus intravenous fluids, etc., the general condition did not improve and the child died on the twelfth hospital day. Following necropsy examination the cause of death was listed as a ruptured appendix with appendiceal abscess and generalized peritonitis. It is possible that this child, when seen by the surgeons nine days prior to death, had a localized abscess which later perforated. We believe this case might have been saved if incision and drainage of the abscess had been performed when first seen by the surgeon.

We feel the following factors were responsible for the reduction in mortality in our series, in order of their importance:

1. Carefully controlled pre- and postoperative fluid electrolyte administration.
2. Increasing use of the McBurney incision.
3. Routine use of gastro-duodenal suction in all peritonitis cases both pre- and postoperatively.

From this study, although not statistically proved, it is felt that certain factors definitely decreased our morbidity. They are:

1. Improvement in anesthesia.
2. Antibiotics. These decreased wound infection, allowed decreasing use of drainage and permitted tighter closure of wounds and reduced respiratory complications.
3. Oxygen therapy postoperatively. This controlled distention and lessened respiratory complications.

Before stating our final conclusions, I would like to turn back some 45 years and report the cases of acute appendicitis in the same Children's Hospital in the year 1904. I quote from a Treatise on Appendicitis, 1905, by the late Dr. John B. Deaver³: "In the year ending December 1, 1904, 77 cases of appendicitis were treated in the Children's Hospital of the Mary J. Drexel Home. Of these, two were moribund, and died without operation. Of the 75 patients operated upon, not one died. Among these there were 64 acute, and 11 of chronic appendicitis. In 36 of these acute cases the abscess had either burst before operation, or no abscess had ever existed, the appendix perforating into the general peritoneal cavity. In two cases the abscess was still circumscribed, and was drained extra-peritoneally without removal of

TABLE 8. ACUTE APPENDICITIS IN CHILDREN, MARY J. DREXEL HOSPITAL, JANUARY 1, 1904 TO DECEMBER 1, 1904

	CASES	DEATHS	MORTALITY
Non-perforated, 26 (40.63%)	26	0	0
Perforated, 38 (59.37%)	—	2	5.27%
Perforations with abscess	2	—	—
Perforations with peritonitis	36	—	—
Total	64	2	3.13%

The two patients who died were non-operative deaths.

the appendix. In the remaining acute cases the disease was confined to the appendix, with serous peritonitis in three cases." (Table 8.) This would make the mortality of the 64 acute cases 3.13 per cent. In this series, fluid therapy was administered by hyperdermoclysis and proctoclysis. Abdominal distention was treated by frequent gastric lavage, administered by the old-fashioned stomach pump. We can be sure that in this series neither chemotherapeutic nor antibiotic agents played a part in this low mortality.

COMMENT AND CONCLUSION

The primary reason for studying our cases of acute appendicitis in children over a 20-year period was to evaluate the role that chemotherapy and antibiotics played in the treatment of acute appendicitis. From the analysis of 777 consecutive cases of acute appendicitis from 1930 to 1951, the following opinion has been reached:

1. In this series there is no evidence that the mortality was lowered by the use of chemotherapeutic or antibiotic agents.
2. Though we are unable to substantiate it by any statistical analysis, we feel that the use of chemotherapeutic and antibiotic agents did bring about a lowered morbidity.

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Annual Oration for 1952

Problems in the Management of Massive Bleeding From the Gastro-intestinal Tract*

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The major portion of the recent voluminous literature on massive bleeding from the gastro-intestinal tract has dealt with bleeding from the lower esophagus or stomach, while massive bleeding from other sites has received only scant attention. It is the purpose of this paper to present certain problems which we have encountered in massive gastro-intestinal hemorrhage, with particular reference to cases in which bleeding was not due to peptic ulceration or esophageal varices.

There is at present rather general agreement, among surgeons at least, as to the management of massive bleeding from peptic ulceration of the duodenum or stomach. Numerous reported series^{6,7} have unequivocally demonstrated a higher salvage rate in those cases where rapid blood volume replacement and early surgery in the form of subtotal gastrectomy has been carried out. A physiological basis for the more satisfactory results obtained by emergency surgery and the obtainment of hemostasis as rapidly as possible has been indicated in recent experiments which showed that massive arterial bleeding from the stomach or duodenum reduces the blood flow through the hepatic artery selectively.³ Since hepatic hypoxia has been incriminated by some investigators as the fundamental cause of surgical shock, the implications are evident.

On the other hand, with signs and symptoms of cirrhosis of the liver and bleeding from esophageal varices, there is, in general, agreement that tamponade with a Patton-Johnston or Saengstaken type tube is the emergency treatment of choice. Tamponade is also useful as a diagnostic method in determining the site of hemorrhage when the etiology is obscure. Continued use of tamponade is not without danger of respiratory complications, but this has not occurred in our limited experience. Careful attendance to aspiration of the stomach and pharynx is mandatory.

The real difficulty in the management of the patient with upper massive gastro-intestinal hemorrhage presents itself in those cases in which neither of the above stated causes is apparent, or one of the infrequent causes is present. Among the latter are two conditions which deserve more attention than they have received.

Massive bleeding may occasionally occur from esophageal hiatus hernia.

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CASE REPORTS

Case 1. (Chart No. 178088) A 52-year-old female was admitted to the service of Dr. H. L. Bockus with a history of 3 episodes of severe hematemesis. Thorough studies were negative except for the presence of a large esophageal hiatus hernia (Fig. 1). While in the process of preparing her for operation, massive gastro-intestinal bleeding occurred. Following the rapid administration of 3000 ml. of blood, operation was carried out. Thorough examination was completely negative except for the presence of the hiatus hernia. There was no gross evidence of ulceration within the herniated portion of the stomach. The hiatus hernia was repaired and recovery was uneventful. No further bleeding has occurred since operation 5 years ago.

Another troublesome source of upper gastro-intestinal hemorrhage has been that which has occurred in patients subjected to cardioplasty or esophagogastronomy. There is ample evidence⁵ that whenever the esophago-gastric junction is destroyed, repeated regurgitation of gastric juice into the esophagus almost invariably occurs. As a result of this regurgitation, inflammation, ulceration and scarring of the lower esophagus are commonly found following such operations. In our experience, hemorrhage also has been a troublesome complication. While we have thus far had no hemorrhages in the patients having esophagogastronomy for carcinoma, it has been quite a problem in those patients having various plastic procedures for achalasia. It is well to point out that despite vagotomy incident to esophagogastronomy, ulceration in the lower esophagus will also occur, although the gastric acidity has been decreased.⁵

Case 2. (Chart No. 180788) A 44-year-old female was admitted to the service of Dr. Gabriel Tucker with severe achalasia intractable to conservative management (Fig. 2). At operation a Grondahl-Womach type procedure was performed. On the tenth postoperative day, a massive hemorrhage occurred. In the following 2 weeks she had 3 other episodes of profuse bleeding, manifested by hematemesis and melena, each responding to massive transfusion. It was assumed that the bleeding was from peptic ulceration of the lower end of the esophagus, and conservative management was continued. She returned to her home in Florida, and following another episode of bleeding and poor esophageal emptying, she was re-operated upon.¹ The esophago-gastric junction was almost obliterated with scarring and fibrosis. Longitudinal division and closure transversely was accomplished at the cardio-esophageal junction. Bleeding episodes continued and roentgen examination one year postoperatively revealed delayed emptying and evidence of a duodenal ulcer, with scarring and fibrosis. At operation, however, the pyloro-duodenal area was negative to palpation. A gastroenterostomy was performed and the patient has had no further bleeding in 4 years.

The difficulties attendant upon alteration of the esophago-gastric junction mechanism, hyperacidity, and delayed gastric emptying are readily apparent in this case.

We had felt that the Heller procedure for achalasia had obviated the troublesome complication of hemorrhage. While this may actually prove to be the case, of the 23 patients on whom this procedure has been carried out, two have been readmitted to the hospital with massive bleeding.

Case 3. (Chart No. 183709) A 61-year-old male had an esophagocardio-myotomy performed for achalasia in May, 1949. He was readmitted one year later with severe hematemesis, and although roentgenograms were negative, it was felt that he was bleeding from a duodenal ulcer, and he responded to medical treatment. Esophagoscopy on this occasion was essentially negative. He was readmitted to the hospital 7 months later with massive bleeding. Red blood count was 3 million and hemoglobin 9 Gm. He responded to 2000 ml. of blood and the profuse bleeding ceased. Roentgen studies soon thereafter revealed an area of ulceration in the lower esophagus. Since this was felt to be an ulceration secondary to regurgitation of gastric juice, he was treated conservatively for 2 weeks and repeated roentgen studies revealed almost complete healing of the ulcerated area. An esophagoscopy examination was done at this time, however, and revealed a granulating lesion in the lower esophagus which proved to be carcinoma. The lesion proved to be non-resectable and death occurred 4 weeks after operation (Fig. 3).

This case emphasizes several points. Had we elected to do emergency gastrectomy on this patient with massive hematemesis and a definite ulcer history, we obviously would not have stopped his bleeding. Secondly, in these markedly dilated esophagi, roentgen examination may be completely misleading.

Case 4. (Chart No. 200911) A 61-year-old male was known to have severe achalasia for 10 years. Esophagocardio-myotomy was performed in April, 1949. He did well following operation for some 10 months, at which time he was readmitted with massive melena and a blood count of less than 2 million red blood cells. Exhaustive studies, including a gastro-intestinal series and esophagoscopy, were essentially negative except for poor gastric emptying and a questionable filling defect in the cardia. He was explored and nothing was found. The stomach and duodenum were entirely negative. He got along well after operation until 6 months later when he again had really massive melena. Again esophagoscopy was essentially negative except for moderate inflammation in the lower portion. Barium studies revealed some delay in gastric emptying, but no other abnormalities. The string test indicated bleeding at the lower esophagus. Feeling that the delayed gastric emptying was aggravating the regurgitation, it was elected to perform a subtotal gastrectomy. At operation, the stomach and duodenum revealed no significant pathologic condition. There was no evidence of ulceration or scarring of the duodenum. A subtotal gastrectomy was performed and his convalescence was uneventful. Follow-up examination 8 months after operation revealed the patient to have gained 20 pounds, and to be completely symptom free.²

Here again, it is reasonable to assume that obstruction at the gastric outlet and destruction of the esophago-gastric junction mechanism resulted in acid regurgitation, esophagitis and hemorrhage.

Massive bleeding from the remainder of the gastro-intestinal tract, that is from the second and third portions of the duodenum downward, is manifested by melena. In around 90 to 95 per cent of cases presenting with massive melena, the bleeding can be controlled with a conservative regimen and blood transfusion. In those cases in which the bleeding is from known lesions of the small or large bowel, there is not ordinarily much problem in management other than transfusing the patient and carrying out whatever

procedure may be indicated at the optimum time. Even in those cases, however, where the source of bleeding was known, we have been at times confronted with serious problems. This has been particularly true in patients with ulcerative colitis.

Case 5. (Chart No. 206067) This 14-year-old, extremely emaciated white male, admitted to the service of Dr. H. L. Bockus, with known ulcerative colitis, required a subtotal colectomy as an emergency procedure for massive hemorrhage (Fig. 4). Forty-eight hours after operation, he began to bleed profusely from the remaining sigmoid and rectum. Despite massive transfusions, he repeatedly exsanguinated. On the 13th postoperative day, he was again operated upon and the remaining sigmoid was removed down to the pelvic floor (Fig. 4). The procedure was terminated at this point, since it was felt that death would occur on the operating table if the procedure was further prolonged by removal of the rectum. He continued to bleed from the rectum, however, and died 9 days after the second operation. Perhaps a more heroic attitude when he first began to bleed following the subtotal colectomy would have resulted in the salvage of this patient.

Case 6. (Chart No. 209637) This 34-year-old white female, admitted to the service of Dr. H. L. Bockus, with known ulcerative colitis, was admitted to the hospital for elective subtotal colectomy. Operation was carried out uneventfully and convalescence was smooth. On the 14th postoperative day, she had a moderate hemorrhage from the rectum which ceased following blood transfusion. Seven days later, in the middle of the night, she had an exsanguinating hemorrhage from the rectum. Blood transfusions were rapidly administered through both arms, and an emergency abdomino-perineal resection was performed. Recovery was uneventful (Fig. 5).

When excessive bleeding has occurred in a patient with this disease, it is now our policy to complete the operation in one stage, but this is only done when every factor of safety is considered. Otherwise, if a patient has any appreciable bleeding from the remaining segment following subtotal colectomy, the final stage is completed as soon as conditions permit.

Case 7. (Chart No. 198552) A 44-year-old obese male patient was admitted to the service of Dr. H. J. Tumen with rectal bleeding. Roentgen examination revealed the presence of a pedunculated polyp in the mid sigmoid. In April, 1950, laparotomy was performed and the sigmoid polyp was removed. Abdominal exploration was otherwise essentially negative. No other polyps could be palpated in the colon. His convalescence was smooth until the sixth postoperative day, when he had a massive pulmonary embolus. Heparin and dicoumarol were immediately instituted, and although he was markedly resistant to both, adequate prolongation of clotting time and of prothrombin time was obtained. Four days later he had massive melena. Although he received 8000 ml. of whole blood over the following 96 hours, bleeding continued. Laparotomy was again performed. It was rapidly apparent that the source of bleeding was at the site of the polypectomy since the bowel was free of blood above this point, and filled with blood below the area. A segment of colon containing the previous polypectomy site was resected and intestinal continuity restored. Examination of the resected specimen revealed a slough at the site of excision of the polyp as the source of the bleeding (Fig. 6).

In a reasonable number of patients in which the diagnosis was unknown prior to the bleeding episode, roentgen examination during the bleeding has been helpful, at least in localizing a possible source of the hemorrhage.

Case 8. (Chart No. 205084) The patient, admitted to the service of Dr. H. L. Bockus, was a 61-year-old female admitted with massive bleeding from the bowel. Roentgen examination several days after blood replacement, but while the patient was still having melena, revealed a filling defect in the second portion of the duodenum. Following administration of 1500 ml. of blood, operation was carried out. In the duodenum at the site disclosed by roentgenogram was a long, tube-like structure about 7.5 cm. by 2 cm., covered with normal-appearing mucosa except at the very tip. Here the surface was granular, flattened, and contained three tiny slits which discharged a mucohemorrhagic substance upon slight pressure. The specimen proved to be a submucous cystadenoma originating from the deep mucous duodenal glands (Fig. 7).

Case 9. (Chart No. 209859) A 34-year-old male had received 13 whole blood transfusions for massive melena while in a hospital in Venezuela, and when it was felt that his condition was sufficiently stabilized, he was flown to this country. On admission to the hospital, the patient showed evidence of continued blood loss with hypotension, rapid thready pulse, and hemoglobin of 9.0 Gm. with 3.3 million red blood cells. One liter of blood was rapidly administered with considerable improvement of the vital signs. Approximately 16 hours after admission, while still having melena, barium swallow was carried out. The studies revealed evidence of extrinsic pressure on the duodenum, interpreted as probably due to malignancy. Transfusions were continued and operation was performed approximately 30 hours after admission. The duodenal loop was widely separated as the result of a large, oval, bluish-black tumor bulging out from behind the head of the pancreas. The mass measured about 9 cm. across and 12.5 cm. in length. It was tensely distended with fluid. Anteriorly it was intimately adherent to the duodenum and head and body of the pancreas. During dissection, the soft mass disintegrated as a soft jelly substance and bled profusely. After disintegration, the tumor mass could be felt to communicate with the duodenum through a large ovoid opening on its posterior wall. Hemorrhage was extremely difficult to control. The second and third portions of the duodenum and the tumor were rapidly excised, and duodeno-jejunosomy and cholecystojejunosomy were carried out. The pancreatic duct was ligated. In the postoperative period, he developed a pancreatic fistula and on the 20th postoperative day, he had a sudden exsanguinating hematemesis. He was rapidly transfused and again operated upon. The source of the bleeding was from an eroded pancreatico-duodenal artery and from two anomalous arteries in the extremely vascular bed from which the tumor had been removed. The duodeno-jejunal anastomotic line was also eroded, and bleeding into the bowel occurred at this point. The bleeding was controlled, but since the large erosion into the anastomotic line was irreparable, the only course left open was to perform a partial gastrectomy and gastroenterostomy. His condition remained poor, however, and he died 72 hours after operation. Pathologic diagnosis of the resected tumor was neurofibrosarcoma (Fig. 8).

During both operative procedures, the extreme vascularity of the pathologic process was exceedingly difficult to handle. If a total pancreatectomy had been performed at the original operation, it is probable that the erosions into gastro-intestinal tract and into vessels might have been avoided, thereby averting the fatal sequela.

In some 15 to 20 per cent of patients presenting with massive bleeding *per rectum*, no diagnosis will be forthcoming, even after the most exhaustive survey. This has been a most difficult group with which to deal. We are reluctant to advise exploratory laparotomy during a quiescent phase, since

this is almost invariably nonproductive. Our policy in this group of cases has been to insist that the patient stay near a large medical center at all times with all studies at hand. They are advised to enter the hospital at once for immediate operation should bleeding again occur. We make every effort to operate as soon as possible after, of course, instituting the usual supportive therapy. In some cases handled in this manner, the cause of the bleeding has been quite readily found at operation.

Case 10. (Chart No. 177968) This 64-year-old white female had a severe bout of melena 3 months prior to the present admission. Complete blood studies, barium studies, proctoscopy and esophagoscopy were essentially negative except for the presence of a hiatal hernia. She was readmitted following a severe hemorrhage, with a hemoglobin of 51 per cent. Transfusions were administered and exploration was carried out. At operation, the following were found to be present: (1) A moderately large hiatus hernia, (2) A jejunal diverticulum measuring 2 cm. in diameter and 1.5 cm. deep, situated 30 cm. from the ligament of Treitz, and (3) A large pedunculated tumor on the antimesenteric border of the ileum, 5½ feet from the ileocecal valve. The tumor had a one-inch pedicle and was about the size and shape of a kidney. Blood was present in the intestine distal to this point. The mass was removed, along with 4 inches of ileum on either side. At its attachment to the ileum, the mucosa of the ileum was elevated, rounded and nodular for an area of 2 cm. On cut section, the tumor revealed many cyst-like areas filled with blood, and the pathologic diagnosis was neurogenic fibroma (Figs. 9 and 10).

This case strikingly demonstrates the advantage of operation during a bleeding episode. Theoretically, bleeding could have occurred from any one of the three lesions. Had she been operated upon during a quiescent period, it would have been impossible to tell which one was responsible. Within the past year, we have operated upon, during a bleeding phase, two patients with recurrent bouts of massive melena, to find the source of the bleeding to be a Meckel's diverticulum. In both instances, exhaustive studies had failed to reveal any source for the bleeding.

Case 11. (Chart No. 207348) The patient was a 60-year-old male, admitted to the gastro-intestinal service of Dr. H. L. Bockus in his eighth bout of massive melena. He had been studied intensively in 2 of the larger clinics in this country, but no source for the bleeding was found. Six months prior to the present hospitalization he was explored during a quiescent phase elsewhere. At that time, a Meckel's diverticulum was found and removed, and it was thought that the bleeding point had been eradicated. He began to have massive melena again 72 hours prior to his admission to the Graduate Hospital of the University of Pennsylvania, in September, 1951. Transfusions were immediately instituted, his vital signs stabilized, and the bleeding ceased. For the third time, he was again exhaustively surveyed with negative results. He was advised to return to the hospital for immediate operation if bleeding should again occur. It was hoped that this would facilitate the location of the area of bleeding. Two months later he began passing a small amount of blood, but for some reason, did not enter the hospital until 60 hours later, after he began passing bright blood and clots from the bowel. Immediate preparation and exploration revealed the presence of a large amount of blood in the colon and a moderate amount in the terminal ileum. A complete exploration was made with negative results. Needle aspiration of a small amount of material from the upper jejunum yielded a strongly positive guaiac

test. On re-examination of the pylorus, a small indurated nodule was palpable. The stomach was opened and further examination was non-revealing. It was felt that the nodule might represent a leiomyoma or a tiny ulcer and, therefore, the duodenum was transected and a subtotal gastrectomy was performed. The pylorus was spread open and inspected and a very small but definite ulcer was found. It was then felt that the bleeding point most surely had been found. The patient returned to his home in Florida but has since had melena, and on one occasion required a transfusion of 1000 cc. of blood.

This case readily reveals the difficulty that is sometimes encountered in massive bleeding. Despite two thorough explorations and the removal of two potential sources of bleeding, the Meckel's diverticulum and the pyloric ulcer, the source was not found and the patient has continued to bleed. Obviously, a small lesion has been overlooked.

That one may encounter an insurmountable difficulty as to the location of the point of hemorrhage may be demonstrated by a patient who was seen in consultation by the senior author. This case was previously reported in detail.⁴

Case 12. The patient was a 29-year-old female, admitted to the hospital with massive bleeding *per rectum* of 72 hours' duration. She had been in excellent health prior to admission. Blood transfusions were rapidly administered, but the bleeding was so excessive that she could not be stabilized and it was decided to operate upon her.* The ileum was distended with blood; however, no organic lesion or point of hemorrhage could be demonstrated throughout the entire length of the bowel despite the most careful search, and the abdomen was closed. Although 28 pints of blood were administered postoperatively in an effort to control the bleeding, she nonetheless continued to bleed and died 36 hours postoperatively.

Necropsy revealed massive fresh hemorrhage and blood clot within the lumen of the small intestine extending from the lower jejunum throughout the ileum and colon. In the jejunum, on the mucosal surface, there was a small tumor measuring 0.5 cm. in diameter and having the consistency of a maraschino cherry. Microscopic examination revealed this to be a congenital aneurysm of the jejunum, with rupture into the lumen.

That the reverse of this experience could well have occurred is illustrated by a final case.

Case 13. (Chart No. 152896) A 56-year-old white male was admitted to the hospital in March, 1944, in his 20th episode of severe bleeding. He was known to have a duodenal ulcer and a gastrojejunostomy had been performed elsewhere some 11 years prior to his present admission. His bleeding was thought to be from the ulcer during some of the earlier episodes, and he had subsequently undergone exhaustive study without any other cause being found. Despite massive transfusions, he continued to bleed severely, suddenly passed 3 huge, bloody stools, and died 60 hours after admission. Necropsy showed dense scarring at the pyloro-duodenal junction with obliteration of the lumen. Twenty centimeters from the gastrojejunostomy, a firm nodulated mass about 2.5 cm. in diameter was discovered in the wall of the jejunum. One third of the tumor extended into the lumen. The bleeding originated at this point. The tumor proved to be a leiomyoma of the jejunum (Fig. 11).

* E. B. Beairsto, M.D., Trenton, N. J., operated upon this patient.

This occurred eight years ago while an attempt at diagnosis was still being made by the gastroenterologists. The policy of immediate preparation and exploration at the first sign of recurrence of the bleeding, as practiced since then, would probably have resulted in salvage of this patient.

SUMMARY AND CONCLUSIONS

The cases which we have presented are admittedly rare and are important *per se* only in so far as they have served to illustrate the various problems which we have encountered in the severe bleeder and the manner in which we now manage these cases.

We are in full agreement with emergency gastrectomy in those patients having massive, uncontrollable bleeding on the basis of gastro-duodenal lesions which are amenable to this type of procedure—namely, peptic ulcer, and benign and malignant tumors. However, we feel that a word of caution should be sounded against overapplication of this principle to the extent that gastrectomy is performed although no lesion is found at the time of exploration. In our experience, lesions amenable to this type of surgery constitute only around 75 per cent of the total patients having massive upper intestinal bleeding manifested by hematemesis.

Lastly, we have felt that in patients having massive melena, in whom there is no demonstrable cause after thorough study, operation should be carried out during a bleeding episode. Not only will this allow fairly accurate localization of the bleeding, but also in those cases where more than one potential source may be present, the correct one may be discovered.

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Annual Oration for 1953

The Present Status of Cardiac Resuscitation*

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Nothing is more catastrophic than a sudden unexpected death in the operating room. This is especially true when the operation is a relatively simple one and the patient is young and healthy. Under such circumstances it is a normal reaction for the family to assume that the surgeon has made some error to account for the patient's death. However, unless the surgeon has encountered uncontrollable hemorrhage, the cause of the death may not be readily apparent. A few years ago the family was told that the patient "didn't take the ether well." Today the family is told that the patient died of cardiac arrest. Whatever term is used, the patient is dead, and all the doctors concerned feel reasonably confident that the death was due to some human error and was not necessarily an act of God.

In recent years there has arisen a widespread interest in cardiac resuscitation. This no doubt is due to the fact that there is nothing more dramatic than to raise a person from the dead. Such events have great newspaper appeal as human-interest stories. As a result, whether we like it or not, such stories get into the hands of our newspaper reporters with surprising frequency. It may be said that surely there can be no objection to such an event being reported in the newspapers since it did occur and it is the duty of the newspapers to report interesting events. On the other hand, we would not be nearly so interested in having the story in the newspaper if the complete truth were told. With a slightly different twist to the reporting, the large type in the newspaper might say, "Doctors at University Hospital kill 10-year-old girl while doing a simple appendectomy," and further down in the article it might say, "By carrying out a plan which was proved to be successful in the physiologic laboratory almost 25 years ago and has been in common usage in large surgical centers throughout the world for almost a decade, the doctors were able to revive the child. At present it is too early to determine whether the pretty little Mary Smith is going to be an idiot for the rest of her life due to brain damage sustained while she was dead or whether her brain, as well as the rest of her body, will recover completely."

I would be the last to say that we should not continue to do everything in our power to maintain an active interest in cardiac resuscitation, for much effort has been expended toward helping to create that interest. On the other hand, it would now seem to be time to shift our emphasis toward the prevention of cardiac arrest. It goes without saying that if we are so

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unfortunate as to kill our patient, we should do everything in our power to revive him.

INCIDENCE

There may be those present who say, "Why all the excitement about cardiac arrest? I never have seen a case." Then I will ask you, "Have you never seen an unexpected death in the operating room or shortly thereafter, before the patient has fully recovered from anesthesia?" The chances are that such unexpected deaths are due to cardiac arrest. The surgeon whose experience includes no such catastrophes is very fortunate indeed.

At the Hospital of the University of Pennsylvania approximately 108,000 operations have been performed in the last 8 years. If one excludes patients subjected to cardiac surgery, so as to make the figures more nearly applicable to most general hospitals, there have been 18 patients with cardiac arrest in the operating room. This gives an incidence of about 1 in 6,000 operations. If one excludes operations done with local anesthesia, the incidence is not materially different—1 in 5,600 operations—for there were 2 cardiac arrests in the local group, which included caudal. If the cardiac cases are included, there have been 30 cardiac arrests—an incidence of 1 in 3,600 cases—a figure which is without particular significance.

It should be pointed out that the figures given here do not include deaths from cardiac arrest after the patients have left the operating room. Also, deaths in the operating room due to hemorrhage or other obvious causes are not included.

ETIOLOGY AND PREVENTION

I believe it goes without saying that the surgeon's attitude toward cardiac arrest is the same as the evangelist's toward sin—he is against it. Our problem, therefore, is to ascertain the cause of cardiac arrest and prevent it.

1. One obvious cause is an overdose of the anesthetic agent. There are those who say that cardiac arrest is much more common now, since we have medical anesthetists who use multiple anesthetic agents, than in the old days when we had nurse anesthetists giving open-drop ether. That may well be true, but it must be remembered also that much of the surgery which we are doing today could not be done in the old days under those conditions. Moreover, I am old enough to remember deaths in the operating room in the old days when "the patient didn't take the ether well."

No one can deny that the patient having his gallbladder removed is safer with a nurse anesthetist with perhaps 20 to 30 years' experience giving open-drop ether than with the resident medical anesthetist perhaps in his first year of training who gives spinal anesthesia and then, when that does not work well, supports it with some intravenous Pentothal sodium, a little nitrous oxide, cyclopropane and ether, and perhaps a bit of curare for adequate relaxation, not to mention half a dozen other drugs to make his blood

pressure go up or down. No one is more aware than I of the tremendous contribution made by our medical anesthetists, for certainly without them much of the surgery which we do today would be impossible.

Nevertheless, an overdose of anesthetic agents is a very frequent cause of cardiac arrest. Our medical anesthetists must accept that responsibility. The choice of the anesthetic agent and the judgment as to dosage are highly important. When multiple agents are used, the difficulty of judging dosage may be compounded.

The surgeon is not entirely free of responsibility when it comes to an overdose of the anesthetic agent. When the surgeon is in a hurry and pushes his anesthetist for more relaxation, the inexperienced anesthetist is apt to give too much of too many agents in an effort to please his surgeon quickly.

2. A second very common cause of cardiac arrest is hypoxia. Even when it is not the primary cause, it may be a contributing cause. Ether is such a strong respiratory stimulant that in the old days the patient was not apt to suffer from severe hypoxia unless he had an obstructed airway or was given an overdose of the ether. With the advent of thoracic surgery and the open chest, the anesthetists took on a new responsibility—that of providing adequate ventilation of the lungs so as to keep the patient oxygenated and to eliminate the CO₂. Now it has been shown repeatedly that an accumulation of CO₂ and a deficiency of oxygen are common causes of cardiac arrest. Much has been written in the anesthesiology literature as to the best position of the patient for adequate ventilation, and as to controlled respiration versus assisted respiration. Let there be no doubt, however, that adequate ventilation is required, regardless of the method by which it is obtained.

A high spinal anesthesia may paralyze the muscles of respiration, and the more recent curarelike drugs may stop the respiration completely. For this reason, adequate ventilation has now become a problem even in abdominal surgery. These factors and, upon occasion, the inadequacy of the anesthetist in coping with them, have undoubtedly helped maintain the incidence of cardiac arrest.

The surgeon is not without responsibility as to the adequate ventilation of his patient. If the blood is inadequately oxygenated, he should be the first to recognize it. Moreover, he should drape his patient so that the anesthetist can watch the wound for evidence of cyanosis. In a thoracic operation, the patient should be draped so that the anesthetist can watch the lung and see its movement and help judge the adequacy of the ventilation. In general, more trouble has arisen because of inadequate ventilation than from any other one thing. It is far better to hyperventilate the patient than to carry him along on minimum ventilation. This is especially true of the cardiac patient. On what would normally be considered adequate ventilation, the heart may be blue in a cardiac patient whereas with hyperventilation a definite improvement in color may be noted.

With a poor-risk patient, the ventilation should not be stopped for

long periods while the anesthetist takes the blood pressure, writes on the chart, adjusts the light and does many other things. During an operation on a poor-risk patient, two people should be at the head of the table so that the ventilation may be continuous. Even in the good-risk patient, we encourage our anesthetist to hold his own breath when he stops ventilating the patient to do other things. Under such a regimen we have been pleased with how much more quickly the anesthetist returns to ventilating the patient and how he may even use hyperventilation for a bit to make up for the time lost.

3. Apparently the heart sometimes stops as the result of the vago vagal reflex. There is evidence to suggest that vagal stimulation is much more apt to produce this catastrophe in the presence of hypoxia. In any event, cardiac arrest frequently occurs during intubation or extubation of a patient.

Therefore, it would seem obvious that the anesthetist should deal with the trachea as gently as possible and that the surgeon should handle the hilum of the lung gently. Above all, the patient should be well oxygenated before subjecting him to vagal stimulation.

4. In all probability, most instances of cardiac arrest are the result of a combination of factors. The surgeon should be particularly careful to prevent sudden loss of large amounts of blood and should avoid undue traction on the viscera, either in the abdomen or the thorax.

The cardiac surgeon may cause cardiac arrest by direct stimulation of the heart. This is almost always in the form of ventricular fibrillation. Much has been done in an effort to prevent these catastrophes. For a long time we, along with others, used quinidine, procaine and procaine amide in an effort to prevent these irregularities. However, we have come to feel that adequate oxygenation of the myocardium and gentle handling of the heart, along with minimum anesthesia and maximum blood flow, are the best preventive measures.

DIAGNOSIS

Time is the most important factor in the successful management of cardiac arrest, for the flow of blood to the brain may be interrupted for only about 4 minutes if the patient is to survive. With such a short period of time in which to revive the patient, it is obviously highly important to recognize when that 4-minute period begins.

To a considerable extent the surgeon is dependent upon his anesthetist to ascertain a sudden cessation of blood flow. This requires constant and careful observation by the anesthetist. It goes without saying that if the anesthetist feels of the patient's pulse only every 4 or 5 minutes it would be possible not to recognize the cardiac arrest until it was too late to do anything about it. Therefore, it is evident that the anesthetist must maintain constant observation of the patient if he is to notice an abrupt failure of the circulation the moment it occurs.

When the anesthetist observes that the pulse and the blood pressure

have disappeared suddenly and unexpectedly, we must assume that cardiac arrest has occurred, even though the question may arise as to whether or not the heart is still beating but so feebly as to be undetectable.

If the surgeon happens to be operating in the vicinity of the heart or a large artery, he may immediately confirm the diagnosis by putting his hand upon the heart or the large artery. When less exact methods of confirming the diagnosis are employed, fatal delay may be the result. Time spent looking for a stethoscope if one is not immediately available is time ill spent, since a heart beating so feebly as to produce no pulse and blood pressure is not apt to be heard anyway.

If an electrocardiogram happens to be attached to the patient, ventricular fibrillation may be diagnosed the moment it occurs. In the presence of ventricular asystole, a profound change in the electrocardiogram will also occur. But if an electrocardiogram is not already attached to the patient, fatal delay can be the only result of taking the time to attach it.

Therefore, it becomes obvious that the only reliable rapid method of determining whether or not the patient has cardiac arrest, unless the patient has an electrocardiogram or some similar apparatus attached at the time, is to see or feel the heart or a large artery. We are convinced, therefore, that the surgeon should take the point of view that opening the thorax to feel the heart is a diagnostic procedure. If the anesthetist suddenly and unexpectedly cannot obtain a pulse or blood pressure, the surgeon must accept his observation and open the chest without losing valuable time in attempting to confirm these observations or to make a diagnosis of cardiac arrest by time-consuming and perhaps unreliable diagnostic methods.

It goes without saying that if an anesthetist or a surgeon never has thought through what he would do under such a circumstance, it is extremely unlikely that he can do so sufficiently quickly to save a life. This is no time for meditation or consultation. Once it is found that the pulse and the blood pressure have disappeared suddenly and unexpectedly, the surgeon should be prepared to open the chest with the greatest dispatch. The surgeon needs only a scalpel. If sterile gloves are immediately available perhaps he may take time to put them on but not otherwise. Skin antiseptics and sterile drapes are refinements which can be added later. Their absence should not cost the patient his life. It is far better to have a live patient with an infected wound, than a dead patient with a sterile one.

Given a scalpel, the surgeon should have his hand on the heart in 10 to 15 seconds. The incision should be made in the 4th or the 5th left interspace. If there is no bleeding, the diagnosis is confirmed. If there is bleeding, the incision need not be carried into the chest. The knife should not be plunged through the chest wall with one stroke for fear of cutting into the heart. Having cut through the skin and the muscles, the final opening in the pleura should be made with the handle of the knife or with a finger to avoid cutting the lung. Then the interspace may be opened widely while the left hand protects the lung. The hand can then be pushed

between the ribs, and compression of the heart started. The cartilages above and below may be cut to allow more room.

TREATMENT

In the treatment of cardiac arrest it is not important to differentiate between ventricular asystole and ventricular fibrillation at the outset. The emergency problem is to establish artificial respiration and artificial circulation so that oxygenated blood may go to the brain immediately. If there is cardiac asystole on the basis of the vago vagal reflex the heart will resume normal activity as a rule after a few moments of rhythmic compression. If there is cardiac asystole on the basis of an overdose of anesthesia, it is a simple problem of maintaining the artificial respiration and circulation until the excess anesthetic agent is removed or detoxified. If hypoxia is the problem, the circulation of well-oxygenated blood is all that is required. The important thing is that circulation must be restarted before there is irreparable brain damage. If the heart is in ventricular fibrillation, other considerations in treatment are usually required, but they come after the tissues are oxygenated.

RESPIRATION

If the emergency arises in the operating room, artificial respiration will be provided by the anesthetist. If an endotracheal tube is already in place it, of course, will be used. If not, ventilation can be obtained with a face mask until the patient is well oxygenated before taking time to insert an endotracheal tube.

If the emergency should arise outside the operation room, the patient's lungs may be ventilated by mouth-to-mouth breathing until other equipment becomes available.

CIRCULATION

While the anesthetist is accustomed to providing artificial respiration for the patient, the surgeon is not accustomed to providing artificial circulation, which is equally essential if the patient is to survive.

As soon as the surgeon has his hand upon the heart and finds it is not beating, he should start compressing it rhythmically.

There are a number of factors which greatly influence the effectiveness of the blood flow produced by cardiac massage.

1. Technic of Cardiac Compression. In the laboratory it was found that some practice was required to produce an effective blood flow by cardiac massage. The dog's heart may be compressed most effectively by placing the thumb in front of the heart and the fingers behind. The blood flow produced by compressing the heart against the anterior chest wall was only about half as great as by the above method, while only one fifth as much blood flow could be produced by compressing the heart through the diaphragm.

A small human heart may be compressed with one hand in the same

manner as the dog's heart. A large human heart may be compressed more effectively with less effort, perhaps, by placing one hand in front and one hand behind the heart. The effectiveness of the cardiac compression may be judged by the pulse and the improvement in the color of the patient's skin and tissues. If a good pulse is not palpable at the wrist with each cardiac compression, something is wrong.

There are those who feel that the pericardial sac should be opened routinely to improve the effectiveness of cardiac massage. We do not agree with this. Certainly time should not be taken to open the pericardium initially. It is wise perhaps to dissect into the anterior mediastinum in order to get around the heart more effectively during compression. The pericardium serves to protect the heart from trauma. If the heart does not respond early and the ventricles cannot be felt to be fibrillating through the pericardium, it may be opened to visualize the ventricles directly. Subsequent massage should be done with the flat palms of the hands and not with the fingertips. We have seen not only the auricles but also the right ventricle torn by the fingertips. If the heart has been massaged for a long time even through the pericardium, it is probably wise to leave an opening in the pericardial sac to allow drainage of any blood or fluid which may collect as the result of trauma.

2. Rate of Cardiac Compression. There has been some difference of opinion as to the rate at which the heart should be compressed. Some recommend a rate of 20 to 40 times a minute to allow the ventricles to fill better during diastole. We and others have advocated a faster rate. Using the bubble meter of Dumke and Schmidt to determine the blood flow in the thoracic aorta in dogs, we found that the blood flow increased as the rate of cardiac compression increased, regardless of whether the heart felt full or empty. Rates of 30, 60 and 120 times per minute were used, and in all instances the flow increased as the rate of compression was increased.

For practical purposes, there is a limit to the rate of cardiac compression which can be maintained by the surgeon. If a single surgeon is available, it is difficult to maintain more than 60 compressions per minute for a long period of time. If two or more are available to alternate, a rate of 80 to 100 or higher can be maintained to advantage.

3. Blood Volume. In the laboratory, when the dog's heart felt empty, the cardiac output could be increased significantly by a rapid transfusion of blood or a plasma substitute. In clinical practice, care should be taken not to allow the blood volume to be depleted. This can be recognized when the heart feels empty in spite of waiting a second or more for it to refill. However, equal care must be exercised in not overtransfusing such a patient.

DRUGS

Drugs appear to have no value in getting the heart to start beating again. However, once the heart starts to beat, some drugs may be helpful in increasing the forcefulness of the contractions. Epinephrine at times appears

to be very effective, and calcium chloride also has been of considerable help in some patients. In some cardiac patients we have also found vasoconstrictors such as norepinephrine, Vasoxyl, neo-synephrine, etc., to be of great value. For a time we used procaine routinely in patients with asystole, hoping to prevent ventricular fibrillation. We no longer do so because of its deleterious effect on blood pressure and effectiveness of the heart beat.

VENTRICULAR FIBRILLATION

The presence of ventricular fibrillation may often be diagnosed the moment the hand is placed on the heart because of the irregular contractions of small segments of ventricular musculature. On the other hand, the fibrillary twitchings may be occurring in such small segments of the ventricular muscle that they are not obvious by palpation alone. Therefore, it is wise to suspect that the heart is in ventricular fibrillation in every instance in which it does not return to normal rhythm after it has become well oxygenated. Direct inspection of the heart after opening the pericardial sac will give the answer. It should be remembered, however, that the appearance is quite different when the ventricles fibrillate in large segments as opposed to small segments.

The usual causes of ventricular fibrillation are hypoxia, mechanical trauma, electric shock, and drugs which increase the irritability of the heart. Clinically, ventricular fibrillation is due commonly to coronary occlusion or to respiratory obstruction during anesthesia. In recent years ventricular fibrillation has also occurred commonly as the result of operations directly upon the heart.

In rare instances ventricular fibrillation has reverted to normal rhythm spontaneously or following the use of procaine. In most instances electric shock must be employed. This method of treatment is based upon the observation that the passage of a strong electric current through the heart will cause a simultaneous contraction of all the heart muscle fibers. Following this contraction, the heart is in standstill as relaxation follows. Then the spontaneous heart beat will return in regular rhythm after a short period of asystole.

Before defibrillation is attempted, anoxia must be overcome by cardiac massage and ventilation of the lungs with 100 per cent oxygen. The color of the myocardium should be returned to a nearly normal color. It is seldom profitable to shock a cyanotic heart. The amount of current to be used depends upon the size of the heart. When dealing with a child's heart, the voltage may be set at 115 volts for 0.1 second. For a normal adult heart, we recommend 135 volts for 0.1 second. In the large heart such as is encountered in dealing with aortic stenosis, we recommend 160 to 220 volts for 0.1 second. Unless the patient's entire body contracts with each contact, the current is probably not strong enough. The resistance of the heart may be reduced by compressing the heart somewhat between the two electrodes.

In using the electric defibrillator, it is important to remember that it is

theoretically possible to electrocute the operator, and proper precautions should be taken. The handles of the electrodes should be insulated; but, even so, it is probably wise for the operator to wear two pairs of rubber gloves. The isolating transformer now present in all defibrillators is an added protection, since the operator must come in contact with both electrodes to receive a lethal shock. Even so, it may be wise to avoid contact with the metal operating table and to stand on a wooden stool while applying the shock. Assistants and anesthetists should take their hands off the patient and the operating table as the current is applied.

CLINICAL EXPERIENCE

Cardiac arrest, which may be divided into ventricular asystole and ventricular fibrillation, is a catastrophe which may occur from time to time on any active surgical service. Reports of our experience have been made periodically. The present report is confined to the Hospital of the University of Pennsylvania during a period of 8 years (from January 1, 1946, to January 1, 1954).

During this time approximately 108,000 operations have been performed with 30 cardiac arrests in the operating room. Twelve of these were in cardiac surgical patients. This gives an incidence, as previously noted, of 1 in 6,000 operations, not including cardiac cases, or 1 in 3,600, if all cases are included. Only one third of the cardiac cases have been resuscitated successfully, while one half of the general cases have ended successfully.

Our experience, excluding cardiac cases, is shown by years in Table 1. The cardiac cases are shown in Table 2.

As the experience in this hospital has grown, the concept of opening the thorax quickly in cases of suspected cardiac arrest has been stressed repeatedly to the personnel of the departments of surgery and anesthesiology. As a result, several of the patients owe their lives to the quick action of resident surgeons who opened the chest upon the advice of the anesthetist without waiting for consultation. In almost every instance in which resuscitation was unsuccessful in the general group, the failure could be attributed to delay.

TABLE 1. CARDIAC RESUSCITATION EXCLUDING PATIENTS FOR CARDIAC SURGERY

YEAR	'46	'47	'48	'49	'50	'51	'52	'53	TOTAL
Attempts	1	2	1	2	2	3	2	5	18
Successes	0	1	0	2	2	1	1	2	9

TABLE 2. CARDIAC RESUSCITATION IN PATIENTS FOR CARDIAC SURGERY

YEAR	'46	'47	'48	'49	'50	'51	'52	'53	TOTAL
Attempts	0	0	0	1	2	1	2	6	12
Successes	0	0	0	1	2	0	0	1	4

Two of our failures in 1953, for example, were in orthopedic patients in body casts. Valuable time was lost in removing enough of the body cast to get at the heart. One of these children existed as a decerebrate specimen on our wards for 14 months before dying.

The cause of the cardiac arrest is very important in the prognosis. When asystole has resulted from the vago vagal reflex, usually the heart will start up after only a few compressions. In fact, it apparently may occur from a sharp blow on the chest or sticking a long needle into the heart.

When cardiac standstill is due to an overdose of anesthesia, the problem is merely that of providing an artificial circulation and respiration until enough of the anesthetic agent is washed out. The most difficult problem comes when hypoxia has been a major factor in the cardiac arrest. Under such circumstances the myocardium has already been damaged and obviously will stand an additional period of complete arrest less well.

In the general group of patients (excluding cardiac patients) the heart was usually found to be in standstill. Almost without exception, the heart either returned to normal rhythm or went into ventricular fibrillation. With few exceptions, the heart could then be defibrillated by electric shock after it was well oxygenated. In the failures, the patients then went on to die of brain damage or the hearts did not continue to beat effectively. Almost without exception, failure could be attributed to too great delay.

In the cardiac patients, ventricular fibrillation apparently was due to direct stimulation of the heart, either by a cardiac catheter, as occurred in 2 patients, or during the operation upon the heart. In the two instances of cardiac catheterization an electrocardiogram was running at the time so that the diagnosis of ventricular fibrillation was made immediately. These catheterizations were being done by medical men, and even though there was some delay in getting a surgeon, and mouth-to-mouth breathing was employed for ventilation, both were defibrillated successfully.

Of the 10 patients developing ventricular fibrillation during a cardiac operation, all but one could be defibrillated. The others were returned to their beds, but only 2 survived to leave the hospital. The others died from 2 to 30 days later, primarily from the severity of the cardiac disease which prompted the ventricular fibrillation originally. In no instance was there any evidence of brain damage, because there was no delay in beginning resuscitation.

In this report we have not included the attempts at cardiac resuscitation outside of the operating room. Unquestionably, the chests of a number of patients have been opened on our wards when the patients have been entitled to die in peace. On the other hand, there can be no doubt that in several instances, the patient's life would have been saved except for delay in opening the chest. The delay in diagnosis and treatment is difficult to overcome outside the operating room where the patient may not be observed constantly. We have had no successes under such circumstances. One try was successful for 30 days, but the patient died again before leaving the

hospital. In that instance a surgical resident happened to be at the bedside when ventricular fibrillation occurred.

It would seem perfectly obvious that the most effective method of dealing with cardiac arrest is to prevent its occurrence. It is equally obvious that, when it does occur, many of the patients may be revived by prompt action on the part of the anesthetist and the surgeon.

SUMMARY

1. The methods and the technics which have proved to be successful in resuscitating patients with ventricular asystole and ventricular fibrillation have been discussed.

2. Success in cardiac resuscitation depends upon the restoration of the flow of oxygenated blood to the brain within about 4 minutes. All other considerations are of secondary importance.

3. All surgeons and anesthetists should become familiar with the technic of cardiac resuscitation, since the limitations of time do not allow for consultation should the emergency arise.

4. During an 8-year period 13 patients have been revived successfully at the Hospital of the University of Pennsylvania following sudden death in the operating room.

Annual Oration for 1954

Aspiration of Breast Cysts as a Diagnostic and Therapeutic Measure*

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Since September, 1951, when the Committee for the Study of Delay in the Diagnosis of Breast Cancer in Philadelphia County started functioning, I have, as its chairman, presumed to have a special interest in early diagnosis of this most frequent of cancers. At the same time, it has been brought to my attention that on occasion physicians have tended to jump the gun, so to speak, and resort to radical measures without adequate biopsy. In spite of our zeal in encouraging early diagnosis, surely unnecessary surgery of any kind is to be avoided. Most of us completely distrust the confident diagnostician who can accurately diagnose a breast mass without biopsy, depending upon history and physical examination alone, and we look somewhat askance at the surgeon who can always distinguish between the benign and the malignant by gross examination of the biopsy specimen. I would prefer the physician who is willing to evaluate each adjunct to diagnosis for what it is worth, resorting to biopsy if he can justify the presence of a dominant lesion, and resorting to radical surgery only after proving, by microscopy, that it is necessary.

The question of the relationship between benign breast disease and cancer is an oft discussed and controversial subject. Most authorities agree that cancer incidence is higher in women who have preexisting benign breast disease. According to Warren,[†] it is four and one-half times as great as in the so-called normal female population; according to Clagett,[‡] five times as great, and in Lewison's series,[§] two and three-fifths to three and three-fifths times as great. Most others agree that the incidence is influenced upward, but figures vary. Frantz and colleagues³ investigated the so-called "normal breasts" in a series of 225 routine autopsy cases and found definite microscopic evidence of chronic cystic disease in 53%. Such data as these tend toward confusion and bring us sharply back to the realization that there is really no completely safe formula which will avoid the necessity for individual clinical evaluation of the patient with a lump or lumps in the breast. The patients with lumps or lumpiness may even be in the majority, and the

* Read by Dr. Rosemond as the Annual Oration, Philadelphia Academy of Surgery, December 6, 1954. Published in A.M.A. Archives of Surgery 71:223-229, 1955.

† Reference 11, cited by Lewison.[§]

‡ Reference 1, cited by Lewison.[§]

necessity for choosing a "dominant" lump or lumps is a practical fact, unless, and heaven forbid, we wish to take the attitude of the complete pessimist and do careful bilateral mastectomy on every female child at or before 15 years of age, when breast cancer is so rare as to be worthy of a case report.

In June, 1954, the Committee for the Study of Delay in the Diagnosis of Breast Cancer in Philadelphia County held a special meeting for the purpose of recording its collective opinion concerning certain diagnostic and therapeutic methods. On most subjects, this committee, which lists among its members representatives of various institutions throughout Philadelphia, were in agreement. However, on the question of aspiration of breast cysts, the vote was six against, three in favor, and three abstaining. I have taken it upon myself to prepare a minority report, so to speak, since I am in favor of this procedure if it is carefully used by a surgeon capable of carrying out any further treatment necessary. I must admit that I was surprised to find two others in this group who believed that this method was worthy of consideration.

A few Philadelphians have had the audacity to mention it in print. For example, in 1946, Dr. Roscoe W. Teahan,¹⁰ in a paper read before the Section on Surgery of the Medical Society of the State of Pennsylvania entitled, "The Management of Breast Tumor," stated that

a cyst frequently presents itself as a single lump. . . . No harm is done by attempting to aspirate it with a relatively small needle. If clear fluid is obtained and the cyst collapses, nothing more need be done. However, if the fluid is brownish, bloody, or if an area of induration persists, removal of the area for microscopic examination is advisable.

Drs. Fitts and Donald² stated in a paper which appeared in *Surgery* during 1949, entitled "Diagnosis of Lesions of the Breast,"

The proper treatment of simple cysts of the breasts is controversial. Early in the study we usually advised operation when the diagnosis of cyst was made. We later introduced the policy of attempting aspiration of lumps which were thought to be cysts. We found that breast cysts large enough for aspiration were rubbery in consistency and smooth in outline. Several were tender. When a previous operation had shown cystic disease, we felt reassured in resorting to aspiration instead of exploratory operation. . . . In 22 instances, the dominant lump was collapsed by the aspiration of clear fluid.

Although opposition is militant and sincere, many others throughout the country have rallied to the support of the careful use of aspiration. Geschickter⁴ has called it a "most valuable procedure for confirming cystic disease." Saphir⁹ has stated that "aspiration of the contents of cysts is often done, principally for diagnosis. Clear fluid indicates a harmless cyst, but bloody fluid should raise suspicion of papilloma." Saltzstein and Pollack⁸ stated, "We consider that aspiration of a simple cyst is a safe procedure, provided the patients are carefully selected and both physician and patient are prepared for excision of any residual localized or indurated mass that does not subside after a few weeks."

Many people have voiced opposition to aspiration, usually for reasons similar to those of Ross,⁷ who stated, "There may be a small cancer present in addition to a larger area of cystic mastitis."

There is general agreement among those interested in the problem that epithelial hyperplasia is the dangerous factor concerned in the so-called pre-malignant states. Dr. J. Harvey Johnston, Jr.,⁵ in an excellent paper presented before the Southern Surgical Association on Dec. 8, 1953, stressed a point which seems extremely significant to me:

Pathologically, it is not illogical to treat the larger cysts by simple aspiration. It seems unsound reasoning to insist upon removal of larger cysts in which there is usually no hyperplasia whatsoever, when one leaves innumerable cysts, often showing epithelial hyperplasia, with much greater malignant potential.

It is certainly true that the larger the cyst the less tendency there is toward epithelial proliferation.

This would lead one to question the logic of considering the macrocyst, which can be made to disappear completely and permanently in so simple a manner, as a dominant lesion. Would it not be more sensible to remove this benign lesion by aspiration so that the really dominant lesion can be better palpated?

In his discussion of Dr. Johnston's paper, Dr. J. M. T. Finney, Jr.,^{*} after stating that he had found an unsuspected carcinoma in the specimen near a resected cyst, said:

I am afraid I will have to disagree with the universal use of cystic puncture as a diagnostic procedure, because it tells us nothing about the interstitial area around or between the cysts, and in the really early case of carcinoma, the focus might be too small to be recognized by palpation, even after complete evacuation of the cyst or cysts.

Many others have talked about missing cancer in the wall of the cyst.

In answer to this, it would seem to me that Dr. Finney was merely fortunate to find a carcinoma situated near enough to a benign cyst to be included in the resected specimen. In our series of 150 cases, the two cysts which were carcinomatous quickly refilled and the two other carcinomas which developed were hardly near enough to have been included in the resection of the cyst and were not present at the time the cysts were aspirated. Dr. Murray Copeland,^{*} among others, believes that "it is better to excise a single cyst of the breast and get a base line on the pathology; follow the patient carefully and, if other cysts develop, aspirate them with some feeling of security." If one is willing to accept the fact that the carcinoma potential is greater in the presence of cystic disease, this seems to be odd reasoning. I can see no more reason to presume that subsequent cysts are any safer than the original and would feel much safer if I could eliminate completely both the original and those to follow by either aspiration or excision.

^{*} In discussion of Johnston.⁵

A factor of real significance is the psychic relief afforded the patient when the mass disappears so promptly. Successful aspiration should be followed by the explanation that follow-up is necessary and why it is necessary. I am convinced that patients so treated tend to be prompter in revealing subsequent masses, since their fear of the results of such a revelation is greatly modified.

Another factor which must be considered in this practical world is the expense to the patient. In one patient in our series aspiration was done 14 different times in 14 different places over a period of 14 years. She still has unutilized breasts, and the cost of her treatment has been negligible. As a semiprivate patient admitted each time for excision biopsy, her hospital bills alone would have amounted to approximately \$1400.00. Loss of time and surgical bills would have added materially to this amount.

We have used aspiration biopsy only in cases of inoperable advanced carcinoma preceding x-ray or hormonal therapy, and this subject does not come within the scope of this report.

The data presented here were obtained from the office records of Drs. Burnett, Caswell, and me. It includes cases seen primarily because of breast masses and does not include those cases aspirated during the course of treatment or follow-up for other conditions; nor does it include patients who have been seen in consultation in the hospital.

I suspect that the carcinoma incidence reported here is somewhat high, since such cases are more to be remembered than the easily handled macrocyst.

Indication for aspiration: Breast mass 1 cm. or more in diameter, not obviously malignant.

Technique: The skin is prepared. A skin wheal is made over the mass, with use of a 27-gauge needle. A 20- or 22-gauge needle is then inserted, and all fluid is withdrawn. The area is again palpated.

If the mass completely disappears, the patient is instructed in self-examination and is asked to examine her breasts daily until she returns to the office in two weeks and to report any return of the mass before that time. Without the patient's knowledge, a hospital bed reservation is made for a date immediately following the two weeks' check-up examination.

If the breasts are normal at the time of the examination in two weeks, the patient is asked to return in six weeks, and if they are again normal she is requested to return in three and six months; in the meantime, she is given an American Cancer Society pamphlet on breast self-examination and asked to examine herself each month.

Precautions: 1. If the mass has not completely disappeared following aspiration, it should be excised promptly for biopsy.

2. Bloody fluid is an indication for immediate biopsy.

3. If the mass recurs promptly, it should be excised.

4. Breast self-examination instructions to the patient are essential.

5. The necessity of and reasons for adequate and careful follow-up should be emphasized to each patient.

6. Aspiration should be done only by a surgeon who is equipped to carry out

any necessary treatment and who is aware of the necessity for prompt diagnosis and treatment of breast cancer.

The present study concerns 150 women who presented themselves as private patients with the chief complaint of a breast lump or lumps, who were treated primarily by aspiration and fluid obtained. Patients who had obvious signs suggesting carcinoma or those in whom aspiration was unsuccessful were adjudged to have a solid tumor and were promptly admitted to the hospital for open biopsy. When fluid was obtained, the patient was evaluated as previously stated and surgery was reserved for those who failed to satisfy the rigid requirements listed under precautions.

PATIENTS	AGE, Yr.
Youngest	15
Average age	39
Oldest	64
4 patients under	23

The youngest patient was 15 years of age, and the oldest was 64 years of age. The patients in this group average 39 years of age. This average is approximately 10 years younger than the average age of the last 1000 consecutive breast cancer cases treated at Temple University Hospital. But there were only four patients under 23 years of age, which age happened to represent the youngest in the group of 1000, and only one, aged 15, was under 20, an age which almost, but not quite, eliminates the possibility of cancer of the breast. Most of our breast cancers have been in the decades 40 to 50 and 50 to 60. Most of the breast cysts were in the decades 30 to 40 and 40 to 50 and become less likely after menopause.

NUMBER OF DOMINANT MASSES PRESENT	CASES, No.
One only	127
Two or more	23
Total	150

The presenting chief complaint in every case was the presence of a mass or masses. In the great majority (127) only one mass was present, and in some (23) two to five distinct masses were found.

MASS FIRST NOTICED BY	CASES, No.
Patient	126 (84%)
Physician	14 (9%)
Unknown	10 (7%)
Total	150

The majority of the masses (126, or 84%) were noted by the patient first. A few (14, or 9%) were found by a physician on routine physical examination, and in some instances (10, or 7%), no record was noted on the chart as to who first discovered the mass.

SYMPTOMS	CASES, No.
Pain or tenderness	44 (29.3%)
Mass only	106 (70.7%)
Total	150

Pain or tenderness precipitated breast examination in 44 patients, 29.3%, and the mass was asymptomatic in 106, or 70.7%, of the patients.

CAPACITY OF CYSTS	Cc.
Smallest	<1
Largest	125

Because I suspect that measurements mentioned are often inaccurate, I have designated the size of the cyst in terms of the amount of fluid it contained. There was a wide variance in this figure, although most cysts contained from 3 to 12 cc. of fluid. There was some variation in color of the fluid, but it was always thin and was usually slightly turbid and greenish brown. The large cyst is definitely more suitable for aspiration.

BREAST DIFFICULTY BEFORE FIRST VISIT	CASES, No.
None	108 (72%)
Mild	27 (18%)
Unknown	15 (10%)
Total	150

In 108 cases, the patient reported no previous breast difficulties when first seen; 27 had had previous minor breast problems such as previous fibroadenomata or known fibrocystic disease. None in this group had had previous carcinoma in the opposite breast, although we have, on occasion, aspirated a mass in the remaining breast of such a patient and believe that aspiration is indicated under such circumstances, with the same criteria as in persons without previous breast disease of any kind.

FOLLOW-UP	
No further breast trouble	75 cases (50%)
Average time followed	58 mo.

Careful follow-up is essential to the safety of this method. With few exceptions, the follow-up should be conducted personally by the surgeon who performed the aspiration so that minute variations will be quickly obvious. If aspiration has resulted in complete elimination of the mass, the follow-up intervals should be two weeks, six weeks, three months, and six months after aspiration. It is my firm belief that carcinoma in the wall of a cyst will produce recurrence within two weeks in almost every instance. I suspect that the chief value of the remainder of the follow-up sessions is to impress upon the patient the continued necessity for reasonable vigilance should another mass or masses appear. Also, the habit of breast self-examina-

tion can be encouraged and a reasonable, sensible attitude toward breast self-observation on the part of the patient can be established during follow-up sessions.

Half our patients have had no further breast disease over a follow-up period averaging 58 months.

FOLLOW-UP	
Returned for reaspiration	61 patients (40.6%)
Average time followed	64 mo.

Approximately 40% have had evidence of subsequent benign breast disease, requiring reaspiration and, in some instances, surgery.

FOLLOW-UP	
Not followed to this date	10 patients (6.7%)
Average time followed	22 mo.

A few were lost to follow-up after a relatively short period of time (average, 22 months) but were normal when last seen.

SURGERY FOLLOWING ASPIRATION	CASES, NO.
None needed	113 (75.3%)
Excision biopsy	33 (22.0%)
Radical mastectomy, initially	2 (1.3%)
Radical mastectomy, later	2 (1.3%)
Total	150

Of the 150 patients aspirated primarily and in some cases reaspirated subsequently, 113 (75.3%) have not as yet required surgery; 33 (22%) have been operated on and fibrocystic disease has been proved by biopsy, and 4 have had radical mastectomy for carcinoma.

CARCINOMA PRESENT AT TIME OF ASPIRATION	CASES, NO.
No nodes and well after 1½ yr.	1
No nodes and well after 3½ yr.	1
Total	2 (1.3%)

In two instances, the carcinoma was obviously present at the time of aspiration. One patient was rigidly followed, and the rapid recurrence of the cyst precipitated biopsy and radical surgery in approximately two weeks after aspiration. She is well one and a half years later.

The other patient is a horrible example as far as follow-up is concerned, but she is also well three and one-half years later, chiefly because of the relatively low-grade nature of the malignancy. She was told to examine her own breasts and report any abnormality to us or to her family physician. The mass returned promptly and was noted by the patient, but, because of the indefinite instructions, she did not report it for more than three months.

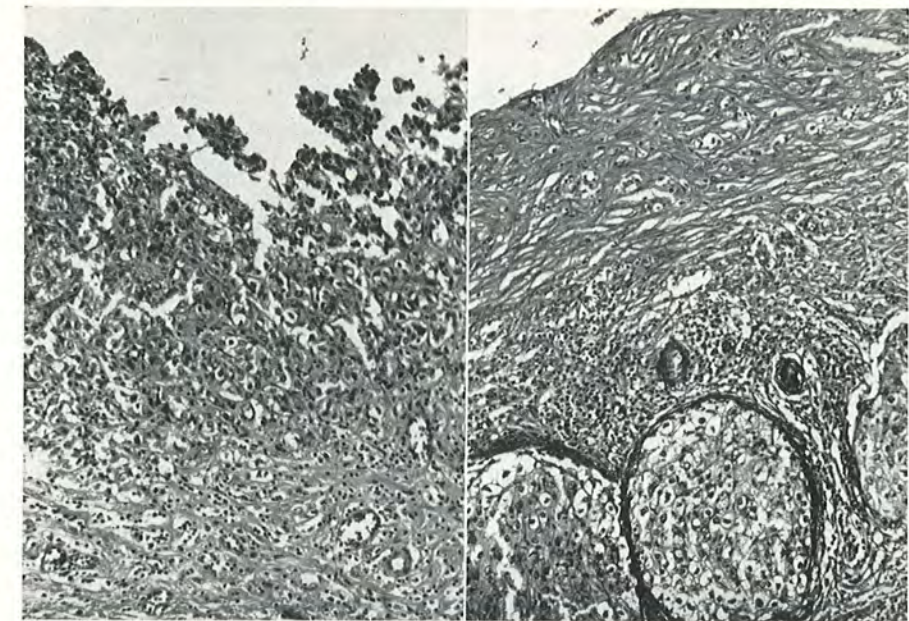


FIG. 1 (Left). Intracystic carcinoma—first case.
FIG. 2 (Right). Intracystic carcinoma—second case.

Fortunately, by chance, the lesion was still well localized. This case emphasizes the need for more careful postaspiration follow-up.

Dr. Augustus Peale, of the Temple University Department of Pathology, who read these slides, was asked to comment about this type of lesion. His comment is as follows:

The two cases in this series would seem to fall into the category of intracystic carcinoma. One case shows a cyst lined by a solid cellular sheet of tumor tissue; some of the cells infiltrate the wall and the surrounding tissue as solid islands or cords (Fig. 1). The second case shows the wall of a cyst, whose lining epithelium is completely lost and is replaced for the most part by a thin layer of inflammatory cells. Within the wall there are solid nests of neoplastic epithelial cells and in one or two tiny areas these cells are present on the lining surface. Whether the latter represents the origin of the tumor or represents invasion from a surrounding lesion is a debatable issue (Fig. 2).

Intracystic carcinoma of the breast is a rare lesion. Actually this is a gross rather than a microscopic entity. The intracystic portion of the tumor in the majority of cases is papillary, although on occasion it may be solid. In rare instances the carcinoma may be confined to the wall of the cyst. Stewart points out that "it is distinctly infrequent to see an unequivocal anatomic example of this type of mammary carcinoma." The explanation for the rarity of this lesion is quite simple. The majority of breast cysts tend to lose their lining cells as they enlarge and in those in which a lining epithelium is retained, it appears as an indistinct layer of flattened cells. Rarely is there papillary proliferation and rarely too are atypical changes noted. True intracystic papillomas are also unusual.

CARCINOMA DEVELOPED LATER	CASES, No.
Opposite breast, 9 mo. later	1
Same breast, another location, 7 mo. later	1
Total	2 (1.3%)

Two patients developed carcinoma subsequently. One, in the opposite breast, was picked up very early because of insistence on routine follow-up. This patient did not have nodes involved and is well 18 months after radical mastectomy.

The other one was also picked up on routine follow-up. Aspiration was unsuccessful; the patient refused biopsy but within two weeks applied to another surgeon, who did the indicated biopsy and radical mastectomy. That was nine years ago. She has been lost to follow-up since 19 months after operation, at which time there was no evidence of recurrence.

It would seem that breast aspiration need not delay appreciably the diagnosis of breast cancer. By rigidly observing simple precautions, human errors in diagnosis tend to be minimized and the truly dominant solid lump or the traitorous cystic lump which recurs can be easily separated from the usually inconsequential simple cyst. Rigid follow-up by the "aspirator" in this case instead of the operator, such as one should employ after excision biopsy, should be emphasized. The uncooperative patient will present an occasional problem, but lack of cooperation can defeat any method. Delay will surely result if this method is used indiscriminately by the physician who is unable to proceed with biopsy and radical mastectomy, and its use by nonsurgeons should be discouraged.

As is generally true, this method is no better than the physician using it.

SUMMARY

This analysis includes 150 private patients treated by aspiration of fluid from a breast cyst or cysts.

Of these, 140 have been followed for an average of approximately five years. Seventy-five have remained free of subsequent breast disease.

Two patients apparently had cancer in the wall of the cyst when first seen. Neither of these had axillary metastases when operated upon, and both are living and well three and a half and one and a half years after radical mastectomy, respectively, although one operation was delayed almost four months because of failure to reexamine promptly.

Two other patients developed cancer of the breast subsequently, one in another site in the same breast, about seven months after aspiration, and the second in the opposite breast, nine months after aspiration.

It would seem that breast aspiration properly explained to the patient tends merely to obviate her fear by demonstrating that some masses can be treated without surgery, rather than give her a false feeling of security, and therefore tends to promote early diagnosis of potential subsequent breast cancer.

Breast aspiration separates cystic from solid masses, thereby emphasizing the true dominant mass.

Aspiration of cysts diminishes psychic and financial trauma and should not delay diagnosis of breast cancer.

In conclusion, I cannot emphasize too strongly the fact that cyst aspiration is safe only in the hands of a competent surgeon who will constantly consider every breast lump as a potential carcinoma.

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Annual Oration for 1955

Peptic Ulcer: Individualization in Management

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The Annual Oration should be something more than the simple presentation of scientific facts. Preferably, it should include the author's philosophy of surgery and should emphasize thoughts and ideas which he has accumulated through the years and may not have had the opportunity to express. Peptic ulcer lends itself ideally to this purpose.

It has been my feeling that the younger surgeon, especially the resident surgeon, has become more interested in doing a procedure than in taking care of an individual, which in its broadest sense must include the welfare of the immediate family. This is especially true in the larger institutions and the larger centers of population, where so frequently the personal touch is lost, and the difficulty of maintaining it is great. A Social Service Department does not take the place of a kind, interested physician or surgeon. Who has not heard the young resident surgeon waxing enthusiastic about the opportunity of doing a gastric resection? I am afraid that the restoration of the patient to a normal place in society is lost sight of in the enthusiasm to do a major surgical procedure, though it must be said that many times this is the only way to accomplish that objective. We who are in a position to teach younger men should so instill in them the primary aim of surgery that one would hear more frequently, "I helped to cure that patient of peptic ulcer," rather than, "I did a gastric resection."

Clinical surgery too frequently lags behind our basic physiologic knowledge of the subject. Someone once said that we need never try a new operation, for we should know from an application of physiologic and pathologic knowledge whether or not the procedure will be successful. Would not many of our gastrojejunal colic fistulas following gastro-enterostomy have been avoided by the use of our basic knowledge of the production of ulcers? Should we not have anticipated the annoying disturbances of gastric motility that followed simple vagotomy?

Therefore, before considering some of the problems that peptic ulcer presents today, let us first review our basic pathophysiologic knowledge as it relates to the production of peptic ulcer.

The presence of acid is the *sine qua non* for the formation of a peptic ulcer. Indeed, the riddle is not the occurrence of ulcer but why autodigestion does not occur more frequently. The factors underlying tissue resistance of

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the areas exposed to acid are a fertile field for further investigation and are not too definitely established. Hence, most of our attention as surgeons has been directed toward modifying the secretion of acid pepsin. A complete knowledge of all the factors that influence acid secretion is essential.

Acid secretion is regulated by nervous impulses through the vagus and by hormonal control largely, but not entirely, through gastrin secreted by the antrum. Uropepsin activity has been increased in denervated gastric pouches in animals from whom the gastric antrum had been removed by injection of cortisone, showing that there is at least another factor present. The surgeon can reduce acid pepsin activity either by removing the majority of the secreting glands or by removing the stimulus to these glands. This must be done with the lowest possible mortality and with the least number of unfavorable side effects. On these premises we must base our surgical procedure and critically evaluate the present surgical methods employed.

The most commonly employed and generally accepted procedure to attain this goal today is the 75 per cent gastric resection, with restoration of gastro-intestinal continuity by some variety of gastrojejunostomy. This removes the antrum and with it the gastrin phase of secretory activity and some of the acid-secreting cells. This produces a very satisfactory therapeutic result in 85 to 90 per cent of patients. However, a small percentage may have very annoying side effects (severe dumping), resulting in poor nutrition, and the very occasional case may develop recurrent ulceration. Recurrent ulceration can be avoided by more radical resection at the risk of increasing the number of severe nutritional disturbances. This latter condition is most difficult to correct and therefore should be avoided at the risk of a slightly higher incidence of recurrent ulcers.

What are the physiologic weaknesses of the classic gastric resection? (1) It removes a large part of the storage capacity of the stomach. (2) It does not remove all the acid-secreting portion of the stomach. (3) It empties the gastric contents into the jejunum, which has been shown to be less resistant to ulceration than the duodenum. (4) It removes the inhibiting action on gastric secretion exerted by the duodenum when acid chyme enters into it.

Theoretically, these weaknesses are largely avoided by the hemigastrectomy, vagotomy and gastroduodenostomy as advocated by Zollinger, Coffey and others. Admittedly, this removes fewer of the acid-secreting cells, but most of the stimulus to acid secretion is removed with the removal of the antrum and vagotomy, and the inhibiting effect of gastric contents flowing over the duodenum is retained. The discontinuance of the original Billroth I procedure because of technical difficulties is an argument against the adoption of this procedure. These technical difficulties may have been solved by mobilizing the duodenum more adequately through incision of the lateral peritoneum, as in exposure of the head of the pancreas, and freeing the stomach remnant by mobilizing the spleen, incising the diaphragmatic peri-

toneum and vagotomy, thus permitting a gastroduodenostomy without tension. Certainly in gastric ulcer a Billroth I procedure can be done in much less time and with greater ease than closure of the duodenal stump and a gastrojejunostomy.

Wangensteen's revival of the sleeve resection would appear on the surface to be the most physiologic of the operations devised to reduce gastric acidity. He is very enthusiastic about his end-results, reporting no cases of recurrent ulceration in over 100 such procedures. General trial of this method should await the test of time, and reports from other large clinics, confirming his results.

In our search for the ideal surgical procedure in the treatment of ulcer, we should not lose sight of the fact that it is unlikely that one procedure will be found that will be suitable for all patients. The operation should be fitted to the patient, and not the patient to the operation. It would be the height of clinical stupidity to believe that the same procedure would be as efficacious in an obstructed ulcer in a poor-risk 75-year-old patient with a low acidity as in a high-strung young male with a free acidity of over 100. Zollinger has emphasized this fact in suggesting that the type of operation be varied according to the nutritional status of the patient. He has suggested the use of vagotomy and simply gastro-enterostomy for the underweight individual, vagotomy and hemigastrectomy for the patient of normal weight, and the classic gastric resection for the rarer obese patient.

More important than the selection of the type of operation is the selection of the patient for surgery. Peptic ulcer is inherently not a so-called surgical disease. No surgical procedure is necessary in the management of the patient who is suffering from a simple uncomplicated ulcer of the duodenal cap. Surgery is reserved for the complications of ulcer, namely, perforation, hemorrhage, obstruction and intractability.

PERFORATED ULCER

Individualization of the patient must be considered even in the treatment of ruptured ulcer. Where there had been only one accepted procedure, namely, closure of the perforation, there are now 3 possible choices: (1) closure of the ulcer, (2) definitive treatment (i.e., gastric resection) and (3) conservative treatment (gastric suction, antibiotics and parenteral fluids).

It should be emphasized that simple closure of ulcer is still the procedure of choice in handling most of these cases. There must be definite indications to consider using one of the other two methods.

It is illogical to assume that gastric resection can be accomplished with as low a mortality as an emergency procedure, with a patient often in shock and with some peritoneal contamination, as it can as a planned routine procedure on a well-prepared patient. As the late Roscoe Graham¹ so aptly put it, "There is no necessity to add a partial gastrectomy to the therapy of an acute perforation of a duodenal ulcer in order to save the patient's life." However, there might be the occasional case, seen early following a minimal

leak where surgery had been considered for intractability, in which definitive treatment might be carried out with a negligible increase in mortality. Jones and Doll give the following indications for immediate resection: (1) the perforation is gastric and possibly due to neoplasm, (2) the patient has had ulcer trouble for over a year, (3) ulcer perforation and hemorrhage occurring concomitantly and (4) one or more previous perforations.

As a result of more complete long-term follow-up, we now realize that many patients with ruptured ulcers have further trouble. Nevertheless, in series followed, at least 30 per cent of ruptured ulcers have no or minimal further difficulty from their ulcer diathesis. This means that if gastric resection were accepted as routine treatment for ruptured ulcer, 30 per cent of individuals would have a large part of their stomach removed needlessly. This is quite a price to pay for saving the other 70 per cent a second operation.

A number of reports have appeared in the literature emphasizing the excellent results obtained by continuous gastric suction in perforated ulcer. The success of this procedure is predicated on the assumption that the tube never becomes plugged and functions perfectly 100 per cent of the time. Constant supervision is mandatory, and failure of the method would be especially likely to occur with the changing personnel so characteristic of larger institutions. At present, this method should be considered in patients who are seen, for the first time, many hours or days following rupture, with the typical findings of extensive peritonitis. In these, surgery is associated with an extremely high mortality. One rarely sees a so-called leaking ulcer with physical signs limited to the right upper quadrant and the right gutter and where, indeed, the diagnosis may be in some doubt. If gastric suction promptly relieves the symptom in this individual, surgery may not be necessary. Again, one emphasizes that the surgeon who explores these latter individuals cannot be criticized.

MASSIVE HEMORRHAGE

There is no agreement as to the handling of massive hemorrhage from peptic ulcer. Stewart and others recommend emergency surgery as soon as the patient can be prepared. Miller reports mortality of 0 in 400 cases of hemorrhage in ulcer cases treated medically. This is an exceptional result, and there are very few clinicians who have not seen patients die from hemorrhage in whom surgery was postponed too long. However, to operate as an emergency on all massively bleeding ulcers would place a tremendous strain on the personnel of all but our larger institutions. Again, the clinician and surgeon must individualize his choice of therapy.

It is generally agreed that these cases are handled best by the combined supervision of a gastro-enterologist and a surgeon. Feeding is the main cog in medical management, and fasting plays no role whatsoever. Naturally, blood loss must be intelligently replaced, and an adequate supply kept available for any emergency.

The astuteness of the clinician is taxed to the utmost in deciding when medical management has failed and surgery becomes imperative. Dr. Smyth has emphasized the great compensating factors in the cardiovascular system to blood loss. The patient may appear well, with normal blood pressure and pulse, and suddenly decompensate and go into shock from concealed hemorrhage.

The following patients demand surgical intervention: (1) one who starts to bleed while under medical care in the hospital, (2) one who shows evidence of continued or recurrent hemorrhage after 48 hours of medical management, (3) a patient who continues in a border-line shock state in spite of 1,000 cc. of blood and (4) the individual from whose history one would suspect a *chronic*, perforating, posterior duodenal ulcer. Age per se is not an indication for surgery. It is true that the older the patient the more likely he is to continue bleeding, but at the same time he is also a poorer surgical risk. Surgery can be carried out with a lower mortality if this older group can be adequately prepared and then interval resection done.

The failure to find the source of bleeding in exploration for massive upper gastro-intestinal hemorrhage presents one of the most vexatious problems confronting the surgeon. Gilchrist and Chun presented 5 such cases, 2 of which recovered following a so-called blind resection. In the 3 fatal cases, autopsy revealed bleeding areas in the gastric remnant 3.5 to 7 cm. from the esophagus. They recommend mobilization of the entire stomach by freeing both curvatures and ligating all vessels, if no bleeding source can be found after evacuating clots from the distended stomach through a gastrotomy incision extending to within 7 cm. of the esophagus. A 75 to 80 per cent resection is done, and if peptic erosions are present, an infradiaphragmatic vagotomy is also performed. It would seem more logical to do a vagotomy routinely. If bleeding continues, reoperation and almost total gastrectomy is recommended.

GASTRIC ULCER

I recognize that gastric and duodenal ulcers are two different entities, but for the sake of completeness, gastric ulcer is discussed briefly.

The difficulty in differentiating benign gastric ulcer from gastric carcinoma does not warrant resection for all gastric ulcers. However, if there is any suspicion of malignancy, resection should be carried out without delay. The factors which indicate resection without a trial of medical treatment are: (1) the presence of achlorhydria, (2) ulcer located on the greater curvature and (3) indigestion developing suddenly in a man over 50 who never had digestive disturbance before. Other gastric ulcers should receive intensive medical treatment in the hospital and should show marked x-ray evidence of healing in a 2-week period. McGlone and Robertson state, "If complete healing of an ulcer in a reasonable period of time was used as a final criterion of the benign nature of the lesion, all of the malignant ulcers of the lesser curvature would have been discovered and adequately treated."

Prepyloric lesions cause the greatest confusion. Here the index of suspicion should be increased. Probably these lesions should be included with greater-curvature lesions demanding prompt gastric resection. The end results from a moderate gastric resection are so satisfactory that the slight mortality is not a contraindication.

INTRACTABILITY

The indication for surgery in about 60 per cent of the cases is intractability. This is a nebulous term, and its interpretation depends largely upon the enthusiasm of the surgeon. Here the patient's welfare is closely related to the integrity of the surgeon. A tissue committee cannot guard against the gastric resection of an ulcer which should have been given a trial of medical management. Indeed, one would have no need for tissue committees if we prevented any but men of honest purpose from receiving surgical training. But why should I belabor integrity to this Academy? I was never so proud to be a member as last year when this Academy, without a dissenting vote, enthusiastically supported a hospital in refusing to grant privileges to a surgeon who had falsified his income tax returns.

The honest clinician frequently has great difficulty in deciding when medical treatment has failed. This holds true especially in the non-cooperative patient. One should not consider as intractable a patient who is unwilling to make a definite contribution to achieving freedom from symptoms by modifying his routine of life. Again quoting Roscoe Graham, "This belief serves to warn the enthusiastic operator of the disaster which awaits him if he accepts for operation a patient suffering from a duodenal ulcer who is so utterly devoid of self-discipline that the physician in desperation has admitted failure of non-operative therapy and asked that operative therapy be tried."

This is so important that, in order to emphasize it further, I wish to recount a personal experience.

S. F., a young mother of 28 with 3 children, was admitted for gastric resection on 3-26-51. She was one of 6 siblings, one of whom suffered from epilepsy. She had had two previous gynecologic procedures, including a total hysterectomy in 1946. She complained of indigestion and nervousness. A duodenal ulcer was diagnosed by means of x-rays at 2 different hospitals. Her acidity was within normal range. She was treated at the Clinic of the University of Pennsylvania Hospital, and psychiatric aid was sought. However, she failed to respond to the psychotherapy. Following this, surgical therapy was recommended by another surgeon. Foolishly, with this background, I accepted her for gastric resection. At surgery minimal disease was found in the duodenum, and only a moderate resection was done. Immediately, she developed characteristic signs and symptoms of the "dumping" syndrome. Her weight dropped from 145 pounds to a low of 112 pounds 3 years later. She was studied by Dr. Machella and found to have extremely rapid emptying of her gastric remnant. All efforts to improve nutrition by

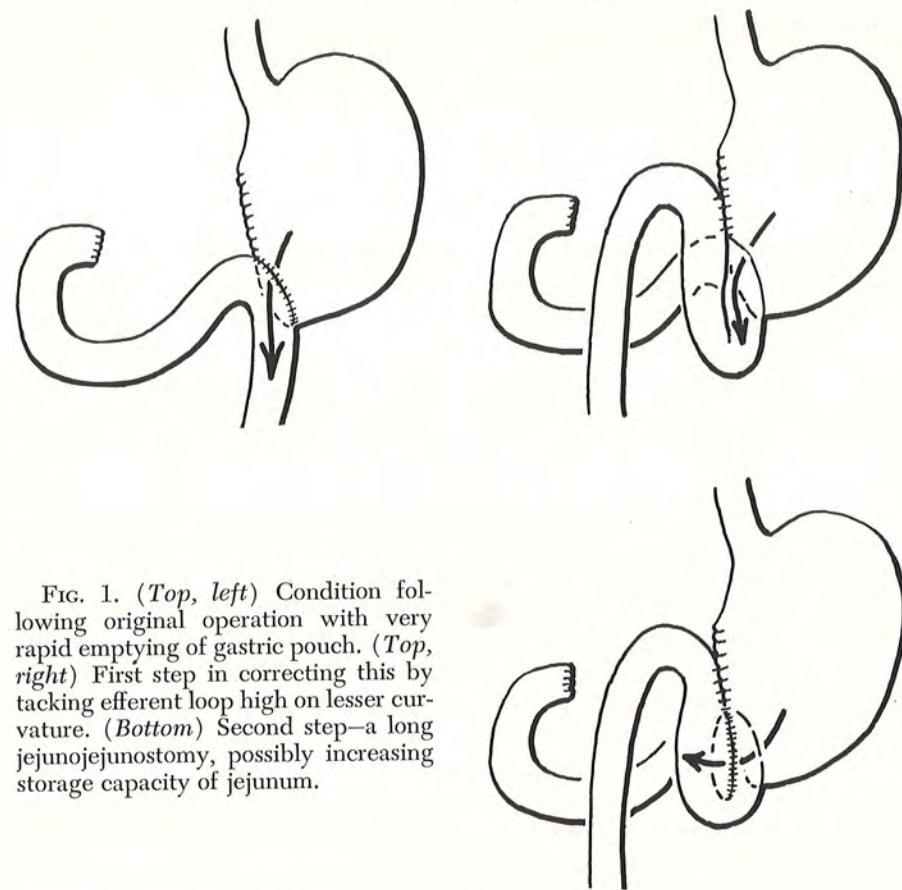


FIG. 1. (Top, left) Condition following original operation with very rapid emptying of gastric pouch. (Top, right) First step in correcting this by tacking efferent loop high on lesser curvature. (Bottom) Second step—a long jejunojejunostomy, possibly increasing storage capacity of jejunum.

medical means failed. An attempt was made to correct this mechanically as shown in Figure 1. The reservoir in the upper jejunum was increased, and gastric emptying was delayed by bringing the distal loop of jejunum high on the lesser curvature. She promptly felt much improved and has gained 10 pounds since this procedure done on 3-3-54. However, since that time, she has been admitted to the hospital for attempted suicide, has received electric shock therapy, and when last seen on 9-12-55 complained of severe constant headaches, although at this time she had no gastro-intestinal complaints. Obviously, she was an intractable patient rather than a patient with an intractable ulcer, and surgery has even less to offer than psychotherapy in such cases.

In conclusion, I would like to quote Oliver Wendell Holmes:

But a glance at the prevalent mode of treatment of any two successive generations will show that there is a changeable as well as a permanent element in the art of healing; not merely changeable as diseases vary or as new remedies are introduced but changeable by the going out of fashion of special remedies by the decadence of a popular theory from which their fitness was deduced. There is

no reason to suppose that the present time is essentially different in this respect from any other. Much therefore which is now very commonly considered to be the result of experience will be recognized in the next or in some succeeding generation as no such result at all, but as a foregone conclusion based on some prevalent belief or fashion of the time.

It behooves us to guard against following the fashion of the times blindly in the surgical treatment of peptic ulcer. Rather, we should base our treatment on basic physiology, pathology and past experience. Finally, a surgical procedure, no matter how well conceived and carried out, will be a failure if done on a patient in whom it is not indicated.

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Annual Oration for 1956

Pulmonary Artery Thrombosis

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Let us consider pulmonary artery thrombosis as a surgical problem. This disease entity needs to be included in our thoughts as we deal with an increasing number of surgical lesions of the heart and the great vessels. The forbidding ramparts of the latest field in surgery have been breached. Stenotic lesions of the pulmonic, mitral and aortic valves have been dealt with successfully. Progress is being made in the correction of mitral and aortic regurgitation and in overcoming the deficiency of the coronary blood supply to the heart. Electronic machines provide extracorporeal circulation and a dry operative field for the closure of intra-auricular and intraventricular septal defects. Patent ductus arteriosus and coarctation of the aorta have yielded to surgical therapy. Homografts, as well as man-made grafts, and shunts from the latest synthetic fibers are reducing the mortality rate from aneurysms of every type. A brilliant account on the resection of aortic aneurysms involving the renal, celiac and superior mesenteric arteries with restoration of blood flow in 4 cases was reported in the November issue of *Annals of Surgery* by DeBakey and his associates. It is a truly astounding feat and a thriller to read.

None of these extraordinary milestones in surgery could be recounted without the advanced strides in anesthesia of recent years. The development of its various technics parallels the new procedures in the field of surgery. These achievements are not due to the efforts of surgeons and anesthesiologists alone but also to those of the skilled cardiorespiratory physiologists, internists, roentgenologists, physiological chemists and numerous laboratory technicians.

Literature on pulmonary artery thrombosis is growing, but nothing of hope, comfort or the saving of life is found on any of the pages. This disease state or complication has been recognized for 120 years, but the diagnosis was always made postmortem. However, Middleton (1943)¹ stated that, in the 16 years prior to his report, the antemortem diagnosis of pulmonary artery thrombosis was made in 53 patients, and later confirmed at autopsy. Of course, all of these patients presented classic clinical evidence of cor pulmonale on the basis of obstruction of the blood flow to the lungs.

Pulmonary artery thrombosis is unquestionably more common than it is generally thought to be, as stated by Brenner (1935),² who found pulmonary artery thrombi in 28 cases in 100 unselected autopsies. However, the thrombi were in the smaller arteries and not always directly associated with the death of the patient. This is an example of seeking and finding what others overlook.

A thorough history and complete physical examination, bearing in mind

a possible previous thrombotic or embolic episode, is desirable and certainly essential, if clues pointing to pulmonary thrombosis are to be uncovered. Also the expectation of an early diagnosis stems from the knowledge gained today by x-ray, electrocardiographic and angiographic studies. Herein lies the hope of a successful approach to the problem.

We are interested in thrombosis of a main or primary subdivision of the pulmonary artery because it produces progressive obstruction to the output of the right ventricle and finally sudden death.

Thrombosis, in the vast majority of cases in the literature, seemed to be secondary to an embolus, not immediately fatal, and in a small number there was no history of an embolus. In the first group, the embolus sprang from a thrombus elsewhere and lodged in one of the smaller pulmonary arteries. The thrombus progressed by accretion toward the main pulmonary artery with ultimate obstruction. To a lesser degree, pulmonary artery thrombosis is in situ. The formative site of the thrombus is a lesion in the wall of the vessel. It, too, grows by accretion toward the main artery, hindering the blood flow and resulting in fatal termination as shown by Savacool and Charr³ in 12 cases of pulmonary tuberculosis, where the thrombus began in a vessel adjacent to a tuberculous lesion.

The progress of the obstruction varies widely in both types of thrombi. According to Magidson and Jacobson,⁴ symptoms of the blockage are present from 8 days to 6 years. Histologic examination revealed the age of the thrombi to be parallel with the duration of the symptoms seen in the obstruction. Their color varies from gray to yellow with organization and fibrosis through several layers of lamination to the fresh-red fatal thrombus that completed the obstruction.

The degree of obstruction to the pulmonary artery necessary to produce a fall in systemic blood pressure was found by Gibbon, Hopkinson and Churchill⁵ to be 60 per cent, and occlusion of 90 per cent or more of the diameter of the artery was required to cause death. The interval between the onset of symptoms and death, of course, provides the opportunity for an accurate diagnosis and possible relief of the obstruction by surgery.

All authors are agreed that patients who have had a pulmonary embolus of sufficient size to be recognized as a complication of the postoperative or postpuerperal state, or following severe infection or burn, are prone to develop thrombosis in the pulmonary artery. Furthermore, they concur that individuals who have suffered metabolic or physiologic imbalances or primary pulmonary disease, such as tuberculosis or cardiac lesion, especially mitral stenosis or septal defect, are subject to this hazard. Repair of septal defects and relief of the valvular stenosis are necessary prophylactic measures. Moreover, prompt correction of fluid and electrolyte imbalances, and restoration of normal blood volume, and early adequate ambulation to prevent stasis in the peripheral veins, have long been emphasized in the prevention of thrombi and subsequent emboli from the systemic veins.

The symptoms and signs, if any, of pulmonary artery thrombosis after

pulmonary embolization are chest pain, difficulty in breathing, cough, blood spitting followed by fever, increased pulse and respiratory rate; later, friction rub, rales and a density in the periphery of a lung determined by roentgen study. Subsequential course may be uneventful or stormy, but in either event this marks the time for change in management, with the hope that the patient may be guided safely to a quiescent stage. However, symptomatology may be extremely varied and frequently unrelated to the chest. Middleton was the first to describe abdominal pain, either in the epigastrium or the lower abdomen. He also pointed out the appearance of jaundice in the patient with pulmonary artery thrombosis. The clinical factors of increasing obstruction to the blood flow of the right heart are dyspnea and cyanosis that are not relieved by the administration of oxygen, an appearance of apprehension, fever up to 104°, moderate increase in pulse rate but no significant change in the blood picture, and little or none in the blood pressure, until shortly before death. Brenner also reported that a to-and-fro murmur over the pulmonary artery may be heard anteriorly and in the intrascapular area, and the second pulmonic sound will be accentuated.

Those patients who survive a pulmonary embolus do not necessarily make a complete recovery. It is to this group of patients, and by far the largest, that I wish to give separate consideration. Careful follow-up examinations need to be made, and the results of observation and studies well documented.

Consider briefly a patient whose convalescence from a surgical operation or some form of trauma has been interrupted by the discovery of a peripheral thrombosis, followed by symptoms referable to the lungs. Physical examination reveals the lungs to be clear, and there is no evidence of chronic cardiac disease. If the embolus is of sufficient size to produce a shadow, then the roentgen study of the lungs will be of great help.

Boswell and Palmer (1931),⁶ and Fowler (1933),⁷ published articles on pulmonary artery thrombosis and therein stated that the pulmonary artery shadow was present on the chest film study but was thought to be insignificant until the autopsy was performed. Hanslin and Eyler (1951),⁸ after a study of 5 cases, felt they had established sufficient criteria to make a diagnosis of pulmonary artery thrombosis by x-ray examination. Their criteria are: (1) enlargement of the right heart, (2) dilatation of the pulmonary artery proximal to the block, (3) enlargement and alteration in the contour of the artery at the level of the thrombus, (4) decrease in the caliber of the vessels distal to the thrombus, with increased radiolucency of the corresponding area.

Keating and associates (1953),⁹ in a study of 7 patients, stressed the importance of progress roentgenograms to rule out or confirm the progressive enlargement of the pulmonary artery shadow in cases of suspected pulmonary artery thrombosis. They further clarified their findings on pulmonary artery thrombosis by stating that the artery shadow becomes sharper because of lack of pulsation of the vessel, and simultaneously there is increased radio-

bility of the lung fields due to ischemia and the absence of pulmonary congestion. They confirmed the discovery of the enlarged right heart shadow by Hanslin and Eyler and added that there is also either a tendency to or outright right axis deviation on the electrocardiogram.

Keating (1955),¹⁰ in reporting 4 more cases of pulmonary artery thrombosis, confirmed the earlier x-ray characteristics and in addition stated that the thrombus has an elliptical configuration tapering abruptly at its distal point. He counseled that pulmonary artery thrombosis must be differentiated from the mediastinal mass lesion, notably, carcinoma of the bronchus with obstructive emphysema.

Carroll,¹¹ and many others, pointed out that pulmonary artery thrombosis must be thought of in patients without a history of previous thrombus in the peripheral veins, or embolization. However, they do present symptoms and signs of pulmonary artery obstruction but no physical findings of rheumatic or congenital heart lesions. The aspects of the obstruction are dyspnea, nocturnal or on slight exertion, cyanosis, often polycythemia, slight edema of the lower extremities, a palpable liver and right axis deviation. In addition, the roentgenogram of the chest will show an enlarged right auricle and ventricle and enlarged pulmonary artery shadow with increased lobar or lung translucency. Elevated venous blood pressure and delayed circulation time will also be in evidence. Such a clinical picture usually points unerringly to the suspected diagnosis of pulmonary artery thrombosis.

Further information is obtainable today by the use of cardiac catheterization and angiocardiology. One patient in Carroll's series, a 30-year-old male, was so studied, and the first reports showed "the dye entering a large right auricle and then, slowly, an extremely large right ventricle; the main pulmonary artery appeared larger than normal and a branch of the right pulmonary artery was visualized and appeared normal in size but the left pulmonary artery was not seen at any time and lung appeared to be avascular." Complete block of the left pulmonary artery was the conclusion, and all previous studies were confirmed at subsequent operation. "The left artery was thrombosed and contained bright red blood on aspiration. Occlusion of the artery distally prevented further aspiration of blood. Since the normal flow in the pulmonary artery had been disrupted the artery was ligated and divided." The patient recovered from his operation and was discharged unimproved. This is the first reported instance of a surgical approach to the problem.

Cathcart¹² and Johnson¹³ diagnosed pulmonary artery thrombosis by cardiac catheterization and angiocardiology. Their patients were referred for the study, and information as to the ultimate outcome is not known. Cathcart believes that early diagnosis is possible by combining the means now available. If this is true, progressive thrombosis that leads to certain death can surely be halted.

Jesser and DeTakats,¹⁴ in their report on the production of experimental pulmonary embolus, described their emergency treatment as the administra-

tion of oxygen with intravenous injection of atropine and papaverine. Atropine is given because it inhibits the vagus. Jesser and DeTakats have also shown experimentally that papaverine increases the blood flow through the pulmonary vessels to a greater extent than the flow shown on the control film. They also confirmed experimentally the increased translucency of the lung. The combined use of oxygen, atropine and papaverine with anticoagulants has become widely accepted as the initial therapy both in the embolic and the thrombotic states. If the patient survives an attack, usually therapy abruptly ends here, and he is discharged with finality and a sigh of relief. It is the responsibility of everyone who has had a patient with this complication to inform the family doctor of the possibility of progressive obstruction of the pulmonary artery blood flow due to thrombosis. Both doctor and patient should be urged to take advantage of cardiorespiratory studies at intervals of 3 to 4 months.

Whenever any data are presented indicative of thrombosis in the pulmonary arterial tree, immediate thoracotomy should be advised. No delay in performing this operation should be permitted until the patient begins to show clinical signs of right heart failure. Conceivably, the relief of the thrombosis may be limited to segmental or lobar resection of the affected lung. With our present understanding of cardiorespiratory physiology and the physical limitation of the patient, there should be no contraindication to surgical correction even in the presence of bilateral thrombi provided that they are limited to a segment or a lobe. It is conceivable that Carroll's patient, who had a thoracotomy because of complete obstruction of the first portion of the pulmonary artery and patency of the pulmonary artery distally, could well have had resection of the blocked artery and graft at the same time with restoration of blood flow.

I repeat, successful treatment of the obstruction in the heart and the great vessels of the systemic circulation is being done by an increasing number of surgeons. There is no valid reason why the same may not be accomplished in dealing with an obstructed blood flow of the pulmonary circulation. I suggest that we bear in mind the motto of our far-ranging Seabees: "The difficult we will do immediately; the impossible may take a little longer."

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The 75th Anniversary of the Philadelphia Academy of Surgery

The 75th Anniversary of the Philadelphia Academy of Surgery was celebrated on November 20, 1954, at the Barclay Hotel, with Dr. Gibbon in the chair. Dr. Gibbon presided in the absence of the president, Dr. L. K. Ferguson, who was ill. After a few introductory remarks, Dr. Gibbon introduced the past presidents of the Academy who were present:

Dr. Charles E. Mitchell
Dr. Damon Pfeiffer
Dr. Robert Ivy

Dr. John B. Flick
Dr. Calvin Smyth
Dr. I. S. Ravdin

Dr. Smyth then read a brief history of the Philadelphia Academy of Surgery in which he stated that our society was founded on April 21, 1879, by Dr. S. D. Gross. A group of physicians met at his home at 11th and Walnut Streets, and these physicians became known as the Founders Group. The established purpose of the Academy of Surgery was to promote, cultivate and improve the art and the science of surgery and also to improve public health. A few of the accomplishments of Dr. Gross were enumerated, including the fact that he founded the American Surgical Association in 1880. It is of interest what the certificates of membership of both the Philadelphia Academy of Surgery and the American Surgical Association are identical. Dr. Gross, at his death, established a fund, the income of which is \$1,500 every 5 years. This amount is to be paid for the best essay in surgery or surgical pathology presented in the English language which has not been published previously. A number of outstanding contributions are included among these essays.

There have been 251 surgeons elected to active membership in the Philadelphia Academy of Surgery; honorary fellowships have been conferred upon 56 surgeons—41 Americans and 15 from foreign countries. In 1929 we celebrated the 50th Anniversary of the Philadelphia Academy of Surgery with a scientific meeting and dinner. One of the most interesting functions of the Academy, namely, the joint meetings with the New York Surgical Society, was touched upon briefly. These meetings occur either in Philadelphia or in New York, on alternating years, and the scientific programs always have been excellent. The pleasant relationship between the members of the two organizations has been most gratifying.

Dr. Gibbon then introduced Dr. A. C. Wood who is the oldest living member of the Philadelphia Academy of Surgery. As this is the oldest surgical society in America representatives of many of our outstanding surgical organizations were invited to attend this celebration. Dr. Gibbon then introduced the physicians representing the various surgical associations:

Dr. Gibbon represented the American Surgical Association
Dr. Arthur Allen, American College of Surgeons
Dr. Leon Leahy, Central Surgical Association
Dr. Irving Walker, New England Surgical Association
(North Pacific Surgical Association was not represented as it was celebrating simultaneously its 25th anniversary)
Major General Leonard Heaton, Pacific Coast Surgical Assn.
Dr. George Finney, Southern Surgical Association
Dr. Erwin H. Schmidt, Western Surgical Association
Dr. Richard Sweet, Boston Surgical Society
Dr. Jefferson Browder, New York Surgical Society
Dr. Amos Koontz, Baltimore Surgical Society
Dr. N. Silcox, Royal College of Physicians and Surgeons of Canada
Dr. John Mulholland, American Board of Surgery
Major General George Armstrong, United States Army Medical Forces
Captain J. Gordon, United States Navy Medical Forces
Dr. Richard Kern, Philadelphia College of Physicians

Honorary fellowships were conferred upon 8 distinguished surgeons, one of which was received in absentia. Each recipient of the honorary fellowship was introduced by a Fellow of the Academy who gave a brief outline of his accomplishments, honors and contributions. The recipients responded with remarks of friendship and appreciation of the honor conferred upon them.

Dr. John Flick introduced Dr. Arthur Allen, Boston, Mass.
Dr. Jonathan Rhoads introduced Dr. Fred Coller, Ann Arbor, Mich.
Dr. I. S. Ravdin introduced Mr. Digby Chamberlin, Leeds, England
Dr. Emory Burnett introduced Dr. Harold Foss, Danville, Pa.
Dr. Julian Johnson introduced Dr. Erick Husfeldt of Copenhagen
Dr. Francis C. Grant introduced Dr. Howard Naffziger, of San Francisco, Calif.
Sir James Patterson Ross, surgeon to Queen Elizabeth 2nd, received in absentia
Dr. Damon Pfeiffer introduced Dr. Allen Whipple, New York, N. Y.

Dr. Detlov Bronk then gave the paper of the evening, entitled, "Discoveries of New Knowledge." Following this excellent presentation, the meeting adjourned.

Transactions of the Philadelphia Academy of Surgery

The Year 1951

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, January 8, 1951, at 8:15 P.M. The President, Dr. Calvin M. Smyth, was in the chair. There were 128 members and guests present.

SCIENTIFIC PROGRAM

I. Paper

DR. DELBERT C. SMITH*	Treatment of Thoracic Duct Injury.
DR. MARK W. WOLCOTT* and	<i>Discussed by:</i> Drs. FERGUSON,
DR. L. KRAEGER FERGUSON	BURNETT, WALKER and WOLCOTT

II. Paper

DR. ROBERT A. COOPER*	The Use of Gelatin as a Blood Sub-
Introduced by:	stitute
DR. IRVIN E. DEIBERT	<i>Discussed by:</i> Drs. DEIBERT, RAV-
	DIN and COOPER

III. Paper

DR. HENRY P. ROYSTER	Control of Blood Volume in Radical
DR. HENRY P. PENDERGRASS*	Operation for Cancer of Head and
DR. JAMES M. WALKER*	Neck
MARIE BARNES*	

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, February 5, 1951, at 8:15 P.M. The President, Dr. Calvin M. Smyth, was in the chair. There were 104 members and guests present.

SCIENTIFIC PROGRAM

I. Case Report

DR. LAWRENCE CURTIS	Case of Cystic Teratoma of the
	Head; Three-Year Progress Report

* By invitation.

II. Case Report

Successful Transabdominal Aortic Embolectomy, "Saddle-Type"
Discussed by: Drs. GIBBON and McLAUGHLIN

III. Paper

DR. ROBERT K. FINLEY, JR.*	Changes in Urine and Serum Elec-	
DR. JOHN Y. TEMPLETON, III*		trolytes, and Plasma Volume, after
Introduced by		Major Intrathoracic Operations
DR. JOHN H. GIBBON, JR.	<i>Discussed by:</i> Drs. TEMPLETON,	
	GIBBON and RHODES	

The annual conjoint meeting of the New York Surgical Society and the Philadelphia Academy of Surgery was held on Wednesday, March 14, 1951, at the Academy of Medicine, 2 East 103rd Street, New York, at 2:15 P.M. in Room 20. The president of the New York Surgical Society, Dr. Ralph Colp, and the president of the Philadelphia Academy of Surgery, Dr. James E. Thompson, jointly presided.

SCIENTIFIC PROGRAM

LESTER BLUM, M.D.	Arterial Infusion
	<i>Discussor:</i> DR. JOHN B. FLICK,
	Philadelphia

C. DOUGLAS SAWYER, M.D.	One-Stage Total Colectomy and Anal
	Ileostomy for Congenital Familial
	Polyposis of the Colon (movie in
	color)
	<i>Discussor:</i> DR. L. K. FERGUSON,
	Philadelphia

HERBERT CONWAY, M.D.	Tests for the Evaluation of the Cir-
	culation in Tubed Pedicles and
	Flaps
	<i>Discussor:</i> DR. HENRY ROYSTER,
	Philadelphia

JOHN L. MADDEN, M.D.	Congenital Atresia of the Esophagus
	Treated by a One-Stage Primary
	Esophagostomy Employing
	a Right Transpleural Approach
	<i>Discussor:</i> DR. JOHN H. GIBBON,
	Jr., Philadelphia

LOUIS R. SLATTERY, M.D.	Operative Cholelithotomy
GEORGE M. SAYPOL*	<i>Discussor:</i> DR. I. S. RAVDIN, Phila-
	delphia

* By invitation.

ARTHUR S. W. TOUROFF, M.D. First Surgical Cure of Infected Patent Ductus Arteriosus (11 yr. result)
Discussor: DR. W. EMORY BURNETT

SAMUEL A. THOMPSON, M.D. Conversion of the Auricular Appendage into a Leak-Proof Valve Tube for Cardial Surgery (movie in color)
Discussor: DR. JULIAN JOHNSON

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, April 2, 1951, at 8:15 P.M. The president, Dr. Calvin M. Smyth, was in the chair. There were 136 members and guests present.

SCIENTIFIC PROGRAM

I. Case Report

DR. FREDERICK W. DASCH* Intrapleural Fibroma (Giant Sarcoma) Arising from the Chest Wall
Introduced by
DR. S. DANA WEEDEE *Discussed by:* DRs. GIBBON and BURNETT

II. Paper

DR. STANLEY LORBER* Afferent Loop Studies after Subtotal
DR. HARRY SHAY* Gastrectomy
Introduced by *Discussed by:* DRs. SHAY, RAVDIN,
DR. I. S. RAVDIN SMYTH, WALKLING, BURNETT and
WEEDEE

III. Paper

DR. HAROLD A. ZINTEL Subtotal Adrenalectomy for Essen-
DR. CHARLES C. WOLFERTH* tial Hypertension
DR. WILLIAM A. JEFFERS* *Discussed by:* DRs. LIPSCHUTZ,
DR. JOSEPH H. HAFKENSCHIEL* RHOADS, COOPER and LUKENS
DR. FRANCIS D. LUKENS*

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, May 7, 1951, at 8:15 P.M. The president, Dr. Calvin M. Smyth, was in the chair. There were 94 members and guests present.

* By invitation.

SCIENTIFIC PROGRAM

I. Case Report and Presentation of Patient

DR. ARTHUR W. VON DEILEN* Cylindroma of Upper Jaw: Surgical
Introduced by and Prosthetic Reconstruction
DR. ROBERT H. IVY after Resection
Discussed by: DRs. IVY, SMYTH,
and MEDINGER

II. Paper

DR. ALEX W. ULIN* Cholecystitis in Childhood and Early
DR. JOSEPH L. NOSAL* Adolescence
DR. WILLIAM L. MARTIN* *Discussed by:* DRs. MARTIN, KNOX,
Introduced by BURNETT and SMYTH
DR. I. S. RAVDIN

III. Paper

DR. H. TAYLOR CASWELL* The Role of Chronic Perforation in
Introduced by Intractable Hemorrhage Occurring
DR. W. EMORY BURNETT with Peptic Ulcer
Discussed by: DRs. WEEDEE, BUR-
NETT and RHOADS

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, October 1, 1951, at 8:15 P.M. The president, Dr. Calvin M. Smyth, was in the chair. There were 123 members and guests present.

SCIENTIFIC PROGRAM

I. Case Report

DR. LEWIS C. MANGES, JR. Partial Hepatectomy for Solitary Me-
DR. JOHN REINHART* tastasis
Discussors: DRs. DAVIS, LEVER-
ING, WEEDEE, ROBERTS, MANGES,
SMYTH, DEAVEE, McCORMICK and
MEDINGER

II. Paper

DR. WILLIAM T. FITTS, JR. An Experimental Study of the Use
DR. H. LOWRY RUSH* of Intramedullary Fixation in the
DR. EDWIN MONROE* Presence of Gross Contamination
DR. JOHN GIBBONS* *Discussors:* DRs. BROOKS, MOORE,
NICHOLSON, WEEDEE and SHALLOW

* By invitation.

The Year 1952

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, January 7, 1952, at 8:15 P.M. The president, Dr. Calvin M. Smyth, was in the chair. There were 137 guests and members present.

SCIENTIFIC PROGRAM

I. Case Reports

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| DR. WM. T. FITTS, JR.
DR. WM. E. DEMUTH*
DR. I. S. RAVDIN | Two Cases of Hemoperitoneum Due to Perforation of the Gallbladder
<i>Discussors:</i> DRs. FITTS, SMYTH, RAVDIN and WALKLING |
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II. Paper

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| DR. FREDERICK A. BOTHE | The Inflammatory Factor in Lesions of the Colon |
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III. Paper

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| DR. PAUL NEMIR*
DR. HERBERT R. HAWTHORNE | Recent Clinical and Experimental Studies on Intestinal Obstruction
<i>Discussors:</i> DRs. RAVDIN, DRUBKIN and HAWTHORNE |
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A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, February 4, 1952, at 8:15 P.M. The president, Dr. I. S. Ravdin, was in the chair.

SCIENTIFIC PROGRAM

I. Case Report

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| CAPT. GEORGE WM. WARE, MC,
USA Valley Forge Army Hos-
pital*
COL. HAROLD A. CONRAD, MC,
USA | Spontaneous Rupture of the Esophagus
<i>Discussors:</i> DRs. FERGUSON, ROB-
BINS, GIBBON and JOHNSON |
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II. Paper

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| JESSE T. NICHOLSON, M.D. | Structural Variation in the Scapular Glenoid as a Cause of Recurrent Dislocation of the Shoulder
<i>Discussors:</i> DRs. BROOKE, RAVDIN |
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* By invitation.

III. Follow-up Study

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| WILLIAM HAGEN, M.D.*
JONATHAN E. RHOADS, M.D. | Results of Inguinal and Femoral Herniorrhaphy
<i>Discussors:</i> DRs. WALKLING, FER-
GUSON, WEEDER |
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The annual conjoint meeting of the New York Surgical Society and the Philadelphia Academy of Surgery was held on Wednesday, March 12, 1952, at Mitchell Hall, College of Physicians, Philadelphia, Pa., at 2:15 P.M. The president of the New York Surgical Society, Dr. Henry W. Cave, and the president of the Philadelphia Academy of Surgery, Dr. I. S. Ravdin, jointly presided.

SCIENTIFIC PROGRAM

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| W. EMORY BURNETT, M.D. | Experience with Treatment of Esophageal Neoplasm
<i>Discussor:</i> JOHN H. GARLOCK, M.D. |
| HAROLD A. ZINTEL, M.D. | Lumbodorsal Sympathectomy
<i>Discussor:</i> J. WILLIAM HINTON, M.D. |
| L. KRAEER FERGUSON, M.D. | Palliation in Carcinoma of the Colon and Rectum
<i>Discussor:</i> MICHAEL R. DEDDISH, M.D. |
| CALVIN M. SMYTH, M.D. | Early Operation for Actively Bleeding Duodenal Ulcer
<i>Discussor:</i> FREDERICK H. AMENDOLA, M.D. |
| JOHN Y. TEMPLETON, M.D. | Reconstruction of the Cervical and Thoracic Trachea by Means of a Plastic Tube; Case Report
<i>Discussor:</i> WILLIAM L. WATSON, M.D. |
| JONATHAN E. RHOADS, M.D. | Present Status of the Plasma Expanders
<i>Discussor:</i> DAVID V. HABIB, M.D. |
| CHARLES P. BAILEY, M.D. | Auriculo-Septo-Pexy for Atrial Septal Defects
<i>Discussor:</i> JOHN L. MADDEN, M.D. |

* By invitation.

- JOHN H. GIBBON, JR., M.D. Recent Developments with an Extra-
corporeal Circuit for the Tempo-
rary Maintenance of the Cardio-
respiratory Functions
Discussor: ELLIOTT S. HURWITT,
M.D.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, April 7, 1952, at 8:15 P.M. The president, Dr. I. S. Ravdin, was in the chair.

SCIENTIFIC PROGRAM

- I. Case Report
DR. L. DONALD PRUTZMAN* Arteriovenous Fistulae of the Lung
DR. JOHN B. FLICK *Discussor:* DR. FLICK
- II. Motion Picture
DR. HANS MAY Repair of Tendons within the Flexor
DR. R. S. OAKEY, JR.* Sheath of the Finger
Discussors: DRs. MOORE, ROYSTER
- III. DR. EUGENE B. SPITZ* Technical Advances in the Treat-
DR. C. EVERETT KOOP* ment of Communicating Hydro-
Introduced by cephalus
DR. JONATHAN RHODS *Discussors:* DRs. GRANT, JAEGER

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, May 5, 1952, at 8:15 P.M. The president, Dr. I. S. Ravdin, was in the chair.

SCIENTIFIC PROGRAM

- I. Case Report
DR. ALMA DEA MORANI* Avulsion of the Middle Third of the
Face
Discussor: DR. IVY
- II. Case Report
DR. FREDERICK A. BOTHE Curling's Ulcer of the Esophagus and
DR. RICHARD B. MAGEE* Stomach Complicating a Burn
Discussors: DRs. DEEVER, RAVDIN,
LEVERING, MAGEE

* By invitation.

- III. Paper
DR. WILLIAM H. ERB Experience with Transmetatarsal
DR. ELMER GRIMES* Amputation in Diabetic Gangrene
DR. PAUL C. HOUSTON* *Discussors:* DRs. BOTHE, WEEDER,
ERB

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, October 6, 1952, at 8:15 P.M. The president, Dr. I. S. Ravdin, was in the chair.

SCIENTIFIC PROGRAM

- I. Case Report
DR. JULIAN STERLING* Urachal Tract Abscess First Appear-
DR. RALPH GOLDSMITH ing in the Adult
Discussors: DRs. DAVIS and HAW-
THORNE
- II. Paper
DR. JAMES DULL* A Comparative Study of the Effec-
DR. JOHN MURPHY* tiveness of Various Methods of
DR. HAROLD A. ZINTEL Preparation of the Patient's Skin
Preoperatively
Discussors: DRs. HATFIELD,
WEEDER, SMYTH, GOLDSMITH,
DAVIS and ZINTEL
- III. Paper
DR. BRIAN COOKSON* Intracardiac Surgery Under Direct
Introduced by Vision by the Use of Hypothermia
DR. CHAS. BAILEY *Discussors:* DRs. BURNETT, FAY,
KIRBY and GIBBON, JR.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, November 3, 1952, at 8:15 P.M. The first vice-president, Dr. L. Kraeer Ferguson, was in the chair.

SCIENTIFIC PROGRAM

- I. Case Report
DR. STEVEN GALLAGHER* Inclusion Disease of the Newborn
Introduced by *Discussors:* DRs. GIBBON and STAY-
DR. JOS. STAYMAN MAN

* By invitation.

II. Case Report

DR. WILLIAM BLAKEMORE* Gangrene of the Hand Following
 DR. PAUL DUMKE* Intrarterial Transfusions
 Introduced by *Discussors:* DRs. BAILEY, WEEDER,
 DR. I. S. RAVDIN ROYSTER, BURNETT, ZINTEL, KIRBY

III. Paper

DR. ALEXANDER W. ULIN* Further Observations of the Experi-
 DR. LESTER VAN ESS* mental Reconstruction on the
 DR. JOSEPH ENTINE* Common Duct
 Discussors: DRs. HAWTHORNE,
 MARTIN, SMYTH, WEEDER and
 KIRBY

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, December 1, 1952, at 8:15 P.M. The president, Dr. I. S. Ravdin, was in the chair.

SCIENTIFIC PROGRAM

I. Case Report

DR. ALBERT BEHREND* Necrotizing Gastritis and Esophagitis
 DR. ALBERT B. KATZ* Arising from Ulcerative Colitis
 DR. J. W. ROBERTSON* *Discussor:* DR. ALBERT B. KATZ
 Introduced by
 DR. FRANK ALLBRITTEN, JR.

II. Annual Oration

DR. HERBERT R. HAWTHORNE Problems in the Management of
 Massive Hemorrhage from the
 Gastro-intestinal Tract

Report of the Secretary for the Year 1952

During the year 1952, The Philadelphia Academy of Surgery held seven regular stated meetings. In addition, on March 12, 1952, sixty-five Fellows of the Philadelphia Academy of Surgery met with members of the New York Surgical Society in Philadelphia. Following the Scientific Program at the College of Physicians, dinner for the combined Societies was held at the Racquet Club.

* By invitation.

Exclusive of the combined meeting with the New York Surgical Society, the average attendance at the Academy meetings was 38 Fellows. This attendance record compares favorably with that of 1951.

Nine case reports and eight papers were presented by Fellows and guests. Thirteen guests participated in the presentation of papers.

At the May meeting Dr. Ravdin appointed a committee to review the By-Laws of the Academy. Drs. Rhoads, Smyth and Weeder were appointed to this committee.

The Transactions of the Philadelphia Academy of Surgery covering the years 1943 to 1950 were published by J. B. Lippincott Company. These Transactions were issued to the members during November 1952. The Philadelphia Academy of Surgery is greatly indebted to J. B. Lippincott Company because a large part of the cost of printing these Transactions was borne by the J. B. Lippincott Company.

The following six doctors were elected Fellows: Drs. Frederick B. Wagner, Jr., Charles B. Bailey, Donald Cooper, Alfred S. Frobese and Capt. Robert Cooper, U.S.N., and Capt. Harold Young, U.S.N. Captains Robert Cooper and Harold Young received Military Fellowships.

The Nominating Committee, Drs. Calvin Smyth, Chairman, John H. Gibbon, Jr., and Julian Johnson, presented the following nominations for officers for 1953:

President—Dr. I. S. Ravdin.
 1st Vice-President—Dr. L. Kraeer Ferguson.
 2nd Vice-President—Dr. John H. Gibbon, Jr.
 Secretary—Dr. J. Montgomery Deaver.
 Treasurer—Dr. S. Dana Weeder.
 Recorder—W. Emory Burnett.
 Council—Drs. Adolph A. Walkling and Calvin M. Smyth.
 Business Committee—Dr. Jonathan E. Rhoads, Chairman, and Dr. Frank F. Allbritten, Jr.

The Annual Oration for 1952 was given by Dr. Herbert R. Hawthorne on December 1, 1952. The title was "Problems in the Management of Massive Hemorrhage from the Gastro-intestinal Tract."

J. MONTGOMERY DEAVER, M.D.
Secretary

The Year 1953

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, January 5, 1953, at 8:15 P.M. The President, Dr. I. S. Ravdin, was in the Chair.

SCIENTIFIC PROGRAM

I. Case Report

- ROBERT M. BUCHER, M.D.*
Introduced by
DR. W. EMORY BURNETT
- Fat Necrosis of the Tail of the Pancreas Producing Diabetes and Obstructive Splenomegaly
Discussors: DRs. WEEDEE, SMYTH, BURNETT, FERGUSON and GOLDSMITH

II. Case Report

- E. F. McLAUGHLIN, M.D.
L. M. TOCANTINS, M.D.*
- Uncontrollable Hemorrhage during Operation Related to Incompatible Blood
Discussors: DRs. SMYTH, JOHNSON, TOCANTINS, BOTHE and FERGUSON

III. Paper

- CHARLES P. BAILEY, M.D.
- Surgical Treatment of Aortic Stenosis
Discussors: DRs. JOHNSON, GIBBON and GOLDSMITH

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, February 2, 1953, at 8:15 P.M. The President, Dr. I. S. Ravdin, was in the Chair.

SCIENTIFIC PROGRAM

I. Case Report

- DR. R. ROBERT TYSON*
Introduced by
DR. EMORY BURNETT
- Imperforate Anus with Rectourethral Fistula
Discussors: DRs. RHOADS, FERGUSON and WALKLING

II. Case Report

- DR. BENJAMIN LIPSHUTZ
DR. HARRY J. EPSTEIN*
- Hemobilinuria, Hemorrhagic Cholecystitis and Gastrointestinal Hemorrhage Associated with Rupture of Liver
Discussors: DRs. ROSEMOND, DEEVER, HAWTHORNE, LIPSHUTZ

III. Paper

- DR. DONALD R. COOPER
DR. L. KRAEER FERGUSON
- Splenic Injection as a Means of Diagnosis of Portal Hypertension
Discussors: DRs. BROWN and FERGUSON

* By invitation.

The annual conjoint meeting of the New York Surgical Society and the Philadelphia Academy of Surgery was held on Wednesday, March 11, 1953, at the New York Academy of Medicine, 2 E. 103rd Street, New York, New York, at 2:15 P.M. The President of the New York Surgical Society, Dr. Henry W. Cave, and the President of the Philadelphia Academy of Surgery, Dr. I. S. Ravdin, jointly presided.

SCIENTIFIC MEETING

- ARTHUR H. BLAKEMORE, M.D. Portacaval Shunting in Difficult Cases—Technical Advances
Discussed by GEORGE P. ROSEMOND, M.D.
- MICHAEL R. DEDDISH, M.D. Colotomy and Coloscopy in the Detection of Colonic Neoplasms
Discussed by EMORY BURNETT, M.D.
- JOHN P. WEST, M.D.
CHARLES F. SCHETLIN*
- Thrombosis of the Abdominal Aorta Treated by Thrombo-endarterectomy
Discussed by DR. JOHN H. GIBBON, JR., M.D.
- BYRON STOOKEY, M.D. Cordotomy in the Treatment of Osteoarthritis of the Hip
Discussed by JOHN ROYAL MOORE, M.D.
- CHARLES LESTER, M.D. Pigeon Breast and Other Protrusion Deformities of the Chest
Discussed by FRANK F. ALLBRITEN, M.D.
- HENRY T. RANDALL, M.D. The Effects of Bilateral Adrenalectomy on Patients with Advanced Malignant Disease
Discussed by HAROLD A. ZINTEL, M.D.
- S. W. MOORE, M.D. Resection of the Abdominal Aorta with Homologous Graft
Discussed by JULIAN JOHNSON, M.D.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, April 6, 1953, at 8:15 P.M. First Vice-President, Dr. L. Kraefer Ferguson, was in the Chair.

* By invitation.

SCIENTIFIC MEETING

I. Paper

DR. PRESTON C. IVERSON Mandibulofacial Dystrophy
Discussor: DR. ROYSTER

II. Case Report

DR. WILLIAM S. PARKER Traumatic Amputation of Gallbladder Without a Wound of the Abdominal Wall
Discussor: DR. J. W. LEVERING

III. Paper

DR. W. EMORY BURNETT
DR. ROBERT M. BUCHER* Comparison of the Smithwick and Extensive Thoracolumbar Sympathectomy for Hypertension
Discussor: DR. HAROLD ZINTEL

A stated meeting of the Philadelphia Academy of Surgery was held in Mitchell Hall, College of Physicians, on Monday, May 4, 1953, at 8:15 P.M. The President, Dr. I. S. Ravdin, was in the Chair. The meeting this evening was a joint meeting with the Philadelphia Society of Anesthesiologists. There were 220 present for the Scientific Session.

SCIENTIFIC PROGRAM

I. Anesthesia for the Seriously Injured Patient

A.—K. KEOWN, M.D., Hahnemann Hospital
B.—CAPTAIN ROBERT B. BROWN, MC, USN, U. S. Naval Hospital, Bethesda, Md.
C.—CHARLES EGAN

II. The Use of Curarelike Drugs for Surgical Procedures

A.—ROBERT D. DRIPPS, M.D., Hospital of the University of Pa.
B.—CALVIN M. SMYTH, M.D., Abington Memorial Hospital

III. Anesthesia with Induced Hypotension

A.—HRANT H. STONE, M.D., Graduate Hospital
B.—ALEXANDER BRUNSCHWIG, M.D., Memorial Hospital, New York City

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, October 12, at 8:15 P.M. The President, Dr. I. S. Ravdin, was in the Chair.

* By invitation.

SCIENTIFIC PROGRAM

I. Paper

DR. CHARLES P. BAILEY Surgical Treatment of Mitral Regurgitation
DR. WILLIAM L. JAMISON* *Discussors:* DRs. JOHNSON and BAILEY

II. Motion Picture

DR. JULIAN STERLING Total Gland Transplant Using Vascular Anastomoses in the Treatment of Chronic Tetany
DR. RALPH GOLDSMITH *Discussors:* DRs. ROYSTER, WEEDER and FERGUSON

III. Paper

DR. WM. S. BLAKEMORE* A Simplified and Economical Apparatus for Preserving Arterial Grafts by Drying in the Frozen State
DR. HERNDON B. LEHR* *Discussor:* DR. RHOADS
DR. PHILIP N. SAWYER*
DR. CHARLES K. KIRBY
DR. JULIAN JOHNSON

A stated meeting of the Philadelphia Academy of Surgery was held in Mitchell Hall, College of Physicians, on Monday, November 2, 1953, at 8:15 P.M. The President, Dr. I. S. Ravdin, was in the Chair.

SCIENTIFIC PROGRAM

I. Paper

DR. R. ROBERT TYSON* Use of Amino Acridine in Infected Wounds
DR. W. EMORY BURNETT

II. Case Report

DR. JOSEPH M. HOFFEL* Pulmonary Resection for Metastasis
Introduced by
DR. JOHN B. FLICK

III. Case Report

DR. BROOKE ROBERTS* Multiple Episodes of Cardiac Arrest
Introduced by
DR. I. S. RAVDIN

IV. Guest Speaker

SIR JAMES PATERSON ROSS, Obliterative Arteritis
London, England
Introduced by
DR. I. S. RAVDIN

* By invitation.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, December 7, 1953, at 8:15 P.M. First Vice-President, Dr. L. Kraeer Ferguson, was in the Chair.

SCIENTIFIC PROGRAM

I. Case Report

DR. S. DANA WEEDER
DR. E. F. McLAUGHLIN

Actinomycosis of the Lung—Lobectomy with Recovery
Discussors: DRs. DEEVER, BURNETT and McLAUGHLIN

II. Case Report

DR. ALEXANDER W. ULIN
DR. AXEL K. OLSEN*
DR. WILLIAM L. MARTIN

Factors Determining Mortality in a Patient with Acute Head Injury
Discussors: DRs. OLSEN and JAEGER

III. Annual Oration

DR. JULIAN JOHNSON

The Present Status of Cardiac Resuscitation

Report of the Secretary for the Year 1953

During the year 1953, the Philadelphia Academy of Surgery held seven regular stated meetings. In addition, on March 11, 1953, the Philadelphia Academy of Surgery met with the members of the New York Surgical Society in New York. The May meeting of the Academy was a joint meeting with the Philadelphia Society of Anesthesiologists.

The average attendance at the Academy meetings was 40 Fellows. This attendance record compares favorably with that of 1952.

Nine Case Reports and seven papers were presented during the year by Fellows and Guests. During the year fifteen guests participated in the presentation of case reports and papers.

At the November 2nd meeting the Academy was honored by having Sir James Paterson Ross of London, England, as guest speaker. His presentation was entitled "Obliterative Arteritis."

The Annual Oration was given in December by Dr. Julian Johnson. The title was "The Present Status of Cardiac Resuscitation."

On December 7th Council met with Mr. Pierre C. Fraley, medical reporter of the Philadelphia Evening Bulletin, and fee splitting and ghost surgery in Philadelphia was discussed.

The following nine doctors were elected Fellows during 1953:

Drs. Charles K. Kirby, Wm. C. Martin, Michael Scott, Lindley B. Reagan, C. Everett Koop, Robert A. Cooper, Richard Oakey, James S. C. Harris and Alfred R. Shands, Jr.

* By invitation.

The Nominating Committee, Dr. Calvin Smyth, Chairman, Drs. Ivy, Flick and Deaver, presented the following nominations for officers for 1954:

President—L. Kraeer Ferguson, M.D.

1st Vice-President—John H. Gibbon, Jr., M.D.

2nd Vice-President—Adolph A. Walkling, M.D.

Secretary—J. Montgomery Deaver, M.D.

Treasurer—S. Dana Weeder, M.D.

Recorder—W. Emory Burnett, M.D.

Council—I. S. Ravdin, M.D. and Frederick A. Bothe, M.D.

Business Committee—Jonathan E. Rhoads, Chairman, and Frank F. Allbritten, Jr., M.D.

J. MONTGOMERY DEEVER, M.D.
Secretary

The Year 1954

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, January 4, 1954, at 8:15 P.M. The President, Dr. I. S. Ravdin, was in the Chair.

SCIENTIFIC PROGRAM

I. Case Report

DR. ROBERT BOYD, III

Cholecystitis in Children: Report of a Case of Cholecystitis with Perforation
Discussors: DRs. ROSEMOND, SMYTH and KOOP

II. Case Report

DR. JAMES A. LEHMAN
DR. WALTER DALONZO*

Chronic Inflammatory Tumor of the Right Side of the Colon Simulating Malignancy: Report of Four Cases
Discussors: DRs. BOTHE, GOLDSTEIN

III. Presidential Address

DR. I. S. RAVDIN

The Changing Scene in American Surgery

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, February 1, 1954, at 8:15 P.M. The President, Dr. L. Kraeer Ferguson, was in the Chair.

* By invitation.

SCIENTIFIC PROGRAM

I. Case Report

DR. FREDERICK A. BOTHE
DR. RICHARD DRISCOLL*

Removal of the Entire Small Intes-
tine with the Exception of the
Terminal Six Inches and a Four-
Year Follow-Up

Discussors: DRs. STEVENS, JOHN-
SON, BURNETT, RANIERI, WEEDER,
GOLDSTEIN

II. Case Report

DR. BENJAMIN BAKER*
DR. SAMUEL CRESSON*
Introduced by
DR. W. EMORY BURNETT

Sacrococcygeal Teratoma

III. Case Report

DR. LINDLEY B. REAGAN
DR. KEITH YOUNG*
DR. JOHN NICHOLSON*

Successful Defibrillation During an
Acute Coronary Attack in a
Forty-Year-Old Man (by Means
of Cardiac Massage and Electrical
Defibrillation)

Discussors: DRs. JOHNSON, BAILEY

IV. Paper

DR. JESSE T. NICHOLSON
DR. ROBERT HEATH*
DR. ROBERT M. FOSTER

Bryant's Traction in Children: A
Case of Circulatory Complications
Discussors: DRs. RHOADS, GIBBON
and BURNETT

The annual conjoint meeting of the New York Surgical Society and the Philadelphia Academy of Surgery was held on Wednesday, March 10, 1954, at Mitchell Hall, College of Physicians, Philadelphia, Pa. at 2:15 P.M. The President of the New York Surgical Society, E. Jefferson Browder and the President of the Philadelphia Academy of Surgery, Dr. L. K. Ferguson, jointly presided.

SCIENTIFIC PROGRAM

I. DR. FRANK F. ALLBRITTEN
DR. GEORGE J. HAUPT
DR. JOSE AMADEO

Pulmonary Ventilation During Sur-
gical Operation: The Effect of
Intratracheal Vacuum During the
Deflation Phase of Ventilation

* By invitation.

2. DR. MICHAEL SCOTT
DR. HENRY WYCIS
DR. FREDERICK MURTAGH
Stainless Steel Cranioplasty
3. DR. C. EVERETT KOOP
DR. ROBERT C. HORN
The Radical Treatment of Neuro-
blastoma
4. DR. DONALD R. COOPER
DR. JOSEPH A. RITTER
Hypertension in a Thirteen-Month-
Old Infant Successfully Treated
by Unilateral Nephrectomy
5. DR. T. L. ORLOFF
DR. D. M. SKLAROFF
DR. E. M. COHN
DR. J. GERSHON-COHN
Introduced by
DR. RALPH GOLDSMITH
Intravenous Cholangiography with
a New Contrast Medium "Bili-
grafin"
6. DR. HAROLD A. ZINTEL
DR. ROBERT BOTTI
The Management of Patients with
Pheochromocytoma
7. DR. PAUL NEMIR
DR. HERBERT R. HAWTHORNE
Further Studies on Pulmonary Func-
tion Utilizing the Method of Con-
trolled Unilateral Bronchovascular
Occlusion

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, April 5, 1954, at 8:15 P.M. The President, Dr. L. Kraeer Ferguson, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. FREDERICK W. PITTS
Introduced by
DR. JONATHAN E. RHOADS
A Comparative Study of the Penrose
Drain and Drains of Teflon
Discussors: DRs. RAVDIN, SMYTH,
WEEDER, ROSEMOND
2. DR. EDWIN W. SHEARBURN
DR. JOHN CONNELL*
DR. JOHN E. HOPKINS*
Rectal Ulcer with Perforation Asso-
ciated with Endarteritis Obliterans
and Hypertension
Discussors: DRs. BOTHE, WEEDER,
DEAVER and SHEARBURN
3. DR. PAUL GROTZINGER*
DR. WM. C. SHOEMAKER*
DR. HORACE D. MARUCCI*
Introduced by
DR. WILLIAM L. MARTIN
DR. ALEX W. ULIN*
The Use of Inverted Seromuscular
Grafts from the Ileum for Replace-
ment of Segments of the Urinary
Bladder: An Experimental Study
Discussors: DRs. SMYTH, MARTIN
and FERGUSON

* By invitation.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, May 3, 1954, at 8:15 P.M. The President, Dr. L. Kraeer Ferguson, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. FREDERICK R. ROBBINS. Memoir of the Late DR. CHAS. A. STEINER. Academy stood for a moment's silence in respect to DRs. STEINER, GAMON and ROTHSCHILD.
2. DR. CHARLES H. STONE, III[°]
DR. ROBERT E. SASS[°]
DR. WILLIAM H. ERB
Tracheotomy in General Surgery
Discussors: DRs. GOLDSMITH, ERB, WEEDER, BOTHE, DEEVER, HAWTHORNE
3. DR. EUGENE B. SPITZ
DR. HARRY W. SLADE[°]
The Surgical Management of Cranio-stenosis in Early Infancy
Discussor: DR. ERB
4. DR. HARRY SHAY[°]
Introduced by
DR. JONATHAN E. RHOADS
The Importance of Appraising the True Gastric Acidity After Subtotal Gastrectomy
Discussors: DRs. RHOADS, HAWTHORNE, GOLDSMITH

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, October 4, 1954, at 8:15 P.M. The President, Dr. L. Kraeer Ferguson, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. JAMES S. C. HARRIS
DR. ROBERT E. SASS[°]
Pulmonary Decortication for Empyema in a Premature Infant
Discussor: DR. BURNETT
2. DR. W. W. LINDENMUTH[°]
DR. CARL MAY[°]
Introduced by
DR. ADOLPH A. WALKLING
Experience with Duodenostomy After Gastrectomy for Duodenal Ulcer
Discussors: DRs. DEEVER, GIBBON, WEEDER, SMYTH and WALKLING
3. DR. FRANK TROPEA, JR.[°]
Introduced by
DR. CHARLES P. BAILEY
A Report of 3 Cases of Successful Aortic Embolectomy
Discussors: DRs. GIBBON, ROSEMOND, BAILEY

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, December 6, 1954, at 8:15 P.M. The Second Vice-President, Dr. Adolph Walkling, was in the Chair.

[°] By invitation.

SCIENTIFIC PROGRAM

1. DR. JOHN E. HOPKINS[°]
DR. J. MONTGOMERY DEEVER
Case Report: Gastroileostomy
Discussors: DRs. SMYTH, KNOX, DEEVER
2. DR. HENRY S. WIEDER, JR.[°]
Introduced by
DR. JESSE T. NICHOLSON
Case Presentation: Replacement of Femur by Turn-up Plasty of Tibia
Discussors: DRs. NICHOLSON, LEVERING, WEEDER
3. DR. GEORGE P. ROSEMOND
Annual Oration: Aspiration of Breast Cysts as a Diagnostic and Therapeutic Measure

Report of the Secretary for the Year 1954

During the year 1954, the Philadelphia Academy of Surgery held six regular stated meetings. In addition, on March 10, 1954, the New York Surgical Society met with the Philadelphia Academy of Surgery here in Philadelphia. The meeting was well attended. On November 20, 1954, the 75th Anniversary Celebration of the Academy was held at The Barclay. Honorary Fellowships were conferred upon eight outstanding surgeons from the United States and abroad.

The average attendance at the Academy meetings was 35 Fellows. This attendance record compares favorably with that of 1953.

Seven case reports were presented during the year and 19 papers were presented. At the January 4th meeting Dr. Ravdin presented the Presidential Address. The Annual Oration was given by Dr. George P. Rosemond on December 6, 1954.

The following nine doctors were elected Fellows during 1954: Drs. Eugene B. Spitz, Brooke Roberts, John Y. Templeton, III, Julian Sterling, Robert P. Glover, James F. O'Neill, Courtney Clegg (Military Fellowship), Robert M. Bucher and R. Robert Tyson.

The Nominating Committee, Dr. Calvin Smyth, Chairman, Drs. Ravdin and Shallow, presented the following nominations for officers for 1955:

President—L. Kraeer Ferguson, M.D.

1st Vice-President—John H. Gibbon, Jr., M.D.

2nd Vice-President—Adolph A. Walkling, M.D.

Secretary—J. Montgomery Deaver, M.D.

Treasurer—S. Dana Weeder, M.D.

Recorder—W. Emory Burnett, M.D.

Council—I. S. Ravdin, M.D. and Frederick A. Bothe, M.D.

Business Committee—Jonathan E. Rhoads, Chairman and Edwin W. Shearburn, M.D.

J. MONTGOMERY DEEVER, M.D.
Secretary

[°] By invitation.

The Year 1955

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, January 3, 1955, at 8:15 P.M. The Second Vice-President, Dr. Adolph Walkling, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. S. DANA WEEDEE R Memoir on the late Edward F. McLaughlin, M.D.
2. DR. RALPH GOLDSMITH Memoir on the late Norman S. Rothschild, M.D.
3. DR. BROOKE ROBERTS Case of Sudden Aortic Occlusion Occurring in Leriche's Syndrome; Treated by Grafting
Discussors: DRs. RAVDIN, SHEARBURN, JOHNSON
4. DR. CHARLES K. KIRBY
DR. JOHN R. SENIOR* Acute Pancreatitis
Discussors: DRs. WAGNER, SMYTH, RAVDIN, O'NEILL
5. DR. CHRIS J. D. ZARAFONETTIS*
Introduced by
DR. W. EMORY BURNETT Potassium Paramino Denzoate in Management of Conditions of Excess Fibrosis
Discussors: DRs. ROYSTER, BURNETT, WEEDEE R

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, February 7, 1955, at 8:15 P.M. The President, Dr. L. Kraeer Ferguson, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. R. ROBERT TYSON Thromboendarterectomy—Report of 3 Cases
Discussors: DRs. BURNETT, WAGNER, GIBBON and JOHNSON
2. DR. GEORGE M. AUSTIN*
Introduced by
DR. FRANCIS C. GRANT Total Cerebral Hemispherectomy
Discussors: DRs. JAEGER and GRANT
3. DR. LOUIS H. BLOCK*
Introduced by
DR. RALPH GOLDSMITH The Problem of Nutritional Shock in the Chronically Ill
Discussors: DRs. RAVDIN, GOLDSMITH and GIBBON

* By invitation.

The annual conjoint meeting of the New York Surgical Society and the Philadelphia Academy of Surgery was held on Wednesday, March 9, 1955, at the Academy of Medicine, 2 East 103rd Street, New York, N. Y. at 2:15 P.M. The President of the New York Surgical Society, E. Jefferson Browder, M.D. and the President of the Philadelphia Academy of Surgery, Dr. L. Kraeer Ferguson, jointly presided.

SCIENTIFIC PROGRAM

1. S. F. REDO, M.D.*
W. A. BARNES, M.D. Ulcer Formation in Antiperistaltic Loops of Jejunum
Discussor: W. EMORY BURNETT, M.D.
2. H. L. SANDERS, M.D.*
H. T. RANDALL, M.D.
K. E. ROBERTS, M.D.* Extracellular Electrolyte Changes and Renal Compensations Following Gastric Drainage (Hypochloremic Alkalosis)
Discussor: DONALD R. COOPER, M.D.
3. GEORGE HUMPHREYS, M.D.
CHARLES FINDLAY, M.D.* Congenital Anomalies of Intestinal Rotation in Adults
Discussor: FREDERICK R. ROBBINS, M.D.
4. HERBERT CONWAY, M.D.
RICHARD B. STARK, M.D. Pedicled Tissue Coverage for Defects of the Lower Extremity
Discussor: JOHN R. MOORE, M.D.
5. CLARENCE DENNIS, M.D.
KARL E. KARLSON, M.D.*
CHARLES C. FRIES, M.D.* Brain Changes Associated with Air Embolism
Discussor: JOHN H. GIBBON, JR., M.D.
6. PETER W. STONE, M.D.*
WILLIAM H. WADE, M.D.*
JERE W. LORD, JR., M.D.
CHARLES G. NEUMANN, M.D.* Observations on Experimental Revascularization of the Kidney—A Preliminary Report
Discussor: FREDERICK A. BOTHE, M.D.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, April 4, 1955, at 8:15 P.M. The President, Dr. L. Kraeer Ferguson, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. IRVIN E. DEIBERT Memoir on the late Dr. Robert S. Gamon

* By invitation.

2. DR. FREDERICK A. BOTHE
DR. LORING E. SYLVESTER*
DR. OSCAR V. BATSON*
Revascularization of the Heart with
a Direct Skin Flap
Discussors: DRs. SYLVESTER, IVY,
BATSON and GOLDSMITH
3. DR. THEODORE D. STEVENSON*
Introduced by
DR. GILSON COLBY ENGEL
Case Report: Hemangiopericytoma
of the Thigh
Discussors: DRs. JAEGER, FERGUSON,
WEEDER
4. DR. JOHN W. RAKER*
Introduced by
DR. ADOLPH A. WALKLING
The Worcester Tornado Disaster

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, May 2, 1955, at 8:15 P.M. The President, Dr. L. Kraeer Ferguson, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. FREDERICK A. BOTHE
Memoir on the late Dr. John Jopson
2. DR. WILLIAM C. STAINBACK*
Introduced by
DR. FREDERICK W. ROBBINS
Pheochromocytoma of Unusually
Large Size
Discussors: DRs. RAVDIN, GIBBON,
BOTHE
3. DR. WOODROW W. LINDENMUTH*
Introduced by
DR. ADOLPH A. WALKLING
Late Complications in Two Cases of
Pancreatic Duodenal Resection for
Carcinoma
Discussors: DRs. BURNETT, HOPKINS,
RAVDIN
4. DR. HENRY T. NICHOLS*
Introduced by
DR. CHARLES P. BAILEY
Ventriculoplasty for Cardiac Aneurysm
Discussors: DRs. GIBBON, GLOVER

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, October 3, 1955, at 8:15 P.M. The President, Dr. L. Kraeer Ferguson, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. ORVILLE C. KING
Memoir on the late Dr. Henry P.
Brown, Jr.
2. DR. CHARLES FINEBURG*
Introduced by
DR. JOHN H. GIBBON, JR.
Case Report: Resection of the Right
Lobe of the Liver for a Primary
Hepatoma
Discussor: DR. GIBBON

* By invitation.

3. DR. R. ROBERT TYSON
DR. E. A. SPALDING*
DR. U. NU. RAE*
Mechanical Cleansing, Neomycin
and Polymixin; Their Effect on the
Fecal Flora
Discussors: DRs. FERGUSON,
DEAVER, RHOADS, HAWTHORNE
4. DR. ALFRED S. FROBESSE
DR. HERBERT R. HAWTHORNE
DR. JAMES L. A. ROTH*
Post-operative Enteritis Secondary to
Antibiotic Therapy
Discussors: DRs. WAGNER, MOGAVERO,
TYSON, ROTH, DEIBERT and
WEEDER

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, November 7, 1955, at 8:15 P.M. The President, Dr. L. Kraeer Ferguson, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. IRVING E. DEIBERT
Memoir on the late Dr. H. Wesley
Jack
2. DR. WILLIAM NICHOLS*
Introduced by
DR. CHARLES K. KIRBY
Arterio-Venous Fistula of the Renal
Vessels
Discussors: DRs. KIRBY and WALKLING
3. DR. PAUL NEMIR, JR.
Excision of Large Aneurysm of the
Common Carotid Artery and Res-
toration of Continuity by Primary
Anastomosis: Report of a Case
Discussors: DRs. GIBBON, KIRBY,
GROFF and JAEGER

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, December 5, 1955, at 8:15 P.M. The President, Dr. L. Kraeer Ferguson, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. LEWIS C. MANGES
Memoir on the late Dr. Hubley R.
Owen
2. DR. VICTOR F. GRECO*
Introduced by
DR. JOHN Y. TEMPLETON, III
Late Spontaneous Tension Contra-
lateral Pneumothorax Following
Pneumonectomy; Report of a Case
Successfully Treated
Discussors: DRs. BURNETT,
RHOADS, GOLDSMITH

* By invitation.

3. DR. JERRY ZASLOW*
DR. DAVID M. SKLAROFF*
DR. HARRY KORNFELD*
Introduced by
DR. RALPH GOLDSMITH
- Case Report: Adenoma of the Lingual Thyroid Presenting as a Mass in the Right Submental Triangle; The Use of Scintigram in Management
Discussors: DRs. IVY and BOTHE
4. DR. WILLIAM H. ERB
- Annual Oration: Peptic Ulcer; Individualization in Treatment

Report of the Secretary for the Year 1955

During the year 1955, the Philadelphia Academy of Surgery held seven regular stated meetings. In addition, on March 9, 1955, there was a Conjoint Meeting with the New York Surgical Society. This was held in New York City. The meeting was well attended by both Societies.

The average attendance at the Academy meetings was 41 Fellows. This attendance record for the past year was slightly higher than for the year 1954.

Eleven case reports were presented during the year and (8) papers were presented. The annual oration was given by Dr. Wm. H. Erb at the December 5, 1955, meeting. Seven memoirs were given.

The following nine doctors were elected Fellows during 1955: Dr. Paul Nemir, Jr., Dr. Samuel L. Cresson, Col. Walter Matuska, Chief of Surgery at Valley Forge Army Hospital (Military Fellowship), Dr. Alex W. Ulin, Dr. Walter A. D'Alonzo, Dr. John W. Raker, Dr. Frederick W. Dasch, Dr. Albert Behrend and Dr. Joseph M. Hoeffel.

The Nominating Committee, Dr. Ravdin, Dr. Smyth and Dr. Burnett, presented the following nominations for officers of the Academy for the year 1956:

President—John H. Gibbon, Jr., M.D.
1st Vice-President—Adolph Walkling, M.D.
2nd Vice-President—W. Emory Burnett, M.D.
Secretary—J. Montgomery Deaver, M.D.
Treasurer—S. Dana Weeder, M.D.
Recorder—Frederick A. Bothe, M.D.
Council—Fred Robbins, M.D. and L. K. Ferguson, M.D.
Business Committee—Jonathan Rhoads, M.D., Chairman, and Edwin W. Shearburn, M.D.

J. MONTGOMERY DEAVER, M.D.
Secretary

The Year 1956

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, January 9, 1956, at 8:15 P.M. The President, Dr. L. Kraefer Ferguson, was in the Chair.

* By invitation.

SCIENTIFIC PROGRAM

1. DR. S. DANA WEEEDER
Memoir on the late Dr. Wm. B. Swartley
2. DR. ARTHUR W. VON DEILEN*
DR. JAMES B. COX*
Introduced by DR. ROBERT IVY
The Treatment of Rectal Incontinence by the Use of the Gracilis Muscle Transplant
3. DR. HOUCK BOLTON*
DR. RICHARD GILMAN*
Introduced by
DR. CHARLES P. BAILEY
Case Report on Successful Surgical Treatment of Dissecting Aneurysm of the Entire Thoracic Aorta
Discussors: DRs. JOHNSON, RHOADS
4. DR. IRVING MARSHALL*
Introduced by DR. I. S. RAVDIN
Collagen Disease of the Small Intestine
Discussors: DRs. RAVDIN, BEHREND

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, February 6, 1956, at 8:15 P.M. The President, Dr. Gibbon, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. FREDERICK B. WAGNER, JR.
Memoir on the late Dr. Thos. Shallow
2. DR. EUGENE B. SPITZ
Cerebral Hemidecortication in a Case of Sturge-Weber Syndrome
Discussors: DRs. LEFIA and GIBBON
3. DR. JULIAN A. STERLING
Termination for the Bile Duct (Moving Picture)
Discussors: DRs. RHOADS and WAGNER
4. DR. J. C. DAVILA*
Introduced by
DR. ROBERT P. GLOVER
The Experimental and Clinical Application of Total Circumferential Suture of the Mitral Annulus in the Treatment of Mitral Insufficiency
Discussors: DRs. KIRBY, GLOVER and BAILEY

The annual conjoint meeting of the New York Surgical Society and the Philadelphia Academy of Surgery was held on Wednesday, March 14, 1956, at Mitchell Hall, College of Physicians, Philadelphia, Pa., at 2:15 P.M. The President of the New York Surgical Society, J. William Hinton, and the Presi-

* By invitation.

dent of the Philadelphia Academy of Surgery, Dr. John Gibbon, Jr., jointly presided.

SCIENTIFIC PROGRAM

1. DR. JOHN Y. TEMPLETON, III
DR. THOMAS F. NEALON*
DR. JOHN H. GIBBON, JR.
A Five-Year Follow-Up on 353 Patients with Bronchogenic Carcinoma
Discussor: DR. HERBERT MAIER
2. DR. SAMUEL L. CRESSON
Traumatic Rupture of the Common Duct in Children: Report of a Case
Discussor: DR. THOMAS SANTOULL
3. DR. CHARLES P. BAILEY
DR. HARRY GOLDBERG*
Post-Operative Recurrence of Mitral Valve Stenosis
Discussor: DR. FRANK GLENN
4. DR. I. S. RAVDIN
DR. ROBERT P. DARROW*
Recent Improvements in the Results Obtained in Gastric Cancer
Discussor: DR. GORDON MCNEER
5. DR. FREDERICK A. BOTHE
Primary Carcinoma of the Small Intestine
Discussor: DR. HOWARD PATTERSON
6. DR. JONATHAN E. RHOADS
DR. LAWRENCE C. BLAIR*
Contribution of Plastic Surgery to Other Fields of Surgical Endeavor
Discussor: DR. THOMAS W. STEVENSON

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, April 2, 1956, at 8:15 P.M. The President, Dr. Gibbon, was in the Chair.

SCIENTIFIC PROGRAM

1. COLONEL WALTER H. MATUSKA, MC, Valley Forge Army Hospital
Annular Pancreas: Report of 3 Cases
Discussors: DRs. SHEARBURN and CRESSON
2. DR. ROBERT G. RAVDIN*
Introduced by
DR. JONATHAN RHOADS
Acute Staphylococcic Enteritis Complicating Abdominal Surgery
Discussors: DRs. JOHNSON and FROESE
3. DR. S. DANA WEEDEE
Hemangioma of the Spleen with Spontaneous Hemorrhage
Discussor: DR. PILLING

* By invitation.

The conjoint meeting of the Philadelphia Academy of Surgery and the Philadelphia Society of Anesthesiologists was held in Mitchell Hall, College of Physicians, on Monday, May 7, 1956.

SCIENTIFIC PROGRAM

1. The Use of Hypothermia During Surgical Procedures.
DR. ALFRED S. FROESE, Graduate Hospital of the University of Pa.
DR. ROBERT D. DRIPPS, Hospital of the University of Pa.
2. Advantages and Disadvantages of the Use of Multiple Anesthetic Agents.
DR. I. S. RAVDIN, Hospital of the University of Pa.
DR. SEYMOUR SCHOTZ, Presbyterian Hospital
DR. LOUIS H. HAMPTON, Jefferson Medical College Hospital

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, October 1, 1956, at 8:15 P.M. The President, Dr. Gibbon, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. THOMAS F. NEALON, JR.*
DR. JOHN H. GIBBON, JR.
A Study of the Increased Ventilatory Requirements During Open Thoracotomy
Discussor: JULIAN JOHNSON, M.D.
2. DR. WILLIAM S. BLAKEMORE*
DR. HERNDON B. LEHR*
DR. BROOKE ROBERTS
Experience with an Arterial Homograft Bank—a Report of 100 Consecutive Arterial Homografts
Discussors: DRs. BURNETT, NEMIR, ROBERTS, JOHNSON and WAGNER
3. DR. G. RAYMOND BROWN*
DR. W. EMORY BURNETT
An Evaluation of Local and Systemic Therapy in Experimental Peritonitis
Discussor: DR. RHOADS

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, November 5, 1956, at 8:15 P.M. The President, Dr. Gibbon, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. JOHN B. FLICK
Memoir on the late Dr. John H. Gibbon, Sr.
2. DR. FREDERICK ROBBINS
Memoir on the late Dr. Charles H. Harney

* By invitation.

3. CDR. E. T. STARZYNSKI, MC, USNR*
Introduced by
DR. JOSEPH W. STAYMAN
Case Report and Presentation of Patient Repair of Large Traumatic Cranial Defect by Single Iliac Bone Graft
Discussors: DRs. GIBBON and MAY
4. DR. ROBERT N. SWARTLEY*
Introduced by DR. ROBERT IVY
Primary Carcinoma of the Vagina: 3 Cases Treated with Radical Surgery
Discussors: DRs. MEDINGER and SCHWEGMAN

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, December 3, 1956, at 8:15 P.M. The First Vice-President, Dr. Adolph Walkling, was in the Chair.

SCIENTIFIC PROGRAM

1. DR. HARRY V. ARMITAGE*
DR. WILLIAM H. ERB
Recurrent Volvulus of the Caecum Associated with Failure of Rotation of the Intestine
Discussors: DRs. DEIBERT, DEEVER, CRESSON and ERB
2. DR. RICHARD F. OAKEY
DR. HANS MAY
The Use of Cutis Grafts to Bridge Defects in Large Tendons
Discussors: DRs. MAY and BOTHE
3. DR. GEORGE WILLAUER
Annual Oration—Pulmonary Artery Thrombosis

Report of the Secretary for the Year 1956

During the year 1956, The Philadelphia Academy of Surgery held six regular meetings. In addition, on March 14, 1956, there was a Conjoint Meeting with the New York Surgical Society. The meeting was held at the College of Physicians here in Philadelphia. Seven papers were presented by the Philadelphia Academy of Surgery, and these were discussed by members of the New York Surgical Society. Dinner was served at the Racquet Club. Seventy-five members of the Philadelphia Academy of Surgery were present. A Conjoint Meeting of the Academy and the Philadelphia Society of Anesthesiologists was held in Mitchell Hall, College of Physicians, on Monday, May 7, 1956. Dinner preceded this meeting. This meeting also was well attended by both groups.

The average attendance at the Academy meetings was 37 Fellows.

* By invitation.

Eight case reports were presented during the year and (16) papers were presented. The annual oration was given on December 3, 1956, by Dr. George Willauer. The oration was entitled "Pulmonary Artery Thrombosis." During the year four memoirs were given.

The following nine physicians were elected Fellows during the year 1956: Drs. Arthur Von Deilen, George Strong, Robert Ravdin, Thomas J. E. O'Neill, Paul Grotzinger, Robert Buyers, John E. Hopkins, George Austin and William Nichols. Capt. P. J. McNamara was made a Government Fellow as was Brig. Gen. Sam F. Seeley.

The Nominating Committee, Drs. Ferguson, Ravdin and Smyth, presented the following nominations for officers of the Academy for the year 1957:

President—John H. Gibbon, Jr., M.D.
1st Vice-President—Adolph Walkling, M.D.
2nd Vice-President—W. Emory Burnett, M.D.
Secretary—J. Montgomery Deaver, M.D.
Treasurer—S. Dana Weeder, M.D.
Recorder—Frederick A. Bothe, M.D.
Council—Fred Robbins, M.D. and L. K. Ferguson, M.D.
Business Committee—Jonathan Rhoads, Chairman.

J. MONTGOMERY DEAVER, M.D.
Secretary

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Contributors

- Albritten, Frank F., Jr.
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