Transactions of the

Philadelphia Academy of Surgery

VOLUME XXXI

1964 – 1968

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Philadelphia
1970

NOTICE

The thirty-first volume of the TRANSACTIONS OF THE PHILADELPHIA ACADEMY OF SURGERY covers the 5 years from 1964 to 1968 inclusive.

William S. Blakemore

Recorder

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Contents

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 and Inactive Fellows.

Section 2. The Active Membership shall be limited to one hundred and fifty (150) 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.

Section 7. Inactive Fellows. This consists of Active Fellows or Senior Fellows no longer in active practice of Surgery but who wish to participate in the activities of the Philadelphia Academy of Surgery. These Fellows will be subject to reduced dues and will not be subject to assessments.

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.

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.

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. 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, 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 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 of 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 a 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. Government Fellows shall be assessed annual dues of $15.00. Inactive Fellows will be subject to reduced dues and will not be subject to assessments. 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.

Any active Fellow not attending at least two (2) of the Stated Meetings in any one (1) year (October through May) shall state in writing to the Secretary the reasons for this failure. The names of such Active Fellows shall then be read to the members of Council by the Secretary. The members of Council may then take whatever action they deem necessary as follows: excuse, reprimand, or expel the offending Fellow.

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 non-Fellow 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, 1968

President

DR. GEORGE P. ROSEMOND

First Vice-President

DR. JULIAN JOHNSON

Second Vice-President

DR. THOMAS F. NEALON, JR.

Secretary

DR. DONALD R. COOPER

Treasurer

DR. EDWIN W. SHEARBURN

Recorder

DR. WILLIAM S. BLAKEMORE

Council

DR. JOHN Y. TEMPLETON
DR. GEORGE WILLAUER

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

Business Committee

DR. H. TAYLOR CASWELL (Chairman)
With the Recorder

Gross Committee

DR. PAUL NEMIR, JR. (Fund Chairman)

Philadelphia Academy of Surgery

Founded April 21, 1879

Incorporated December 27, 1879

Officers

1879

Temporary Chairman ..... ADDINELL HEWSON

Temporary Secretary ..... J. EWING MEARS

Temporary Treasurer ..... WILLIAM HUNT

Temporary Recorder ..... JOHN B. ROBERTS

PRESIDENT

ELECTED		ELECTED	
1880	SAMUEL D. GROSS	1930	GEORGE P. MULLER
1884	D. HAYES AGNEW	1932	JOHN SPEESE
1891	WILLIAM HUNT	1934	WALTER ESTELL LEE
1895	THOMAS G. MORTON	1936	DAMON B. PFEIFFER
1898	DEFOREST WILLARD	1938	J. STEWART RODMAN
1902	RICHARD H. HARTE	1940	ELDRIDGE L. ELIASON
1904	HENRY R. WHARTON	1942	ROBERT H. IVY
1906	JOHN B. ROBERTS	1944	HUBLEY R. OWEN
1908	WILLIAM J. TAYLOR	1946	JOHN B. FLICK
1910	ROBERT G. LECONTE	1948	THOMAS A. SHALLOW
1912	GWILYM G. DAVIS	1950	CALVIN M. SMYTH
1914	JOHN H. GIBBON	1952	I. S. RAVDIN
1916	CHARLES H. FRAZIER	1954	L. K. FERGUSON
1918	EDWARD MARTIN	1956	JOHN GIBBON, JR.
1920	GEORGE G. ROSS	1958	ADOLPH WALKLING
1922	JOHN H. JOPSON	1960	W. EMORY BURNETT
1924	EDWARD B. HODGE	1962	J. MONTGOMERY DEAVER
1926	CHARLES F. MITCHELL	1964	JONATHAN E. RHOADS
1928	ASTLEY P. C. ASHHURST	1965	GEORGE J. WILLAUER
		1967	GEORGE P. ROSEMOND

VICE-PRESIDENT

ELECTED		ELECTED	
1880	D. HAYES AGNEW	1880	R. J. LEVIS

ELECTED		ELECTED	
1884	SAMUEL W. GROSS	1926	GEORGE P. MULLER
1889	JOHN H. PACKARD	1928	JOHN SPEESE
1891	WILLIAM W. KEEN	1930	WALTER ESTELL LEE
1891	J. EWING MEARS	1932	DAMON B. PFEIFFER
1898	JOHN ASHHURST, JR.	1934	J. STEWART RODMAN
1900	RICHARD H. HARTE	1936	E. J. KLOPP
1900	HENRY R. WHARTON	1938	ELDRIDGE L. ELIASON
1902	JOHN B. DEAVER	1938	ROBERT H. IVY
1904	JOHN B. ROBERTS	1940	HUBLEY R. OWEN
1905	WILLIAM J. TAYLOR	1942	JOHN B. FLICK
1906	ROBERT G. LECONTE	1943	THOMAS A. SHALLOW
1908	G. G. DAVIS	1945	CALVIN M. SMYTH
1910	JOHN H. GIBBON	1948	L. KRAEER FERGUSON
1912	CHARLES H. FRAZIER	1950	I. S. RAVDIN
1914	EDWARD MARTIN	1952	L. K. FERGUSON
1916	GEORGE G. ROSS	1954	JOHN H. GIBBON, JR.
1918	JOHN H. JOPSON	1956	ADOLPH WALKLING
1919	H. C. DEAVER	1958	W. EMORY BURNETT
1920	JOHN H. JOPSON	1960	J. MONTGOMERY DEAVER
1920	EDWARD B. HODGE	1962	JONATHAN E. RHOADS
1922	CHARLES F. MITCHELL	1964	GEORGE J. WILLAUER
1924	ASTLEY P. C. ASHHURST	1965	GEORGE P. ROSEMOND
1926	ASTLEY P. C. ASHHURST	1967	JULIAN JOHNSON

SECRETARY

ELECTED		ELECTED	
1880	J. EWING MEARS	1935	HENRY P. BROWN, JR.
1885	J. HENRY C. SIMES	1940	JOHN B. FLICK
1893	THOMAS R. NEILSON	1942	L. KRAEER FERGUSON
1896	WILLIAM J. TAYLOR	1943	CALVIN M. SMYTH
1905	JOHN H. GIBBON	1945	L. KRAEER FERGUSON
1909	CHARLES F. MITCHELL	1948	J. MONTGOMERY DEAVER
1915	GEORGE P. MULLER	1958	WILLIAM B. FITTS
1920	J. STEWART RODMAN	1960	HENRY P. ROYSTER
1922	HUBLEY R. OWEN	1964	THOMAS F. NEALON
1930	DEFOREST P. WILLARD	1967	DONALD R. COOPER

TREASURER

ELECTED		ELECTED	
1880	WILLIAM HUNT	1904	JAMES P. HUTCHINSON
1891	WILLIAM G. PORTER	1911	EDWARD B. HODGE

ELECTED		ELECTED	
1920	DUNCAN L. DESPARD	1938	HARRY E. KNOX
1922	WILLIAM B. SWARTLEY	1947	S. DANA WEEDER
1935	L. KRAEER FERGUSON	1960	ORVILLE C. KING
	1965 EDWIN W. SHEARBURN		

RECORDER

ELECTED		ELECTED	
1880	JOHN B. ROBERTS	1920	HENRY P. BROWN, JR.
1881	DEFOREST WILLARD	1922	J. WILLIAM BRANSFIELD
1884	C. B. G. DENANCREDE	1926	CALVIN M. SMYTH, JR.
1884	J. EWING MEARS	1937	ADOLPH A. WALKLING
1891	LEWIS W. STEINBACH	1950	JONATHAN E. RHOADS
1902	JOHN H. GIBBON	1952	W. EMORY BURNETT
1905	JOHN H. JOPSON	1956	FREDERICK A. BOTHE
1915	JOHN SPEESE	1960	H. TAYLOR CASWELL
	1966 WILLIAM S. BLAKEMORE		

COUNCIL

ELECTED		ELECTED	
1880	JOHN ASHHURST, JR.	1936	WALTER ESTELL LEE
1880	JOHN H. BRINTON	1936	ROBERT H. IVY
1894	WILLIAM B. HOPKINS	1940	J. STEWART RODMAN
1895	HENRY R. WHARTON	1940	DAMON B. PFEIFFER
1898	THOMAS R. NEILSON	1941	EDWARD B. HODGE
1900	W. JOSEPH HEARN	1942	THOMAS A. SHALLOW
1902	ROBERT G. LECONTE	1942	ELDRIDGE L. ELIASON
1906	THOMAS R. NEILSON	1943	ROBERT H. IVY
1910	J. CHALMERS DE COSTA	1946	HUBLEY R. OWEN
1920	CHARLES F. MITCHELL	1947	CHARLES F. MITCHELL
1922	GEORGE G. ROSS	1948	FRANCIS C. GRANT
1922	JAMES H. BALDWIN	1950	THOMAS A. SHALLOW
1923	WILLIAM J. TAYLOR	1952	ADOLPH WALKLING
1924	JOHN H. JOPSON	1952	CALVIN M. SMYTH
1924	JOHN SPEESE	1954	I. S. RAVDIN
1925	EDWARD B. HODGE	1954	FREDERICK A. BOTHE
1926	DAMON B. PFEIFFER	1956	FREDERICK ROBBINS
1927	CHARLES F. MITCHELL	1956	L. KRAEER FERGUSON
1930	ASTLEY P. C. ASHHURST	1957	FREDERICK ROBBINS
1930	HUBLEY R. OWEN	1958	JOHN H. GIBBON, JR.
1932	GEORGE P. MULLER	1959	ORVILLE C. KING
1935	DEFOREST P. WILLARD	1960	ADOLPH WALKLING

ELECTED		ELECTED	
1960	JONATHAN E. RHOADS	1964	J. MONTGOMERY DEAVER
1962	DONALD K. COOPER	1965	JONATHAN E. RHOADS
1962	W. EMORY BURNETT	1967	JOHN Y. TEMPLETON
	1967 GEORGE WILLAUER		

With President, Vice-President, Secretary and Treasurer

BUSINESS COMMITTEE

ELECTED		ELECTED	
1895	WILLIAM J. TAYLOR	1930	EDWARD T. CROSSAN
1895	DEFOREST WILLARD	1930	JOHN B. FLICK
1896	RICHARD H. HARTE	1931	HENRY P. BROWN, JR.
1897	ROBERT G. LECONTE	1932	EDWARD T. CROSSAN
1900	G. G. DAVIS	1935	B. FRANKLIN BUZBY
1902	JOHN H. JOPSON	1936	JOHN B. FLICK
1905	GEORGE G. ROSS	1938	L. KRAEER FERGUSON
1908	FRANCIS T. STEWART	1940	J. MONTGOMERY DEAVER
1914	JOHN SPEESE	1942	CALVIN M. SMYTH
1916	WALTER ESTELL LEE	1943	FREDERICK A. BOTHE
1916	MORRIS BOOTH MILLER	1943	W. EMORY BURNETT
1917	DAMON B. PFEIFFER	1944	ADOLPH A. WALKLING
1917	ASTLEY P. C. ASHHURST	1946	J. MONTGOMERY DEAVER
1919	A. BRUCE GILL	1949	FREDERICK A. BOTHE
1919	J. STEWART RODMAN	1950	JOHN H. GIBBON, JR.
1920	ARTHUR BILLINGS	1950	JONATHAN E. RHOADS
1922	DAMON B. PFEIFFER	1951	FRANK ALLBRITTEN, JR.
1924	DEFOREST P. WILLARD	1954	EDWIN W. SHEARBURN
1928	WALTER ESTELL LEE	1960	JOHN Y. TEMPLETON, III
	1964 BROOKE ROBERTS		

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 M. GIBBON, JR.
GEORGE P. ROSEMOND

1957

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

1961

GEORGE P. ROSEMOND
S. DANA WEEDER
GEORGE WILLAUER

1964

PAUL NEMIR, JR.
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1953 OAKEY, RICHARD S., JR., M.D., Lankenau Medical Building, Philadelphia, Pennsylvania, 19151.

1954 O'NEILL, JAMES F., M.D., F.A.C.S., 8116 Bustleton Avenue, Philadelphia, Pennsylvania, 19152. American Association for Thoracic Surgery; Assistant Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Chairman, Department of Surgery, Nazareth Hospital; Attending Surgeon, Holy Redeemer Hospital, Meadowbrook, Pennsylvania.

1956 O'NEILL, THOMAS J. E., M.D., F.A.C.S., 110 Centennial Building, Front Street and Lehigh Avenues, Philadelphia, Pennsylvania, 19125. American Association for Thoracic Surgery; Associate Professor, Thoracic Surgery, Head of Section, Woman's Medical College; Director, Thoracic Surgery, Episcopal Hospital, Abington, Woman's Medical College Hospital; Surgeon, Holy Redeemer, Northeastern, and Abington Memorial Hospitals.

1939 *PARKER, ALAN P., M.D., F.A.C.S., 130 Fishers Road, Bryn Mawr, Pennsylvania, 19010. Consulting Surgeon, Bryn Mawr Hospital.

1947 PARKER, WILLIAM S., M.D., F.A.C.S., Bryn Mawr Medical Building, Bryn Mawr, Pennsylvania, 19010. Associate Professor, Surgery, Graduate School of Medicine, University of Pennsylvania; Attending Surgeon, Bryn Mawr Hospital.

1965 PIERUCCI, LOUIS, JR., M.D., 1025 Walnut Street, Philadelphia, Pennsylvania, 19107. Associate Professor of Surgery, Jefferson Medical College; Assistant in Surgery, Cooper Hospital, Camden, New Jersey; Attending Surgeon, Jefferson Medical College Hospital.

1958 PILLING, GEORGE PLATT, M.D., F.A.C.S., 2600 N. Lawrence Street, Philadelphia, Pennsylvania, 19133. Attending Surgeon, St. Christopher's Hospital for Children; Assistant Professor of Surgery, Temple University

*Senior Fellow.

School of Medicine; American Academy of Pediatrics, Affiliate in Surgery.

1960 PITT, LELDON P., M.D., F.A.C.S., 811 Spruce Street, Philadelphia, Pennsylvania, 19107. Instructor, University of Pennsylvania; Associate Surgeon, Pennsylvania Hospital; Consultant Surgeon, Rush Hospital.

1962 RANDALL, PETER, M.D., F.A.C.S., Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, Pennsylvania, 19104. American Association of Plastic Surgeons; American Society of Plastic and Reconstructive Surgery; Halsted Society; Cleft Palate Association; Plastic Surgery Research Council; Society of Head and Neck Surgeons; Robert H. Ivy Society; Associate Professor of Plastic Surgery, School of Medicine. University of Pennsylvania; Hospital of the University of Pennsylvania; Senior Surgeon, Children's Hospital of Philadelphia; Consultant in Plastic Surgery, Veterans Administration Hospital.

1951 RANIERI, TITO A., M.D., M.Sc., 2320 South Broad Street, Philadelphia, Pennsylvania, 19145. Associate in Surgery, Graduate School of Medicine, University of Pennsylvania; Attending Surgeon, Methodist Hospital; Volunteer Reserve Unit, United States Naval Medical Corps.

1924 *RAVDIN, I. S., M.D., D.Sc. (Hon.), F.A.C.S., R.R.C.S. (Eng.), F.R.C.P. (Can.), R.R.C.S. (Edin.), F.R.C.S. (Ireland), L.H.D. (Hon.), L.L.D. (Hon.), 3400 Spruce Street, Philadelphia, Pennsylvania, 19104. Pan-Pacific Surgical Association; International Federation of Surgical Colleges; American College of Surgeons; American Surgical Association; Southern Surgical Society; American Association for Surgery of Trauma; Halstead Surgical Club; Society for Vascular Surgery; Vice-President for Medical Affairs, University of Pennsylvania; Emeritus Professor of Surgery, School of Medicine, University of Pennsylvania.

1956 RAVDIN, ROBERT G., M.D., F.A.C.S., 3400 Spruce Street, Philadelphia, Pennsylvania, 19104. Associate Professor, Surgery, University of Pennsylvania; Surgeon, Philadelphia General, Veterans Administration, University of Pennsylvania Hospitals.

1953 REAGAN, LINDLEY B., M.D., F.A.C.S., 131 Madison Avenue, Mount Holly, New Jersey, 08060. Chief, Department of Surgery, Burlington County Memorial Hospital; Instructor, Burlington County Memorial Hospital.

1943 *RHOADS, JONATHAN E., M.D., D.Sc. (Med.), LL.D. (Hon.), D.Sc. (Hon.), F.A.C.S.; 3400 Spruce Street, Philadelphia, Pennsylvania, 19104. American Association for the Surgery of Trauma; American Surgical Association; Hawthorne Surgical Society; The International Society of Surgery; International Surgical Group; Pan-Pacific Surgical Association; Society of Clinical Surgery; Society of Graduate Surgeons, Los Angeles County; Society of University Surgeons; Southern Surgical Association; Surgeons Travel Club; John Rhea Barton Professor of Surgery and Director of the Harrison Department of Surgical Research, The University of Pennsylvania School of Medicine; Chief of the Department of General

*Senior Fellow.

Surgery, Hospital of the University of Pennsylvania; Consultant Surgeon, Germantown, Bryn Mawr, Veterans Administration, and Monmouth Medical Center Hospitals.

1941 *RISTINE, EDWIN R., M.D., F.A.C.S., 17 Clinton Avenue, Mantua, New Jersey. Emeritus Surgeon, Cooper Hospital, Camden, New Jersey.

1928 *ROBBINS, FREDERICK R., M.D., F.A.C.S., 317 Millbank Road, Bryn Mawr, Pennsylvania, 19010. Consulting Surgeon, Pennsylvania and Bryn Mawr Hospitals.

1954 ROBERTS, BROOKE, M.D., F.A.C.S., 3400 Spruce Street, Philadelphia, Pennsylvania, 19104. Society of University Surgeons; American Association for the Surgery of Trauma; International Society of Blood Transfusions; North American Chapter International Cardiovascular Society; Physiological Society of Philadelphia; Society of Vascular Surgery; American Surgical Association; Professor of Surgery, University of Pennsylvania; Consultant in Surgery, Veterans Administration Hospital; Chief, Section on Peripheral Vascular Surgery, Hospital of the University of Pennsylvania.

1964 ROBERTS, JOHN, M.D., 5555 Wissahickon Avenue, Philadelphia, Pennsylvania. Assistant Clinical Professor of Surgery, School of Medicine, Temple University; Senior Attending Surgeon, Chestnut Hill Hospital; Surgeon, Germantown Hospital.

1945 *ROSEMOND, GEORGE P., M.D., M.S. (Surg.), F.A.C.S., 3401 North Broad Street, Philadelphia, Pennsylvania, 19140. American Surgical Association; American Association for Thoracic Surgery; International Society of Surgery; Professor of Surgery, Chairman of the Department of Surgery, Temple University School of Medicine; Chief of Surgery, Temple University Hospital; Associate Attending Surgeon, St. Christopher's Hospital for Children; Consulting Physician in Thoracic Surgery, Veterans Administration Hospital, Wilkes Barre.

1950 *ROYSTER, HENRY PAGE, M.D., F.A.C.S., Room 1000, Ravdin Building, University Hospital, 3400 Spruce Street, Philadelphia, Pennsylvania, 19104. Society of University Surgeons; American College of Surgeons; Southern Surgical Association; American Society of Plastic and Reconstructive Surgery; American Surgical Association; American Cleft Palate Association; The Robert H. Ivy Society; The Society of Head and Neck Surgeons; American Association of University Professors; American Association of Plastic Surgeons; International Association of Plastic Surgeons; Eastern Surgical Society; Pan-Pacific Surgical Association; American Board of Plastic Surgery; International Surgical Society; Professor of Surgery, School of Medicine, University of Pennsylvania; The Children's Hospital of Philadelphia; Consultant in Plastic Surgery, Veterans Administration Hospital; Consultant in Plastic Surgery, Naval Hospital; Consultant in Plastic Surgery, Army Hospital, Fort Dix; Chief of Plastic Surgery Service, Graduate Hospital of the University of Pennsylvania, Philadelphia General Hospital, Hospital of the University of Pennsylvania; Director of

*Senior Fellow.

the Cleft Palate Clinic and Chief of Plastic Surgery Service, Children's Hospital, Philadelphia.

1967 SACKS, CHARLES LOUIS, M.D., 245 North Broad Street, Philadelphia, Pennsylvania. Associate Clinical Professor of Surgery, Hahnemann Medical College; Associate in Surgery, Albert Einstein Medical Center.

1960 SAIN, FLETCHER D., M.D., F.A.C.S., 1245 Highland Avenue, Abington, Pennsylvania, 19001. Visiting Lecturer, Temple University Medical School; Director Department of Surgery, Lower Bucks County Hospital; Visiting Surgeon, Abington Memorial Hospital.

1965 SARIS, DEMETRIUS S., M.D., 216 North Broad Street, Philadelphia, Pennsylvania, 19102. Assistant Professor of Surgery, Hahnemann Medical College.

1962 SCHUMANN, FRANCIS, M.D., F.A.C.S., 8815 Germantown Avenue, Philadelphia, Pennsylvania, 19118. Blockley Research Society; Clinical Associate Professor of Surgery, Woman's Medical College; Attending Surgeon, Chestnut Hill Hospital; Surgeon, Woman's Medical College Hospital; Chief of Surgery, Roxborough Memorial Hospital; Attending Surgeon, Veterans Administration Hospital.

1951 SCHWEGMAN, C. W., M.D., F.A.C.S., 3400 Spruce Street, Philadelphia, Pennsylvania, 19104. Society of Military Surgeons; American Surgical Association; International Society for Surgery; Secretary, American Board of Surgery; Associate Professor of Surgery, University of Pennsylvania; Associate Professor of Surgery, Graduate School of Medicine; Associate Surgeon, Hospital of the University of Pennsylvania; Attending Surgeon, VA Hospital; Director, Tumor Clinic, Hospital of the University of Pennsylvania.

1953 SCOTT, MICHAEL, M.D., F.A.C.S., 3401 North Broad Street, Philadelphia, Pennsylvania, 19140. Professor and Chairman, Department of Neurosurgery, Temple University Hospital.

1965 SENCINDIVER, PAIGE VICTOR, M.D., F.A.C.S., 2301 South Broad Street, Philadelphia, Pennsylvania. Attending Surgeon, Methodist Hospital; Assistant Surgeon, Jefferson Hospital.

1947 SHEARBURN, EDWIN W., M.D., M.S., F.A.C.S., 306 Lankenau Medical Building, Philadelphia, Pennsylvania, 19151. Professor of Clinical Surgery, Jefferson Medical College; Director, Division of Surgery and Chief of General Surgery, Lankenau Hospital; Consultant in Surgery, Valley Forge Army Hospital.

1965 SIGEL, BERNARD, M.D., 3300 Henry Avenue, Philadelphia, Pennsylvania, 19129. Associate Professor of Surgery and Chief, Surgical Service, Woman's Medical College; Veteran's Administration Hospital.

1957 SINGMASTER, LAWRENCE, M.D., F.A.C.S., 106 West Front Street, Media, Pennsylvania. American Thyroid Association; Associate Professor, Surgery, Jefferson Medical College; Assistant Director of Surgery, Riddle Memorial Hospital, Media, Pennsylvania; Assistant Professor of Clinical Surgery, Graduate School, University of Pennsylvania.

*Senior Fellow.

1954 SPITZ, EUGENE B., M.D., F.A.C.S., 40-50 West Front Street, Media, Pennsylvania. Fellow of American Academy of Pediatrics; Professor of Biomedical Engineering, Pennsylvania Military College; Chief, Division of Neurosurgery, Broad Street Hospital and Medical Center.

1960 STAHLGREN, LEROY H., M.D., F.A.C.S., Episcopal Hospital, Front Street and Lehigh Avenue, Philadelphia, Pennsylvania, 19125. Director of Surgery, Episcopal Hospital; Lecturer, Woman's Medical Hospital; Professor of Surgery, School of Medicine, Temple University.

1957 STAINBACK, WILLIAM C., M.D., F.A.C.S., Bryn Mawr Medical Building, Bryn Mawr, Pennsylvania, 19010. Associate in Surgery, University of Pennsylvania School of Medicine; Instructor, Graduate School, University of Pennsylvania; Director, Department of Surgery, The Bryn Mawr Hospital; Consultant in Surgery, Veterans Administration Hospital, Wilmington, Del.

1950 STAYMAN, JOSEPH W., JR., M.D., F.A.C.S., 8815 Germantown Avenue, Philadelphia, Pennsylvania, 19118. Thoracic Surgical Association; Associate Professor of Clinical Surgery, Jefferson Medical College; Director of Surgery, Chestnut Hill Hospital; Surgeon, All Saints Hospital; Attending Surgeon, Jefferson Medical College Hospital.

1968 STEEL, HOWARD HALDEMAN, M.D., M.S., 3401 North Broad Street, Philadelphia, Pennsylvania, 19140. Chief Surgeon, Shriners Hospital for Crippled Children; Orthopedic Consultant, Walson Army Hospital, Fort Dix; Professor of Orthopedic Surgery, Temple University Hospital and St. Christopher's Hospital.

1948 *STEVENS, LLOYD W., M.D., F.A.C.S., 133 South 36th Street, Philadelphia, Pennsylvania, 19104. Professor of Clinical Surgery, University of Pennsylvania; Director of Surgery, Presbyterian Hospital; Consultant Surgeon, Riddle Memorial, Philadelphia General, and Taylor Hospitals.

1956 STRONG, GEORGE H., M.D., F.A.C.S., 255 South 17th Street, Philadelphia, Pennsylvania, 19103. American Urologic Association; Associate Professor, Urology, Jefferson Medical College; Assistant Attending Urologist, Jefferson Medical College Hospital; Associate, Department of Urology, Episcopal Hospital.

1957 SWARTLEY, ROBERT NORMAN, M.D., 50 Bethlehem Pike, Philadelphia, Pennsylvania, 19118. Instructor in Surgery, Jefferson Medical College; Senior Attending Surgeon, Chestnut Hill Hospital.

1954 TEMPLETON, JOHN Y., III, M.D., F.A.C.S., 1025 Walnut Street, Philadelphia, Pennsylvania, 19107. American Surgical Association; American Association for Thoracic Surgery; Professor of Surgery, Jefferson Medical College, Attending Surgeon, Jefferson Medical College Hospital.

1958 TROPEA, FRANK, JR., M.D., 1422 Race Street, Philadelphia, Pennsylvania, 19102. Clinical Professor of Surgery, Hahnemann Medical College and Hospital; Director of Surgery, St. Agnes Hospital; Consultant Surgeon, Philadelphia General Hospital.

1954 TYSON, R. ROBERT, M.D., M.S., F.A.C.S., 3401 North Broad Street, Philadelphia, Pennsylvania, 19140. Professor of Surgery, Temple University

*Senior Fellow.

School of Medicine; Chief, Vascular Surgery Section, Temple University Hospital; Associate Surgeon, Episcopal and St. Christopher's Hospitals; Consultant, Veterans Administration Hospital, Wilkes-Barre.

1955 ULIN, ALEX W., M.D., F.A.C.S., 1500 Vine Street, Philadelphia, Pennsylvania, 19102. Clinical Professor of Surgery, Hahnemann Medical College and Hospital; Director, Medical and Surgical Research, Ethicon, Inc.

1956 VON DEILEN, ARTHUR W., M.D., D.D.S., F.A.C.S., 501 White Horse Pike, W. Collingswood, New Jersey. Fellow, American College of Dentists; Fellow, American Society of Plastic and Reconstructive Surgery; Assistant Professor of Plastic and Reconstructive Surgery in Medical Schools, University of Pennsylvania; Chief of Plastic and Reconstructive Surgery, Presbyterian Hospital; Cooper Hospital, Camden; West Jersey Hospital, Camden; Our Lady of Lourdes Hospital, Camden; Burlington County Hospital, Mount Holly; Lower Bucks County Hospital, Bristol; Underwood Hospital, Woodbury; Associate in Plastic Surgery, Graduate Hospital, University of Pennsylvania.

1952 WAGNER, FREDERICK B., JR., M.D., F.A.C.S., 255 S. 17th Street, Philadelphia, Pennsylvania, 19103. Fellow, American College of Angiology; Clinical Professor of Surgery, Jefferson Medical College; Attending Surgeon, Jefferson Medical College Hospital; Director of Surgery, William B. Kessler Memorial Hospital, Hammonton, New Jersey.

1960 WEST, CLIFTON F., JR., M.D., Lankenau Medical Building, Philadelphia, Pennsylvania, 19151. Instructor in Surgery, Jefferson Medical College; Associate Surgeon, Lankenau Hospital.

1939 *WILLAUER, GEORGE, M.D., D.Sc., F.A.C.S., 6129 Greene Street, Philadelphia, Pennsylvania, 19144. American Association for Thoracic and Vascular Surgery; Founder, American Board of Thoracic Surgery; Pennsylvania Association for Thoracic Surgery; Clinical Professor of Surgery (Hon.), Jefferson Medical College.

1927 *WILLIAMSON, ERNEST G., M.D., F.A.C.S., F.R.C.S. (Edin.), 6353 Woodbine Avenue, Philadelphia, Pennsylvania, 19151. Surgeon, Presbyterian Hospital and Children's Hospital.

1965 WOLFERTH, CHARLES C., JR., M.D., Suite 2307, The Windsor, 17th Street and the Parkway, Philadelphia, Pennsylvania, 19103. Senior Attending Surgeon, Hahnemann Hospital; Associate Surgeon, Abington Hospital; Consultant in Surgery, United States Naval Hospital.

1958 ZASLOW, JERRY, M.D., M.S., F.A.C.S., F.I.C.S., 6735 Harbison Avenue, Philadelphia, Pennsylvania, 19149. Assistant Clinical Professor of Surgery, Temple University Hospital; Associate Surgeon, Albert Einstein Medical Center, Northern Division; Senior Surgeon and Chairman, Department of Surgery, John F. Kennedy Hospital.

*Senior Fellow.

NON-RESIDENT FELLOWS

ALLBRITTEN, FRANK F., JR., M.D., 39th and Rainbow Boulevard, Kansas City, Kansas, 66103. General and Thoracic Surgery.

AUSTIN, GEORGE, M.D., M.Sc., Loma Linda University Medical School, Loma Linda, California. Neurosurgery.

BAILEY, CHARLES P., M.D., M.Sc., D.Sc. (Med.), F.A.C.S., 34 East 67th Street, New York, New York, 10021. General and Thoracic Surgery.

DELAURENTIS, DOMINIC A., M.D., D.Sc. (Surg.), F.A.C.S., 759 Chestnut Street, Springfield, Massachusetts, 01107. General Surgery.

EHRLICH, EDWARD W., M.D., F.A.C.S., 1000 Ryland Street, Reno, Nevada, 89502. General Surgery.

FRY, KENNETH EVANS, M.D., F.A.C.S., Health Department, Court House, Wala Wala, Washington, 99362. General Surgery.

MANGES, LEWIS C., JR., M.D., F.A.C.S., Medical Center, Windsor, New York, 13865. General Surgery.

MASON, JAMES BRYANT, M.D., M.Sc. (Surg.), F.A.C.S., 1730 South Jackson Avenue, Tacoma, Washington, 98465. General Surgery.

MEADE, RICHARD H., M.D., F.A.C.S., 750 San Jose Drive, SE, Grand Rapids, Michigan. General and Thoracic Surgery.

NEALON, THOMAS F., JR., M.D., F.A.C.S., St. Vincent's Hospital and Medical Center of New York, 170 West 12th Street, New York, New York, 10011. General Surgery.

NORTH, JOHN P., M.D., F.A.C.S., 55 East Erie Street, Chicago, Illinois, 60611. General Surgery.

SCHELL, JAMES F., M.D., F.A.C.S., 506 Sharpley Lane, Bellewood, Wilmington, Delaware, 19803. General Surgery.

THOMPSON, JAMES CHARLES, M.D., F.A.C.S., 1000 West Carson Street, Torrance, California, 90509. General Surgery.

WEBER, EDGAR H., M.D., F.A.C.S., 123 SE Second Street, Evansville, Indiana. General Surgery.

WELLS, J. RALSTON, M.D., F.A.C.S., De Land, Florida. General Surgery.

INACTIVE FELLOWS

BUCHER, ROBERT M., M.D., M.S. (Surg.), F.A.C.S., 3401 North Broad Street, Philadelphia, Pennsylvania, 19140. General Surgery.

DAVIS, DAVID M., M.D., 818 Pennstone Road, Bryn Mawr, Pennsylvania, 19010. Urology.

MAY, HANS, M.D., Box 1477, Christiansted, St. Croix, Virgin Islands, 00822. Plastic Surgery.

MOORE, ROBERT MILO, M.D., 1617 John F. Kennedy Boulevard, Philadelphia, Pennsylvania, 19103. General Surgery.

SHANDS, ALFRED RIVES, JR., M.D., Box 269, Wilmington, Delaware. Orthopedic Surgery.

STERLING, JULIAN ALEXANDER, M.D., M.Sc., Sc.D., 3505 South Ocean Drive, Hollywood, Florida, 33020. General Surgery.

GOVERNMENT SERVICE FELLOWS

CALES, ROBERT J., CAPTAIN, (MC), USN, U.S. Naval Hospital, Philadelphia, Pennsylvania, 19145.

CUSTIS, DONALD L., CAPTAIN, (MC), USN, U.S. Naval Hospital, Philadelphia, Pennsylvania, 19145.

MAHIN, HARRY P., CAPTAIN, (MC), USN, 740 Coronado Avenue, Coronado, California, 92118.

THOMAS, PAUL A., COLONEL, (MC), USA, Valley Forge General Hospital, Phoenixville, Pennsylvania, 19460.

NEW FELLOWS

1964

DR. JACK COLE
DR. DOMINIC DELAURENTIS
DR. H. ALAN HUME
DR. F. DANA LAW
DR. NEWTON MASSON
DR. ROBERT MOORE
DR. N. HENRY MOSS
DR. JOHN M. ROBERTS
DR. DAVID M. SENSENIG

1965

DR. RUDOLPH C. CAMISHION
DR. HERBERT E. COHN
DR. JULIO C. DAVILA
DR. GEORGE GOWEN
DR. WILLIAM Y. INOUYE
DR. HERNDON B. LEHR
DR. DAVID Y. P. LIN
DR. RICHARD N. MYERS
DR. LOUIS PIERUCCI, JR.
DR. DEMETRIUS S. SARIS
DR. P. VICTOR SENCINDIVER
DR. BERNARD SIGEL
DR. CHARLES C. WOLFERTH, JR.

1966

DR. EDWARD CLOSSON
CAPT. D. L. CUSTIS, MC, USN
DR. RICHARD H. FLANDREAU
DR. J. CURTIS LAMP
DR. THOMAS W. LANGFITT
DR. WILLIAM M. LEMMON
DR. JULIUS A. MACKIE
DR. HUNTER NEAL
COL. PAUL THOMAS, MC, USA

1967

DR. ROBERT BOWER
DR. PHILIP D. GORDY
DR. ROBERT K. JONES
DR. FREDERICK MURTAGH
DR. CHARLES SACKS

1968

DR. JAMES P. BOLAND
DR. LESTER M. CRAMER
DR. JOSEPH C. DONNELLY
DR. FELIX GLAUSER
DR. WILLIAM HARDESTY
DR. HOWARD H. STEEL

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. DENANCREDE, 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

ELECTED		DIED
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
1929	ALBIN LAMBOTTE, Esneux, Belgium	
1929	HENRI HARTMANN, Paris, France	
1929	TH. TUFFIER, 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.	March 4, 1957
1929	ELLISWORTH ELIOT, JR., New York, N. Y.	November 2, 1945
1929	RUDOLPH MATAS, New Orleans, La.	September 23, 1957
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.	December 4, 1954
1954	HAROLD FOSS, Danville, Pa.	
1954	DIGBY CHAMBERLAIN, Leeds, England	
1954	FREDERICK COLLER, Ann Arbor, Mich.	November 5, 1964
1954	HOWARD NAFZIGER, San Francisco, Calif.	1961
1954	ARTHUR ALLEN, Boston, Mass.	March 18, 1958
1954	ERIK HUSFELDT, Copenhagen, Denmark	
1954	ALLEN WHIPPLE, New York, N. Y.	April 16, 1963
1954	SIR JAMES PATTERSON ROSS, London, England	

Fellows Deceased

1964-1968

YEAR	NAME	ELECTED	SPAN OF LIFE
1964	KIRBY, CHARLES K.	1953	1914-1964
1965	GILL, ARTHUR BRUCE	1914	1876-1965
1965	ORR, THEODORE	1938	1887-1965
1966	CROSSAN, EDWARD T.	1919	1890-1966
1966	*DASCH, FREDERICK W.		1915-1966
1966	FETTER, THEODORE L.	1960	1903-1966
1966	PFEIFFER, DAMON B.	1912	1878-1966
1966	SMYTH, CALVIN M.	1924	1894-1966
1966	WALKLING, ADOLPH A.	1928	1896-1966
1966	WEEDER, STEPHEN DANA	1928	1896-1966
1967	*BATES, WILLIAM	1928	1889-1967
1967	BROOKE, JOHN A.	1944	1874-1967
1967	COLONNA, PAUL C.	1948	1892-1967
1967	DEIBERT, IRVIN E.	1930	1893-1967
1968	FERGUSON, L. KRAEER	1931	1897-1968
1968	GRANT, FRANCIS C.	1925	1891-1968
1968	*IVERSON, PRESTON		1909-1968
1968	JAEGER, J. RUDOLPH	1946	1895-1968

* Nonresident

Memoirs

Charles K. Kirby

1914-1964

DR. CHARLES K. KIRBY was born in 1914, the son of Mr. and Mrs. William Kirby. He received his preliminary education in Springfield, South Dakota. He was musically inclined and was one of those rare individuals with perfect pitch. While going to high school, he often practiced on his violin as long as five or six hours a day. Even at this early age it was apparent that he was a perfectionist. He seriously considered a career in music before deciding to study medicine. His college work was taken at Trinity College, and his medical studies at Cornell University from which he was graduated in 1940. After his internship at New York Hospital in New York City, he joined the Air Force as a medical officer and was sent to India.

In 1944 he joined the 20th General Hospital situated in Assam, India, and it was there that those of us at the University of Pennsylvania first met him. We were so much impressed with him that after the war we were able to prevail upon him to give up his idea of going back to Cornell, and to come to Philadelphia to complete his surgical training at the Hospital of the University of Pennsylvania. His ability and industry were promptly recognized and he became a member of the permanent staff in 1948. He was progressively promoted in rank until he became Professor of Surgery in 1962.

Dr. Kirby's chief interest was in thoracic surgery, so that he was closely associated with me from the beginning. The fact that he was a perfectionist and that he was willing to give unlimited attention to detail was largely responsible for the success of the illustrated text of thoracic surgery on which we worked together. These same qualities in him were also largely responsible for our success in open heart surgery at the University. To him nothing was too much trouble if it would add a bit of safety to our bypass equipment, nothing was too much expense if it gave the patient a better chance at a successful operation.

Dr. Kirby had the imagination and perseverence to tackle a problem and see it through. His untimely death is particularly regrettable in that it cut short his ambition to build an artificial human heart. In his presidential address before the Society for Artificial Internal Organs in 1961, he predicted that if a fraction of the engineering know-how and cost expended upon the Manhattan Project were available to us, a successful artificial human heart could be perfected within three to five years. His zeal for this

project and his keen appreciation of the many problems involved in it will be sorely missed by those of us hoping to fulfill his ambition.

Dr. Kirby was a member of numerous medical organizations, including the American Surgical Association, the American Association for Thoracic Surgery, the Laennec Society of Philadelphia which he served as President in 1959, and the American Society for Artificial Internal Organs which he served as Secretary, President-Elect and finally President in 1961-1962.

On January 20, 1964, Dr. Kirby died at the age of forty-nine of a massive coronary occlusion. He is survived by his mother, Mrs. William M. Kirby; his sister, Mrs. Alice Eckhardt; his twin brother, Dr. William M. M. Kirby; and his four children, Alice 12, Malcolm 9, Robin 6, and William 3.

Those of us at the University will always remember Dr. Kirby for the zeal with which he pursued his particular investigative interest, and for his ability to pass that zeal on to the young men who worked with him. We shall remember him for the constant attention he gave to his patients. He was always the perfectionist—nothing was ever too much trouble for him to see personally that things were just right for them—often at great personal sacrifice in the matter of time.—JULIAN JOHNSON, M.D.

Arthur Bruce Gill

1876-1965

ARTHUR BRUCE GILL was born of Scottish ancestry on December 12, 1876, in Greensburg, Pennsylvania. He graduated from Muskingum College with a B.A. degree in 1896 and from the University of Pennsylvania with a M.D. degree in 1905. He was a member of Sigma Xi and Alpha Omega Alpha honorary fraternities. After internship at the Presbyterian Hospital he went on a cruise around the world with Mr. and Mrs. George W. Childs Drexel on their yacht.

Dr. Gill's early hospital appointments were in general surgery, his later ones in orthopedics. He was Assistant Surgeon at the Presbyterian Hospital, 1906-1914, Orthopedic Surgeon, 1914-1941, and Consulting Orthopedic Surgeon, 1941-1953. At the Widener Memorial Industrial School for Crippled Children he was Assistant Surgeon, 1911-1920, and Chief Surgeon, 1920-1942. He was Orthopedic Surgeon at the Episcopal Hospital, 1915-1925. At the Orthopedic Hospital he was Assistant Surgeon, 1908-1914, and Orthopedic Surgeon, 1914-1941. He was Chief Surgeon at the Childrens' Seashore House, Atlantic City, New Jersey, 1938-1943, and at the Alfred I. DuPont Institute, Nemours Foundation, Wilmington, Delaware, where he was later a member of the Medical Advisory Board. He was also operating surgeon for pediatric clinics in Carbon and Schuylkill counties. From 1920-1942 Dr. Gill was Professor of Orthopedic Surgery at the University of Pennsylvania School of Medicine; he was Emeritus Professor from 1942 until his death.

Dr. Gill was a member and officer of many organizations, including the American Academy of Orthopedic Surgeons and the American Orthopedic Association. He served as president of the former in 1938 and the latter in 1944. He was a member of the International Society of Orthopedic Surgery and Traumatology and was a member and president of the Philadelphia Orthopedic Club. He was elected a Fellow of the Academy of Surgery of Philadelphia in 1914, and a Fellow of the College of Physicians of Philadelphia in 1920. He held honorary membership in the Ambroise Paré Society of France, the Pennsylvania Orthopedic Society and the Orange County, Florida, Orthopedic Society.

Dr. Gill's special interest in crippled children led to his serving on various advisory committees concerned with their care, including those of the AMA, the Secretary of Health of Pennsylvania, the Children's Bureau of the Department of

Labor, Washington, D.C., and the Department of Health of New York City.

In addition to his many contributions to the literature of orthopedic surgery, Dr. Gill developed a number of original surgical procedures, six of which bear his name. He was rated among the foremost authorities on congenital dislocation of the hip.

A tall and athletic man, Dr. Gill took pride in having coached a winning football team at Muskingum. He liked tennis, swimming, and dancing. He was one of the earliest members of the Doctors' Golf Association of Philadelphia which he served as president in 1950. He was active in organizing the Inter-Hospital Bridge League. His other memberships included the Merion Cricket and Golf Clubs, the Franklin Inn, and the St. Andrews Society.

In 1938 Dr. Gill married Mabel Halsey Woodrow, a talented artist. In 1955 he had a stroke which left his speech badly impaired. He retired, therefore, from practice. In 1955 he moved to Mount Dora, Florida. Dr. Gill once presented patients, at this Academy, upon whom he had operated successfully by radical excision for Dupuytren's contracture. In Mount Dora, lawn bowling is the favorite sport. To be able to grasp a bowling ball Dr. Gill had to have his Dupuytren's contracture operated upon. Cancer resulted in invalidism in his last years which was endured with Mrs. Gill's devoted care. Dr. Gill died, at the age of 89, near Asheville, North Carolina on November 7, 1965.—GEORGE M. LAWS, M.D.

Damon B. Pfeiffer

1878-1966

DR. DAMON BECKETT PFEIFFER of Meadowbrook, Emeritus Chief of Surgery at Lankenau Hospital and Abington Memorial Hospital, died January 6, 1966 at Lankenau Hospital at the age of 87.

A native of Williamstown, New Jersey, Dr. Pfeiffer was graduated magna cum laude from Princeton University, and received his M.D. from Johns Hopkins Medical School. He served his internship and preceptorship in surgery at Lankenau Hospital under Dr. John B. Deaver.

During World War I, he was in command of a U.S. Army base hospital in Toul, France. He was discharged with the rank of Lt. Colonel.

Dr. Pfeiffer was a member of many professional organizations such as the Philadelphia Academy of Surgery, the American College of Surgeons, American Surgical Association, a Fellow of the College of Physicians of Philadelphia and from 1936-1938 he was President of the Philadelphia Academy of Surgery.

He was Associate Professor of Surgery at the Graduate School of Medicine of the University of Pennsylvania and was the author of numerous articles on surgery.

Dr. Pfeiffer's wife was the former Elizabeth Reeves Howell. She died on December 27, 1965. He is survived by a stepson, Charles Howell.

Dr. Pfeiffer was a man of strong opinions and ardent enthusiasms. Among his particular interests were current events, shooting, bird dogs and most particularly, Princeton University.

He was a quiet philanthropist. In 1961 he won the Humanitarian Award from the Monroe Township Chamber of Commerce, his home town. The citation read as follows: "For philanthropic efforts and manifestations in promoting fellowship and the welfare of the community." He was a generous contributor to the Lankenau Hospital to Princeton University and to the Library of the College of Physicians of Philadelphia.

Dr. Damon Pfeiffer was respected and beloved by his patients, by his intern and resident staff and by his assistants and associates. He was a surgeon's surgeon.—J. MONTGOMERY DEAVER, M.D.

Adolph A. Walkling

1896-1966

ADOLPH A. WALKLING, graduate of the Jefferson Medical College in 1917, longtime Clinical Professor of the Jefferson Medical College and President of the Philadelphia Academy of Surgery from 1958 to 1960, died on March 28, 1966.

Walkling spent his entire professional life teaching students, interns and residents in the clinics, wards and private services of the Jefferson and Pennsylvania Hospitals. His work and responsibilities were never a chore, and his concern for his students, colleagues and patients was boundless.

In addition to his hospital and teaching duties, he was active in the affairs of the Alumni Association of the Jefferson Medical College for over forty years. He served as a class agent and loyal member of the Executive Committee of the Alumni, and fulfilled the position of president successfully in 1951.

Walkling was a faithful attendant at the meetings of the many societies of which he was a member. I refer particularly to the Philadelphia Academy of Surgery, the American College of Surgeons and the American Surgical Association. He contributed thirty-three papers to surgical literature.

Besides his professional activities, he shared with his devoted wife, the former Marion Ware, enthusiasm for the collection of rare books and old prints of the Pennsylvania Hospital exhibited a few years ago by Charles Sessler. From their lovely garden they gathered rose petals for the potpourri to fill their large unique collection of rose jars.

Like all proud fathers, Walkling had an intense interest in his sons. He was enthusiastic about their Scout maneuvers and school year sports. He was also very mindful of their education and never missed any of their school functions and teachers' meetings. Neither of them chose the field of medicine as a career, however. Richard became interested in electronics and is now manufacturing highly specialized electronic devices and components. Robert's choice was the academic sphere. He is currently a professor of physics at Bowdoin.

Adolph Walkling had a full life. Surely he is greatly missed by his family. His presence and counsel are a loss to all who knew him, especially to the Fellows of this Academy.—GEORGE WILLAUER, M.D.

Frederick W. Dasch

1915-1966

FREDERICK W. DASCH, M.D. was born in Wilkes-Barre, Pennsylvania, on November 20, 1915. He received his early education there and graduated from high school in Forty-Fort, Pennsylvania. He received both his college and medical degrees from the University of Pennsylvania. He served his internship in the Wilkes-Barre Hospital.

Dr. Dasch served in the Medical Corps of the United States Army from 1942 to 1945 and was discharged with the rank of Major. Following the war he received residency training at Germantown Hospital and at Jefferson Hospital. he practiced in Philadelphia until 1956. At that time he moved to Pottsville, Pennsylvania where he practiced until his death.

In addition to his professional positions Dr. Dasch found time to be a member of several organizations. He was Diplomate of the American Board of Surgery and Diplomate of the American Board of Thoracic Surgery. Also, he was a member of the Pennsylvania Thoracic Surgical Society, the American Association for Thoracic Surgery, the American Medical Association, the Pennsylvania State Medical Society, and the Philadelphia and Schuylkill County Medical Societies. Dr. Dasch was a Fellow of the Philadelphia Academy of Surgery and also a Fellow of the American College of Surgeons.

Dr. Dasch was Chief of Surgery at the Pottsville Hospital, and was a member of the staff of the Good Samaritan Hospital.

He was active in both hospital and community affairs and will be remembered for his positive moral and ethical standards, as well as for his personal warmth and enthusiasm.

Dr. Dasch died suddenly on August 13, 1966 of acute coronary thrombosis. He is survived by his wife Anne, his daughter Judith Anne, and son Frederick W. Dasch, Jr.—JOSEPH W. STAYMAN, JR., M.D.

Edward T. Crossan

1890-1966

EDWARD THOMAS CROSSAN was born in Wilmington, Delaware, July 23, 1890. He received his early education in the Wilmington School System. In 1908 he was graduated from Salesianum Prep School. He attended Georgetown University for one year and was graduated from the University of Pennsylvania School of Medicine in 1913. From October 1914 to January 1917, he served his internship and preceptorship under Doctor Astley Paston Cooper Ashhurst at the Protestant Episcopal Hospital.

On January 16, 1917 Doctor Crossan married Elizabeth Clark of Wilmington. Three days later the young married couple sailed to France for service with the American Red Cross Hospital in Neuilly Sur Seine under the command of Doctor James P. Hutchinson. The building was a new school converted into a hospital by replacing the desks and other school equipment with hospital equipment donated in September 1914 by the American Colony under the sponsorship of Mrs. Vanderbilt.

In April 1917 diplomatic relations were broken with Germany. The hospital which had been founded by the Americans in 1914 was taken over by the United States Government. In July 1917 the hospital was commissioned as the American Red Cross #1 and was staffed by American and French physicians. Doctor Crossan was commissioned as a First Lieutenant and Doctor Hutchinson was Chief of Surgery. This hospital became the proving ground for the new interns in the care of war casualties. Soon Pennsylvania Hospital, University of Pennsylvania Hospital, Jefferson Hospital and Johns Hopkins Hospital sent units to augment the service. In the spring of 1920, Doctor Crossan was transferred to the American Ambulance #3 in Paris. Upon his return to the United States in May 1920, he received his honorable discharge from the military service at Fort Dix, New Jersey.

When he resumed civilian practice, he was appointed to the Surgical Staff of the Episcopal and Orthopedic Hospitals as an associate of Doctor Ashhurst. He became Chief of Surgical Service "A" in 1932 and he served as Secretary of the Staff of the Episcopal Hospital for many years. During this period of time he had an opportunity to work with the outstanding orthopedic surgeons of the day, Doctor Bruce Gill, Doctor DeForrest Willard and Doctor Ashhurst. Many members of this Academy recall Doctor Ashhurst as the "watch-dog of the Academy." One can readily

see that a man of Doctor Ashhurst's scruples would choose as his associate a young surgeon of the caliber and integrity of Doctor Crossan.

Doctor Crossan was appointed to the Academy of Surgery in 1919. He delivered the Annual Oration of the Academy in 1929, and for many years he was Chairman of the Program Committee, a post which he cherished and to which he gave much time and thought in order to stimulate the best in surgery in the metropolitan area of Philadelphia.

Besides the Academy, he was a member of the Philadelphia County Medical Society, the Medical Society of the State of Pennsylvania, the American Medical Association, Fellow of the Philadelphia College of Physicians, the American College of Surgeons, taking an active part on the Committee of Traumà, the World Medical Association, The Founders Group of the American Board of Surgery, and the Military Order of Foreign Wars. As a member of the International Society of Surgery, he had already made plans to attend the 1967 Surgical Congress in Vienna.

He was Assistant Professor of Surgery at the University of Pennsylvania School of Medicine; Resident Surgeon of the Lumberman's Mutual Casualty Company. This company was very proud of him because of his honesty and fairness in the compensation cases. Integrity was his most outstanding characteristic. He hated any form of chicanery or deceit in either professional or social life.

He was a lecturer in Surgical Pathology and Applied Anatomy. The medical students enjoyed their clinical work at Episcopal Hospital because they had the opportunity to observe about 80 ward patients. They liked especially the careful and detailed handling of the fracture cases.

In clinical surgery he acquired a mastery of technique and judgment. He wrote well, talked well, and was fluent in foreign languages. As a disciple of Doctor Ashhurst he contributed several papers about general surgical subjects. Because of his keen scientific observation, he often caused controversy during this period by challenging some of the accepted methods of treatment such as the management of osteomyelitis. He was far ahead of his time in his knowledge of this malady. He was an advocate of early ambulation. He demanded strict discipline in the operating room, and was influential in introducing the color green there.

At the age of six Dr. Crossan made it known that he was interested in the medical profession; and with such determination, he was able to give to the profession unselfish service. He was fortunate in having an understanding and devoted consort who was always at his side. He had much admiration for the arts and music. Doctor and Mrs. Crossan were patrons of all the performances of the opera and the Philadelphia Orchestra. Many times they went together to enjoy a good concert in New York City.

He was an avid reader, and a collector of stamps, First Editions, Fine Binding, and Fore Edge. Be-

cause of his knowledge of foreign languages, travel was a joy. The theatre, music, books and travel were his forte. He was truly a scholar and a gentleman.

Upon his retirement from the practice of surgery he not only kept his interests in the cultural events of the city and attended the scientific meetings, but he also became a student of geology at the University of Pennsylvania. He was a member of the Philadelphia Society for the Promotion of Agriculture, better known as the "Farmers Club," an organization which dates back to colonial times. He became a breeder of livestock, and was interested in the processing of the end products.

On September 11, 1966, Doctor Crossan had an acute coronary, and after a short illness suddenly died. He lived according to the axiom of Sir William Osler, "It is better to die as a swinging gate rather than a rusty one."

The Academy of Surgery and Philadelphia medicine will remember this man as an individualist and forthright person who possessed self-reliance, resolution, patriotism and courage that will be an inspiration to younger men.—T. A. RANIERI, M.D. and JOSEPH T. BEARDWOOD, JR., M.D.

Stephen Dana Weeder

1896-1966

STEPHEN DANA WEEDER was born February 18, 1896 in Philadelphia, Pennsylvania. He attended Central High School and the University of Pennsylvania School of Medicine, from which he was graduated in 1917. His internship was deferred from 1917 to 1919 while he served in the United States Army. He spent 19 months in Europe and attained the rank of Captain in the Medical Corps. Following his discharge from the Army, he served a rotating internship at the Philadelphia General Hospital for 18 months.

Dr. Weeder then started on a distinguished career in surgery. He was appointed to the staff of both the Germantown and Chestnut Hill Hospitals and spent several years at the Pennsylvania Hospital. On many occasions, he spoke of his preceptors, Doctors William B. Swartley and Robert LeConte, and their influence upon him. In 1920 he began teaching at the University of Pennsylvania School of Medicine's Department of Anatomy, and held a position there until 1932. From 1942 to 1946 he was Clinical Associate Professor of Surgery at the Women's Medical College, and continued as Clinical Professor until 1949. At that time he was appointed a Clinical Professor of Surgery at the Jefferson Medical College. He continued his teaching of the Jefferson medical students until 1961.

Dr. Weeder was certified by the American Board of Surgery in 1938. He was appointed Director of the Department of Surgery of both the Germantown and Chestnut Hill Hospitals, and later served several terms as President of the Staff of these two institutions: twice at Germantown Hospital and four times at Chestnut Hill Hospital.

Of the many organizations of which he was a member, he felt the Philadelphia Academy of Surgery was the finest. He was a member of the Founder's Group of this Academy in 1928, and served as Treasurer from 1947 to 1960. He was elected to the Philadelphia College of Physicians, and served as a member of the Board of Directors of the Philadelphia County Medical Society from 1946 to 1950. He was a member of the American College of Surgeons and the American Medical Association.

Research was another important facet for Dr. Weeder. He spent considerable effort in the experimental production of regional enteritis and its relationship with mesenteric lymphadenitis. Later he showed his diversity by developing a Direction Finder for fractures of the femoral neck.

His writings and publications

were many and covered a wide area. He published two editions of Bundy's "Anatomy and Physiology". He also was an assistant editor in the 9th edition of Davis' "Applied Anatomy" revised by Dr. George P. Muller.

Dr. Weeder married Caroline D. Nixon on April 16, 1925. They had four children: two girls, Dorothy and Caroline, and two sons, Dana and Richard. Both of his sons are now in surgery. Dana finished his residency at the Germantown Hospital and is now serving with the United States Navy as a Lieutenant Commander in Viet Nam. Richard is completing his final year of surgical residency at the Geisinger Memorial Hospital in Danville, Pennsylvania.

Dr. Weeder was a great sportsman. He enjoyed squash in his earlier years and golf always. He was an enthusiastic member of the Philadelphia Doctors Golf Association and often said that he would rather play any sport than observe it. His greatest pleasure in life was sailing, or more accurately, yacht racing, and he never attained his fill of it.

One cannot conclude this memorium without recalling Dr. Weeder's great dedication to surgery, the hours he gave to teaching, to patients and to his residents. Time was never a factor in his desire to demonstrate and pass on to the younger men the basic principles of surgery. Likewise, basic principles in *all* of life were very fundamental to him. His emphasis of these principles to his associates and children left a mark that will never be forgotten.

Dr. Weeder was a devout Presbyterian, and prayer was always a segment of his life. He died quietly at home on October 3, 1966, leaving a family and many friends stronger by his integrity and fundamental ideals.—JAMES S. C. HARRIS, M.D.

Irvin E. Deibert

1893-1967

The news that Doctor Irvin E. Deibert had passed away at his winter home in Florida on January 5, 1967, came with great shock even though he had been ill the preceding months. His accomplishments in the field of surgery shall long be remembered. He was born September 19, 1893 in Camden, New Jersey. He grew up in Haddon Heights, New Jersey, and was graduated from the local high school in 1910. He did his undergraduate work at Temple and Princeton Universities, and was graduated from the Jefferson Medical School in 1917. He served an internship at the Cooper Hospital, Camden, New Jersey. He was a First Lieutenant in the United States Army in World War I. He took work at the Postgraduate School of Medicine of New York from 1920 to 1923. After a short period of general practice of medicine, he confined his work to the specialty of general surgery for the remaining years of his life.

He was first appointed the Chief Attending Surgeon of the Cooper Hospital and subsequently became Senior Surgeon until his retirement. He was Consulting Surgeon at the Zurbrugg Memorial Hospital, Riverside, New Jersey; Consulting Surgeon of the Bancroft School, Haddonfield, New Jersey; Surgeon to the Camden County Tuberculosis Hospital and Visiting Lecturer in Surgery at the Graduate School of Medicine, University of Pennsylvania. He was a member of the Camden County Medical Society, New Jersey State Medical Society, American Medical Association, New Jersey State Surgical Society, the College of Physicians of Philadelphia, Pennsylvania; The Laennec Society of Philadelphia; New Jersey State Medical School Commission; the Philadelphia Doctors Golf Association, The Racquet Club, the Riverton Country Club; Seaview Country Club, Pine Valley Golf Club; a Fellow of the American College of Surgeons, Diplomate and Member of the Founders Group of the American Board of Surgery, and a Fellow of the Philadelphia Academy of Surgery. He was former president of the New Jersey State Board of Health, The Camden County Medical Society; the Board of Managers of the Tuberculosis Hospital, Lakeland, New Jersey; and the New Jersey State Surgical Society.

He wrote many papers and gave many lectures in the field of surgery. He also gave the Annual Oration at the Philadelphia Academy of Surgery. He was very active with the Fracture and Trauma Committee of the American College of Surgeons, and an Examiner for the

American Board of Surgery. He was a man of great stature, and a leader in every society of which he was a member. He was not satisfied with mediocrity. He was a thinker, an inspiring teacher who gave generously of his time and energy to his students and to his associates. He gained a recognition and eminence in the field of surgery enjoyed by few men. To his wife, two daughters, son and many friends, his loss is great.—ROBERT A. COOPER, M.D.

L. Kraeer Ferguson

1897-1968

L. KRAEER FERGUSON, M.D., former Chairman, Department of Surgery, School of Medicine, Division of Graduate Medicine, University of Pennsylvania, and former Chairman of the Department of Surgery of The Woman's Medical College of Pennsylvania, died on Sunday, April 7, 1968. Dr. Ferguson was born in Caledonia, New York, but he spent most of his life practicing surgery in Philadelphia, Pennsylvania. As the son of a United Presbyterian minister, he considered the ministry as a career. During his enrollment at Westminster College in New Wilmington, Pennsylvania, however, he decided to study medicine. His grandfather, the Reverend Robert B. Ferguson, had been President of the college from 1884 to 1906. In December, 1917, while still a junior in college, he volunteered to serve in the Army Medical Corps, and was sent to France. He was awarded his A.B. degree in absentia from Westminster in June, 1918. Because his return from France was delayed after the war, he attended the Universite d' Aix-Marseille for six months. Upon his return from France in the summer of 1919, he matriculated at the University of Pennsylvania in the School of Medicine, with which he was associated throughout his career.

"Fergy" is reported by classmates to have had the best academic record in his class in medical school and was a member of the Alpha Omega Alpha and a social fraternity, Alpha Mu Pi Omega. As a student, he also belonged to the Hartzell Dermatological Research Society. He is remembered as outgoing and friendly, and very much liked by the other students, librarians, and teachers. Despite his air of nonchalance and his quickness at repartee, he was kind and helpful to those in need. He earned his M.D. degree in 1923, served his internship at the Hospital of the University of Pennsylvania in 1925, and, as recipient of the Agnew Fellowship in Surgery, completed his surgical residency training in 1928 as the first resident in the formal training program.

Dr. Ferguson then spent one year in Germany studying at the University of Frankfurt-am-Main. His high degree of verbal proficiency in German enabled him to translate the two-volume book, *Operative Gynecology*, by Dr. H. V. Pehan and Dr. J. Amreich into English. It was published in the United States by J. B. Lippincott in 1934 and was considered an authoritative text on the subject for many years. It is of interest that Dr. George Gellhorn of St. Louis, who wrote

the introduction to the English edition, is the father of the present Dean of the University of Pennsylvania School of Medicine.

In 1929, Dr. Ferguson returned to Philadelphia as a member of the surgical faculty at the University of Pennsylvania. Encouraged by his stimulating research efforts with Dr. Detlev Bronk in the Johnson Foundation, he published data about the nervous control of intercostal respiration. That same year, he was appointed Chief of the Surgical Outpatient Clinic at the Hospital of the University of Pennsylvania. From this experience, he wrote *Surgery of the Ambulatory Patient* (published in 1942), which was acclaimed as an outstanding text on the subject and is now in its fourth edition. He served for many years on the staff of the Philadelphia General Hospital, and was Chief of Surgery there from 1937 to 1955.

During World War II, Dr. Ferguson volunteered to serve in the Naval Medical Corps. As a member of the University of Pennsylvania Naval Unit, he was Chief of Surgery aboard the Hospital Ship Solace in the Pacific theatre of war. In the care of the wounded servicemen, his group compiled a record-low mortality rate from battle casualties. Of 4,039 patients treated on the ship, only seven died. Upon his return to the United States he was appointed Chief of Surgery at the U. S. Naval Hospital in St. Albans, New York, and was discharged from the Navy in October, 1945 with the rank of Captain in the United States Naval Reserve. During the remainder of his life, Dr. Ferguson maintained a keen interest in and provided strong support to Military Medicine, particularly as a consultant and lecturer in the Navy's Surgical Training Program.

Dr. Ferguson again returned to Philadelphia, and was appointed to the position of Clinical Professor of Surgery at the University of Pennsylvania School of Medicine. The following year, he was appointed Professor and Chairman, Department of Surgery, Woman's Medical College of Pennsylvania, and Professor of Surgery, Graduate School of Medicine, University of Pennsylvania. He held both of these positions until 1960, although he had recovered from a coronary occlusion in 1954. In 1960, he was appointed Emeritus Professor of Surgery, Woman's Medical College of Pennsylvania and Chairman, Department of Surgery of the Graduate School of Medicine of the University of Pennsylvania.

In 1962, at the time of his retirement from the position of Chairman of the Department of Surgery, Dr. Ferguson had partial paralysis of his left hand so that he felt it necessary to retire from his active practice. Because of his vast clinical experience, he was, nevertheless, frequently consulted for difficult cases by younger surgeons and continued to make teaching rounds at the Graduate Hospital of the University of Pennsylvania. In 1967, in recognition of the many years he had devoted to the study and practice of medicine at the University of Pennsylvania, Dr. Ferguson was named Emeritus Professor of Surgery of the School of Medicine, Division of Graduate Medicine, University of Pennsylvania.

In addition to his numerous lectures to students during the twenty years that he was Professor of Surgery at both the University of Pennsylvania School of Medicine and the Woman's Medical College of Pennsylvania, Dr. Ferguson was also coauthor of more than one hundred and fifty articles published in medical journals. These were based on his observations from his wide clinical experience and dealt with a diversity of topics such as carcinoma of the stomach, ulcerative colitis, regional enteritis, gastrointestinal hemorrhage, gastric resection, peptic ulcer, intestinal obstruction, and edematous pancreatitis. He became recognized as an authority for his contribution to gastrointestinal surgery. He wrote some of them in German. In addition to contributing chapters to medical texts, Dr. Ferguson wrote three books. Two of his books, *Surgical Nursing,* which is now in the eleventh edition and was published in its early editions with Dr. Eldridge Eliason with whom he received some of his early surgical training, and, *Surgery of the Ambulatory Patient,* are used extensively as textbooks in medical and nursing schools. His third book, *Explain It to Me, Doctor,* is designed for the layman and will be published posthumously in the fall of 1968. With William S. Blakemore, M.D., he was co-editor of the second volume of *Current Perspectives in Surgery* entitled *Current Perspectives in Gastroenterology,* which was published in 1967

Dr. Ferguson was a member of many medical organizations such as the American Medical Association, the Philadelphia Academy of Surgery, the American Gastroenterological Association, the American College of Surgeons, the American Surgical Association, the Bockus International Society for Gastroenterology, the American Society for Experimental Pathology, Sigma Xi, the College of Physicians of Philadelphia, the Federated American Society for Exploratory Biology, the Pan Pacific Surgical Association, the International Surgical Group, Society International de Chirurgie, Sydenham Coterie, and the Surgeons' Club. He served as officer in a number of these organizations. In 1961, his former residents established the L. Kraeer Ferguson Surgical Society as a tribute to him. He was named Honorary Professor of the University of Santo Domingo in the Dominican Republic. In 1960, he received the Alumni Achievement Award from his alma mater, Westminster College, for distinguished accomplishment. In his honor, Woman's Medical College of Pennsylvania has established the L. Kraeer Ferguson Visiting Professorship to bring guest professors to the College, and because of his abilities and interest in medical writing, the University of Pennsylvania School of Medicine is establishing a memorial fund for young physicians to attain greater competence in medical writing.

Dr. Ferguson was a meticulous clinical surgeon, excellent teacher, and friend and physician for whom students and patients felt deep loy-

alty. Most of all, he was a dedicated member of the medical profession. He had a facility with words that is rare among men in medicine. He wrote with such clarity of expression that, despite his numerous other achievements, his examples of medical writing may be the accomplishment by which he will be most remembered by his profession.—WILLIAM S. BLAKEMORE, M.D.

Calvin Mason Smyth, Jr.

1894-1967

CALVIN MASON SMYTH, JR., was born in Philadelphia, August 24, 1894, the son of Calvin Mason Smyth and Margretta Slaughter Smyth. He was the eldest of four children. Educated in Philadelphia, attending Germantown Academy and earning the B.S. degree from the University of Pennsylvania, he was graduated in the famous class of 1918 from the Medical School. Many members of that class attained professional rank in various fields of medicine. His uncle, Henry Field Smyth, was Professor of Hygiene at the Medical School.

His marriage to Madeline Williams brought forth two illustrious sons: Calvin Mason Smyth, III, of the State Department of the United States, specializing in the Affairs of Latin America and Far East Relations, and Thomas Williams Smyth, Vice-President of Smyth, Akins & Lerch. Both young men were wrestling champions in the Interacademic League. Five grandchildren are in the lineage.

After service in the United States Army Medical Corps in World War I, he was an intern and later surgical resident at the Hospital of the University of Pennsylvania under the professorship of John B. Deaver. In 1920 he was appointed Instructor in Surgery at the Medical School and during the same year was appointed to the original faculty of the Graduate School of Medicine as Instructor in Surgical Research. He progressed through academic levels to the rank of Professor in 1952 and Emeritus Professor in 1961. In his formative years, he was Professor of Physiology at the Philadelphia College of Pharmacy. His vast knowledge of the Polyherbelists was fascinating.

Associated with Doctor Damon B. Pfeiffer, Doctor Smyth was coauthor of many surgical treatises. He was affiliated with many hospitals in the metropolitan area of Philadelphia. From 1919 he served at the Methodist Hospital and as Chief of Surgery from 1932 to 1950. He was also on the medical staff at the Woman's Hospital. In 1953 he became Surgeon-in-Chief of the Abington Memorial Hospital and Director of the Pfeiffer Clinic from which he retired in 1963.

He was Consultant in Surgery to the United States Naval Hospital, Philadelphia, and a Consultant to the Surgeon General of the Army. He made a survey of the medical facilities of the United States Army in Europe in 1953 and in the Asian Theater of Operations in 1956. He was retired with the rank of Brigadier General in the United States Army Medical Corp Reserve.

He was a member of the Phila-

at G.A. 1903 - 1912
Class of 1912

delphia County Medical Society, the Medical Society of the State of Pennsylvania, the American Medical Association; a Fellow of the American College of Surgeons, American Surgical Association, Philadelphia Academy of Surgery, Philadelphia College of Physicians, Societe Internationale de Chirurgie (Brussels), American Association of University Professors, Eastern Surgical Association and Society for Surgeons of the Alimentary Tract. In addition Doctor Smyth was a member of the Society of the Sigma Xi, Phi Kappa Psi Fraternity (College) and Phi Alpha Sigma (Medical), Society of the Friendly Sons of St. Patrick, and the Union League of Philadelphia.

Doctor Smyth edited many books on surgery, including a revision of Bickham's "Operative Surgery," 1932, Vol. VIII; and "Surgical Treatment," three volumes by Warbasse, 1937. Also, he was the author of numerous chapters and many articles in surgical literature. His work and duties led him directly to his second consorte, Marguerite Schlegel, whom he affectionately called Martha. Her cheerful performance of her chores reminded him of the biblical counterpart. This charming lady prepared the voluminous manuscripts and was his constant companion at meetings, lectures and on his other tours of duty.

When the American Board of Surgery was formed in 1937, Doctor Smyth was a founder and active in the organization and preparation of the first examinations. He was closely associated with Doctor J. Stewart Rodman in the Secretarial Office, becoming vice-chairman 1951-53. This is an important part of the History of Surgery in the United States. The many Diplomates of the Board who have gone through the rigorous examinations for certification will recall their state of anxiety. Despite the fact that he examined more young surgeon candidates than any other member of the Board, his great tact and understanding in dealing with their problems brought admiration for his unflinching honesty and fairness. His efforts were labors of love and he was loyal to the ideals and objectives of improving surgical training in the United States.

As a Fellow of the Academy of Surgery, he faithfully attended all its meetings. He was Secretary for many years and progressed to every office culminating in the Presidency from 1950-52. He stimulated debate and controversial dialogue. His discussions were eloquent, well-worded and concise, favoring constructive criticism. On December 4, 1944, he gave the Annual Oration, "Graduate Surgical Training in America."

As a member of the original faculty of the Graduate School, he became the nonpareil in making the transition to teaching graduate students in contrast to undergraduates. The two-hour round table conferences were well organized with teacher-student participation in all phases of the profession. He emphasized the importance of not deviating from the routine in the care of patients regardless of their social status. While associated with Doctor Joshua E. Sweet in the Research Department, he designed the operating table with a center trough for the use of animals in experimental surgery.

Following the attack on Pearl Harbor, the Surgeon General sent hundreds of neo-surgeons to the Graduate School for a six-week intensive course, in which Doctor Smyth and his associates participated without honoraria.

The early years of the Twentieth Century between the two World Wars saw a great change in undergraduate education, a growing improvement in graduate medical education, and the evolvement of specialty training and branch specialties. It was during this era that Doctor Smyth and many senior members of the Academy were architects in molding new practices in the decorum of the profession and more cordial relationships in sharing medical and surgical management. This was the period in which emphasis was placed in making the patient "safe for surgery." With his efforts to insure that the science and the art of Surgery should adjust to the changes in social relationship, he still kept the common touch. It was a pleasure to watch Doctor Smyth, a skillful and merciful surgeon, examine and gently palpate the abdomen of an acutely ill patient.

In 1935, he was the medical consultant for the State of Pennsylvania on the Workmen's Compensation Laws, which brought uniformity in compensation to the laborers for injury in the line of duty. In 1955, Governor George Leader appointed Doctor Smyth as the first M.D. to the State Board of Examiners of Osteopathic Physicians. He accepted the assignment in order to contribute enlightenment in this competitive profession. He organized the "modus operandi" of the examinations and raised the standards of the future practicing physicians.

In his youth he was associated with Edward Everett Horton and William Harrigan on the stage which resulted in a lifelong friendship. In college he was coxswain of the Varsity Crew, as well as an accomplished bass-violinist. He proudly displayed his active Local 77 Musicians Union Card. A masterful raconteur, he was the stellar attraction at the Annual Meeting Between the New York and Philadelphia Surgeons. He exhibited the highest faculty of the intellect and the finest medium for communication.

His death, on June 18, 1967, was the sequelae of an acute myocardial infarction, often called the "physicians' malady."

He led a full life. Devoted to his work and his scientific accomplishments, he also enjoyed the pleasures of life—good company, music, and conversation. He was a great teacher, an investigator of merit, and a clinical surgeon with skill, sympathy, and warmth toward patients.

The dead live in the memory of the living. Doctor Smyth, as a believer of body and soul, left us the heritage: Live and be prepared to die tomorrow; work and learn as to live forever.—T. A. RANIERI, M.D.

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, Calif.

1935 "The Therapeutic Problems in Bowel Obstruction."—Dr. Owen H. Wangensteen, 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.

1962 "The Pathogenesis of Gastric and Duodenal Ulcers."—Dr. Lester Dragstedt, Gainesville, Fla.

1967 "Cholesterol Metabolism and Atherosclerosis as Influenced by Partial Small Bowel Intestinal Exclusion."—Dr. Henry Buchwald, University of Minnesota, Minneapolis, Minn.

*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
1882 D. Hayes Agnew
1883 William Hunt
1884 John H. Brinton
1885 John H. Packard
1886 R. J. Levis
1887 J. Ewing Mears
1888 C. B. G. deNancrede
1889 John B. Roberts
1890 DeForest P. Willard
1891 William G. Porter
1892 T. G. Morton
1893 C. W. Dulles
1894 W. B. Hopkins
1895 John B. Deaver
1896 James M. Barton
1897 Thomas R. Neilson
1898 O. H. Allis
1899 William J. Taylor
1900 None
1901 H. R. Wharton
1902 J. M. Spellissy
1903 R. G. LeConte
1904 G. G. Davis
1905 J. Chalmers DaCosta
1906 Richard H. Harte
1907 Edward Martin
1908 Charles H. Frazier
1909 John H. Gibbon
1910 Astley P. C. Ashhurst
1911 John H. Jopson
1912 George C. Ross
1913 William L. Rodman
1914 Alfred C. Wood
1915 Frances T. Stewart
1916 Edward B. Hodge
1917 J. Edwin Sweet
1918 None
1919 None
1920 John G. Clark
1921 J. Torrance Rugh
1922 George P. Muller
1923 Walter Estell Lee
1924 Robert H. Ivy
1925 John Speese
1926 Damon B. Pfeiffer
1927 Emory G. Alexander
1928 Edward J. Klopp
1929 Edward T. Crossan
1930 J. Stewart Rodman
1931 Hubley R. Owen
1932 Eldridge L. Eliason
1933 George M. Dorrance
1934 DeForest P. Willard
1935 A. Bruce Gill
1936 Alexander Randall
1937 Henry P. Brown, Jr.
1938 Isidor S. Ravdin
1939 John B. Flick
1940 Francis C. Grant
1941 William Bates
1942 S. Dana Weeder
1943 Frederick A. Bothe
1944 Calvin M. Smyth
1945 Adolph A. Walkling
1946 John H. Gibbon, Jr.
1947 L. Kraeer Ferguson
1948 Jonathan E. Rhoads
1949 Francis C. Grant
1950 W. Emory Burnett
1951 J. Montgomery Deaver
1952 Herbert R. Hawthorne
1953 Julian Johnson
1954 George Rosemond
1955 William H. Erb
1956 George Willauer
1957 Irvin E. Deibert
1958 Orville C. King
1959 James R. Jaeger
1960 H. Taylor Caswell
1961 Donald R. Cooper
1962 John Y. Templeton, III
1963 Edwin W. Shearburn
1964 Henry P. Royster
1965 C. Everett Koop
1966 Kenneth E. Fry
1967 Thomas F. Nealon, Jr.
1968 R. Robert Tyson

Annual Oration for 1964

THE MANAGEMENT OF BURNS*

HENRY P. ROYSTER, M.D.

I am indebted to Dr. Jonathan Rhoads for the honor of presenting the Annual Oration before the Philadelphia Academy of Surgery. The topic, burns, seems timely since our progress in that field is questionable because the successive methods of treatment have not always fulfilled enthusiastic predictions.

Analysis of technics of burn therapy is an impossible task because of the wide variation in burns. Also, the unusual clinical statistical methods often fail to show the real facts. Bull and Squire[1] and others[2,3] have stated that mortality is the only criterion which lends itself to the objective analysis of therapy. In spite of the wide variety of treatment applied to burn patients over the past 100 years, Moyer[2], in particular, has shown a similarity of rates of mortality. When applied to modern therapy, probit analysis has revealed that one type of method has little advantage over the other. Further, this statistical method, when graphically presented, furnishes a mortality contour plot which is useful in predicting with great accuracy the chance of a fatality of a given patient, particularly with reference to age. Familiarity with such a chart may serve to dull or excite the energies of the attending physician depending on his scientific curiosity. The lesson to be learned, the theme of this paper, concerns overtreatment of the severely burned patient in the face of a static mortality rate.

*Delivered December 7, 1964.

MATERIAL

The material consists of patients observed over the past ten years at the Hospital of the University of Pennsylvania and the Graduate Hospital of the University of Pennsylvania. The accompanying chart graphically illustrates the data concerning the extent of surface area of burn, the age and the rates of fatality in the various groups. The rate of mortality increases with the age of the patient and the amount of surface area burned.

The treatment of the patients varied from simple vaseline gauze occlusive dressings on outpatients to the exposure method. "Early" excision, during the first week after the occurrence of the burn was rarely performed. Appropriate chemical formulae for administration of water, colloids and electrolytes were employed according to the preference of the surgeon in charge. Removal of necrotic tissue was accomplished by various methods, as was subsequent split skin grafting.

No particular method of treatment was proved to be superior. Initial care of the burns was of good quality in all cases. Care in the "infective" phase and in the stage of skin grafting varied in intensity. Success was thought to be related more directly to constant, detailed attention by physicians and nursing staff than to the methods employed. Low intake of food, poor local care of wound and lack of a comprehensive plan for skin grafting were the areas in which good standards were not maintained.

FLUID BALANCE

We contend that strict adherence to formulas, in an effort to maintain the urinary output at a satisfactory level, may lead to an excessive intake of fluids resulting in the overloading of the vascular system. Hardy and others[4] have found that patients with burns often retain urine for the first few days after the burn and then later excrete it. In several patients, retention of fluid has been associated with cardiac failure and pulmonary edema.

From studies at the Meyer Memorial Hospital in Buffalo, New York, Eagle[5] has supplied data to support the view that these early changes in retention of fluid are transient and can be largely ignored if adequate amounts of fluid, salt and colloid are given. He decries the use of the standard formulas (Evans, Brooke) by saying that they failed because the patients did not handle the new situations created by the treatment. He therefore labeled as iatrogenic the electrolyte and fluid balance problems in the early phase of burn treatment. Eagle said that for 48 hours as much as 15 per cent of body weight of fluid is sequestered with protein and electrolytes as edema fluid to be released later. The main problem is the amount of fluid required to maintain the volume of blood in order to prevent shock without producing an overload later when fluid reenters the blood stream.

Eagle said that *urine output* is the important gauge of fluid intake, but that "free water" is required for the kidney to excrete. His suggestion is to dispense with any plan to give a certain amount of water, electrolytes or protein at specific times since there is no way that such a schedule can be determined. He devised a mixture of 2 per cent protein and 0.67 per cent saline in 5 per cent dextrose and water by mixing readily available stock material as follows:

1 unit of plasma
1 unit of 5 per cent in water
1 unit of 5 per cent in PSS

I.V. flow is recommended to be 20 ml. per hour per per cent of body surface burned. Urine output is expected to vary between 20 and 30 ml. per hour.

How, then, to manage this phase of burn therapy? In broad terms, in the absence of a specific toxin for other substance elaborated as a result of the burn process, the objective is treatment of the symptoms of actual or impending shock rather

than a striving to bring into line the abnormal laboratory findings. Eagle's method of fluid administration leads to a proper balance of intravenous therapy with a minimum of confusion among the burn team and a maximum of clarity in record keeping. Blood transfusion may be employed according to the patients' needs.

LOCAL WOUND CARE

Little remains to be said of the immediate treatment of the burn wound. The oscillating waves of interest continue in one or another of the wound applications, and in the exposure or the occlusive technics. In our own experience, shortly after the report by Wallace[6], we relied on the exposure method. Recently, we have had doubt about the efficacy of this method, especially its ability to control local infection and septicemia. These suspicions coincide with an increasing incidence of septicemic death in which some patients survived the toxemic phase only to succumb to infection. We are considering returning to the use of local sulfonamides as an initial dressing. A case in point is that of a 7-year-old girl with third degree burns over 35 per cent of the trunk and lower extremities who was treated by the exposure method. First, severe constriction and arterial blockage of the legs were relieved by multiple incisions. Second, necrotic tissue was excised. The necrosis continued to advance, however, presumably because of the infection, until death occurred in septicemia 12 days postburn.

Practical advances in burn therapy which have proved helpful follow: The burn team concept is early excision of necrotic tissue in the first two to four weeks; allografting; return to vigorous local therapy (antibiotics, baths); maintain very high caloric intake (up to 5000 calories per 24 hours). We have considered as superfluous and overburdening to the patient the following:

(a.) Cleansing of the early burn wound when it is more likely to be sterile than at other times;
(b.) overuse of blood and its substitutes in the first 3 days postburn with the sequela of increased viscosity;
(c.) disturbance of the patient by too frequent attention by medical and nursing staffs;
(d.) reliance on exposure method;
(e.) too many visits by family;
(f.) overemphasis on fever, perhaps prompting the surgeon to modify treatment on that basis alone.

PREPARATION FOR SKIN GRAFTING

The most exacting and difficult part of the treatment of severe burns is the management of the patient undergoing skin grafting. The burn team must function as a working unit even more closely than in the early days after the burn injury. The patient whose life is saved by 24-hour vigilance right after the injury should not lose the interest of the staff in the protracted reparative phase. A rigid schedule must be enforced. The efforts of the nursing, anesthesiology and medical staff must be utilized in carrying out a coordinated schedule. The following plan for the preparation of the granulating wound is submitted for use after the necrotic tissue has been removed.

1. Dress under light anesthesia at 8:00 a.m., two or three times a week as needed.
2. Use no preoperative medication.
3. Excise necrotic tissue when the demarcation clearly shows.
4. Graft each area as it becomes ready.
5. Splint properly.

This plan is usually unsuccessful from the lack of a method for the reconstruction, from shunting the patient to a low priority on the operative schedule, and from a failure to maintain sufficient nutrition orally or by nasogastric tube.

TABLE 1

Degree of Burn	Age	#of Patients	Deaths	Per Cent of Mortality Per Group
0-15%	0-10	26	---	
	10-50	28	---	1.5%
	Over 50	13	1	
16-30%	0-10	8	1	
	10-50	9	---	18%
	Over 50	11	4	
31-45%	0-10	1	1	
	10-50	1	---	60%
	Over 50	3	2	
46+%	0-10	1	---	
	10-50	5	5	99%
	Over 50	5	5	
	Grand Total:	111	19	17%

Finally, in closing, I might add that quality care of a burn patient consists of detailed attention to all phases of treatment. Too often, too much is done in the first days after the burn and not enough in succeeding days. In this discussion, selected parts of the problem are covered, and the significance of the report lies more in what was omitted than in what was included, as in separating wheat from chaff.

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Annual Oration for 1965

THE MANAGEMENT OF ATRESIA OF THE ESOPHAGUS:*

Pacemaker in the Surgery of the Newborn

C. EVERETT KOOP, M.D., Sc.D.

In the surgical care of children, no group of lesions presents a challenge equal to the management of those lesions of the newborn which are incompatible with life, but amenable to surgical correction. Although several of the congenital anomalies present long-term problems in rehabilitation or technical problems which require immediate solution, none can equal atresia of the esophagus for the complexity and variety of factors associated with survival.

Indeed, the record of a given institution is an indication of its understanding, both historically and at present, of the need of radiology, biochemistry, anesthesiology and dedicated nursing care as ancillary support to the pediatric surgeon.

Mindful of the difficulties a new specialty faces in growth and development, I selected as a subject for this oration the management of atresia of the esophagus with the hope that you might regard it as the pacemaker in the development of neonatal surgery.

*Delivered December 6, 1965

An infant born with atresia of the esophagus complicated by pneumonia and prematurity, which is also a life-threatening anomaly, presents a series of problems capable of humbling the most competent of surgeons. This report on the management of 249 cases of esophageal atresia at The Children's Hospital of Philadelphia will focus attention on those factors in the management which affected survival. In order to make this report meaningful, three five-year periods will be compared. The first successful primary end-to-end anastomosis of the esophagus was carried out in our clinic in May 1948. From January 1, 1950, through December 31, 1964, 220 patients, whether dead on arrival or successfully managed were presented for treatment and are included in the report. As of April 1, 1965, a follow-up has been obtained on each of these patients. Autopsies were performed on 86% of those infants who died.

FREQUENCY

Seasonal and geographic variations have stimulated studies in epidemiology[41,42]. There are significant, but as yet, inexplicable variations in the seasonal incidence and seasonal mortality in our own series. On one occasion, we saw seventeen atresias of the esophagus within twenty-one days and the majority of these came from the same geographic area of Pennsylvania.

The frequency of atresia of the esophagus is stated to vary from 1 in 800 to 1 in 12,000[30]. A careful analysis of neonatal statistics shows that an incidence of 1 in 3,300 represents a fair estimate.[31] Sixty per cent of our patients were males. On only one occasion were two children in the same family afflicted with the same anomaly. Ten pairs of siblings have been reported to have esophageal atresia.[32,33,34]

CLASSIFICATION

An entity as complicated as atresia of the esophagus defies reasonable comparison of cases unless they are divided into well-defined groups. Comparison of mortality and morbidity statistics from one series to another is also meaningless unless the comparison is between strictly categorized groups. We categorized our cases by body weight, the presence of associated anomalies, and the presence of severe pneumonia or hyaline membrane disease. The latter diagnosis is used only when demonstrated at autopsy.

The premature infant is one under five pounds. Associated anomalies have been divided into three groups. Severe anomalies are those which are immediately incompatible with life and could lead to the death of the infant within the operative period of thirty days. Major anomalies are those which would be incompatible with life, but do not necessarily lead to the death of the patient within thirty days. A combination of several major anomalies could put the patient into the severe group. Mild to moderate anomalies are those which are not in the other two groups and which should have very little to do with the outcome of the surgical procedure. We have used a modification of Waterston's classification[1] of pneumonia by adding to it the microscopic diagnosis of hyaline membrane disease, which cannot be called a congenital anomaly. X-ray opacification of one lobe of the lungs is called moderate pneumonia. Changes in both lungs or opacification of the whole of one lung is called severe pneumonia. A patient having x-ray opacification of one lobe and symptoms of marked respiratory distress such as cyanosis, retractions, or tachypnea was put in the severe pneumonia group.

Severe anomalies were picked first so that severe pneumonia in the presence of a severe anomaly would be categorized as a severe anomaly. Grouping into various categories was easy except for certain combinations of cardiovascular defects which tended to escalate the risk.

ANATOMICAL VARIETIES OF ESOPHAGEAL ATRESIA

Any anatomical classification of esophageal atresia depends upon some knowledge of the embryology

of the anomaly. In early life, the trachea and esophagus start out as a common tube[43]. The incomplete separation of the esophagotracheoseptum, whether spontaneous or as a result of pressure from aberrant vessels, results in an atresia with or without a tracheoesophageal fistula.

Since anatomic explanation seems to be required to assure intersystem communication, we have analyzed our cases anatomically rather than numerically[35] or alphabetically[10,13]. The incidence of esophageal atresia with tracheoesophageal fistula to the distal esophageal segment was found to be 86% in our cases and agrees closely (86.5%) with the results of the survey conducted by the Surgical Section of the American Academy of Pediatrics.[2] Usually, the two portions of the esophagus are separated for a variable distance, but in one half of our patients with this common variety, the ends of the esophagus were in partial contact. An airless abdomen is usually thought to indicate the absence of a tracheoesophageal fistula, but it can also occur when the fistulous tract is blocked with a mucus plug, as it was in several of our patients. Esophageal atresia without a fistula was found in 6% of our patients. Other anatomical varieties are rare, but important to discover inasmuch as the highest mortality rate is associated with them. Two anatomical variations which have never been reported elsewhere were found in our series. One was with a duplication of the proximal esophagus and the other was one with several duplications of the lower esophagus. Absence of the entire esophagus is extremely uncommon and of no clinical significance since it occurs only in monsters.

Five varieties of the esophageal atresia which have been reported in the literature were not seen in this series.

DIAGNOSIS AND SYMPTOMATOLOGY

Polyhydramnios is the first warning sign of the possibility of high intestinal obstruction in the developing fetus.[4,5] Excessive liquor accumulates most consistently in states which render the fetus mechanically or neurologically incapable of either swallowing or absorbing amniotic fluid. Anencephaly is the most common cause of polyhydramnios and is followed by esophageal atresia and other high intestinal obstructions. Polyhydramnios was present in 17% of our cases of esophageal atresia with a fistula, but the incidence in infants without a fistula jumped to 57%. Often obstetrical histories were not available to us so these figures probably represent a lower incidence than is actually the case. Scott[3] found that twelve of their thirteen patients with esophageal atresia had a history of polyhydramnios. The single exception had a double fistula which provided a route for the swallowed liquor to pass into the lower intestinal tract from where it would be absorbed. Although we feel that the passage of a nasogastric catheter should be a routine diagnostic procedure in all neonates, this procedure should at least be carried out in all infants born to mothers with polyhydramnios. One in ten to twelve instances of polyhydramnios is estimated to be due to esophageal atresia.[3,4]

Immediately after birth, the most common sign in esophageal atresia is an increase of mucus in the nose and mouth. This increase can be accompanied by choking, coughing, cyanosis, apnea and other signs of respiratory distress. Mortality is increased when cyanosis (60%) or apnea (64%) have been present, probably because of other factors such as prematurity and associated anomalies.

In our series, a delay of 48 hours is making the diagnosis increased the operative mortality to 57% as opposed to the over-all operative mortality of 41%. Severe associated anomalies are found less frequently in the group diagnosed late (15%) as compared to the whole series (21%). Infants with obvious anomalies appear to be diagnosed early while babies with only esophageal anomalies are diagnosed later. We have for years advocated the use of a catheter in making the diagnosis of esophageal atresia. A #10 radiopaque, red rubber catheter inserted into the blind pouch of an infant suspected of having an atresia of the esophagus will coil up, usually at the level of T-3, in such a way as to produce an unquestionable diagnostic sign or either the PA or lateral film of the upper thorax. Such films should include the abdomen as well since the presence of gas in the stomach and beyond indicates the presence of a tracheo-esophageal fistula. Rarely, a second alimentary tract obstruction may also be shown. We have never been misled into operating unnecessarily on a baby with a coiled catheter in his esophagus.

In this series, radiopaque contrast material (hereafter referred to as dye) was used in making the diagnosis of esophageal atresia in 83 patients. The use of radiopaque contrast material is dangerous and usually unnecessary since it significantly increases the mortality in esophageal atresia. It is necessary only in the diagnosis of the unusual types of esophageal atresia. From the records available to us, distinguishing among barium, water soluble, or oil soluble contrast material was in many cases impossible. Most radiologists feel that the use of small amounts of contrast material is safe in their hands. X-rays showed, however, that 43% of patients with a dye study who were referred to us had aspirated dye into their lungs. The incidence of pneumonia (80%) was twice as high in the dye group as in the entire group (44%). The incidence of severe pneumonia (31%) was three times as high in the dye group as in the nondye group (9%). The mortality in the dye group was 51% as opposed to 31% in those patients in whom dye had not been used. This difference is statistically significant. Although a healthy baby may tolerate this insult to his respiration, the margin of safety in one with severe anomalies is small. This small margin is illustrated by a mortality of 86% of patients who had a severe anomaly and received dye as opposed to a mortality of 48% of patients who had a severe anomaly

but received no dye. Oily contract materials are probably more harmful than barium or aqueous solutions because some neonates cannot swallow oil without tracheal contamination. De Carlo[28] has shown that 13% of neonates given a swallow of iodized oil on the first day of life aspirate it into their lungs.

TRANSPORTATION

Temperature control and prevention of aspiration should be the two factors foremost in the mind of the person transporting an infant to a pediatric center. A history of the patient and any x-rays already taken should accompany the infant. A trained attendant should accompany the baby in order to keep him in the controlled environment of an incubator or at least wrapped in a blanket. The pharynx should be aspirated every fifteen to thirty minutes with a naso-esophageal catheter which should have been accurately placed in the bottom of the blind proximal esophageal pouch. If a gastrostomy has already been performed or a chest tube has already been inserted, they should be aspirated periodically as well. Oxygen should be available to those babies who require it. Of eight babies in this series who were admitted with a temperature under 96°, seven died. The mechanism of this added metabolic stress of cold is poorly understood, but increased energy expenditure, the increased ratio of surface area to body weight, and the absence of subcutaneous tissue undoubtedly play important roles. Buttow[6] and Silverman[7] have carried out valuable studies showing significantly increased survival in patients who were maintained at a normal body temperature. The mortality rate for babies transported within the Philadelphia area was 34% while those who came from more than 10 miles away had a mortality rate of 40%.

PROCEDURES ON ADMISSION

On admission, the patient is examined by an experienced physician. Naso-esophageal catheter and endotracheal aspiration is carried out not only to clear the trachea of secretions, but also to obtain material for cultures. Thick tracheal secretions accumulate rapidly especially in infants in whom dye has been used in making the diagnosis and even in babies less than 24 hours old. An effort to ascertain the duration of labor, premature rupture of the membranes, anoxia and fetal distress should be made since these are the conditions that predispose the body to pneumonia, septicemia, and a bleeding diathesis. Regardless of the patient's history, we routinely administer Vitamin K, Vitamin C and antibiotics and suggest that they also be administered in the hospital of birth before the patient is transported.

A survey of tracheal cultures during the last five years shows a predominant gram negative organism, especially in the pulmonary tree and the blood stream. For this reason, our routine antibiotic coverage has been altered to procaine penicillin (100,000 units i.m.) and kanamycin (10 mg. per lb.)[8] in divided doses every 12 hours per day. Such therapy does not exceed five days. Antibiotics are frequently changed according to the sensitivity studies on cultures and the response of the patient. We believe that such predictive therapy is strongly indicated in neonatal surgery. If we wait until the clear-cut, culture-proven septicemia occurs, reversal is almost impossible with our present drug therapy.

Before surgery, a Replogle* sump catheter is placed in the upper esophageal pouch and the patient is placed in the head-elevated position in a warm, humidified Isolette in a neonatal intensive care unit. Blood is typed and cross-matched and a complete blood count and urinalysis is obtained. If the hemoglobin is above 15 Gm./100 ml., plasma is used initially rather than blood during the operative procedure. Preoperative medication is confined to 0.15 mg. of Atropine.

The mortality is higher in those patients operated upon in the first 24 hours of life. An analysis of the cases operated upon in the first day of life shows this statistic to be associated with the incidence of both prematurity (53%) and severe congenital anomalies (53%). Their incidence is twice as high as that found in the series as a whole.

Although we feel that operation should not be delayed unnecessarily, we do not operate on these infants in the middle of the night unless really unusual circumstances prevail.

*—Aloe Medical Division of the Brunswick Co., St. Louis, Missouri.

Although individual cases seemed to indicate that lengthy operations were not to the patient's benefit, the length of operation is apparently not significant in achieving survival in this series. We have on occasion completed division of the tracheo-esophageal fistula and end-to-end anastomosis of the esophagus in less than one hour, but a period twice as long is more usual.

PRIMARY OPERATIVE PROCEDURES

Because induction with a bag and mask may force anesthetic gases and oxygen into the stomach, we prefer to do endotracheal intubation before the induction. We usually employ cyclopropane through a closed system with a CO_2 absorber. A cutdown is placed in the saphenous vein and the infant is placed on a mattress* for regulation of body temperature.

There are remarkable differences in surgical techniques as practiced by experienced surgeons in the approach to the mediastinum, the technique of division and closure of the tracheo-esophageal fistula, and in the anastomosis of the two ends of the esophagus.

After the first 26 patients in this series, we used the transpleural approach rather routinely since we thought that it gave better exposure, provided easier dissection of the lower esophagus and a shorter operating time. We acknowledge that the extrapleural approach provides less trauma to the lungs, perhaps demands the use of less anes-

*—Gorman-Rupp Industries, Inc., Bellville, Ohio.

thesia, gives a more quiet operative field and is safer if a leak develops. In regard to the latter, we have been using an extrapleural drain[9] for almost four years which is placed in a tunnel from the posterior margin of the wound under the pleura to a site in the mediastinum near the anastomosis. In several patients in whom a leak at the anastomosis has occurred postoperatively, no empyema has developed when this drain was in place.

Multiple ligation of the fistula[33,37] without division led to recanalization in one of our early patients. Since that time we have almost routinely divided the fistula and closed the trachea by a double running suture of #5-0 silk. Care must be taken to prevent leaving too much esophagus attached to the trachea on the one hand or causing a narrowing of the trachea by excision of too much esophagus at the site of the fistula on the other. We have made no effort to interpose a pleural flap[13] or a segment of azygos vein to prevent recurrence of the fistula. Hollinger [14] reports that in 11% of patients tracheal narrowing occurred at the site of the fistula closure because of inversion of the edges, granuloma or too tight a closure. He noted a diverticulum from the residual esophagus remained on the trachea in 5% of the patients examined. We have had only one patient in whom tracheal narrowing was thought to be present at the site of fistula closure. It was found at autopsy. Although we often attribute a typical postoperative hacking cough to a residual pouch left on the trachea, we have never had to operate because of it nor have we found chronic lung disease to be a problem in any of our patients in long-term follow-up now well over fifteen years in some patients.

Following the closure of the tracheo-esophageal fistula, the distal esophagus is dissected as much as possible to give adequate length. In general, however, this dissection is kept to a minimum. Tissue forceps are never used to pick up the esophagus and all manipulation is done either with a suture needle or a plastic hook. Culture is taken from the site of division of the fistula if, for any reason, an endotracheal specimen has not been obtained preoperatively. Before anastomosis, the proximal end of the lower esophagus is trimmed appropriately and the anastomosis carried out by simple through and through interrupted sutures of #5-0 silk on an atraumatic needle. Before the anastomosis is completed, a #5 polyethylene nasogastric feeding tube is inserted by the anesthetist through the anastomosis into the stomach. This tube is securely taped in place and is never put on suction.

Although 40% of our patients underwent Stamm gastrostomy during some phase of their operative management, we feel its routine use[11,12,36,48] is not necessary and certainly is not without complication[2,38]. Two of our deaths were due to gastrostomy.

As few sutures as possible are used to perform the anastomosis adequately. The usual number is about twelve to fourteen.

We test the adequacy of the closure of the fistula by putting saline in the mediastinum to see if there is an air leak. We do not test the tightness of the esophageal anastomosis as Sandblom reported by injecting saline into the lumen[46].

STAGED PROCEDURES

As early as 1913, Richter[15] proposed a transpleural ligation of the tracheo-esophageal fistula and a gastrostomy to leave the upper esophageal pouch in place for use in the end-to-end anastomosis of the esophagus. Modifications of this procedure were tried, but only in 1940 did Ladd[17] in Boston and Leven[18] in Minneapolis perform the first staged procedure which resulted in a living patient. When the first successful primary end-to-end anastomosis of the esophagus was performed in March, 1941, by Haight[16], the staged procedure soon became history. In 1962, Holder, McDonald and Woolley [19] presented their thoughtful experience with fifteen premature or critically ill infants with atresia of the esophagus. The therapy consisted of gastrostomy, retropleural division of the fistula, and later when the infant had become strong enough to withstand a major procedure, an end-to-end anastomosis of the esophagus.

Disappointed by our high operative mortality in certain poor risk patients, we started staged procedures in 1962. Our analysis of these patients was presented before the American Surgical Association this year[50]. At the present time, we feel the indications for staging as follows: a long gap between esophageal segments, a friable distal esophageal segment or the presence of a long, narrow fistula, prematurity in some cases, severe pneumonia in a poor risk patient, certain associated severe anomalies, and combinations of the foregoing.

Roughly one-half of the patients with esophageal atresia makes up the ideal full-term infant without severe pneumonia or severe associated anomalies. The other half represents patients with unique problems. Twenty-seven per cent of premature infants make up most of this latter group. If the selected patients from this problem group could be tided over the vulnerable period of life until they could tolerate not only an end-to-end anastomosis of the esophagus, but also the potential complications associated with it, survival would increase.

Earlier staged procedures consisted of cervical esophagostomy and gastrostomy. This sacrifice in esophageal length committed us later to an interposition colon transplant. The survival rate of patients on whom delayed colon transplants are performed is excellent, however. The morbidity usually results from angulation of the neck of the esophagus and from the great numbers of leaks and strictures at the esophago-colic anastomosis. In the group of patients being considered at this time, we have used the stage procedures in thirteen.

The staged procedure which we use is a simple one. The operation consists of division of the fistula and a Stamm gastrostomy for feeding purposes. Using endotracheal

anesthesia we cut transpleurally to divide the fistula. The proximal end of the distal esophagus is closed and sutured high to the posterior chest wall. Postoperatively, the upper pouch is left intact and kept empty by means of sump suction. Gastrostomy feedings are started on the third postoperative day.

Because of the gap remaining between the ends of the esophagus, a certain amount of freeing-up of the distal esophagus will be necessary during the definitive procedure. This procedure will result in again destroying the blood supply to the end of the esophagus at the time of esophageal anastomosis. In suitable patients who are able to withstand additional operative time, this destruction can be prevented by dividing the aortic branches at the initial procedure and allowing the intramural blood vessels to supply this part of the esophagus through the left gastric and phrenic arteries. This intramural blood supply will not be destroyed in freeing-up the esophagus at the time of definitive surgery.

During the interval between procedures, pulmonary complications are cleared and the patient who is a poor risk is allowed time to attain more growth and vigor before definite esophageal repair is carried out. The incompetent gastroesophageal junction of the newborn permits reflux of gastric contents up the thin-walled, flimsy esophagus and causes it to become hypertrophied and increase in length. The optimum time for esophageal anastomosis must be individualized. It depends upon the progress of the patient and the indication for staging.

Wide gaps can be rather easily approximated because of the better blood supply and the better quality of the esophageal tissue. All patients with a fistula were able to have end-to-end anastomoses of the esophagus performed. Recently, we have been tagging the closed distal esophagus with a silver clip in order to determine its level by x-ray postoperatively. This fact could be extremely helpful in determining the time for anastomosis in a growing group of patients whose short upper esophagus is elongated by daily bougienage after the manner described by Howard[20]. Two patients had no fistula. In one of them, the ends of the esophagus were approximated by creating a small hiatal hernia. An intrathoracic colon transplant was performed on the second one.

Formerly, we had a 17% rate of leaks in our primary anastomoses. For the past two and one-half years, however, since we started the staged procedures and left the upper pouch intact, we have not had a single leak in a primary anastomosis of the esophagus. The staged procedure has eliminated the urgency of getting the two ends of the esophagus together.

In our earlier experience we did only a gastrostomy and all patients died before a second procedure could be accomplished. In the staging procedures, we did 23 cervical esophagostomies accompanied by gastrostomies, and intended to do an eventual colon transplant in the mediastinum. Thirteen of these patients died before we were able to do the definitive operation, most of them from severe associated congenital anomalies. These patients primarily had cardiovascular anomalies and complications. All ten of the patients who received colon transplant survived the procedure or procedures and did well.

In the thirteen patients in whom the upper pouch was left intact after the manner just described, twelve survived one procedure. Nine of these had been premature and three had severe pneumonia. All required tracheostomy and one was a Mongol with esophageal atresia without a fistula, duodenal atresia, perforation of the stomach, severe congenital heart disease, and multiple genitourinary problems.

One operative death was due to recanalization of a triply ligated fistula in our first patient. After this procedure, we discarded ligation in favor of division.

There were three late deaths: One was due to a large pulmonary artery aneurysm, another, in a Mongol with a large ventriculoseptal defect, was due to congenital heart disease, and the most tragic of all was a case of anaphylactic shock from a single penicillin injection six months after the initial operation.

The primary end-to-end anastomosis of the esophagus is still the operation of choice in esophageal atresia. Experience has shown, however, that if this procedure is used in the type of poor risk patients just mentioned, the mortality is too high. As our percentage of primary operations had decreased, our operative survival has increased. This statistic is most noticeable in the premature patient.

At the present time, our over-all survival rate is 82%, 72% for prematures. Although staging should not be taken lightly because of the prolonged hospital stay, the increased expense, and the skilled personnel necessary to implement the program, the rate of survival will be improved in a group of patients formerly considered to be hopeless.

POSTOPERATIVE PULMONARY COMPLICATIONS

Any operation which involves the esophagus and trachea with associated anomalies of the mediastinum and thorax might be expected to be subject to many complications. Only certain important points will be stressed here. In the analysis of the causes of death in the past fifteen years, 50% were due to respiratory complications, especially pneumonia as well as a few cases of hyaline membrane disease. The mortality has markedly decreased in the past five years, but 50% of the deaths are still due to the pulmonary problems mentioned. In the future, the correct management of pulmonary problems will probably be the biggest single factor to increase the rate of survival.

Postoperatively the patient is positioned in a warm, humidified Isolette with his head up and is turned frequently. If intravenous fluids are necessary, they are maintained until feedings can be started through the nasogastric tube or gastrostomy.

Posterior pharyngeal aspirations are carried out every hour with a catheter marked at 8 cm. to prevent its insertion into the esophagus, where it might damage the anastomosis. The preoperative antibiotic schedule is continued until culture and sensitivity results have been reported, when either certain antibiotics are stopped or changed.

Absent cough reflexes and a weakness in the neonate commonly make him unable to handle tracheal secretions. Postoperative direct laryngoscopy is employed in order to carry out tracheal aspiration with a sterile catheter two to three times a day, depending on the amount of secretions present. This is usually necessary only one day since the secretions thin out and clear. The aspiration is then extended to once every 24 hours. With experience, aspirating the trachea with the head turned to the left side to aspirate the right main stem bronchus and vice versa for the left side becomes relatively simple. The lung should be re-expanded after tracheal aspiration by eliciting a vigorous cry or by gentle, positive pressure mask breathing to prevent residual atelectasis. Postoperative chest films should be obtained on the first postoperative morning and then every three days unless more frequent examinations are necessary.

The best indices of lung problems in the newborn is the nature of the tracheal secretion and the chest film. We have found the stethoscope quite misleading in determining the postoperative condition of neonates. If the program outlined does not clear up the secretions, and if tracheal aspiration becomes necessary more frequently, a tracheostomy is indicated. We have performed fourteen tracheostomies in the last five years and have nine living patients from this group. Instead of a tracheostomy, others have used a Portex endotracheal tube in 27 neonates for periods up to three weeks. Their encouraging results have stimulated us to evaluate this technique. Following decanalization of a tracheostomy in infants, a Portex nasotracheal tube may also be used to overcome transient respiratory obstruction.

Atelectasis often accompanies pneumonia. In a newborn, small areas of a primary lack of expansion coupled with obstruction of the bronchi usually due to thick secretions can cause sudden respiratory distress. Signs of the shifts of the mediastinum and compensatory emphysema on the side opposite the atelectasis are often late and difficult to pick up without a good x-ray examination. Tracheal aspiration with direct laryngoscopy coupled with gentle, positive pressure bag breathing will usually re-expand the lung. There are two important periods during which to guard against this complication: the immediate postrecovery phase and the period five to seven days postoperatively, when there is a tendency to relax one's vigilance.

Aspiration pneumonia is one of the most dreaded postoperative complications. In our series we have a mortality of 73%. We delay nasogastric tube feeding to the third day or later and start oral feedings on the eighth day after the feeding tube has been removed and a thin barium swallow shows an anastomotic leak. The disturbed vagal innervation to the esophagus and stomach in conjunction with the usual gastro-esophageal incompetence in neonates[29] makes aspiration of feedings a potential hazard during the entire postoperative period. Postoperative vomiting and gastric distention can often be prevented by keeping the baby either with the right side down or on his abdomen in order to get optimal gastric emptying[44]. Laryngeal edema, tracheal malacia[27,47] and pneumothorax are other lesions which one must consider in the infant who has a respiratory problem.

POSTOPERATIVE ESOPHAGEAL PROBLEMS

Anastomotic Leaks

The most unfortunate complication in esophageal anastomosis is an anastomotic leak. In seventeen per cent of our primary anastomoses with such leaks, we had a mortality rate of 70%. The disadvantage of transpleural single layer anastomosis cannot be doubted here. In the last two years since we have been using staged procedures, we have not had the urgency to get the ends together, consequently, we have not had a single leak in a primary end-to-end anastomosis of the esophagus.

In the treatment of the leak, determination of its size is important. If the leak is small, it can often be handled by keeping the chest tube open. If it is large, however, and has signs of toxicity, a cervical esophagostomy and gastrostomy should be performed promptly. Re-operation for closure of the leak is not advised. It accounts for four deaths in our early series.

Esophageal Strictures

Esophageal strictures are probably due to tight anastomoses made under tension. Inflammatory changes caused by leaks complicate the situation. A typical stricture is usually picked up at the two or three months of age when solid foods are added to the diet. Strictures occurred in 38 of our patients, and accounted for 27% of the primary anastomoses that we performed. We do not consider a stricture to be a lesion as defined only by x-ray examination. The term stricture in this series denotes an x-ray finding in a patient who is also having swallowing difficulties. Treating the x-ray picture rather than the patient in these circumstances, involves many unnecessary dilatations.

In some patients, the simple passage of mercury-filled bougie takes care of the swallowing difficulty once and for all. In others, a filiform and follower can be used, but unless the method is successful immediately, it should not be used because of the danger of perforating the esophagus. If a gastrostomy is in place, the use of retrograde bougienage with Tucker bougies is certainly safest[45]. Zachary[40] places a catheter through the stricture for continuous dilatation and feeds through it. In those cases which do not respond to dilatation

in four to six months, resection of the stricture is indicated. Shultz and Clatworthy[39] report a 20% mortality rate in patients with strictures. We have had six deaths from stricture in this series. (16% of strictures). Overpersistence in dilatations is certainly not recommended[21]. Death has been due to aspiration pneumonia or airway obstruction from dilatation of the proximal pouch.

Neurogenic Dysfunction of the Esophagus

Significant neurogenic dysfunction of the esophagus was found in fourteen of our patients. This entity has been described by Sieber[49] and by Clatworthy[39] who reported two deaths from this complication. The diagnosis can be suspected on clinical grounds, but is best made by x-ray where the yo-yo sign as described by Kirkpatrick[26] is pathognomonic. Instructing the mother concerning the problem as well as teaching her to handle regurgitation when it occurs, including aspiration by motor suction, will enable most of these babies to be discharged to home care.

TRACHEOESOPHAGEAL RECURRENT FISTULAS

Fistulas[22] recur weeks or months following repair of the esophagus. They are probably caused by small suture perforations with abscess formations which then erode into the trachea. Recurrent fistulas should be suspected in the patient who has persistent upper respiratory infection associated with coughing and cyanosis following eating. Even when recurrent fistulae are suspected, diagnosis often defies the most persistent research.[23,24,25] We had nine patients with recurrent fistulas in this series. Four of them died. Two of these had been initially operated on in other hospitals. Time of operation has to be individualized.

CONCLUSION

TRENDS IN SURVIVAL

The trends in survival in recent years have been encouraging, although there are many as yet unsolved difficulties, especially in the area of postoperative complications.

At present, we are achieving a 92% rate of survival in the full-term infant who has no severe associated anomaly or no severe pneumonia or hilar membrane disease.

In the premature infant, the same category of patient is enjoying an 82% rate of survival. The largest single factor in this upward trend is the staged procedure.

Considering both full-term and premature infants, the improvement is survival figures is certainly due to the cumulative effect of the several factors referred to earlier as affecting survival. Among these, however, the skilled nursing care that has been possible only for the past three years is perhaps most important. Dips in survival can be correlated historically with deficiencies of one sort or another in nursing care.

Three years ago the Children's Bureau entrusted the Children's Hospital of Philadelphia and my staff with a five-year pilot study to determine whether increased survival and decreased morbidity might be obtained in the management of congenital anomalies incompatible with life, but amenable to surgical correction. The plan was to have a specially constructed neonatal surgical unit staffed by a cadre of nurses whose only responsibility would be the care of patients in that unit. They could be directed by attending and resident staffs with a particular interest in neonatal surgery.

If the trends described here with atresia of the esophagus, the most difficult of all the neonatal lesions, are confirmed by results of analysis of the other anomalies in question, we might well face an era of improved care for infants born with congenital defects, an era when hospitals might provide the necessary expensive care without asking either parents or community to pay the cost of this particular variety of catastrophic surgical illness.

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Annual Oration for 1966

THE FIRST SUCCESSFUL CHOLECYSTOTOMY*

Some Problems with Calculous Cholecystitis 100 Years Later

KENNETH E. FRY, M.D.

When asked by your President, Dr. George Willauer, to give this address sometime last January, I had little idea that the first such Annual Address was given in 1881 by Dr. Samuel D. Gross, Professor of Surgery at the Jefferson Medical College, the title being "John Hunter and His Pupils". It would seem to me that the word address will far better fit my contribution this evening, since the word oration is completely frightening to the audience as well as to the speaker.

A brief resumé of the history of our knowledge of gallstones and biliary tract surgery may be of interest. Gallstones have been found in ancient mummies, and inflammation of the liver was described by Hippocrates and Galen. Among the hundred case records and autopsies made by Antonio Benevieni and published posthumously in 1507, there were two cases in which gallstones were found. In 1761 Morgagni published accounts of twenty postmortem examinations in which gallstones were found. During this same period, common duct stones were noted by an autopsy by Bonetus. For the past two hundred years, therefore, it must have been common knowledge that gallstones were a frequent cause of serious disease.

The surgeon who first drew attention to inflammatory conditions due to gallstones was J. L. Petit. His report, published in 1743, carried information about patients dating back to 1716. The principal argument of Petit's work centered on when to drain a localized abscess, and when to refrain from doing so. Almost unanimous opinion favored incision and draining of the localized abscess, but this was often accomplished in successive stages. The first stage involved an incision extending to the parietal peritoneum, and was followed by the use of local irritants in an attempt to produce adhesions between the intraperitoneal abscess and the parietal peritoneum. Agents used as irritants were horseradish, spruge, cantharides, onion, and caustic potash of soda. At the second stage, the abscess was incised without contaminating the peritoneal cavity. Petit's work stimulated a research project by M. Herlin, a French naval surgeon, whose report was published

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in Journal de Medecine Chirurgie de Pharmacie in 1767. Herlin was stimulated by the knowledge that wounds of the gallbladder as well as some of the complications caused by gallstones were always fatal. His work proved that wounds of the gallbladder, at least in the cat and the dog, were not hopeless. He created such wounds, then ligated the cystic duct and closed the abdomen. The animals survived and in fifteen days had returned to their state of normal health. Petit was informed of this work but would not believe that the neck of the gallbladder had been ligated. Autopsy of the animals left no doubt. Herlin's associates successfully performed cholecystectomy in two dogs after ligating the cystic duct. In the one hundred years following the work of Herlin, no real progress in biliary tract surgery was made.

A hundred years ago, on June 15, 1867, John Stough Bobbs in Indiana made the diagnosis of a possible ovarian cyst in a thirty-year-old woman. Under anesthesia, an incision below the umbilicus revealed the structure to be the gallbladder. He opened the gallbladder, removed clear fluid and stones, and closed the opening in the gallbladder with sutures. Uneventful recovery followed. Bobb's report appeared in Transactions of the Indiana State Medical Society in 1868.

In 1878 three surgeons in different parts of the world operated on the gallbladder, and in the following year, 1879, a fourth began a series of gallbladder operations which had much to do with popularizing this procedure. On April 18, 1878, J. Marion Sims performed a cholecystostomy in South Carolina. The patient died eight days later and autopsy revealed no remaining stones and no tumor. In a two-stage procedure, Theodor Kocher of Bern operated successfully on both June 18th and June 25th of this same year. On November 4, 1878, W. W. Keen at the Jefferson Medical College Hospital performed a cholecystostomy. The patient died on the fifth postoperative day. Between 1879 and 1889 Lawson Tait in England performed a series of fifty-five operations on the gallbladder with only three fatalities.

In 1877 Charcot made the classical description of the symptoms of common duct stones and interest in surgical approaches to the ductal system as well as to the gallbladder developed. In 1882 Langenbeck in Germany performed the first cholecystectomy. Courvoisier in 1888, Varcie in 1889, and Thornton in 1891 demonstrated in rapid succession the feasibility of surgical exploration of the biliary system. Shortly afterwards in 1898, Mc Burney carried out a transduodenal division of the sphincter of Oddi in order to remove an impacted stone. By 1911, Kocher had performed one hundred choledochostomies with only two deaths.

In surgery great improvements in therapy often take place immediately after the development of an approved diagnostic method. This was certainly true in surgery of the biliary tract. The pioneer work of Graham and Cole in February of 1924 resulted in the discovery that calcium tetrabromphenolthalein could be given intravenously in doses large enough to concentrate in the gallbladder in such a way as to allow it to be visualized on an x-ray film. This discovery allowed accurate diagnosis in patients with chronic biliary tract disease. Soon after, improvements in anesthesia permitted cholecystectomy in a large part to replace cholecystostomy as treatment for patients with calculous cholecystitis.

We would expect that with these developments in the surgery of the biliary tract, all problems would have been solved. This has not proved to be true, however. Nothing disturbs a surgeon and bruises his pride so much as the discovery after a carefully performed exploration, that he has left a stone in the common bile duct. Exploration of the common duct with the available malleable scoops and Bakes' dilators together with the use of flushing and suction leaves much to be desired.

Being completely dissatisfied with these methods, for several years I looked forward with enthusiasm to the use of operative cholangiography. It was not until 1959 that the equipment became available.

Mirizzi of Buenos Aires performed operative cholangiography in 1931, and reported this experience in 1932. Another excellent report by Mirizzi entitled "Operative Cholangiography" appeared in 1937 in *Surgery, Gynecology & Obstetrics.* His cholangiographic studies were performed through the gallbladder, through the cystic duct and directly into the common duct.

At first operative cholangiography was used only in selected patients. Then, using the cystic duct, routine cholangiography via the gallbladder was done whenever possible and has been successful except when the cystic duct is obstructed. In the group of patients with obstructed cystic ducts, completion of the examination successfully is possible if the obstructing stone can be dislodged into the gallbladder at operation. A criticism of this method is that stones in the gallbladder may be forced into the common duct. If the bile in the gallbladder is aspirated, and if only 10 to 20 cc. of opaque material is used, the tension in the gallbladder is usually less than when the gallbladder is exposed at the time of operation. Prior to taking the film, light massage of the gallbladder is necessary. It is the first step at the time of operation, preceding exploration of the peritoneal cavity. Exploration is followed by dissection of the cystic duct and cystic arteries. The cystic duct is not ligated until the x-ray film and report are ready.

If this stone is not dislodged, cholangiography through the cystic duct is done. If indications for common duct exploration are definite, cholangiography by "T" tube is done.

According to the ordinary indications for duct exploration as noted in Table 1, in this group of 300 patients with calculous cholecystitis, thirty-three per cent had choledochostomies. Stones were found in 43% of these explorations. Thus,

TABLE 1. Operative Procedures Prior to Operative Cholangiography

Total	300	
Common duct explorations	98	33%
Removal common duct stones	42	43%
Retained stones following exploration	5	11%
Sphincterotomy	2	

stones were found in 14% of the patients operated upon. In this same group, stones were retained in 11%, all of these being patients in whom stones had been removed from the common duct.

In the last 252 patients operated upon, operative cholangiography has been used as a routine procedure. The type of cholangiograms done is presented in Table 2.

TABLE 2. Types of Operative Cholangiograms

Via gallbladder	183
Unsatisfactory with cystic duct obstruction	11
Via cystic duct	19
Via "T" tube in common duct	75

Table 3 is a summary of the findings. The total number of studies is greater than the number of patients, since two or more studies are often performed at one operative procedure. The third group, those with no egress into the duodenum with no organic cause found, are responsible for repeated examinations.

Examples of operative cholangiograms are found in Figures 1 through 10 with explanatory comments about each.

TABLE 3. Findings in Operative Cholangiography

Common duct stone, stricture, tumor	57
No egress into duodenum, organic obstruction	27
No egress into duodenum, no organic cause	25
Unusual anatomic findings	10

A summary of the findings in patients having operative cholangiograms is shown in Table 4.

TABLE 4. Operative Procedures with Operative Cholangiography

Total	252	
Common duct exploration	79	31%
Removal of common duct stones	50	63%
Retained stones following exploration	4	8%
Sphincterotomies	7	

In 79 choledochostomies, stones were found and removed in 50 patients, increasing the positive common duct explorations from 43% to 63%. An additional 7 patients were found to have lesions at the ampulla, necessitating sphincterotomy.

Four errors were made and these were not excusable. Close cooperation between radiologist and surgeon when viewing questionable films is necessary. With shifting personnel in the department of radiology, perfection is impossible.

A few examples of these studies are:

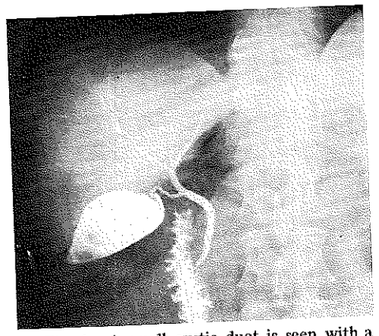

Fig. 1. A small cystic duct is seen with a normal common duct.

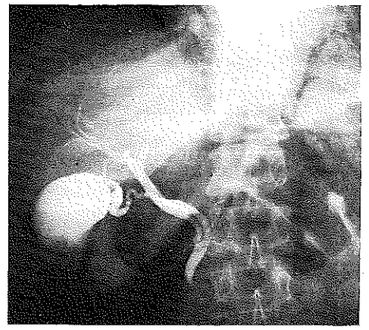

Fig. 2. A small cystic duct is present with low insertion into the common duct.

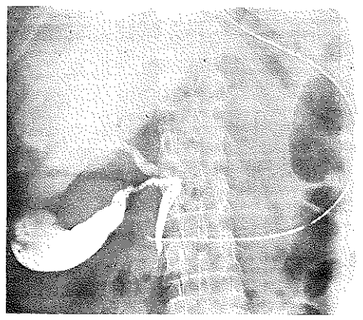

Fig. 3. A small cystic duct is present with a stone incompletely obstructing it.

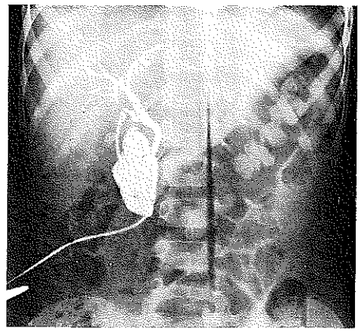

Fig. 4. A cholangiogram through the cystic duct in a child four years of age, who two months prior to operation had an attack of acute pancreatitis with a serum amylase of 1600 units. A single stone was present in the gallbladder. The common duct was not explored and the child has remained well for four years.

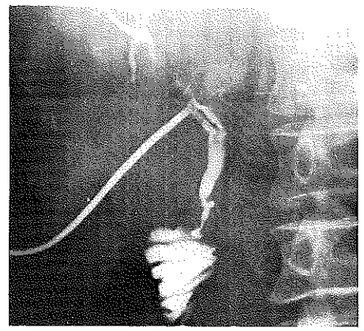

Fig. 5. Dilatation of the common duct with a small diverticulum in its lower portion is seen.

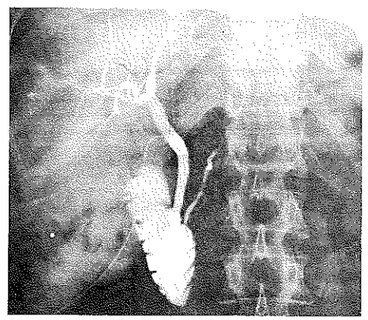

Fig. 6. A normal common duct with visualization of a portion of the pancreatic duct is seen. This finding was reported in 23 patients.

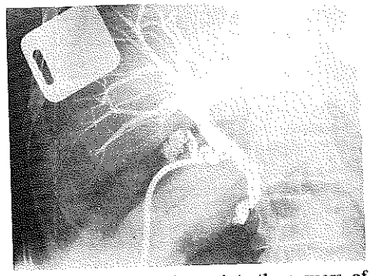

Fig. 7. This patient, sixty-three years of age, had had a cholecystectomy at the age of thirty-one. Oral cholecystogram revealed the presence of stones in a small gallbladder, and this slide shows a long cystic duct with a gallbladder remnant.

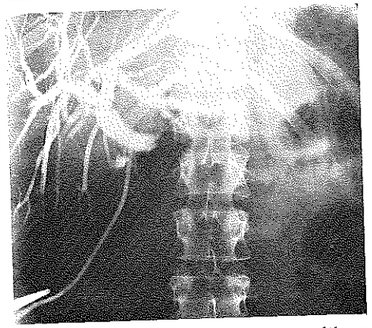

Fig. 8. An enlarged common duct with no opaque entering the duodenum is seen. This patient had a fibrous stricture of the sphincter of Oddi. After exploration of the lower end of the common duct, it is not uncommon for spasm of the sphincter to be present. Before this was fully appreciated, two unnecessary duodenostomies were carried out. They revealed only spasm to be present, since dilators dropped readily through the sphincter into the duodenum.

Fig. 9. This study was reported as normal; however, common duct exploration was carried out with the removal of stone.

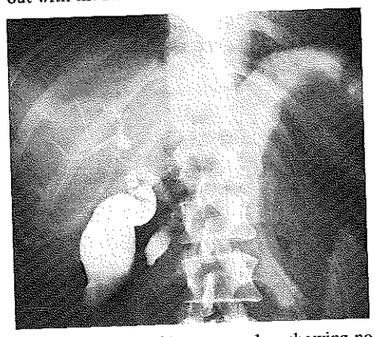

Fig. 10. This film was read as showing no evidence of common duct stone. Incomplete filling of the ductal system was responsible for not seeing a large calculus in the common hepatic duct.

Prior to the use of operative cholangiography, I had a feeling of complete frustration until a postoperative cholangiogram was done. On five occasions, as listed, this frustration was fully justified. The use of operative cholangiography varies from hospital to hospital and even from surgeon to surgeon in the same institution. Some surgeons never use it; some, as Heneage Olgilvie, use it occasionally. He states that he believes it to be necessary about once or twice a year. I believe that its routine use will increase as it is found to be worthwhile.

The advantages of such a program are that with visualization of the entire hepatic ductal system, the number of positive common bile duct explorations will increase and the number of negative explorations will decrease. I believe that the number of unsuccessful common duct explorations with retained stones will decrease. With constant use of operative cholangiography and with each patient as a learning experience, the degree of anxiety following common duct exploration can not be entirely relieved, but can be reduced. Routine operative cholangiography benefits the patient and does not add to the risk of operation.

Annual Oration for 1967

THE PLACE OF SURGERY IN THE MEDICAL SCHOOL OF TODAY AND TOMORROW*

THOMAS F. NEALON, JR., M.D.

For the past several years, Jefferson Medical College, like many other medical schools, has been in the process of revising its curriculum. The avowed purpose of this revision was to reduce the amount of time of courses required in all departments in order to create time for elective courses for the students. In the first draft of the new program which was presented to the faculty, the Committee to Review the Curriculum had taken away 70 per cent of the lectures and 65 per cent of the clerkship time assigned to the Department of Surgery. This amount was far more than any other department had lost. Such a recommendation was not remarkable considering that it came from a committee which had no representation from the Department of Surgery.

This experience at Jefferson probably represents an extreme, but unfortunately, it is an indication of what is happening in many of the medical schools in the country.

Some medical educators do not consider surgeons physicians but instead, skilled craftsmen who perform technical services for which they are overpaid. These myths of the exaggerated size of surgeons' fees and the extroverted personality of the average surgeon apparently disturb many physicians in other specialties. They have set out to decrease the influence of the surgeon on the students. They no longer feel that the basis for a good medical school are sound departments of medicine, ob-gyn, and surgery, and have attempted to replace them with psychiatry or behavioral sciences. They are trying to move the teaching of surgery to the postgraduate level. A review of the records would seem appropriate.

In the past quarter of a century, has surgery done anything to advance the practice of medicine? Indeed it has. I think we might really say that this has been the golden age of surgery. In reviewing the events which justify such a statement, I am proud to be able to remind you that many of the men who contributed to these advances were or are members of the Philadelphia Academy of Surgery.

The entire specialty of heart surgery as we know it today was really initiated in the early forties. Until 1939 the only operations performed on the heart or great vessels were suture of heart wounds, drainage of the pericardial fluid, and pericardiectomy. In 1939, Robert Gross succeeded in ligating a patent ductus. In 1944, he divided a vascular ring, and in that same year Clarence Crafoord successfully resected a coarctation of the aorta. In 1945, Alfred Blalock announced his successful treatment of the tetralogy of Fallot by a shunting operation, and proved for the first time that a disease of the heart could be successfully treated by surgery. The popularization of the operation for mitral stenosis by Charles Bailey and Dwight Harkins established heart surgery.

This awakening did much more than establish an important place for the surgeon in the treatment of heart disease. It had a very important impact on the entire field of cardiology. It forced the cardiologist to re-evaluate and revamp his diagnostic techniques and standards. Before this time, a cardiologist would first make a careful physical examination and then give a specific anatomic diagnosis of a cardiac lesion which could not be verified until after the patient died, and then only if an autopsy were performed. With the advent of heart surgery, the surgeon was able to check the diagnosis, sometimes the very next day. Those of us whose careers bridge the period during which heart surgery was born can assure you that it brought about a considerable revision of the diagnostic criteria of the average cardiologist. The same might be said for the finality with which the initial diagnoses were made. Once the cardiologists were stimulated by this advance, they in turn developed many new diagnostic techniques so that the entire field benefited from the impetus provided primarily by surgeons.

One entire division of cardiac surgery, namely, open heart surgery, was theorized, proved practical in the laboratory, and finally used successfully on a human patient by our own John H. Gibbon, Jr. There are very few instances in which one man is so clearly responsible for such an important contribution to the welfare of mankind. Furthermore, the methodical and meticulous manner in which he went about proving his concept before risking a human life is a classical example of how original ideas should be tested before they are used in clinical practice. The heart lung machine allows surgeons to carry out regularly life-saving operations which were impossible prior to its development. Once again, stimulated by the surgeons, the cardiologists met the challenge and contributed many worthwhile diagnostic improvements. The invention of the heart lung machine was the most significant research accomplishment of this era at Jefferson Medical College. Yet, in the last year of his tenure, Dr. Gibbon's department had no representative on the Committee to Revise the Curriculum.

Although there had been interest in vascular surgery for a long time, the field was given a big boost by the attack on aneurysms by Charles Dubost, Michael DeBakey, and Henry Bahnson. Further improve-

*Delivered December 4, 1967.

ments included the demonstration that plastic materials could be safely substituted for diseased vessels.

The scope of many operations was extended to allow more radical treatment of malignant lesions. Much of this extension of operations was made possible by improvements in anesthesia in our understanding of fluids and electrolytes.

Many of the improvements in anesthesia were initiated by surgeons. The average anesthesiologist is primarily a pharmacologist. Surgeons are more interested in pulmonary physiology, and particularly, in ventilation under anesthesia. The contributions of Clarence Crafoord, Frederick Mautz, and John Gibbon resulted in a better understanding of the physiology of breathing and the development of an apparatus to assist ventilation under anesthesia.

Surgeons have also contributed to a better understanding of fluids and electrolytes. John Lockwood worked out the role of potassium in fluid and electrolyte balance and demonstrated its value in the postoperative patient. Francis Moore has done much to improve understanding of fluids and electrolytes and body composition. Many surgeons have done outstanding work on shock.

Surgeons have played an important role in the emerging field of transplantation. Their contributions have been beyond the technical factors involved in connecting the blood supply of the transplant to that of the recipient. Their research on the basic immunologic problems has been vital to successful transplantation. It is most appropriate at this time to congratulate the team of surgeons in South Africa who successfully transplanted the first human heart. We will want to follow the course of their patient very carefully to see how he fares.

I do not plead for a maintenance of the status quo of the medical curriculum. Improvement in the teaching of all branches of medicine, including surgery, is necessary, but the substantial contributions made by surgeons in the recent past would seem to warrant an increase rather than a decrease in prestige.

What does surgery have to offer the medical student of the future? First and foremost, every student needs some training in basic surgical principles, even though he will not enter a surgical specialty. At Jefferson, we recently saw some severe complications associated with the infusion of cancericidal chemotherapeutic agents. Discussion with my friends elsewhere revealed that these were not limited to our hospital. The complications usually occur as a secondary infection of the wounds. Further investigation revealed that many physicians do not know how to care for an open wound. Physicians should be taught in medical school the surgical principles related to the care of a wound. Specific considerations can be reserved for those who choose some branch of surgery as a career.

Today, surgery is a scholarly profession with highly organized training programs and associated research activities. Clinical surgical research has produced many spectacular advances. These sometimes

overshadow the many sound physiological principles which have been formulated from good basic surgical research. The student will not be able to realize what surgery has to offer him unless he spends some time on a surgical service.

A movement has been started to make teaching in medical schools a multidisciplinary responsibility. I endorse this approach. The practice of medicine should be an interdisciplinary activity, and surgeons, who emphasize positive action rather than deliberate procrastination, have much to offer such a team approach.

The basic scientists complain that too much teaching time has been devoted to clinical subjects and that as a result, basic science has been shortchanged. They advocate curtailing the time spent in clinical training and increasing the time for teaching the basic sciences. The basic scientist who teaches his specialty without consideration of its clinical implications has no place in a medical school. The same can be said of the clinician who does not consider basic scientific principles in his clinical care. Ideally, clinicians and basic scientists should be participating in integrated teaching which does not segregate courses into clinical categories or basic science. Not only will the students be taught more meaningfully, but both the basic scientists and the clinicians will benefit from contact with each other. In a similar manner, different clinical departments interested in the same disease should collaborate in teaching that subject.

There has been considerable agitation to increase the teaching of psychiatry. Why is psychiatry assuming such prominence in medical school? The main explanation I have heard is the large amount of funds which the federal government is granting to members in that specialty. Proponents argue that teaching time should be proportionate to the funds granted. Such medical educators are allowing the federal administrators to decide the relative importance of the subject matter in medical schools. In fairness, I do not think the federal planner intended this emphasis. The funds are being spent to educate adequate numbers of specialists in psychiatry. The amount of money is an indication of this need rather than an indication of the relative importance of the specialty.

I do not mean to imply that there is no need for psychiatry in surgery. Every surgeon in this room who saw a patient today practiced a degree of psychiatry, and the good surgeon does it every time he comes in contact with his patients. And I dare say he probably does it well. He does it since he was trained to do this by the most qualified man available, the man who trained him to be a surgeon. Surgeons are well versed in the psychiatric problems which occur in patients with normal psychic reactions who must be exposed to surgical operations. They know a great deal more about such problems than the highly trained psychiatrist whose training is oriented towards the patient with severe psychiatric aberrations.

What can we who disagree with

the de-emphasis of surgery do about it? Those of us who are members of University teaching staffs must press our demands that all students be given a minimal education in surgical principles and that all students seriously interested in surgery be given adequate opportunity to develop their interest.

As alumni of a medical school, each one can express his attitude through that avenue. We must encourage our organizations to initiate action which will assure surgery a proper place in the curriculum of the medical school. However, with opportunity goes responsibility. If we are given opportunity to teach the student we must make every effort to have him acquire the most knowledge from the time available.

Francis Moore points out that the surgical curriculum should "offer the student the opportunity to see, meet and study surgical patients in the company of a faculty and a resident staff who demonstrates concern for his growth in knowledge and self-confidence. He will have intimate contact not only with diagnosis and treatment of daily ills, but likewise with life-endangering disease.

Along the way the student can participate in the open sterile anesthetized tissue dissection of the disease process itself, in patients he himself has admitted to the hospital and examined. At this time he can see the pathology *in situ*, assist in its repair or removal and follow the patient during recovery to witness the tissue resynthesis of anabolic convalescence which, after life threatening or debilitating illness, is surely one of the most rewarding experiences in all of medicine."

Unfortunately this glowing picture is not always realized. Too often, surgeons do not have time to give the students proper guidance. They sometimes take great pleasure in describing in infinite detail technical problems related to the operative procedure and pass over lightly the thought and knowledge which goes into good diagnosis, preoperative preparation and postoperative care.

The surgical clerkship is an invaluable teaching method if it is properly used. In his recent article in JAMA entitled "Surgical Clerkship, Milestone or Millstone," Gardner Child wrote the following: "Certainly it was a milestone in education when Dr. Osler introduced the Clerkship 60 years ago. That some surgical clerkships have become millstones of exploitation about the necks of medical schools is becoming more and more obvious—seas of routine urines, miles of complete blood counts, buckets of stools for ova and parasites, servants to house officers, undiscussed histories and physical examinations, over-long hours in operating rooms scrubbed on private patients, ill timed lectures and 'pupil teachers.'"

A good clerkship exposes the student to adequate clinical material, gives him responsibility in the care of the patient and accesss to direct consultation at the faculty level. He should be treated as an equal. Too often, the surgeon tends to talk down to the student.

The more improvements we make in the teaching of surgery, the more easily we will be able to sell it. In our own efforts to obtain an adequate recognition of surgery, the students have turned out to be our best allies. Their pressure on the administration was far more effective than any other force.

I am proud of the specialty to which we belong. It has contributed much to the advancement of medicine in the past and promises to contribute even more in the future. We must keep surgery in a position in which it can fulfill that promise.

Annual Oration for 1968

FEMORO TIBIAL BYPASS 5½ YEARS EXPERIENCE*

R. ROBERT TYSON, M.D.

The most distal artery used for reconstructive vascular surgery in the leg has been the popliteal until in 1964, at this academy, I presented a group of patients in whom arteries, more distal than the popliteal, were used to salvage lower extremities[1]. These were extremities with far advanced occlusive disease that otherwise would have been lost since these arteries previously had not been considered usable for reconstructuve procedures. Our report stimulated interest among others.

One and one half years ago, the group from Baylor[2], reported that fifty similar patients were operated on over a two year period. There have also been sporadic reports of one or two cases in the intervening four years.

Our experience has now grown to more than fifty cases and we have extended the procedure with success distal to the tibia. We have been concerned, on occasion, about the viability of the intervening tissues that have been bypassed. We have added basically little to arterial surgical techniques, but have utilized and modified known methods to meet our problems. The use of magnification dates back to my experience in 1950[3] using cuffed blood vessels to perform portocaval and arterial portal shunts in rats. We then had a boost from the laboratory work of Dr. Jacobson[4], who described successful suture anastomosis in small vessels, thus significantly reducing the amount of foreign body. Our technique, using continuous fine suture material, remains the same as that reported to you in 1964.

CASE SELECTION

Most of our cases represent true salvage situations in which the vascular disease is extensive. (Table 1) We have used these criteria for all situations of arterial insufficiency as well as for this particular selection of cases. In this group we have had only two patients in whom the surgical indication was the threatened loss of job. The latter two patients should have the best prognosis. Ironically, one patient decided, after two years, that deep knee bends were no longer contraindicated, and the graft occluded within a week of starting this exercise.

*Presented December 2, 1968.

The other graft is still functioning after five years.

Having met either of the criteria in Table 1, the patient was admitted and had a general evaluation plus an arteriogram. We prefer a percutaneous femoral arteriogram because it is simpler and assures better visualization in the leg since no dye is lost from the leg. We repeat injections as needed until the dye is seen in the collateral vessels distally, one of the major distal arteries visualizes, or we have been convinced that no dye is getting down. We believe that if dye is seen in the collaterals at a given level and none is seen in a main conduit, the main conduit is almost certainly occluded. We have, at times, seen no collateral dye at a given level but have seen dye in a main conduit. We believe dye in a main conduit implies that this conduit is open for some distance and suggests a usable vessel. We would like to follow the dye column into the foot; however, sometimes this is not accomplished.

TABLE 1. Indications for Reconstructive Arterial Surgery

1. Threatened Loss of Tissue
   - Gangrene
   - Ischemic Ulcer
   - Rest Pain
2. Threatened Loss of Occupation.

After the presence of a distal main conduit has been established the patient becomes a candidate for surgery unless there is some overwhelming concomitant problem contraindicating surgery. If there is, one must then consider whether or not a major amputation and rehabilitation would carry more risk than successful bypass surgery. One must also consider the odds of the bypass surgery succeeding, because with failure, amputation will, of course, be necessary; thus resulting in two operations instead of one. Suffice it to say this is peripheral surgery, not very traumatic, done with epidural or light general anesthesia and well tolerated by the infirm. The following report concerns those patients who, in the last five and one half years, have met the preceding requirements and who were operated.

PROCEDURE

The patient is placed in the supine position. The popliteal, posterior tibial, and peroneal arteries are approached through medial incisions. The femoral and anterior tibial arteries are approached through anterior incisions. Intervening incisions are made as needed to remove the saphenous vein. In most instances the incisions used to expose the artery and remove the vein are also used to construct the tunnel. We expose the distal artery first, put soaked catgut about it, open the artery longitudinally at a soft spot, introduce a plastic catheter that fits without effort distally and rapidly inject 20 cc of saline containing heparin. Heparin in saline is also injected proximally. If this is accepted without either ejection of the catheter or undue resistance we proceed with bypass. The soft catgut is tied loosely, but tightly enough, about the vessel to control bleeding. This method is atraumatic to the vessel and takes up little space. These ties will be cut with a

scalpel at the conclusion of the procedure. The proximal artery is exposed, the saphenous vein removed and the tunnel, following the course of the artery, is made. The vein is irrigated with saline, the tributaries tied with triple "O" black silk and the vein distended to try to eliminate spasm. A Levin tube is threaded through the tunnel and used to pull the vein into the tunnel by inserting the irrigating cannula into the flared end of the Levin tube. We have not had any malpositioning of the graft by this method.

The distal anastomosis is then done end to side, using small instruments, magnification and seven "O" teflon coated dacron sutures. A simple over and over suture is used. Next, the excess vein is removed, the vein is cut obliquely and opened lengthwise a short distance and anastomosed to the proximal artery in a similar fashion, end to side with six "O" suture material. Usually the proximal anastomosis has been at the femoral bifurcation, but it has also been to the common femoral, superficial femoral, and popliteal arteries. Closure is usually skin only.

We have tried to avoid using prosthetics because of our experience in the femoro-popliteal area and because of the reports of others. We have used composite grafts occasionally. There have been a few cases in which a prosthetic was present or had been placed in the arterial system proximal to the femoro tibial bypass. Except for one time, when the vein was not suitable, the bypass was not done, and this time part of the vein was suitable. Perhaps, when improved prosthetics are available, they should be tried when the vein is not suitable. Local endarterectomy has also been used when it seemed appropriate.

RESULTS

We have required a leg to be preserved and to be functioning to call the result successful. Invariably we find a hot foot develops within 36 hours and we can usually find a distal pulse in a successful case. The degree of heat seems to be a function of the severity of the pre-existing occlusive problem and the adequacy of the bypass. The local heat will be apparent for three to five days. Early loss of the heat, as well as loss of the pulse, may signify occlusion of the bypass.

Of the fifty-five operations that were performed, (Table 2) forty-eight were bypass operations and seven were exploratory. Persons with diabetes comprised less than half of the group. The reasons for exploration only, were: too much calcium, one patient; unusable vein, one patient, (a preoperative venogram might have identified a vein rendered unusable by multiple areas of obstruction); the remaining five patients had veins that could not be irrigated without undue resistance. Our success rate, not counting the late closures which occluded from 3 months to several years, was 70% (Table 3). Persons with diabetes followed the same pattern, but not with quite as good results.

TABLE 2. Femoro Tibial Bypass 5½ Years

	Total	Diabetics
Bypass Performed	48	16
Explored Only	7	3
Total	55	19

TABLE 3. Femoro Tibial Bypass 5½ Years

	Total	Diabetics
Bypassed	48	16
Bypass Open	37	11
Bypass Closed	11	5
Bypass Insufficient	4	2
Bypass Closed Late	4	1

Table 4 illustrates the number of years we have had successful bypasses working. Some of the patients indicated here have died of unrelated causes, and one patient, whom I have been unable to contact recently, is listed as being successful only for as long as we know of his satisfactory result. If the graft is still functioning, he would be in the 3 to 5½ year group. Table 5 indicates the distal vessel used and the success or failure of the operation. The salvaged column is not the same as the open column since not all bypasses preserved the extremity. Our most distal successful bypass performed was to the dorsalis pedis, in our oldest patient (87 years old). Our longest functioning bypass was the first patient we operated on. Our youngest patient is 33 years old. The most common vascular problem has been atherosclerosis, although we have had a few patients in whom a diagnosis of arteritis seems justified. There is one case of possible trauma.

TABLE 4. Femoro Tibial Bypass 5½ Years

Bypass Functioning	Number
3–5½ Years	7
1½–3 Years	9
½–1½ Years	9

TABLE 5. Femoro Tibial Bypass 5½ Years

	Total	Open	Closed	Salvaged
Anterior Tibial	10	7	3	7
Posterior Tibial	23	18	7	16
Peroneal	11	8	4	6
Tibio-Peroneal	4	4	1	4

In four patients a functioning graft failed to preserve the leg. Two of these patients were diabetic. We have found nothing unique about the patients or their arteriograms. This situation has not occurred to us in other areas when dealing with occlusive disease. We had always associated a functioning graft with preservation of the leg; however, when we consider the ubiquity of atherosclerosis we should not be surprised. Incidentally, this situation has led us to regard the presence of a hot foot, postoperatively, as more indicative of a successful result than the presence of a pulse.

We have seven patients with proximal prosthetics. Most of them had a prosthetic bypass or interposition to meet a local need. The autogenous vein was anastomosed to the side of the prosthetic and carried distally. Most of the prosthetics have occluded, but most of the patients also had wide spread disease. We wondered if a prosthetic femoro-popliteal bypass plus a distal tibial autogenous vein bypass, perhaps arising from the prosthetic bypass, might not be mutually sup-

porting. Despite past experience, the only true composite bypass has been functioning for six months. Our reasons for using prosthetics in conjunction with vein grafts have been because of previous occlusive disease proximal to the femoral artery, the presence of a femoral aneurysm, or inability to attain the needed length of vein, and the desire to verify for ourselves that composites are not useful. In any event, our experience in this area has been too limited to warrant any conclusions.

We have encountered less than normal surgical wound healing in some patients with severe atherosclerosis even in the presence of a successful bypass. In a few patients in this group, however, we encountered good healing of an ulcer in the foot but prolonged and difficult healing of a knee incision that failed to heal per primam. In two cases this situation was severe enough for us to momentarily entertain the thought of removing the knee area; however, we did not know what to do with the foot. Fortunately, both eventually healed. This experience suggests that intermediate anastomosis in a long bypass, to provide blood supply to the knee area, might be considered when suitable vessels are present. Or might it be possible, some day, to interpose a knee prosthetic between the thigh and foot.

CONCLUSION

We believe we have presented ample evidence that small vessels below the knee, when properly utilized, will salvage a leg in a surprisingly large number of cases. The technique has been learned and practiced by three surgeons, other than myself; who have contributed to the present group of patients. I do not believe that we have reached the distal limit as yet, but would not, except to go distal to the plantar arches.

These same techniques are applicable to renal arteries in children, accessory renal arteries and coronary arteries. These techniques might be applied to the middle cerebral artery or branches of the arteries to the gut as well as for transplantation of tissues.

This experience has been rewarding and it also has been deeply appreciated by many patients.

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Transactions of the Philadelphia Academy of Surgery

The Year 1964

A stated meeting of the Philadelphia Academy of Surgery was held in the College of Physicians on January 6, 1964 at 8:15 p.m. The President, Dr. J. Montgomery Deaver, was in the chair. There were 116 members and guests present.

SCIENTIFIC PROGRAM

DR. JAMES M. HUNTER	The Early Development and Application of an Artificial Tendon. *Discussed by:* DRS. OAKEY and HUNTER
DR. ERWIN A. COHEN* DR. IRVING A. SCHWARTZ* DR. JERRY ZASLOW	Use of Fibrinolysin After the Insertion of Arterial Prosthetic Grafts in Dogs. *Discussed by:* DRS. NEMIR and COHEN
DR. VICTOR P. SENCINDIVER	Retroperitoneal Abscess–An Unusual Complication of Pelvic Surgery–Five Cases. *Discussed by:* DRS. STAYMAN, CASWELL and SENCINDIVER.

A stated meeting of the Philadelphia Academy of Surgery was held at the College of Physicians at 8:15 p.m. on February 3, 1964. The President, Dr. Jonathan Rhoads, was in the chair. There were 103 members and guests present.

SCIENTIFIC MEETING

DR. N. HENRY MOSS	Cancer of the Male Breast. *Discussed by:* DRS. ROSEMOND, RHOADS, and MOSS.
DR. ROBERT CRICHLOW*	Popliteal Aneurysms. *Discussed by:* DRS. NEMIR, SHEARBURN, and ROBERTS.

*By invitation.

DR. ROBERT M. MOORE	Some of the Current Problems of the American Board of Surgery.

CONJOINT MEETING

The annual conjoint meeting of the New York Surgical Society and the Philadelphia Academy of Surgery was held at 2:00 p.m. in Mitchell Hall of the College of Physicians in Philadelphia on March 4, 1964. Dr. Elliott Hurwitt, President of the New York Surgical Society, and Dr. Jonathan E. Rhoads, President of the Philadelphia Academy of Surgery, jointly presided. There were 163 members and guests present.

SCIENTIFIC PROGRAM

DR. JULIAN JOHNSON DR. CHARLES K. KIRBY DR. GORDON K. DANIELSON* DR. ARIE VERHAGEN* DR. KIRKLEY R. WILLIAMS*	Recent Experiences in Open Heart Surgery. *Discussed by:* DR. GEORGE ROBINSON
DR. C. EVERETT KOOP DR. ESSBAGH KABIN*	Chemotherapy as an Adjunct to Surgery and Radiation in the Treatment of Tumors in Children. *Discussed by:* DR. THOMAS SANTILLI
DR. H. ALAN HUME DR. WILLIAM H. ERB DR. LLOYD W. STEVENS	Treatment of Hepatic Encephalopathy by Surgical Exclusion of the Colon. *Discussed by:* DR. LOUIS M. ROUSSELOT
DR. JOHN ROYAL MOORE	The Closed Fracture of the Long Bones. *Discussed by:* DR. PRESTON WADE
DR. CHARLES FINEBERG DR. CHARLES W. WIRTS* DR. FRANZ GOLDSTEIN* DR. JOHN Y. TEMPLETON, III	Jejunal Interposition in the Treatment of Postgastrectomy Syndromes. *Discussed by:* DR. HENRY T. RANDALL
DR. JOHN V. BLADY	Reconstructive Surgery of the Oral Cavity, Oro and Hypopharynx. *Discussed by:* DR. GEORGE CRICKELAIR

A stated meeting of the Philadelphia Academy of Surgery was held in the College of Physicians at 8:20 p.m. on April 6, 1964. The President, Dr. Jonathan E. Rhoads, presided. There were 85 members and guests present.

*By invitation.

SCIENTIFIC PROGRAM

DR. JULIAN JOHNSON	Memorial to Dr. Charles K. Kirby
DR. FREDERICK A. REICHLE	Serotonin and the Dumping Syndrome. *Discussed by:* DR. ROSEMOND
DR. CHARLES L. DEARDORFF, JR.	The Use of THAM in Prevention of Citrate Intoxication.** *Discussed by:* DR. GIBBON, JR.
DR. CHARLES V. PERRILL	The Structure of the Major Bile Ducts: Are Muscle Fibers Present?* *Discussed by:* DR. DEAVER

The stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on May 4, 1964 at 8:15 p.m. The President, Dr. Jonathan E. Rhoads, presided. There were 71 members and guests present.

SCIENTIFIC PROGRAM

DR. JACK W. COLE*	The Pathology of Familial Polyposis.
DR. CALLISTO DANESE* DR. JOHN M. HOWARD	Lymphangiographic Studies of the Upper Extremity Following Radical Mastectomy.
DR. RICHARD L. ROVIT* DR. KHALIL JAWAD* DR. RICHARD BERRY*	Cushing's Syndrome and the Hypophysis: A Revaluation of Pituitary Tumors and Hyperadrenalism.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on October 12, 1964 at 8:15 p.m. The President, Dr. Jonathan E. Rhoads, presided. There were 74 members and guests present.

SCIENTIFIC PROGRAM

DR. IAN McLARIN*	Achlorhydria Associated with Chronic Pancreatitis–Clinical Observation. *Discussed by:* DRS. ROBERTS, BROOKS, and McLARIN.
DR. ROBERT TYSON	Femorotibial Bypass in Arterial Occlusive Disease. *Discussed by:* DRS. ROBERTS, NEMIR, and TYSON

*By invitation.
**Prize winning essay, 1964.

DR. GEORGE GOWEN* — A Stage Procedure for Carcinoma of the Tongue, Floor of the Mouth and Alveolar Ridge.
Discussed by: DRS. RHOADS and GOWEN.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on November 2, 1964 at 8:15 p.m. The President, Dr. Jonathan E. Rhoads, presided. There were 84 members and guests present.

SCIENTIFIC PROGRAM

DR. PAUL JAMES — Hyperbaric Oxygen Therapy for Clostridial Myositis.
Discussed by: DRS. DICKSON, EHRLICH, ROBERTS, CASWELL, BLAKEMORE, RHOADS, and JAMES.

DR. DAVID J. LaFIA* — Results and Complications of Bilateral Thalamotomy for Parkinson's Disease.
Discussed by: DRS. WYCIS and LaFIA.

DR. BERNARD SIGEL* — Resection of Superior Mesenteric Vein and Replacement with Venous Autograft During Pancreaticoduodenectomy.
Discussed by: DRS. HOWARD, FROBESE and SIGEL.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall at the College of Physicians on December 7, 1964 at 8:15 p.m. The president, Dr. Jonathan E. Rhoads, presided. There were 105 members and guests present.

SCIENTIFIC PROGRAM

DR. DAVID M. SENSENIG — Plication of the Inferior Vena Cava with Staples.
Discussed by: DRS. ROBERTS, MYERS, HAWTHORNE, SACHS, and SENSENIG.

DR. EDWIN SHEARBURN — Duodenal Varicosities.
Discussed by: DRS. BASSETT and SHEARBURN.

DR. HENRY P. ROYSTER — Management of Burns. (Annual Oration)

*By invitation

Report of the Secretary for the Year Ending December, 1964

The Philadelphia Academy of Surgery experienced a most satisfactory year in 1964. At seven stated meetings, there were interesting programs on various subjects. The average attendance was 54 Fellows, a higher average than the previous year. The average number of guests was 38 per meeting.

The conjoint meeting of the Philadelphia Academy of Surgery and the New York Surgical Society was held in Philadelphia on Wednesday, March 4, 1964. Approximately 86 members of the Philadelphia Academy attended the meeting. The program was an exellent one and everyone enjoyed the meeting.

The Annual Oration, "Management of Burns," was delivered by Henry P. Royster, M.D.

Nine new surgeons were elected to Fellowship. They were Dr. Alan Hume, Dr. Dana Law, Dr. David Sensenig, Dr. Robert Moore, Dr. Newton Masson, Dr. John Roberts, Dr. Dominic De Laurentis, Dr. N. Henry Moss, and Dr. Jack W. Cole. The Philadelphia Academy was saddened by the death of Dr. Charles K. Kirby. A memoir to him was delivered before the Academy on April 6, 1964 by Dr. Julian Johnson.

At the April meeting of the Academy, prizes were awarded for the Surgical Essay Competition held for surgical residents in the Philadelphia area. First prize was awarded to Dr. Frederick Reichle for his paper, "Serotonin and the Dumping Syndrome." Second prize was awarded to Dr. Charles L. Deardorff for his essay, "The Use of THAM in Prevention of Citrate Intoxication." Third prize went to Dr. Charles V. Perrill. His paper was entitled "The Structure of the Major Bile Ducts: Are Muscle Fibers Present"? The prizes were $300., $150., and $75., respectively. The Academy is now sponsoring its Second Surgical Essay Competition.

Programs of the Academy meetings are being mailed to all the residents in the Philadelphia area. Approximately 203 are sent out each month.

THOMAS F. NEALON, JR., M.D.
Secretary

The Year 1965

A stated meeting of the Philadelphia Academy of Surgery was held in the College of Physicians on January 4, 1965 at 8:30 p.m. The President, Dr. Jonathan E. Rhoads, was in the chair. There were 80 members and guests present.

SCIENTIFIC PROGRAM

DR. OSCAR SERLIN — Multiple Primary Malignant Tumors.
Discussed by: DRS. NEALON, ROSEMOND, HAWTHORNE, RHOADS and SERLIN.

DR. HARVEY LERNER	Heparin Inhibition of Gastric Secretion. *Discussed by:* DRS. VOGT and LERNER.
DR. WILLIAM M. LEMMON	Traumatic Pseudo-Coarctation of the Aorta—Successful Repair. *Discussed by:* DRS. NEMIR, INOUYE and LEMMON.

A stated meeting of the Philadelphia Academy of Surgery was held in the College of Physicians at 8:30 p.m. on February 1, 1965. Dr. Jonathan E. Rhoads, the President, was in the chair. There were 85 members and guests present.

SCIENTIFIC PROGRAMS

DR. CHARLES P. BAILEY	Reconstruction of the Cardiac Valves with Autologous Tissue Versus Implantation of Prosthetic Valves. *Discussed by:* DRS. JOHNSON, HAUPT, DAVILA and BAILEY.
DR. THOMAS W. LANGFITT	Signs and Symptoms of Increased Intracranial Pressure: A Reappraisal. *Discussed by:* DRS. GROFF, LAFIA and LANGFITT.
DR. RUDOLPH CAMISHION	Successful Embolectomy from Pulmonary Artery without Use of Extracorporeal Circulation. *Discussed by:* DRS. GIBBON and CAMISHION.

CONJOINT MEETING

The annual conjoint meeting of the Philadelphia Academy of Surgery and the New York Surgical Society was held in the College of Physicians on March, 1965 at 8:15 p.m. The President of the New York Surgical Society, Dr. Robert Wylie, and the President of the Philadelphia Academy of Surgery, Dr. Jonathan E. Rhoads, jointly presided. There were 60 members present, as well as the members of the New York Surgical Society.

SCIENTIFIC PROGRAM

DR. JOHN L. MADDEN	Cross End-to-Side Ureteroureterostomy

DR. WILLIAM J. MCCANN* DR. PARTRICIO Y. TAN*	Between Normal Ureters and Between the Unilateral Obstructed and Normal Ureter. *Discussed by:* DR. JOHN MURPHY
DR. GERROLD M. BECKER DR. KEITH M. SCHNEIDER DR. ALLAN E. KARK	Problems of Intersexuality. *Discussed by:* DR. SAMUEL L. CRESSON
DR. SVEN J. KISTER DR. E. FOSTER CONKLIN DR. DAVID V. HABIF	Autotransplantation of Lymph Nodes *Discussed by:* DR. JOHN M. HOWARD
DR. LOUIS R. P. DEL GUERICIO DR. NEIL R. FEINS DR. RAMA P. COOMARASWAMY DR. JOSEPH COHN DR. DAVID STATE	Clinical Value of Combined Splenoportography and Transhepatic Cholangiography in Biliary-Pancreatic Carcinoma. *Discussed by:* DR. PAUL NEMIR, JR.
DR. KARL E. KARLSON DR. WILLIAM V. CARACCI DR. BERNARD M. WECHSLER	Electrical Pacing of the Heart. *Discussed by:* DR. GEORGE HAUPT and DR. DRYDEN MORSE.
DR. NOEL MILLS	Selective Vascular Thrombosis by Intravascular Metallic Particles. *Discussed by:* DR. ROBERT R. TYSON.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on Monday, April 5, 1965 at 8:15 p.m. The Vice-President, Dr. George Willauer, was in the chair.

SCIENTIFIC PROGRAM

DR. WILLIAM S. PIERCE*	Total Heart Replacement by a Single Intrathoracic Blood Pump.**
DR. JOHN E. HOPKINS	Stenosing Ulceration of the Small Bowel. *Discussed by:* DRS. BROWN and WANG.
DR. ROHLO A. ARDIZONE* DR. HERBERT A. LIPSHUTZ	Extended Radical Neck Dissection. *Discussed by:* DR. ROYSTER

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson

*By invitation.

Hall of the College of Physicians at 8:15 p.m. on May 3, 1965. The President, Dr. Jonathan E. Rhoads, presided.

SCIENTIFIC MEETING

DR. LEONARD WEINER*	Conditioning for Organ Transplants.**
DR. ROBERT B. WEIMANN*	Venous Reconstruction in the Postphlebitic Leg. *Discussed by:* DRS. ROBERTS and TYSON.
DR. ROBERT K. JONES*	Lumbar Disc Disease in Children and Adolescents. *Discussed by:* DRS. GROFF, MOORE, and NICHOLSON.

A stated meeting of the Philadelphia Academy of Surgery was held at the College of Physicians on October 4, 1965 at 8:30 p.m. The President, Dr. Jonathan E. Rhoads, was in the chair. There were 73 members and guests present.

SCIENTIFIC PROGRAM

DR. JULIO C. DAVILA DR. M. E. SANMARCO	Continuous Measurements of Left Ventricular Volume. *Discussed by:* DRS. CAMISHION, RHOADS, and DAVILA.
DR. KARL C. JONAS	Marion Operation for Extrahepatic Portal Hypertension. *Discussed by:* DRS. PESKIN and JONAS.
DR. ERIC KAHN	Effect of Splenic Extract on Transplantation Immunity. *Discussed by:* DRS. SENSENIG, BLAKEMORE, and KAHN.

A stated meeting of the Philadelphia Academy of Surgery was held in the College of Physicians at 8:30 p.m. on November 1, 1965. The Vice-President, Dr. George Willauer, was in the chair. There were 68 members and guests present.

SCIENTIFIC PROGRAM

DR. NICHOLAS T. ZERVAS	Radio Frequency Hypophysectomy for Treatment of Breast Cancer. *Discussed by:* DRS. WILLAUER, CASWELL, WEEDER, TEMPLETON and ZERVAS.
DR. WILLIAM K. GORHAM, III DR. HERBERT LIPSHUTZ	Infections of the Hand and their Management. *Discussed by:* DRS. CASWELL, WEEDER, SHEARBURN, KAPPEL, WILLAUER and LIPSHUTZ.
DR. DOMINIC A. DE LAURENTIS	Rectus Sheath Hematoma. *Discussed by:* DRS. ROSEMOND, WEEDER, MOSS and DE LAURENTIS.

*By invitation.
**Prize winning essay, 1964.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians at 8:15 p.m. on December 6, 1965. Dr. Jonathan Rhoads, the President, presided. There were 84 members and guests present.

SCIENTIFIC PROGRAM

DR. EDWARD W. CLOSSON	Spontaneous Rupture of Hepatic Artery Aneurysm. *Discussed by:* DRS. ROBERTS, FITTS, WILLAUER and CLOSSON.
DR. J. CURTIS LAMP	Subungal Keratoacanthoma and its Differentiation from Squamous Cell Carcinoma. *Discussed by:* DRS. MAY, ROYSTER, and LAMP.
DR. C. EVERETT KOOP	Atresia of the Esophagus. (Annual Oration)

Report of the Secretary for the Year Ending
December, 1965

During the year 1965, the Philadelphia Academy of Surgery held eight stated meetings. Many interesting papers on various subjects were presented. There was an average attendance of 50 Fellows and 30 guests at each meeting.

The conjoint meeting of the Philadelphia Academy of Surgery and the New York Surgical Society was held on March 3, 1965. The Philadelphia Academy of Surgery was the guest of the New York Surgical Society. Approximately 60 Fellows were present from Philadelphia. Everyone enjoyed the excellent program.

The Annual Oration, "Atresia of the Esophagus" was delivered by Dr. Charles Everett Koop.

The Academy organized a trip to the annual meeting of the American Medical Association in order to participate in the meeting of the Section on Surgery. Twenty-four members made the trip.

The society organized several dinners for the residents prior to the regular meetings. These were sufficiently successful so that the members decided to repeat them again this year.

The Constitution of the Academy of Surgery was amended to raise the Active Membership from 100 to 110.

There were thirteen surgeons elected to Fellowship during the year. These were as follows: Rudolph C. Camishion, George F. Gowen, William Y. Inouye, David Y. P. Lin, Richard N. Myers, Bernard Sigel, Demetrius S. Saris, P. Vincent Sencindiver, Julio C. Davila, Charles Wolferth, Herbert Cohn, Louis Pierucci, and Herndon Lehr.

Two active members were transferred from the Active to the Senior Fellowship. At present there are 100 Active Members, 57 Senior Members, 16 Nonresident Fellows, and 5 Government Service Fellows.

Programs of the meetings are being mailed to approximately 221 Residents.

At the April meeting of the Academy of Surgery prizes were awarded for the Surgical Essay Competition which was held for the Surgical Residents in the Philadelphia area. First prize was awarded to William S. Pierce who wrote "Total Heart Replacement by a Single Intrathoracic Pump." He was awarded $300.00 for his contribution. A second prize was awarded to Leonard Weiner who entered "Conditioning for Organ Transplantation." He was awarded $150.00. A third prize of $75.00 was given to Eric M. Kahn for his essay, "Effective Splenic Extract on Transplantation Immunity." The Academy is now sponsoring its third Surgical Essay Competition.

THOMAS F. NEALON, JR., M.D.
Secretary

The Year 1966

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on January 3, 1966 at 8:15 p.m. There were 100 members and guests present. The President, Dr. Jonathan E. Rhoads, presided.

SCIENTIFIC PROGRAM

DR. L. D. MILLER DR. I. B. BORUCHOW DR. WILLIAM T. FITTS, JR.	Perforative Carcinoma of the Colon—Analysis of 284 Cases. *Discussed by:* DRS. GIBBON and MILLER

DR. JOEL NOBEL	An Improved Vehicle for Cardiopulmonary Resuscitation. *Discussed by:* DRS. KING, GIBBON, TEMPLETON and NOBEL
DR. ADELE K. FRIEDMAN et al.*	A Cooperative Evaluation of Mammography. *Discussed by:* DRS. ROSEMOND, WEEDER, BEHREND, FRY, RHOADS and FRIEDMAN.

A stated meeting of the Philadelphia Academy of Surgery was held in the College of Physicians on February 7, 1966 at 7:45 p.m. There were 98 members and guests present. Dr. George Willauer, the President, presided.

SCIENTIFIC PROGRAM

DR. JULIO C. DAVILA DR. E. V. LAUTSCH	Advances in the Design of Artificial Heart Valve in Relation to Tissue Healing. *Discussed by:* DRS. JOHNSON, TEMPLETON, HAUPT, BLAKEMORE and DAVILA.
DR. RICHARD N. MYERS	Percutaneous Transhepatic Cinecholangiography. *Discussed by:* DRS. RHOADS, DODD and MYERS.
DR. CHARLES C. WOLFERTH, JR. DR. PAUL M. JAMES	Experiences with Central Venous Pressure Determinations—An Analysis of 325 Cases. *Discussed by:* DRS. GOWEN, WILLAUER and WOLFERTH.

CONJOINT MEETING

The annual conjoint meeting of the New York Surgical Society and the Philadelphia Academy of Surgery was held in the College of Physicians at 2:00 p.m. on Wednesday, March 9, 1966. The President of the Academy of Surgery, Dr. George Willauer, was in the chair. There were 156 members and guests present.

*By invitation.

SCIENTIFIC PROGRAM

DR. JULIUS A. MACKIE
DR. STANLEY J. DUDRICK
DR. I. S. RAVDIN

Malignant Gastric Ulcer and Gastric Cancer—Results of Surgical Treatment.
Discussed by: DR. GORDON P. MCNEER

DR. THOMAS F. NEALON, JR.
DR. JOSEPH J. PROROK*
DR. STEPHEN GOSIN*

Treatment of Respiratory Failure with Controlled Ventilation.
Discussed by: DR. LOUIS R. DEL GUERCIO

DR. STANLEY J. DUDRICK
DR. HARRY M. VARS*
DR. HOWARD M. RAWNSLEY*
DR. JONATHAN E. RHOADS

Total Intravenous Alimentation and Growth in Puppies.
Discussed by: DR. STANLEY LEVENSON and DR. DAVID V. HABIF.

DR. R. ROBERT TYSON
DR. D. A. DE LAURENTIS

Femorotibial Bypass.
Discussed by: DR. W. GRAHAM KNOX.

DR. H. TAYLOR CASWELL

Definitive Treatment of 536 Cases of Hyperthyroidism with ^{131}I or Surgery.
Discussed by: DR. ROBERT H. ELLIOTT

DR. HERBERT E. COHN

Use of Isolated Intestinal Loops in the Management of Chronic Renal Failure.
Discussed by: DR. EDWARD GOLDSMITH

A stated meeting of the Philadelphia Academy of Surgery was held in the College of Physicians at 8:15 p.m. on April 4, 1966. The President, Dr. George Willauer, was in the chair. There were 69 members and guests present.

SCIENTIFIC PROGRAM

DR. JOHN TRAPNELL
DR. JOHN HOWARD

Operative Pancreatography.
Discussed by: DRS. RHOADS, NEMIR and HOWARD.

DR. FREDERICK REICHLE

Mucoepidermoid Tumors of the Bronchus.
Discussed by: DRS. ROSEMOND, NEALON, WILLAUER and REICHLE.

*By invitation.

DR. HUNTER NEAL

Ligation and Division of the Left Renal Vein as an Adjunct to Aortic Resection.
Discussed by: DRS. TYSON, ROBERTS, SHEARBURN and NEAL.

A stated meeting of the Philadelphia Academy of Surgery was held in the College of Physicians at 8:15 p.m. on May 2, 1966. Dr. George Willauer, the President was in the chair. There were 78 members and guests present.

SCIENTIFIC PROGRAM

DR. PHILIP GORDY

Hemispherectomy in the Treatment of Infantile Hemiplegia.
Discussed by: DRS. WILLAUER, ROBERTS and GORDY.

DR. STANLEY FARB
DR. ROBERT BUYERS

Management of Complete Laryngotracheal Transection.
Discussed by: DRS. TEMPLETON, BARNETT and FARB.

DR. HARVEY LERNER

Hydroxyurea in the Treatment of Epidermoid Tumors of the Head and Neck.
Discussed by: DRS. BRESSI, LIPSHUTZ, METTINGER, KRAMER and LERNER.

A stated meeting of the Philadelphia Academy of Surgery was held in the College of Physicians at 7:30 p.m. on October 3, 1966. The President, Dr. George Willauer, was in the chair. There were 80 members and guests present.

SCIENTIFIC PROGRAM

DR. JOHN IBACH
DR. WILLIAM H. ERB

Time, the Important Factor in Pneumatic Dilation for Achalasia.
Discussed by: DRS. ATKINS and ERB

DR. HOBART A. REIMANN

Periodic Peritonitis.
Discussed by: DRS. RHOADS and WILLAUER

DR. STANLEY DUDRICK DR. LEONARD MILLER DR. CLAUDE R. JOYNER DR. D. J. ESKIN	Clinical Use of Ultrasound in Diagnosis of Pulmonary Emboli. *Discussed by:* DR. ROBERTS.

A stated meeting of the Philadelphia Academy of Surgery was held in the College of Physicians at 8:15 p.m. on November 7, 1966. The President, Dr. George Willauer, presided. There were 83 members and guests present.

SCIENTIFIC PROGRAM

DR. LESTER M. CRAMER	Extension of Surgical Horizons by the Use of Pedicle Principles. *Discussed by:* DRS. IVY, MAY, LIPSHUTZ and WILLAUER.
DR. ROBERT K. JONES	Further Consideration of the Combined Surgical and Radiation Treatment of Craniopharygiomas. *Discussed by:* DR. MURTAGH.
DR. JOSEPH PROROK DR. STEVEN SANDLER	Limitation of Pressure Controlled Respirators to Ventilate Patients in Severe Bronchospasm. *Discussed by:* DRS. JOHNSON, and NEALON.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians at 8:15 p.m. on Monday, December 5, 1966. There were 86 members and guests present. Dr. George Willauer, the President, was in the chair.

SCIENTIFIC PROGRAM

DR. EDWIN L. KAPLAN* DR. WILLIAM L. DYSON* DR. WILLIAM T. FITTS, JR.	Duodenal Obstruction Due to Hypertrophy of Brunner's Glands–With Incidental Finding of Pancreatitis Carcinoma. *Discussed by:* DR. ERB.
DR. GEORGE J. WILLAUER	Memoir to Dr. Adolph A. Walkling.
DR. KENNETH E. FRY	First Successful Cholecystostomy, Some Problems with Calculus Cholecystitis 100 Years Later. (Annual Oration)

*By invitation.

Report of the Secretary for the Year Ending December, 1966

For the year ending December, 1966, the Philadelphia Academy of Surgery experienced a most satisfactory year. At the seven stated meetings there were interesting programs on various subjects. The average attendance was 52 Fellows and 33 Guests.

The conjoint meeting of the Philadelphia Academy of Surgery and the New York Surgical Society was held in Philadelphia on Wednesday, March 9, 1966. The meeting was well attended. Following the scientific meeting, sixty members and ninety-six guests adjourned to the Racquet Club for cocktails and dinner.

The Annual Oration, "The First Successful Cholecystostomy, Some Problems with Calculus Cholecystitis 100 years Later," was delivered by Dr. Kenneth E. Fry.

Eleven new surgeons were added to the membership: Dr. Thomas Langfitt, Dr. William Lemmon, Dr. Richard Flandreau, Dr. Curtis Lamp, Dr. Hunter Neal, Dr. Julius Mackie, Dr. Philip Gordy, Dr. Edward Closson, Captain Donald Custis, MC, USN, and Colonel Paul Thomas, MC, USA.

The members of the Academy were saddened by the deaths of Dr. S. Dana Weeder and Dr. Adolph Walkling.

As of December 31, 1966, there were 93 Active Members, 53 Senior Members, 16 Nonresident Fellows and 7 Government Service Fellows. During the past year, programs of the monthly meetings were sent to 105 residents.

This past year the Academy sponsored a Surgical Essay Competition for Surgical residents in the Philadelphia area. The prizes were awarded equally to Dr. G. Frank Tyers of the University of Pennsylvania for a paper entitled, "A New Device for the Nonoperative Repair of Internal Cardiac Pacemakers" and to Dr. Frederick A. Reichle of Temple University Medical School for a paper entitled, "Histidine Metabolism after Portacaval Shunt."

THOMAS F. NEALON, JR., M.D.
Secretary

The Year 1967

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on Monday, January 9, 1967 at 8:15 p.m. Dr. George Willauer, the President, was in the chair. There were 60 members and 23 guests present.

SCIENTIFIC PROGRAM

DR. ROBERT E. BERRY	A Surgeon in Nepal.
COL. PAUL A. THOMAS, MC, USA CAPT. P. C. JOLLY, USN* CAPT. W. C. ASCARI, USN*	Autologous Blood Transfusion for Pulmonary Surgery. *Discussed by:* DR. CAMISHION.

*By invitation.

DR. CHARLES P. BAILEY	Revascularization of the Ischemic Posterior Myocardium. *Discussed by:* DR. LEMMON

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on Monday, February 6, 1967 at 8:15 p.m. The President, Dr. George Willauer, presided. There were 79 members and 13 guests present.

SCIENTIFIC PROGRAM

DR. FELIX GLAUSER*	Rupture of the Diaphragm Due to Blunt Trauma. *Discussed by:* DR. ROSEMOND.
DR. HERNDON B. LEHR	Bank for Viable Skin. *Discussed by:* DRS. BLAKEMORE and TRONCELLITI.
DR. FRED MURTAGH	Peritoneal Shunts in the Management of Hydrocephalus. *Discussed by:* DRS. GORDY, KOOP and SCHULMAN.
DR. JAMES S. C. HARRIS	Memoir on Dr. Stephen Dana Weeder

CONJOINT MEETING

The annual conjoint meeting of the New York Surgical Society and the Philadelphia Academy of Surgery was held at the University Club in New York City on March 15, 1967 at 2:00 p.m. Dr. William P. Whalen, President of the New York Surgical Society and Dr. George Willauer, President of the Philadelphia Academy of Surgery, presided. There were 60 members of the Philadelphia Academy of Surgery present.

SCIENTIFIC PROGRAM

DR. PAUL A. KIRSCHNER DR. JOHN BOLAND*	Critical Evaluation of Preoperative Radiation for Lung Cancer. *Discussed by:* DR. VINCENT W. LAUBY
DR. FRANK C. SPENCER DR. JAY GROSFELD* DR. DAVID A. TICE* DR. J. K. TRINKLE*	Routine Monitoring of Blood Gas Tensions and pH during Cardiovascular and Abdominal Operations. *Discussed by:* DR. THOMAS F. NEALON, JR.

*By invitation.

DR. SAMUEL W. MOORE	Splenic Artery Aneurysm. *Discussed by:* DR. BROOK ROBERTS
DR. B. A. ZIKRIA* DR. A. JARETZKI, III* DR. J. M. FERRER, JR.	An Operative Dye Technique for Demonstration of Myocardial Ischemia. *Discussed by:* DR. JOHN Y. TEMPLETON, III
DR. W. GRAHAM KNOX DR. ROBERT E. MCCABE* DR. JOHN R. SCOTT* DR. HAROLD A. ZINTEL	Bouginage and Steroids in Acute Corrosive Esophagitis. *Discussed by:* DR. PAUL NEMIR, JR.
DR. PETER K. KOTTMEIER DR. EDMUND F. MC NALLY*	Control of Anal Incontinence Through Use of the Levator Ani Sling. *Discussed by:* DR. SAMUEL L. CRESSON

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on Monday April 3, 1967 at 8:15 p.m. The President, Dr. George Willauer, was in the chair. There were 46 members and 22 guests present.

SCIENTIFIC PROGRAM

DR. JERRY ZASLOW DR. JAY H. PORTNER DR. ERWIN A. COHEN DR. ALEXANDER LABE	The Use of Nitrogen Mustard after Radical Mastectomy. *Discussed by:* DRS. HAUPT, DEAVER, RHOADS, ROSEMOND, and WILLAUER.
DR. STANLEY BAUM	The Newer Methods of Radiologic Diagnosis Using Magnification Techniques. *Discussed by:* DRS. ROBERTS, RHOADS, and NEMIR.
DR. J. C. DONNELLY, JR. DR. GEORGE HAUPT	The Use of Transvenous Catheter Pacemakers. *Discussed by:* DRS. FROBESE, TYSON, BLAKEMORE and THOMAS.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on Monday, May 1, 1967 at 8:15 p.m. The Vice-President, Dr. George Rosemond, presided.

*By invitation.

SCIENTIFIC PROGRAM

DR. WILLIAM A. MONAFO	The Treatment of Burns with Silver Nitrate Compresses. *Discussed by:* DRS. OAKEY, DEAVER, RHOADS, BRESSI, BLAKEMORE and FLICK.
DR. RICHARD N. MYERS DR. CLARK E. BROWN DR. J. MONTGOMERY DEAVER	*In Vivo* Effect of Potassium on Human Small Bowel. *Discussed by:* DRS. MILLER, NEMIR and MONAFO.
DR. RAYFORD JONES DR. EDWARD M. COPELAND DR. LEONARD MILLER	Results of Carcinoma of the Colon. *Discussed by:* DRS. MOSS and JONES.
DR. TITO AUGUSTINE RANIERI and DR. JOSEPH T. BEARDWOOD, JR.	A Memoir to Dr. Edward T. Crossan.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on October 9, 1967 at 8:15 p.m. The President, Dr. George Willauer, was in the chair.

SCIENTIFIC PROGRAM

DR. ROBERT A. COOPER	A Memoir to Dr. Irvin E. Deibert
DR. H. A. HUME DR. J. R. IBACH* DR. W. H. ERB	Cholecystectomy in the Aged. *Discussed by:* DRS. ERB, SENCINDIVER, FITTS and SHEARBURN.
DR. LOUIS A. MEIER* DR. ROBERT A. BUYERS	Rationale and Synthesis of a New Carcinogen and the Induction of Bronchial Adenomas in the Experimental Animal. *Discussed by:* DRS. BUYERS and MEIER.
DR. RICHARD A. PADULA* DR. JOSEPH STAYMAN, JR.	Chronic Interstitial Pneumonia Cholesterol Type. *Discussed by:* DRS. CATHCART, SENCINDIVER, FLICK and PADULA.

*By invitation.

A stated meeting of the Philadelphia Academy of Surgery was held at the College of Physicians at 8:15 p.m. on November 6, 1967. The President, Dr. George Willauer, was in the chair. There were 76 members present.

SCIENTIFIC PROGRAM

DR. GEORGE GOWEN	Central Venous Pressure. *Discussed by:* DRS. ROBERTS, RHOADS, TEMPLETON, BLAKEMORE, DAVILA, BAILEY, and TROPEA.
DR. WILLIAM F. BORA, JR.	Fascicular Suture for Repair of Peripheral Nerves. *Discussed by:* DRS. OAKEY and BORA.
DR. HENRY BUCHWALD*	Cholesterol Metabolism and Atherosclerosis as Influenced by Partial Small Bowel Intestinal Exclusion.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall of the College of Physicians on Monday, December 4, 1967 at 7:45 p.m. Dr. George Willauer, the President, was in the chair. There were 56 members and 45 guests in attendance.

SCIENTIFIC PROGRAM

DR. NORTON HERING DR. RICHARD CHODOFF	Congenital Lobar Emphysema.
DR. THOMAS F. NEALON, JR.	The Place of Surgery in the Medical School of Today and Tomorrow. (Annual Oration)

Report of the Secretary for the
Year Ending December, 1967

The Philadelphia Academy of Surgery experienced an active and satisfactory year in 1967.

At the seven stated meetings there were interesting programs on a wide range of surgical topics with an average attendance of 64 Fellows. Two of the programs included visiting guests.

*By invitation.

Dr. Henry Buchwald, Assistant Professor of Surgery at the University of Minnesota, who won the 15th Samuel D. Gross Prize with his essay on "A Laboratory and Clinical Study of Cholesterol Metabolism and Atherosclerosis as Influenced by Partial Small Intestinal Exclusion", presented an abridged version of his essay at the November meeting. The excellent presentation of this outstanding piece of work was enthusiastically received by the Academy.

Dr. William Monafo, Assistant Professor of Surgery, Washington University, presented his work on "The Treatment of Burns with Silver Nitrate Compresses" at the May meeting.

The Conjoint meeting of the Philadelphia Academy of Surgery and the New York Surgical Society was held in New York City on March 15, 1967. Sixty members of the Philadelphia Academy attended. The excellent scientific program and the social program were both held at the University Club. The additional time made possible by holding the entire day's activities in one building allowed a very enjoyable and relaxing, as well as informative day.

The Annual Oration was delivered by Dr. Thomas F. Nealon, Jr. on "The Place of Surgery in the Medical School of Today and Tomorrow."

Five new surgeons were elected to Fellowship—Phillip Gordy, Robert Kenneth Jones, Charles Louis Sachs, Frederick Murtagh and Robert Bowers.

Three memoirs were delivered for departed Fellows. For Stephen Dana Weeder by James S. C. Harris; for Edward T. Crossan by Tito Augustine Ranieri; and to Irvin E. Deibert by Robert A. Cooper.

This year four Active Members were transferred to the Senior List—Albert Behrend, Robert A. Cooper, Paul Mecray, Jr. and Edwin W. Shearburn. At present the membership includes 105 Active Fellows, 50 Senior Fellows, 16 Non-Resident Fellows and 4 Government Fellows.

Programs of the Academy meetings are being mailed to all the surgical residents in the Philadelphia area. Two hundred eighty-one are sent out to residents each month.

THOMAS F. NEALON, JR., M.D.
Secretary

The Year 1968

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, January 8, 1968, at 8:15 p.m. The President, Dr. Willauer, was in the chair. There were 80 fellows and 72 guests present.

SCIENTIFIC PROGRAM

Symposium on Renal Transplantation

DR. HERBERT COHN	Problems of Cadaver Organ Procurement.

DR. EDWARD D. COPPOLA	Measurements of Serum Components During Rejection.
DR. CLYDE F. BARKER	Experience with Renal Transplantation in Patients Studied for Histocompatability.

Discussion of the symposium was opened by Dr. R. E. Billingham* followed by Drs. Johnson and Bower.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, February 5, 1968, at 8:15 p.m. The President, Dr. Rosemond, was in the chair. There were 56 Fellows and 23 guests present.

SCIENTIFIC PROGRAM

DR. J. WALLACE DAVIS*	Self-Esteem and Esthetic Surgery. *Discussed by:* DRS. RANDALL and LIPSHUTZ
DR. WILLIAM HARDESTY*	Mediastinoscopy *Discussed by:* DRS. BLAKEMORE and THOMAS
DR. HENRY H. SHERK*	Septic Arthritis of the Hip Complicating Pelvic Fractures with Visceral Trauma *Discussed by:* DR. MOORE

CONJOINT MEETING

The annual conjoint meeting of the Philadelphia Academy of Surgery and the New York Surgical Society was called to order by Dr. George P. Rosemond, President, at 2:15 p.m. on Wednesday, March 6, 1968 at the College of Physicians in Philadelphia. There were 56 Fellows of the Academy and 82 guests present.

SCIENTIFIC PROGRAM

DR. MORTON D. PAREIRA*	The Natural History of Acute Interstitial Pancreatitis. *Discussed by:* DR. IRVING F. ENQUIST
DR. ROBERT TYSON DR. S. DIPIENTRANTONIO* DR. FREDERICK REICHLE*	Autogenous Venous Patch Grafts in Arterial Prosthetics. *Discussed by:* DR. CHARLES F. STEWART

*By invitation.

DR. MOREYE NUSBAUM* DR. STANLEY BAUM* DR. WILLIAM S. BLAKEMORE	The Pharmacologic Control of Portal Hypertension by Regional Infusion. *Discussed by:* DR. MARVIN R. GLIEDMAN
DR. RICHARD PADULA* DR. S. M. COWAN* DR. RUDOLPH CAMISHION	*In Vivo* Cinephotographic Analysis of Aorta and Mitral Valvular Action. *Discussed by:* DR. ROBERT S. LITWAK
DR. EDWIN SHEARBURN	The Shouldice Repair for Inguinal Hernia *Discussed by:* DR. SAMUEL W. MOORE
DR. RICHARD A. DAVIS	Percutaneous Cordotomy *Discussed by:* DR. T. I. HOEN

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, April 1, 1968, at 8:15 p.m. The President, Dr. Rosemond, was in the chair. There were 54 Fellows and 23 guests present.

SCIENTIFIC PROGRAM

DR. JOSEPH W. STAYMAN, JR. DR. EDWARD D. MCLAUGHLIN	Thoracic Outlet Syndrome Treated by Resection of the First Rib. *Discussed by:* DR. NEMIR
DR. ROBERT LEBER*	Blunt Rupture of the Hepatic Artery. *Discussed by:* DRS. FITTS, TYSON, and ERB.
DR. LEONARD I. GOLDMAN*	Regional Perfusion of Malignant Melanoma of the Extremity.
DR. J. MONTGOMERY DEAVER	Memoir to Dr. Damon B. Pfeiffer.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, May 6, 1968, at 8:15 p.m. The President, Dr. Rosemond, was in the chair. There were 45 Fellows and 6 guests present.

SCIENTIFIC PROGRAM

DR. DAVID K. WAGNER*	Choledochal Duct Cysts with Lithiasis in Children. *Discussed by:* DRS. CRESSON and RHOADS

*By invitation.

DR. JOHN A. WALDHAUSEN*	Ascending Aortic Pulmonary Artery Shunts in Infants and Children. *Discussed by:* DR. JOHNSON
DR. FREDERICK MURTAGH	The Surgical Management of Multiple Intracranial Aneurysms. *Discussed by:* DRS. GROFF and JONES
DR. JOSEPH W. STAYMAN, JR.	A memoir to Dr. Frederick W. Dasch.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, October 7, 1968, at 8:15 p.m. The President, Dr. Rosemond, was in the chair. There were 52 Fellows and 15 guests present.

SCIENTIFIC PROGRAM

DR. WILLIAM S. BLAKEMORE	A Memoir on Dr. L. K. Ferguson
DR. CHARLES S. KREUGER*	Spontaneous Pneumothorax in the Newborn Infant *Discussed by:* DRS. LAUBY and DONNELLY
DR. HERBERT LIPSHUTZ	Anterior Approach to Parotid Surgery *Discussed by:* DR. ULIN
DR. JOHN E. HOPKINS	Cecostomy—An Appraisal *Discussed by:* DRS. SHEARBURN, ULIN, ERB, COOPER

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, November 4, 1968, at 8:15 p.m. The President, Dr. Rosemond, was in the chair. There were 46 Fellows and 23 guests present.

SCIENTIFIC PROGRAM

DR. T. A. RANIERI	A memoir to Dr. Calvin M. Smyth, Jr.
DR. PETER MOULDER*	Cardiac Hypoxia. *Discussed by:* DR. JOHNSON
DR. FREDERICK A. REICHLE*	Mycotic Aneurysm of the Abdominal Aorta. *Discussed by:* DRS. TYSON and STEEL
DR. STANLEY DUDRICK* DR. DOUGLAS W. WILMORE* DR. L. VARS*	Long Term Parenteral Hyperalimentation. *Discussed by:* DRS. BLAKEMORE, SHEARBURN, and ROBERTS

*By invitation.

A stated meeting of the Philadelphia Academy of Surgery was held in Thompson Hall, College of Physicians, on Monday, December 2, 1968, at 8:15 p.m. The President, Dr. Rosemond, was in the chair. There were 58 Fellows and 10 guests present.

SCIENTIFIC PROGRAM

DR. GEORGE M. LAWS	A memoir on Dr. A. Bruce Gill
DR. HOWARD STEEL	Transabdominal Vertebrectomy for the Correction of Severe Lordosis *Discussed by:* DR. JONES
DR. ROBERT TYSON	Femorotibial By-Pass–5½ years Experience (Annual Oration)

Report of the Secretary for the Year Ending December, 1968

The Philadelphia Academy of Surgery experienced a busy, productive, and interesting year in 1968.

At the seven stated meetings many interesting papers on various subjects were presented. There was an average attendance of sixty Fellows and twenty-five guests.

The conjoint meeting of the Philadelphia Academy of Surgery and the New York Surgical Society was held on March 6, 1968. The New York Surgical Society was the guest of the Philadelphia Academy of Surgery, the program being presented by the Philadelphia Academy. Approximately fifty-six Fellows of the Philadelphia Academy were present. Everyone enjoyed the excellent program. At the January meeting a symposium on Renal Transplantation was presented by Drs. R. E. Billingham, Herbert Cohn, Edward D. Coppola and Clyde F. Barker. The symposium, the attendance of which was double that of any of the other programs, was quite a success.

The Annual Oration, "Femorotibial By-Pass 5½ Years Experience" was delivered by Dr. R. Robert Tyson.

There were six surgeons elected to Fellowship during the year. These were as follows: Felix Glauser, Joseph C. Donnelly, Lester M. Cramer, Howard H. Steel, James P. Boland and William H. Hardesty.

One active member was transferred from the Active to the Senior Fellowship. At present there are 108 Active Fellows, 48 Senior Fellows, 17 Nonresident Fellows and 3 Government Fellows.

The Academy continues to mail programs to all surgical residents in the Philadelphia Area.

DONALD R. COOPER, M.D.
Secretary

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