

Annual report of the Peter Bent Brigham Hospital : 1929.

Contributors

Peter Bent Brigham Hospital.

Publication/Creation

Cambridge : Cambridge University Press, 1929

Persistent URL

<https://wellcomecollection.org/works/a6tsb3h4>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

PETER BENT BRIGHAM HOSPITAL --- BOSTON

SIXTEENTH ANNUAL REPORT FOR THE YEAR 1929



1930

FORM OF BEQUEST

I give and bequeath to the Peter Bent Brigham Hospital, a corporation established under the laws of the Commonwealth of Massachusetts, the sum of _____ dollars, the same to be used for the furtherance of its charitable work.



22503068961

SIXTEENTH ANNUAL REPORT
OF THE
PETER BENT BRIGHAM
HOSPITAL

FOR THE YEAR
1929



1930

WELLCOME
LIBRARY

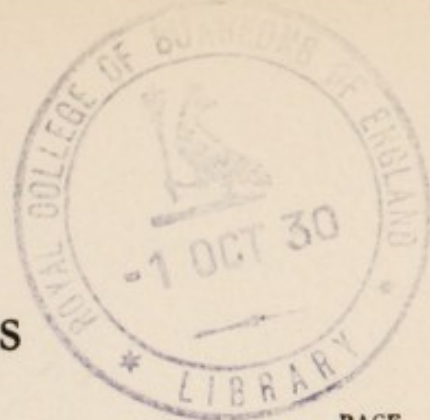
Ann Rep

WX28

.B65


B74P47

1929



Contents

	PAGE
PRESIDENT'S REPORT	1
DONATIONS	7
FREE BEDS	10
REPORT OF THE TREASURER	11
REPORT OF THE SUPERINTENDENT	18
Table I. Table of Medical and Surgical Dis- eases Reported in Terms of Inter- national Classification	22
Table II. Comparative Table of Statistics	28
Table III. Comparative Table of Statistics	31
Table IV. Expense and Revenue Statement	32
REPORT OF THE ROENTGENOLOGIST	38
REPORT OF THE SCHOOL OF NURSING	52
SOCIAL SERVICE	58
REPORT OF THE PATHOLOGIST	72
Publications of the Pathological Staff	76
REPORT OF THE SURGEON-IN-CHIEF	77
Publications of the Surgical Staff	91
Surgical Diagnoses and Operations	111
REPORT OF THE PHYSICIAN-IN-CHIEF	133
Publications of the Medical Staff	151
Summary of Medical Report	169
VISITING PHYSICIANS AND SURGEONS PRO TEMPORE ..	170
TRAVELING FELLOWS IN SURGERY	174
REGISTER OF PRESENT MEMBERS OF THE STAFF	175
REGISTER OF FORMER MEMBERS OF THE STAFF	190
FORMER MEMBERS OF THE CORPORATION	240
OFFICERS OF THE INSTITUTION	241



Digitized by the Internet Archive
in 2019 with funding from
Wellcome Library

<https://archive.org/details/b3171710x>

President's Report

ON JANUARY 10, 1929, Dr. Frederick Cheever Shattuck died, a serious loss not only to this hospital where for many years he was medical advisor to the Corporation, but to the whole medical profession in which he had been a leading physician, teacher and friend of the doctors and students.

The following resolution was voted by the Corporation:

"Dr. Frederick C. Shattuck, for nearly fifteen years Medical Advisor of the Peter Bent Brigham Hospital, died January 10, 1929, and the members of the Corporation wish to give expression to their grateful appreciation of his ever willing and helpful advice in the solution of their many problems, and their admiration for his fine work and high attainments in the field of medicine, his deep and sympathetic interest in all activities connected therewith."

During the past year, many doctors as follows who have received a part of their education at this hospital have been honored by appointments to positions of importance at other hospitals and medical schools.

Dr. Louis B. Baldwin, Assistant Professor and Instructor in Medicine, Strong Memorial Hospital, Rochester, New York.

Dr. Herrmann Blumgart, Associate Professor of Medicine, Harvard University.

Dr. Charles L. Brown, Associate Professor of Internal Medicine, University of Michigan.

Dr. John R. Carty, Assistant Professor of Roentgenology, Cornell University.

Dr. Charles L. Connor, Professor of Pathology, University of California.

PETER BENT BRIGHAM HOSPITAL

- Dr. Thomas D. Cunningham, Assistant Professor of Medicine, University of Colorado.
- Dr. William Dock, Associate Professor of Medicine, Stanford University.
- Dr. Lewis C. Foster, Assistant Clinical Professor of Surgery, Yale University.
- Dr. John Fulton, Professor of Physiology, Yale University.
- Dr. Ross Golden, Associate Professor of Medicine, Columbia University.
- Dr. Burgess Gordon, Assistant Professor of Medicine, Jefferson Medical College.
- Dr. Horace Gray, Associate Clinical Professor of Medicine, Stanford University.
- Dr. Edward A. Greenspon, Chief, Medical Department, Women's General Hospital, Montreal.
- Dr. David A. Haller, Assistant Professor of Medicine, University of Rochester.
- Dr. Axel M. Hjort, Toxicologist and Assistant Director of Medical Research, Medical Research Division, Chemical Warfare Service, Edgewood Arsenal, Edgewood, Maryland.
- Dr. Samuel H. Hurwitz, Associate Professor of Medicine, Stanford University School of Medicine.
- Dr. James M. Kinsman, Assistant Professor of Medicine, University of Louisville.
- Dr. Lawrence A. Kohn, Assistant Professor of Medicine, University of Rochester.
- Dr. Ashley W. Oughterson, Assistant Professor of Surgery, Yale University.

The education of nurses continues to be one of the important phases of the work of the hospital. The principal of the School of Nursing has in previous years reported concerning graduates of the school who are doing institutional work in various parts of the country.

The Public Health Nursing field offers equally important positions and fields of service. Our school has two avenues of preparation for Public Health Nursing.

REPORT OF THE PRESIDENT

One is through the five-year combined course with Simmons College, in which the fifth year of work is devoted to Public Health Nursing at Simmons College. The other is through the four months of field work offered also by Simmons College and which is given annually in affiliation in the three-year course to twelve students.

Following graduation, fifty-two of our nurses have entered the Public Health Nursing field either through visiting nurse associations, as school nurses, in child welfare, in prevention of tuberculosis, or industrial work. Some who are now holding important positions in this field are:

- Helen Ebbs Randell, 1915, Industrial Nurse, Bird Manufacturing Company, Walpole, Mass.
- Eva Gaboury, 1915, Store Nurse, R. H. White Company, Boston, Mass.
- Carrie E. Daniels, 1925, Supervisor, The Community Health Association, Boston, Mass.
- Edith W. Johnson, 1924, Assistant Director, Pawtucket and Central Falls Health Center, under the auspices of the American Red Cross, Pawtucket, Rhode Island.
- Barbara Robinson, 1927, School Nurse, Milton Public Schools, Milton, Mass.
- Margaret A. Lawson, 1927, Red Cross Public Health Nurse, Rockport, Mass.
- Hilda M. Rogers, 1926, School Nurse, Public Schools, Manchester, Mass.
- Gertrude C. Dunham, 1928, County Nurse with Cattaraugus County Health Demonstration, Randolph, New York.
- Jewell Crowley, 1925, Educational Secretary, Boston Tuberculosis Association.
- Helen Locke, 1928, Research Field Worker for Committee on Cost of Medical Care, Headquarters, Washington, D. C. Travelling in ten states. Although this is not Public Health Nursing, she was selected for the work from the staff of the Visiting Nurse Association of Washington, D. C.

PETER BENT BRIGHAM HOSPITAL

Miss Locke, Miss Dunham and Miss Lawson are graduates of the five-year combined course with Simmons College in Public Health Nursing.

We have been grateful during the past year for another one of the many useful gifts from Mr. Augustus Hemenway; he gave the hospital \$1,000 for the purchase of modern beds. This gift has inspired the Corporation to fit the hospital completely with modern beds as well as with many modern bed tables.

The hospital needs financial aid. Our patients are increasing. Modern methods are becoming more and more expensive and our endowment is no larger. Many departments of the hospital urgently require new buildings.

The Out-Door Department has grown and there should be additions, particularly to the admitting, social service, and record departments, which will better enable them to care for our patients. The cost of this addition is estimated at \$30,000, and an endowment of \$30,000 will be necessary to support it.

At present, we lack the special departments such as eye, ear, nose and throat and a dermatological service. The housing of these will require an additional story upon our present out-patient building at an estimated cost of \$75,000, requiring an endowment of \$50,000.

Tentative plans have also been made for a clinical library building. Our present quarters are outgrown. Our record stenographers are now scattered. A large part of our clinical records constantly in use are now stored in an inconvenient basement. We have no suitable locker rooms and rest room for these workers. It is estimated that a building for these needs which would also house our small patients' library and provide a photographic studio for record work would

REPORT OF THE PRESIDENT

cost \$60,000. An endowment of \$50,000 will be necessary.

Facilities in the operating room suite do not meet the requirements. Needed additions and alterations in the laboratories and operating suite are estimated to cost \$135,000, which will require the interest on \$250,000 of additional endowment to maintain these additions and to provide technicians' services.

The pathological department has for some time requested a more suitable amphitheatre permitting the release of the present post-mortem room for additional laboratory space. The estimated cost of this is \$40,000. Interest on \$70,000 will be required to maintain this addition.

We have no funds with which to build these additions. We now spend more than our income. A million dollars will be required for the buildings and endowment necessary to provide for the needs we have described.

The Board of Incorporators is grateful for the valuable services of the following eminent physician and surgeons who have served as temporary chiefs of service during the past year:

Duncan Graham, Professor of Medicine, Toronto University, served as Physician-in-Chief *pro tem* from March 3 to 8.
René Leriche, Professor of Surgery, University of Strasbourg, was here as Surgeon-in-Chief *pro tem* from June 17 to 22.
D. P. D. Wilkie, Clinical Professor of Surgery, University of Edinburgh, served as Surgeon-in-Chief *pro tem* from October 6 to 14.

The hospital acknowledges with gratitude the gifts received during the past year, a list of which will be found on the pages immediately following this report.

PETER BENT BRIGHAM HOSPITAL

We take this opportunity to record our appreciation and gratitude for the faithful services rendered by the staff and employees during the past year.

CHARLES P. CURTIS,

President.

DECEMBER 31, 1929.

Gifts to the Hospital During the Year 1929

Mr. Jesse Koshland	\$ 25.00
Boston Firemen's Relief Fund for a free bed for year 1929	200.00
Mr. Nash Corey	4.00
Mrs. John C. Inches	25.00
Mrs. Charles P. Curtis for a free bed for the year 1929.....	100.00
Mr. Harold R. Austin	5.00
Mr. Edward Green	5.00
Anonymous gift	5.00
Miss Helen A. Greeley	5.00
Mrs. A. M. Greeley	5.00
Anonymous gift	5.00
Legacy under the will of Louis A. Frothingham	5,000.00
Anonymous gifts to the Christmas Fund	33.82
Committee of the Permanent Charity Fund, Inc., to be used for the general purposes of the Social Service Department	2,525.00
Anonymous gift to the fund for research in Renal and Vascular Diseases	1,000.00
Mr. John T. Nightingale gift to the Fiction Library Fund...	50.00
GIFTS TO THE PHILIP H. GRAY FUND FOR THE FURTHERANCE OF NEURO-SURGERY:	
Mrs. Almena S. Gray	10,000.00
Florence S. Doughton	20.00
MR. G. GORHAM PETERS GIFT through Dr. Harvey Cushing to establish a traveling fellowship fund to be known as the G. Gorham Peters Fund	5,000.00
GIFTS TO THE DIABETIC RESEARCH FUND:	
Mrs. Emily H. Romney	25.00
Anonymous gift	200.00

GIFTS TO SOCIAL SERVICE FUND

Mr. and Mrs. F. Douglas		Mrs. William Amory ...\$	10.00
Cochrane	\$ 100.00	Mrs. Francis C. Hall ...	10.00
Mrs. Arthur B. Denny..	25.00	Mrs. George H. Lyman..	10.00
Mrs. Edward W. Grew.	5.00	Miss Louisa Hunnewell .	20.00
Miss Amelia Peabody ..	15.00	Mrs. Edward J. Holmes.	5.00
Mrs. Stephen M. Weld..	10.00	Mr. L. H. H. Johnson..	50.00
Mrs. H. L. Greenough ..	10.00	Mrs. Oliver Ames	15.00
Mr. George E. Cabot ...	25.00	Mrs. Eliot Hubbard	10.00
Miss Harriet S. Curtis ..	10.00	Mr. T. H. Brown	5.00
Mrs. Everett Morss	5.00	Mrs. P. L. Saltonstall ..	5.00

PETER BENT BRIGHAM HOSPITAL

Mrs. John P. Reynolds ..\$	25.00	Mrs. Walter C. Baylies .	\$ 25.00
Miss Sarah Bremer	25.00	Miss Fannie M. Faulkner	20.00
Mrs. Nat'l Thayer	25.00	Mrs. Amory A. Lawrence	25.00
Mrs. H. Pauline Merrick	25.00	Mrs. Charles L. Slattery	5.00
Mrs. Henry Lyman	15.00	Dr. and Mrs. David	
Mrs. H. D. Chandler ...	5.00	Cheever	25.00
Mrs. Henry S. Howe ...	25.00	Mrs. P. H. Lombard	15.00
Mrs. Henry A. Morss ..	25.00	Mrs. C. W. Whittier ...	10.00
Mr. G. Gorham Peters ..	50.00	Mrs. F. W. Sargent	1,000.00
Mrs. R. H. Stevenson ..	5.00	Mrs. George E. Warren.	25.00
Mrs. J. B. Howland	10.00	Mrs. Reginald Foster ...	5.00
Mrs. R. D. Sears	10.00	Mrs. Charles P. Curtis..	50.00
Miss Edith Fitch	10.00	Mrs. Philip Dexter	10.00
Mrs. Moses Williams ...	5.00	Mr. Augustus Hemenway	25.00
Miss Hershey's School		Mr. and Mrs. A. Law-	
Association	100.00	rence Lowell	25.00
Dr. Harvey Cushing ...	50.00	Mrs. John L. Thorndike.	10.00
Mrs. George B. Blake ..	25.00	Mrs. F. B. Crowninshield	10.00
Mrs. Donald Frost	10.00	Mrs. Henry B. Chapin ..	10.00
Mrs. Horace P. Binney..	5.00	Mrs. Richard C. Paine ..	50.00
Mrs. R. H. Gardiner, Jr.	5.00	Mrs. Isabella C. Graham	5.00
Miss Ida Beale	5.00	Mrs. William Aldrich ..	10.00
Mrs. Albert E. Davies ..	10.00	Miss Clara E. Sears ...	5.00
Miss Evelyn R. Sturgis..	25.00	Mrs. Roger Merriman ..	20.00
Mrs. Louis A. Frothing-		Mrs. Samuel E. Guild ..	5.00
ham	25.00	Mrs. R. T. Paine, 2d ...	25.00
Mrs. Malcolm Donald ..	10.00	Mrs. A. Farwell Bemis..	25.00
Mrs. Harry L. Bailey ..	60.00	Mr. Henry J. Sargent ..	200.00
Mrs. William Whitman..	10.00	Mrs. Henry G. Brooks..	5.00
Mr. William P. Homans	10.00	Mrs. Ralph B. Williams.	50.00
Mrs. Robert Saltonstall..	25.00	Mrs. W. R. Peabody ...	10.00
Mrs. Joseph Warren ...	15.00	Mrs. G. B. Denny	25.00
Mrs. Henry P. Binney ..	25.00	Mrs. M. G. Houghton...	25.00
Mr. William Amory	500.00	Mrs. E. A. Taft	10.00
Mr. J. Harleston Parker	10.00	Mrs. Herbert F. Day ...	3.00
Mrs. N. P. Hallowell ..	50.00	Mrs. John C. Gray	25.00
Mrs. Henry S. Grew ...	10.00	Mrs. Neal Rantoul	25.00
Mrs. F. Murray Forbes..	100.00	Miss Ellen T. Bullard ..	10.00
Mrs. William Y. Peters..	25.00	Mrs. W. Davies Sohier..	5.00
Mrs. R. G. Shaw	10.00	Mrs. P. L. Stackpole ...	200.00
Miss Mary Curtis	5.00	Miss Helen Cheever	25.00
Mrs. Arthur Hunnewell..	25.00	Mrs. John C. Lee	10.00
Mr. Arthur W. Hunne-		Mrs. Shepherd Brooks ..	100.00
well	25.00	Mr. Gordon Dexter	25.00
Mrs. J. L. Bremer	25.00	Mrs. Ellerton James	5.00
Mrs. S. B. Wolbach	100.00	Miss Mary Hunnewell ..	10.00
Mrs. Herbert Lyman ...	10.00	Mrs. Gilbert Horrax ...	10.00
Mrs. Francis Peabody ..	10.00	Mrs. H. G. Byng	10.00
Mr. Theodore Lyman ..	500.00	Mrs. F. Winthrop	20.00

GIFTS TO THE HOSPITAL

Miss E. B. Brown	\$ 25.00	Miss Rose L. Dexter ..	\$ 25.00
Mrs. Sidney Williams ..	10.00	Mrs. Fletcher D. Hallock	5.00
Mrs. John Homans	10.00	Mr. J. A. L. Blake	10.00
Mrs. James J. Storrow ..	10.00	Mrs. Hugh Scott	5.00
Mrs. Norman Cabot	15.00	Mrs. H. B. Cabot, Jr. ..	10.00
Miss Margaret Warren..	5.00	Mrs. J. W. Farley	5.00
Mr. Charles P. Curtis ..	100.00	Mr. Ronald T. Lyman ..	25.00
Mrs. Roger Merriman ..	10.00	Miss Katherine A.	
Mrs. John Grandin	25.00	Homans	10.00
Miss Mary C. Herter ..	15.00		
Proceeds of sale for the Social Service Fund			704.45

Free Bed Fund

Alexander Cochrane Free Bed	\$10,000.00
Walter Hunnewell Free Bed	10,000.00
Miss Aimee Lamb (In memory of Mrs. Winthrop Sargent)	5,000.00
Carrie M. Hall Free Bed	5,000.00
(Alumnae Association of the Peter Bent Brigham Hospital School of Nursing)	
Theodore Lyman Free Bed	1,000.00 for ten years
Boston Firemen's Relief Association Free Bed	200.00 for one year
Charles P. Curtis Free Bed	100.00 for one year

Report of Treasurer

A STATEMENT of receipts of income from investments and of payments therefrom out of the office of the Treasurer for the year ending December 31, 1929, is as follows:

INCOME

Real Estate Receipts:

Rents	\$196,373.21	
Taxes paid by tenants	13,623.41	
Insurance paid by tenants	462.97	
Portland St. Power Plant net receipts	558.64	
	<hr/>	\$211,018.23

Interest on Investments:

On bonds	\$ 45,447.85	
On mortgages	8,483.50	
On notes	8,576.70	
	<hr/>	\$ 62,508.05
Dividends	37,026.13	
	<hr/>	99,534.18
Bank interest		2,843.60
		<hr/>
Total income		\$313,396.01

EXPENDITURES

Taxes	\$ 71,011.91
Building repairs, etc.	13,264.80
Insurance	5,964.43
Salaries	7,800.00
Legal expenses	831.35
	<hr/>
Amount carried forward	\$ 98,872.49

PETER BENT BRIGHAM HOSPITAL

<i>Amount brought forward</i>	\$ 98,872.49	
Audit	800.00	
Bank charges .....	.85	
Safe deposit box rent	70.00	
	<hr/>	
	\$ 99,743.34	
Bond premiums amortized	558.93	
	<hr/>	
		100,302.27
		<hr/>
		\$213,093.74
Transferred to Portland St. Power Plant Depreciation Account ...\$	558.64	
Transfer of income applicable to the following funds for year 1929:		
Surgeon-in-Chief Fund	1,565.22	
John P. Reynolds Scholarship Fund	125.00	
	<hr/>	
		2,248.86
		<hr/>
Net investment income available for Hospital Operating expenses		\$210,844.88
Net payments for Hospital Operat- ing expenses as shown by the Superintendent's statement ap- pended	\$206,811.19	
Decrease in Superintendent's supplies	5,674.14	
	<hr/>	
		212,485.33
		<hr/>
Deficit for year 1929 charged to General Fund ..\$		1,640.45

SCHEDULE OF PROPERTY

Land and buildings occupied for Hospital includ- ing furniture and fixtures	\$2,276,498.25
Mortgages	290,200.00
Note Kissell, Kinnicutt & Co., \$50,000 discounted	48,633.33
Note F. S. Moseley & Co., \$50,000 discounted ..	48,211.11
	<hr/>
<i>Amount carried forward</i>	\$2,663,542.69

REPORT OF THE TREASURER

Amount brought forward\$2,663,542.69

Land and buildings:

166/210 Portland Street	786,666.29
38/54 Scollay Square (formerly 5/11 Tremont Row)	492,943.41
108/114 Lincoln Street	153,368.45
91/5 Portland Street	75,957.25
67/9 Commercial Street	74,385.84
1/3 Bowdoin Street	54,452.51
148/50 Hanover Street	60,787.78
1/7 Sudbury Street	60,151.83
4/14 Cambridge Street (formerly 88/92 Court Street)	55,388.53
94/8 Arch and 13/17 Otis Streets	166,211.42
Land corner Albany and Dover Streets	110,221.90
1000 shares Boston & Maine R. R. Co. pfd. A stamped	129,432.68
500 shares Boston & Maine R. R. Co. pfd. A unstamped	36,178.76
120 shares Boston & Maine R. R. Co. P. Pref. pfd.	12,000.00
100 shares Boston & Albany R. R. Co.	25,800.00
524 shares Vermont & Massachusetts R. R. Co.	91,700.00
450 shares Old Colony R. R. Co.	93,150.00
183 shares Nashua & Acton & Boston R. R. Co.	183.00
300 shares State Street Exchange	25,960.00
500 shares Boston Real Estate Trust	58,514.25
150 shares Hotel Trust (Touraine)	15,900.00
100 shares South Terminal Trust	10,300.00
1000 shares Berkeley Hotel Trust	65,000.00
363 shares New York Central R. R. Co.	35,667.95
100 shares Chicago, Milwaukee, St. Paul & Pacific R. R. Co. pfd.	15,162.70
247 shares Pennsylvania R. R. Co.	13,074.10
1500 shares New York, New Haven & Hartford R. R. Co. common	28,500.00

Amount carried forward\$5,410,601.34

PETER BENT BRIGHAM HOSPITAL

<i>Amount brought forward</i>	\$5,410,601.34
375 shares New York, New Haven & Hartford R. R. Co. pfd.	37,500.00
186 shares Pennroad Corporation	2,883.00
\$ 60,000 Edison Electric Illuminating Co. 6% coupon notes due 1930	60,000.00
25,000 Long Island R. R. Co. Gold Debenture 5% bonds due 1934	24,000.00
100,000 Chicago, Burlington & Quincy R. R. Co. Ill. Division 3½% bonds due 1949	89,077.50
20,000 Washington Water Power Co. 5% bonds due 1939	20,162.70
50,000 Boston & Maine R. R. Co. 4½% and 5% bonds due 1944	50,422.99
50,000 Interborough Rapid Transit Co. 5% bonds due 1966	49,500.00
50,000 Burlington Cedar Rapids & Northern R. R. Co. 5% bonds due 1934 ..	51,291.89
25,000 New York Central & Hudson River R. R. Co. first mortgage 3½% bonds due 1997	21,875.00
50,000 Cleveland, Lorain & Wheeling R. R. Co. 5% bonds due 1933	50,991.69
25,000 New York Central & Hudson River R. R. Co. Debenture 4% bonds due 1934	23,937.50
25,000 Northern Pacific R. R. Co. Prior Lien 4% bonds due 1997	24,781.25
50,000 Eastern Massachusetts Street Ry. Co. series A 4½% bonds due 1948 } 2,500 Eastern Massachusetts Street Ry. Co. series D 6% bonds due 1948 .. }	41,450.00
25,000 Quincy Market Realty Co. 5% bonds due 1964	25,000.00
<i>Amount carried forward</i>	\$5,983,474.86

REPORT OF THE TREASURER

<i>Amount brought forward</i>		\$5,983,474.86
28,000	General Electric Co. 3½% bonds due 1942	23,170.00
56,800	Pere Marquette Ry. Co. first mortgage 5% bonds due 1956	49,420.00
3,000	Pennsylvania R. R. Co. 4% bonds due 1948	2,880.00
50,000	Atchison, Topeka & St. Fe Ry. Co. Trans. Continental Short Line 4% bonds due 1958	47,500.00
50,000	Illinois Steel Company 4½% bonds due 1940	47,375.00
25,000	Cedar Rapids Mfg. & Power Co. first mortgage Sinking Fund 5% bonds due 1953	24,250.00
20,000	Milwaukee Electric Railway & Light reg. Ext. mortgage 4½% bonds due 1931	18,500.00
15,000	Montreal Light & Power Co. first mortgage 4½% bonds due 1932 ...	13,875.00
15,000	Baltimore & Ohio R. R. Co. So. Western Division 5% bonds due 1950	14,887.50
2,400	Chicago, Milwaukee, St. Paul & Pacific R. R. Co. 5% bonds due 1975 ..	2,400.00
50,000	City of Toronto, Canada, General Consolidated Loan Debt. 5% bonds due 1941	99,125.00
20,000	City of Toronto, Canada, General Consolidated Loan Debt. 5% bonds due 1943	
30,000	City of Toronto, Canada, General Consolidated Loan Debt. 5% bonds due 1944	
50,000	Canadian Pacific Railway Equipt. Trust 5% bonds due 1944	49,625.00
National Shawmut Bank Special deposit at 4%		100,000.00
<i>Amount carried forward</i>		\$6,476,481.36

PETER BENT BRIGHAM HOSPITAL

Amount brought forward\$6,476,481.36

Cash:

Operating Expense Fund	\$ 20,000.00	
In banks	176,511.47	
		<hr/> 196,511.47
Superintendent's inventories		44,929.01
Accounts receivable		510.00
		<hr/> \$6,718,432.84

Included in the above schedule of property are the following special funds:

DIABETIC RESEARCH FUND	\$ 1,627.43
PHILIP H. GRAY FUND for the furtherance of Neuro-Surgery..	9,769.97
JOHN P. REYNOLDS MEMORIAL FUND	1,000.00
HEMENWAY SQUASH COURT	11,050.00
SURGICAL DRESSING FUND, Donation from the New England Surgical Dressing Committee ..	10,000.00
SURGEON-IN-CHIEF FUND	31,304.46
JOHN P. REYNOLDS SCHOLARSHIP FUND	2,500.00
RADIUM FUND	3,000.00
ALEXANDER COCHRANE FREE BED FUND	10,000.00
THEODORE LYMAN FREE BED FUND	1,000.00
AIMEE LAMB FREE BED FUND in memory of Mrs. Winthrop Sargent	5,000.00
WALTER HUNNEWELL FREE BED FUND	10,000.00
CARRIE M. HALL FUND	5,000.00
SOCIAL SERVICE FUND	337.48
CHRISTMAS FUND	33.82

Amount carried forward\$101,623.16

REPORT OF THE TREASURER

<i>Amount brought forward</i>	\$101,623.16	
G. GORHAM PETERS FUND	5,000.00	
FUND FOR RESEARCH in Renal and Vascular diseases	1,702.08	
	<hr/>	\$108,325.24
		<hr/>
		\$6,610,107.60

Viz.:

Peter Bent Brigham Hospital	\$6,491,380.00
Portland Street Power Plant	
Depreciation account	5,681.09
Real Estate Depreciation Ac- count	111,649.00
<i>Surgeon-in-Chief Fund:</i>	
Income Account	1,195.66
<i>John P. Reynolds Scholarship Fund:</i>	
Income Account	201.85
	<hr/>
	\$6,610,107.60

EDMUND D. CODMAN,
Treasurer.

Report of Superintendent

THE sixteenth annual report of the Superintendent is submitted herewith. There were admitted to the wards during the year 4,472 patients, as compared with 4,523 in 1928. Although the number of admissions was slightly less, the number of days' treatment was greater—78,743 patients' days as compared with 77,691 in 1928. The average time per patient in the hospital has increased slightly, being 18— days against 17— days in 1928. In the out-door department, the total number of visits showed a marked increase, 73,593 for this year as compared with 57,162 in 1928. Notwithstanding this, there were fewer new patients, 7,849 as compared with 8,164 last year. The drop in the number of new patients was on the medical service. It has been the constant aim of the departments to improve the quality of the work, and, with the limit of time, space and personnel, necessarily fewer new patients were seen.

The number of ambulance calls increased from 511 in 1928 to 675 this year, and the mileage traveled has increased nearly 100 per cent over last year.

The daily per capita cost for all house patients was \$7.41—, an increase of .16c over last year. Deducting the cost of operating the private ward and the out-door department, the daily per capita cost was \$6.35—. It was \$6.17— in 1928. Other comparative figures will be found in Table II on page 28.

It gives us great pleasure to record the fact that Miss Carrie M. Hall, Principal of the School of Nursing and Superintendent of Nurses, has recently been

REPORT OF THE SUPERINTENDENT

awarded the Florence Nightingale Medal of the International Red Cross. This medal was established at the International Red Cross Conference held in Washington in 1912, and it was intended to award it annually, but owing to the outbreak of the war and its long duration, no awards were made until 1930. It is given to graduate nurses "who have rendered distinguished service and devoted service."

There have been no changes in the personnel of the administrative staff during the past year.

We regret to have to record the death of Walter H. Hamlin, one of our orderlies who had given us faithful service. His death was the result of an acute attack of heart disease.

There have been no changes in the personnel of the staff of the dietary department during this past year. Fourteen young women were admitted to the six months' course for student dietitians; thirteen of these have completed the course, and the fourteenth, a Red Cross nutritionist, who took half of her course in the summer of 1929, will complete the course in 1930. Columbia University is allowing credit towards a Master's degree from Teachers' College for the work done in our dietary department. The reorganization of the Diet Kitchen, whereby the regular house diet is used as a basis for all special diets, and which was instigated last year, has been successfully continued. At the request of the Physician-in-Chief, a loose-leaf notebook containing special diets commonly used in the hospital has been placed in all wards and the outdoor department as a reference book for the house staff; 13,342 diets were prepared in 1929 as compared with 14,446 in 1928. In these, there were: Diabetic,

PETER BENT BRIGHAM HOSPITAL

2,672; High Caloric, 2,943; Standard Nephritis, 514; Low Protein, 912; Sippy, 902, and Special Anemia diets, 693.

During the year, 9,741 books were circulated from the patients' fiction library, 149 being in foreign languages. Ninety-one books were purchased and 76 were given by our friends. A gift of \$50 for new books was made by one of our private ward patients.

We wish to gratefully acknowledge a generous gift of \$1,000 from Mr. Augustus Hemenway, a former member of the Corporation, for the purchase of new beds.

During the year, we were visited both by fire and flood. On February 10, from an unknown cause, one of our ambulances caught fire while in the garage, resulting in complete destruction of the ambulance and a pleasure car. As a result, the garage had to be entirely re-finished. It has also been equipped with automatic sprinklers. A new ambulance was purchased. On December 14, a 36-inch water main in Huntington Avenue, near the hospital, burst, resulting in a serious flood. Damage to hospital and personal property amounted to about \$1,500.

No decision has been reached by the Corporation as to when or to what extent additions to our laboratories shall be made nor has a decision been made as to the building of a clinical record library. The Corporation has stated that there are no funds for these additions, and have advised further study of our requirements. We should again study the needs of expansion in the out-door department, particularly as to re-arrangement and enlargement of the admitting offices, record rooms, surgical dressing rooms, and social service space.

REPORT OF THE SUPERINTENDENT

I wish to again express sincere thanks to my co-workers in the employ of the hospital for their interest and assistance, and to the members of the Corporation for their support.

J. B. HOWLAND,

Superintendent.

DECEMBER 31, 1929.

PETER BENT BRIGHAM HOSPITAL

Table I
Table of Medical and Surgical Diseases in
Terms of International Classification

JANUARY 1, 1929, TO JANUARY 1, 1930

DISEASES	MEDICAL		SURGICAL		O. D. D.
	Disch.	Dead	Disch.	Dead	
I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES					
1 Typhoid and paratyphoid fever	5	2	2	..	..
4 Malta fever	1	..	..	..	..
5 Malaria	3	..	..	..	3
7 Measles	1	..	1	..	..
8 Scarlet fever	2	..	..	..	1
10 Diphtheria	1	..	..	..	3
11 Influenza	70	..	5	..	20
13 Mumps .....	..	..	..	..	1
16 Dysentery, bacillary	1	..	..	..	..
21 Erysipelas	4	1	1	..	1
22 Acute anterior poliomyelitis	8	2	2	..	1
23 Lethargic encephalitis	2	..	..	..	..
24 Meningococcus meningitis	1	1	..	..	..
25 Other epidemic and endemic diseases	54	..	5	..	295
29 Tetanus	1	..	..	..	1
30 Mycoses	1	..	..	..	2
31 Tuberculosis of respiratory system ..	93	3	21	..	176
32 Tuberculosis of the meninges	1	..	..	..	..
33 Tuberculosis of intestines and peri- toneum	9	1	12	2	10
34 Tuberculosis of vertebral column	3	..	6	1	4
35 Tuberculosis of joints	1	..	2	1	..
36 Tuberculosis of other organs	5	..	27	3	31
37 Disseminated tuberculosis	6	2	1	..	2
38 Syphilis (includes tabes dorsalis and general paralysis of the insane) ..	237	4	42	..	289
39 Soft chancre	1	..	..	..	2
40 Gonococcus infection	17	..	9	..	72
41 Purulent infection, septicemia	5	1	7	2	21
42 Other infectious diseases	1	..	..	..	..

REPORT OF THE SUPERINTENDENT

DISEASES		MEDICAL		SURGICAL		O. D. D.
		Disch.	Dead	Disch.	Dead	
II. GENERAL DISEASES NOT INCLUDEDLED ABOVE						
43	Cancer and other malignant tumors of the buccal cavity .....	..	..	9	1	4
44	Cancer and other malignant tumors of the stomach and liver	24	1	36	6	66
45	Cancer and other malignant tumors of peritoneum, intestines, and rectum	6	1	28	4	30
46	Cancer and other malignant tumors of female genital organs	3	..	14	..	51
47	Cancer and other malignant tumors of the breast	5	1	22	1	16
48	Cancer and other malignant tumors of the skin .....	..	..	3	..	20
49	Cancer and other malignant tumors of other and unspecified organs	42	14	41	5	18
	Malignant tumors of nervous system (verified) (includes gliomas) (cf. also 59 and 84)	1	..	76	12	..
50	Benign tumors and tumors not returned as malignant (tumors of female genital organs excepted) ..	21	2	73	2	289
51	Acute rheumatic fever	34	..	..	..	74
52	Chronic rheumatism, osteoarthritis, gout	104	..	15	..	367
54	Pellagra	5	..	..	..	..
56	Rickets	2	..	4	..	10
57	Diabetes mellitus	77	2	29	3	122
58	Anemia	99	1	39	..	93
59	Diseases of the pituitary gland	3	..	61	1	10
60	Disease of the thyroid gland	50	1	36	1	220
63	Diseases of the adrenals (Addison's disease)	2	2	..	..	3
64	Diseases of the spleen	17	..	1	..	2
65	Leukemia and Hodgkin's disease	17	4	3	..	9
66	Alcoholism (acute or chronic)	18	..	12	..	27
67	Chronic poisoning by mineral substances	3	1	..	..	..
68	Chronic poisoning by organic substances	5	..	..	..	2
69	Other general diseases	99	1	14	1	435

PETER BENT BRIGHAM HOSPITAL

DISEASES		MEDICAL		SURGICAL		O. D. D.
		Disch.	Dead	Disch.	Dead	
III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE						
70	Encephalitis (does not include Encephalitis lethargica, cf. 23)	8	2	9	3	1
71	Meningitis (does not include meningitis specified as meningococcic, tuberculous, rheumatic, etc.)	8	3	14	..	1
73	Other diseases of the spinal cord	25	..	7	..	7
74	Cerebral hemorrhage, apoplexy	60	10	5	..	21
75	Paralysis without specified cause	18	1	8	..	4
77	Other forms of mental alienation ...	80	..	21	..	167
78	Epilepsy	9	..	8	..	99
79	Convulsions (non-puerperal) (5 years and over)	1	..	5	..	2
81	Chorea	11	..	2	..	28
82	Neuralgia and neuritis	15	..	48	..	127
83	Softening of the brain .....	..	..	1	..	..
84	Other diseases of the nervous system	99	1	19	..	456
	Tumors of the nervous system (verified) (cf. also 49 and 59)	..	..	89	21	..
	Tumors of the nervous system (unverified) .....	..	..	68	..	..
	Tumors of the nervous system (suspect)	8	..	110	3	..
85	Diseases of the eye and annexa	93	..	26	..	112
86	Diseases of the ear and of the mastoid process	20	..	14	..	41
IV. DISEASES OF THE CIRCULATORY SYSTEM						
87-90	Diseases of the heart	610	66	90	2	1072
91, 92	Diseases of the arteries	315	8	71	2	88
93	Diseases of the veins (varices, hemorrhoids, phlebitis, etc.)	66	..	110	1	492
94	Diseases of the lymphatic system (lymphangitis, etc.)	5	..	40	..	77
95	Hemorrhage without specified cause ..	3	..	5	..	22
96	Other diseases of the circulatory system	299	4	49	..	22

REPORT OF THE SUPERINTENDENT

DISEASES		MEDICAL		SURGICAL		O. D. D.
		Disch.	Dead	Disch.	Dead	
V. DISEASES OF THE RESPIRATORY SYSTEM						
97	Diseases of the nasal fossae and the annexa	40	..	28	..	169
98	Diseases of the larynx	6	..	1	..	26
99	Bronchitis	68	..	20	..	239
100	Bronchopneumonia (including capillary bronchitis)	85	13	30	2	10
101	Pneumonia	44	5	7	1	6
102	Pleurisy	78	1	42	3	63
103	Congestion and hemorrhagic infarct of the lung	30	2	21	..	1
105	Asthma	63	1	16	..	197
106	Pulmonary emphysema	31	..	1	..	36
107	Other diseases of the respiratory system	20	2	19	1	116
VI. DISEASES OF THE DIGESTIVE SYSTEM						
108	Diseases of the mouth and annexa ...	82	..	42	..	369
109	Diseases of the pharynx and tonsils ..	79	..	132	..	176
110	Diseases of esophagus	8	..	4	..	6
111	Ulcer of the stomach and duodenum..	111	3	33	4	304
112	Other diseases of the stomach (cancer excepted)	39	1	7	..	148
114	Diarrhea and enteritis (2 years and over)	40	5	30	1	60
116	Diseases due to intestinal parasites ...	5	..	3	..	5
117	Appendicitis and typhilitis	8	..	162	3	176
118	Hernia, intestinal obstruction	47	..	167	7	200
119	Other diseases of the intestines	67	1	75	2	558
122	Cirrhosis of liver	16	3	4	1	9
123	Cholelithiasis and cholecystitis	36	..	92	3	79
124	Other diseases of the liver	56	..	40	1	239
125	Diseases of the pancreas	3	..	..	..	..
126	Peritonitis without specified cause	8	1	22	2	7
VII. NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA						
128	Acute nephritis	12	2	2	..	15
129	Chronic nephritis	35	6	3	..	62

PETER BENT BRIGHAM HOSPITAL

DISEASES	MEDICAL		SURGICAL		O. D. D.
	Disch.	Dead	Disch.	Dead	
130 Chyluria	2	..	..	..	..
131 Other diseases of kidneys and annexa (diseases of the kidneys in pregnancy excepted)	43	..	50	1	87
132 Calculi of the urinary passages	7	..	50	1	17
133 Diseases of the bladder	34	..	19	..	325
134 Diseases of the urethra, urinary abscess, etc. ....	..	..	17	1	68
135 Diseases of the prostate	21	..	72	9	76
136 Non-venereal diseases of the male genital organs	7	..	20	..	55
137 Cysts and other benign tumors of the ovary	3	..	20	1	18
138 Salpingitis and pelvic abscess .....	..	..	42	..	66
139 Benign tumors of the uterus	7	..	69	2	62
140 Non-puerperal uterine hemorrhage ...	2	..	14	..	18
141 Other diseases of the female genital organs	28	..	192	..	879
142 Non-puerperal diseases of the breast (cancer excepted)	1	..	20	..	50
VIII. THE PUERPERAL STATE					
143 Accidents of pregnancy	1	..	27	1	41
Pregnancy normal	4	..	6	..	75
Newborn infant .....	..	..	1	1	..
145 Other accidents of labor .....	..	..	1	..	..
IX. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE					
151 Gangrene	1	..	12	1	7
152 Furuncle	2	..	20	..	213
153 Acute abscess	8	..	52	1	149
154 Other diseases of the skin and annexa	50	..	30	..	505
X. DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION					
155 Diseases of the bones (tuberculosis excepted)	33	..	41	1	75

REPORT OF THE SUPERINTENDENT

DISEASES	MEDICAL		SURGICAL		O. D. D.
	Disch.	Dead	Disch.	Dead	
156 Diseases of the joints (tuberculosis and rheumatism excepted)	22	..	6	..	119
158 Other diseases of organs of locomotion	26	..	25	..	314
XI. MALFORMATIONS					
159 Congenital malformations	27	2	44	..	36
XII. EARLY INFANCY					
No cases					
XIII. OLD AGE					
164 Senility	5	..	..	..	5
XIV. EXTERNAL CAUSES					
175 Poisoning by food	3	..	1	..	3
176 Poisoning by venomous animals .....	..	..	..	..	7
117 Other acute accidental poisonings (gas excepted)	13	1	1	..	13
179 Accidental burns (conflagration excepted)	2	..	6	..	83
181 Accidental absorption of irrespirable or poisonous gas	2	..	..	..	1
183 Accidental traumatism by firearms (weapons of war excepted) .....	..	..	1	..	..
184 Accidental traumatism by cutting or piercing instruments .....	..	..	7	..	181
185 Accidental traumatism by fall	5	1	78	4	413
187 Accidental traumatism by machines ..	1	..	2	..	..
188 Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	2	..	67	3	255
189 Injuries by animals (not poisoning) ..	..	..	2	..	55
193 Excessive cold .....	..	..	..	..	2
202 Other external violence (cause specified)	4	..	49	..	1428
203 Other external violence (cause not specified)	4	..	1	..	3
XV. ILL-DEFINED DISEASES					
205 Diseases not specified or ill-defined ..	60	..	38	..	1187
No disease	28	..	16	..	227

PETER BENT BRIGHAM HOSPITAL

Table II
Comparative Tables of Statistics

HOSPITAL WARDS AND SINGLE ROOMS

Patients in hospital first of year:

	1929	1928
Medical	88	79
Surgical	114	107
Total	202	186

Patients admitted during the year:¹

Medical	2,140	2,163
Surgical	2,332	2,360
Total	4,472	4,523

Patients treated in hospital wards and private rooms during the year:

Medical	2,228	2,242
Surgical	2,446	2,467
Total	4,674	4,709

Patients discharged during the year:

Well	608	779
Improved	2,671	2,568
Unimproved	297	287
Untreated	549	541
Died	329	332
Total	4,454	4,507

Patients in hospital end of year:

	1929	1928
Medical	100	88
Surgical	120	114
Total	220	202

¹ The apparent discrepancy between these figures and those shown in the summaries of Surgical and Medical statistics on pages 132 and 169 respectively are explained by the latter tables including transfers from Medical to Surgical and *vice versa*.

REPORT OF THE SUPERINTENDENT

Total patients days' treatment:

Paying patients	39,839	42,915
Part-paying patients	14,834	15,428
Free patients	24,070	19,348
Total	78,743	77,691

Percentage:

Paying patients	51—	55+
Part-paying patients	19—	20—
Free patients	31—	25—
Total	100	100

Average patients per day:

Paying patients	109+	118—
Part-paying patients	41—	42+
Free patients	66—	53—

Total	216—	213—
-------------	------	------

Medical	96+	94—
Surgical	119+	119

Total	216—	213—
-------------	------	------

Average time per patient in hospital	18—days	17+days
--------------------------------------	---------	---------

Daily average cost per patient	\$7.41—	\$7.25—
--------------------------------------	---------	---------

Daily cost per capita for provisions for all persons supported49—	.48—
---	------	------

Patients were admitted as follows:

Paying regular rate	2,488	2,694
Paying less than regular rate ..	716	761
Free	1,268	1,068

Total	4,472	4,523
-------------	-------	-------

OUT-DOOR DEPARTMENT

	1929	1928
Number of new cases treated	7,849	8,164
Medical	3,438	4,004
Surgical	4,183	3,939
Urological	228	221

PETER BENT BRIGHAM HOSPITAL

Number of visits	73,593	57,162
Medical	42,115	32,101
Surgical	27,140	20,989
Urological	4,338	4,072
Cost of maintenance of Out-Door		
Department	\$48,802.11	\$42,276.58
Daily average cost per patient .....	.66+	.74—

AMBULANCE

Ambulance calls during the year	675	511
Average calls per day	2—	1+
Mileage for patients	5,299	3,125
Other business	1,224	2,082
	<hr/>	<hr/>
Total mileage	6,523	5,207

REPORT OF THE SUPERINTENDENT

Table III

Year	Expenses	Receipts	Number of patients admitted to wards	Total days' treatment	Average stay in hospital	Average cost per day per house patient	Daily cost per capita for provisions per day	OUT-DOOR DEPARTMENT			
								Cost of maintenance	New cases treated	Visits	Average cost per visit
1913	\$190,510.41	\$36,571.58	1,370	25,157	20—days	\$7.02—	\$0.53—	\$10,081.39	8,347	30,434	\$0.33+
1914	256,423.25	69,251.23	2,843	49,295	17+days	5.15+	.35—	12,108.39	8,536	36,523	.33+
1915	269,913.46	88,651.55	3,417	60,242	18—days	4.48—	.33+	16,551.07	9,810	47,687	.35—
1916	308,413.81	116,519.00	3,712	65,291	18—days	4.72—	.35—	19,140.56	10,995	53,405	.36—
1917	324,777.80	138,512.48	3,674	65,129	18—days	4.93+	.40—	18,989.10	7,952	45,153	.43—
1918	321,547.28	154,026.47	4,025	66,669	17—days	4.81—	.44—	20,557.07	7,631	49,972	.41+
1919	377,253.15	193,741.63	4,282	65,546	15+days	5.76—	.51—	25,033.43	7,862	49,572	.50+
1920	453,853.94	262,413.29	4,316	69,541	16+days	6.53—	.59—	25,694.39	7,707	52,116	.49+
1921	483,921.52	301,918.05	4,315	68,556	16—days	7.06—	.47—	28,157.67	8,111	58,014	.49—
1922	492,676.00	325,667.28	4,685	70,695	15+days	6.97—	.45+	29,510.51	8,801	57,967	.51—
1923	540,524.41	367,369.45	4,775	74,854	16—days	*6.64—	.47—	32,218.89	8,846	59,336	.54+
1924	535,531.70	354,083.78	4,658	72,539	16—days	*6.83—	.46+	33,753.42	7,081	60,291	.56—
1925	557,252.24	365,749.62	4,422	72,411	16+days	*7.12—	.48+	36,188.43	6,192	55,632	.65+
1926	578,207.16	389,781.57	4,402	75,742	17+days	*6.97—	.48—	35,696.05	7,699	60,671	.59—
1927	620,177.85	412,568.64	4,607	78,645	17+days	*7.05+	.48+	42,276.58	8,164	57,162	.74—
1928	636,392.29	431,017.71	4,523	77,691	17+days	*7.25—	.48—	48,802.11	7,849	75,593	.66+
1929	661,840.21	456,916.54	4,472	78,743	18—days	*7.41—	.49—				

* 1923, 1924, 1925, 1926, 1927, 1928 and 1929 do not include the cost of special nurses.

PETER BENT BRIGHAM HOSPITAL

Table IV Expense and Revenue Statement

ADMINISTRATION EXPENSES

	1929	1928
Salaries, officers, and clerks	\$35,440.90	\$33,882.79
Office expenses		116.50
Stationery, printing and postage	7,809.54	7,630.84
Telephone and telegraph ..	9,522.81	9,637.98
Liability insurance	4,011.16	2,529.50
Miscellaneous	903.83	1,934.00
	<hr/>	<hr/>
Total administration expenses	\$ 57,688.24	\$ 55,731.61

PROFESSIONAL CARE OF PATIENTS

Salaries and Wages:

Physicians and surgeons	\$24,967.42	\$23,866.04
Sup't of nurses and assistants	9,385.98	9,108.43
Nurses	20,311.80	17,986.74
Special nurses	78,669.66	73,350.91
Orderlies	8,364.00	8,486.09
Druggists	6,814.40	6,757.23
Ward employees	11,530.41	10,828.00
Clerks	14,619.15	14,595.46
Instrument repairs	834.62	858.00
	<hr/>	<hr/>
	\$175,497.44	\$165,836.90

Training School:

Salaries	\$ 4,959.58	\$ 4,712.04
Supplies	2,947.32	3,359.64
	<hr/>	<hr/>
	\$ 7,906.90	\$ 8,071.68

Medical and Surgical Supplies:

Apparatus and instruments	\$ 3,487.73	\$ 6,259.30
Medical and surgical supplies	31,433.09	29,115.56
Alcohol, liquors and wines	1,524.70	1,721.11
	<hr/>	<hr/>
	\$ 36,445.52	\$ 37,095.97

<i>Amounts carried forward</i>	\$219,849.86	\$211,004.55
--------------------------------	--------------	--------------

REPORT OF THE SUPERINTENDENT

	1929	1928
<i>Amounts brought forward</i>	\$219,849.86	\$211,004.55
Out-Door Department:		
Wages	\$16,827.06	\$14,486.44
Supplies	17,524.30	14,577.84
	<u>\$ 34,351.36</u>	<u>\$ 29,064.28</u>
X-ray Service and Photography:		
Salaries and wages	\$20,914.01	\$19,443.26
Supplies	18,520.02	18,883.20
	<u>\$ 39,434.03</u>	<u>\$ 38,326.46</u>
Library	\$ 800.00	\$ 800.00
Total professional care of patients expenses	294,435.25	\$279,195.29

DEPARTMENT EXPENSES

Ambulance:		
Labor	\$ 3,163.02	\$ 3,079.07
Supplies	2,477.02	1,399.34
	<u>\$ 5,640.04</u>	<u>\$ 4,478.41</u>
Laboratories:		
Labor	\$15,324.67	\$16,126.31
Supplies	6,511.65	7,824.39
	<u>\$ 21,836.32</u>	<u>\$ 23,950.70</u>
Housekeeping:		
Labor	\$35,668.63	\$34,602.05
Supplies	15,803.44	14,566.10
	<u>\$ 51,472.07</u>	<u>\$ 49,168.15</u>
Kitchen:		
Labor	\$14,794.93	\$15,131.16
Supplies	1,429.91	1,104.00
	<u>\$ 16,224.84</u>	<u>\$ 16,235.16</u>
Laundry:		
Labor	\$11,251.87	\$10,576.00
Supplies	2,259.56	1,664.73
	<u>\$ 13,511.43</u>	<u>\$ 12,240.73</u>
Steward's Department:		
Labor	\$ 3,708.79	\$ 3,871.47
Provisions:		
Bread	3,065.34	2,430.06
Milk and cream	22,906.83	19,934.59
	<u>\$29,679.96</u>	<u>\$108,684.70</u>
<i>Amounts carried forward</i>	\$26,236.12	\$106,073.15

PETER BENT BRIGHAM HOSPITAL

	1929	1928
<i>Amounts brought forward</i>	\$29,679.96	\$108,684.70
Groceries	17,194.65	20,068.42
Butter and eggs	15,717.68	15,356.98
Fruit and vegetables .	11,760.51	12,099.95
Meat, poultry and fish	32,739.90	30,910.34
	<hr/> \$107,093.70	<hr/> \$104,671.81
Total department expenses	\$215,778.40	\$210,744.96

GENERAL HOUSE AND PROPERTY EXPENSES

Electric department	\$ 4,465.54	\$ 4,472.29
Heat, light and power ...	55,569.17	57,151.86
Fuel .....	.....	.....
Gas	3,171.26	3,645.11
Ice	28.00	43.20
Insurance	2,907.91	286.25
Water	5,134.14	3,905.36
Maintenance real estate and buildings	16,688.10	14,446.18
Maintenance machinery and tools	199.48	84.47
Plumbing and steam fitting	6,999.35	6,685.71
Miscellaneous .....	.....	.....
Total general house and property ex- penses	\$ 95,162.95	\$ 90,720.43

EXPENSES FROM SPECIAL FUNDS

Permanent Charity Fund..	\$ 2,525.00	\$ 2,525.00
Social Service Fund	5,846.17	5,902.69
Diabetic Research Fund..	768.10	573.71
Gray Fund	4,770.40	6,707.26
Fiction Library Fund ...	50.00	12.56
Reynolds Scholarship Fund	125.00	125.00
Renal and Vascular Disease Fund	1,297.92	.....
Total expenses from Special Funds	\$ 15,382.59	\$ 15,846.22

CORPORATION EXPENSES

Salaries, officers and clerks \$	74.89	\$ 1,000.00
Miscellaneous	588.00	562.00
Total Corporation ex- penses	\$ 662.89	\$ 1,562.00

REPORT OF THE SUPERINTENDENT

CAPITAL EXPENDITURES

	1929	1928
X-ray equipment (credit)		\$ 228.01
O. D. D. alterations		3,724.85
Laundry machinery	\$ 2,073.50	.....
Total capital expenditures	\$ 2,073.50	\$ 3,496.84

SUMMARY

EXPENSES

	1929	1928
Total administration expenses	\$ 57,688.24	\$ 55,731.61
Total professional care of patients expenses	294,435.25	279,195.29
Total department expenses	215,778.40	210,744.96
Total general house and property expenses	95,162.95	90,720.43
Total hospital expenses	\$663,064.84	\$636,392.29
Corporation expenses	662.89	1,562.00
Capital expenditures	2,073.50	3,496.84
	\$665,801.23	\$641,451.13

SPECIAL FUNDS:

Permanent Charity Fund	\$ 2,525.00	\$ 2,525.00
Social Service Fund	5,846.17	5,902.69
Diabetic Research Fund	768.10	573.71
Fiction Library Fund	50.00	12.56
Gray Fund	4,770.40	6,707.26
Reynolds Scholarship Fund	125.00	125.00
Renal and Vascular Disease Fund	1,297.92	.....

Grand total\$681,183.82 \$657,297.35

REVENUE

	1929	1928
Administration receipts ..	\$ 1,561.45	\$ 2,059.17
Professional care of patients:		
Board of private room patients	\$125,529.97	\$111,935.38
Board of ward pay patients	101,717.87	104,399.60
Special nurses	92,191.22	86,415.91
Out-Door Department ..	50,761.00	42,556.06
Photography and X-ray ..	50,815.65	47,808.76
Miscellaneous	31,732.91	33,847.63
	\$452,748.62	\$426,963.34
Amounts carried forward	\$454,310.07	\$429,022.51

PETER BENT BRIGHAM HOSPITAL

	1929	1928
<i>Amounts brought forward</i>	\$454,310.07	\$429,022.51
Department Receipts:		
Ambulance	\$ 2,584.69	\$ 1,892.12
Miscellaneous	21.78	103.08
	<u>\$ 2,606.47</u>	<u>\$ 1,995.20</u>
Total hospital receipts	\$456,916.54	\$431,017.71
Cash from Treasurer:		
Current expenses	\$206,811.19	\$206,936.58
Reynolds Scholarship		
Fund	125.00	125.00
Permanent Charity Fund	2,525.00	2,525.00
Social Service Fund ...	5,846.17	5,902.69
Diabetic Research Fund	768.10	573.71
Gray Fund	4,770.40	6,707.26
Fiction Library Fund ..	50.00	12.56
Renal and Vascular Dis-		
ease Fund	1,297.92	.....
Additional equipment:		
Out-Door Department		3,724.85
Laundry machinery ..	2,073.50	.....
X-ray equipment		
(credit)		228.01
	<u>\$224,267.28</u>	<u>\$226,279.64</u>
Grand total	\$681,183.82	\$657,297.35

Statement of Stock on Hand

	1929	1928
Administration supplies	\$ 4,167.33	\$ 3,955.10
Professional care of patients' supplies	18,308.91	17,511.13
Department supplies	20,863.94	27,395.11
General house and property supplies ..	1,588.83	1,741.81
	<hr/>	<hr/>
	\$44,929.01	\$50,603.15

Report of the Roentgenologist

FASHIONS in medicine change as well as fashions in clothes, and the medical fashion of the present seems to be the X-ray. Indeed, a close similarity exists when it is discovered that some prospective patients actually go bargain hunting to find where the elusive gall bladder can be examined at the lowest rate per square inch of celluloid. These patients, as do many others, think that the examination is purely mechanical; that if they pose properly the picture will be clear and the answer plainly written on the film in unequivocal terms. Little do they realize that we deal only with shadows, and that even these shadows are subject to countless artificial variations as well as the natural variations due to disease or injury. Our bargain-hunting public, however, has been educated to expect an X-ray, and an X-ray they must have no matter what the complaint. More than once this past year we have noted the cryptic phrases on the requisition: "Physical entirely negative. X-ray to dispel patient's fears." At that, the patient is occasionally right and the doctor is confounded. What joy to tell the stubborn doctor, "I knew I had a fracture." Even though the fracture be but the length of a centimeter, it is worth the price of three X-rays.

In spite of the errors and artefacts which may creep into our nebulous shadows, and into the more important interpretation of these shadows as terms of pathological processes, we seem to have the confidence of the public, at times it seems to an unwarranted extent. It behooves us, therefore, not to betray that confidence, but rather to take stock and see to what extent it is

REPORT OF THE ROENTGENOLOGIST

justified and where we can make ourselves more worthy of it.

In the early phases of Roentgenology the pathways to knowledge were entirely uncharted, each examination was an excursion into the unknown, and many were the difficulties and the pitfalls. Imagine, if you can, the first visualization of an aneurism of the aorta, of a pleural effusion, of gall stones, of any of the numberless conditions now so easily demonstrated as to be almost routine in the day's work. What a sense of achievement and a feeling of discovery and adventure it must have excited! Now with equipment almost technically perfect and almost foolproof we can devote our time less to the mechanical details and more to the interpretation of film shadows. We of the second generation benefit greatly by the maps and charts laid down by our predecessors; by their experiences and their mistakes; and now that we are coming of age we, too, should look to the highways and byways and note the trend of our Science. (Some of our metropolitan colleagues insist on spelling it "Buy-Ways," their trend obviously is toward a business rather than a profession.) Taking stock is always arduous but sometimes illuminating and many times profitable. We have taken stock this past year of our gastro-intestinal X-ray work, just to see how many negative examinations we did, how the percentage of lesions varied, what our accuracy was and what improvement we could make in the work. For this reason we kept, during 1929, an accurate record of gastro-intestinal examinations made and diagnoses rendered, and noted whenever possible the accuracy or errors as demonstrated by operation or autopsy. This, unfortunately, is not an end-result study but simply a cross-section

of a year's work, but as such it may be illuminating, as such records are but rarely used. One of the great values in Doctor Cabot's popular weekly exercise for third-year students is the stress placed upon the mathematical probabilities in any given set of signs or symptoms—a viewpoint of practical value as opposed to theoretical considerations eliminating the statistical help, but unfortunately of very little actual help in the individual case, whatever may be the statistical preponderance of occurrence of the lesion under consideration. The following analysis of this section of the year's work is largely statistical but there are many interesting sidelights along the way.

Gastro-intestinal Examinations

There were 1,649 examinations of the gastro-intestinal tract made in our department during 1929, not including gall bladder examinations. Of these, 1,272 were the so-called "G. I. Series" where the opaque barium meal was given by mouth and 377 where the examination was limited to the colon and made by injection of the barium as an enema. All of them were done under fluoroscopic control, followed by films. There were 1,284 diagnoses rendered, as twelve patients had double lesions, most of these double lesions being combined gastric and duodenal ulcers. The first striking feature was the rarity of oesophageal lesions, only twenty-eight such being demonstrated, the others being reported as normal oesophagi. This gives an incidence of abnormality of only 2.3 per cent. It is noteworthy that practically all of the important lesions gave definite symptoms, and, conversely, that practically all patients with dysphagia had definite abnormalities of the oesophagus to account for the symp-

REPORT OF THE ROENTGENOLOGIST

toms. The frequency of the various lesions in the oesophagus is as follows:

Oesophagus	Cases
Diverticulum	10
Carcinoma	9
Cardiospasm	5
Stricture	3
Spasm	1
	—
Total	28

Of the oesophageal diverticula, only one was large enough to cause symptoms, the others being of the small "traction" variety, usually found in the middle third of the oesophagus and probably due to adhesions from inflammatory processes in the mediastinum.

Stomach

The incidence of the major lesions found in the stomach are, in order of frequency, as follows:

Stomach	Cases
Gastric ulcer	55
Post-operative stomach	36
Gastric carcinoma	32
Diaphragmatic hernia	9
Gastric syphilis	3
	—
Total	135

It is to be noted that ulcer heads the list but leads only by a small margin, and in second place we have post-operative stomachs, patients, in other words, who have had some operation upon the stomach and who return for further examination because of a continuance or a recurrence of symptoms. Nearly all of these operations were for ulcer, but in this group the ulcers either were absent, or could not be demonstrated,

PETER BENT BRIGHAM HOSPITAL

if present. (In duodenal ulcers with gastro-enterostomy and transection of the pylorus we cannot visualize the duodenum to determine whether the ulcer deformity persists or not.) Third in the list are the gastric carcinomas, most of them inoperable, as usual, although eleven resections were performed in 1929 out of this group, a fact which speaks for itself. The fourth class, diaphragmatic hernia, is made up entirely of the small more or less unimportant hernias of the fundus of the stomach through the hiatus oesophagi. Three diagnoses of gastric syphilis were *suggested*, as it is almost impossible to make this diagnosis positively (with confidence) from the roentgen examination alone. One of them was found to have a diffuse gastritis at operation, the other two have not been either confirmed or disproved.

Small Bowel

Small Bowel	Cases
Duodenal ulcer	299
Duodenal diverticulum	15
Jejunal ulcer with gastro-enterostomy	12
Appendicitis	4
Duodenal obstruction	2
Duodenal band	2
<hr/>	
Total	334

The most striking thing in this group is the large number of duodenal ulcers, overshadowing all other diagnoses, and very fashionable this year, as always. The actual percentage of patients with duodenal ulcer is 24, practically one out of each four patients in the gastrointestinal section having this disease, and over half of the positive cases falling into this group. This is quite a contrast to gastric ulcers, fifty-five in num-

REPORT OF THE ROENTGENOLOGIST

ber, forming 4.5 per cent of the total cases, and a ratio of duodenal ulcers to gastric ulcers of almost 6 to 1. Another interesting point not shown in the table is the fact that only four of these 299 cases were diagnosed "healed duodenal ulcer." These were in patients who were known to have had the typical ulcer deformity at a previous date, but who showed no evidence of ulcer on examination or re-examination this year. This, too, is in striking contrast with gastric ulcers, as several of the latter group were seen to heal (disappear) on serial examinations under treatment, 30 per cent of the total having done this, or all but one of those followed by serial examination. The others, not so studied, would probably have done the same. Most of the ulcers were controlled by "medical" treatment, as is the trend of medical fashion, and many of them were not even admitted to the hospital. There were 118 patients with peptic ulcers on the medical wards, with six deaths. Only two of the deaths were due to the ulcer, one due to hemorrhage, and one due to acute perforation and peritonitis. The other four deaths were due to circulatory failure in cardiac cases in two instances, to cerebral hemorrhage in one, and to renal insufficiency in one case. Eighty of this group had ulcer as the primary diagnosis, in the others the diagnosis of ulcer was of importance secondary to something else. There were thirty-three admissions to the surgical wards, with five deaths. Three of these deaths were due to acute perforation, a mortality of 75 per cent as there were four operations for perforated ulcers. One was due to hemorrhage from a gastrojejunal ulcer and the fifth was due to circulatory failure in a patient with arteriosclerosis, the ulcer being of secondary importance. There were twenty-nine

PETER BENT BRIGHAM HOSPITAL

primary diagnoses of ulcer, four others being secondary diagnoses. Of the total (151) there were but fifteen operations, or 10 per cent. Of these seven were partial gastric resections with gastro-enterostomy, four were posterior gastro-enterostomies, and four were plication and suture of perforated ulcers. The total number in the hospital is less than half of the 366 cases seen in our department.

The third class, jejunal ulcers, belongs in this same group and the striking thing here is the well-known propensity of peptic ulcer to form on the margin of a perfectly functioning gastro-enterostomy. The second group, duodenal diverticuli, are of no clinical importance, in all probability, being congenital anomalies of only anatomical interest. The small number (four) of diagnoses of appendicitis is probably an index of conservatism, possibly an admission of inability to make a diagnosis of "chronic appendicitis." From a perusal of reports sent in by roentgenologists in private practice it seems that some of them make a much more frequent diagnosis of this debatable condition.

Miscellaneous Conditions

The odds and ends which cropped up during examination are noted below in Table 4:

TABLE 4

Miscellaneous	Cases
Diagnosis deferred	5
Extrinsic tumors	4
Tuberculosis of cecum	2
Ventral hernia	2
Meckel's diverticulum	1
Benign tumor-duodenum	1
Polyposis gastrica	1
Gastric diverticulum	1

REPORT OF THE ROENTGENOLOGIST

Anal fistula	1
Impacted feces	1
	<hr/>
	19
Negative G. I. series	706
	<hr/>
Total	725

The outstanding feature here is the number and percentage of "negative examinations." Many times we have been asked what percentage of our work was positive and what percentage negative, not only from idle curiosity, but to estimate the efficiency of the staff in weeding out or selecting the proper cases for X-ray examination. Now we can state definitely that 55 per cent of this work in 1929 revealed no pathological process in the gastro-intestinal tract. It will be noted that conditions such as visceroptosis, constipation, spastic colon, etc., are not included; if they were offered as diagnoses and counted as such, the percentage of negative examinations would be considerably lowered.

Another point of interest is the small number listed as "diagnoses deferred." We believe and teach that it is good for the soul as well as good for the intellect to put one's opinion down in writing and to make it as definite as the conditions warrant. If we make a mistake it is remembered longer and no mental juggling can erase the written word in the records. If the opinion is correct it strengthens the force of one's opinion in the succeeding case where similar conditions appear and also increases the value of that opinion. These five cases, then, were ones in which lesions were found that could not be explained logically in terms of pathological processes.

The other entries need no discussion.

PETER BENT BRIGHAM HOSPITAL

The totals of the four classes, plus sixty-two re-examinations, make the sum of 1,284 noted above. The re-examinations were mostly of patients with ulcers to note progress, a few for confirmation, and a few to note the function or appearance of the stomach after operation.

Enemas

In contrast to the G. I. series where only 55 per cent were negative, we note in Table 5 that 75 per cent of the barium enemas gave negative diagnostic results. These enemas are more often given to exclude a lesion with only indefinite signs, such as constipation, blood in the stools, etc., the true value of which is often difficult to estimate, particularly in patients who do not speak our language well.

TABLE 5

Large Bowel	Cases
Diverticulosis	24
Carcinoma	21
Colitis	20
Diverticulitis	9
Obstruction, cause unknown	8
Post-operative colon	7
Benign tumor	2
Inguinal hernia	2
Congenital anomaly of colon	1
Irritable colon	1
Tuberculosis of cecum	1
Gastro-jejuno-colic fistula	1
Normal colon	280
Total	377

The feature next in interest is the frequency of diverticulosis and diverticulitis, the former being the anatomical condition, the latter being the condition plus evidences of infection in the diverticuli or around

REPORT OF THE ROENTGENOLOGIST

them. This would seem to bear out Dr. Evarts Graham's statement that diverticulitis is one of the most common causes of intestinal obstruction in adults—as the result of the disease is usually obstruction, often perforation. Carcinoma ranks second in importance in this series, with colitis a close third, this latter group including acute, chronic and mucous forms. In group 5, obstruction, cause unknown, the obstruction was located but the characteristic identifying features were either absent or undemonstrated, and they are classed thus rather than under their true class as shown by operation, as this is primarily a study of our diagnoses and not of the final diagnosis as entered on the history. It might be of interest to know that in these 1,649 cases we know of only eight mistakes in diagnosis up to the present time. This would give the false percentage of accuracy as 99.5 per cent correct—false because many of the diagnoses both negative and positive were never confirmed, and our figures are not accurate as many confirmations were made by opinions no more valuable than our own. We do know that of all patients operated upon, oesophagoscoped, coming to post-mortem or other wise exposing their lesions to daylight, we were wrong five times. In three other cases we corrected a previous diagnosis by re-examination. In six of these eight cases the lesion was found but misnamed, in only two was it missed entirely. As these are most important they are listed below in Table 6.

TABLE 6

Incorrect Diagnosis	Correct Diagnosis	How Corrected
Cardiospasm	Carcinoma	Oesophagoscopy
Stricture of oesophagus	Carcinoma	Oesophagoscopy
Normal oesophagus	Carcinoma	Re-examination

PETER BENT BRIGHAM HOSPITAL

Carcinoma of stom-	Ulcer	Operation
ach		
Ulcer of stomach	Carcinoma	Re-examination
Ulcer of stomach	Carcinoma	Operation
Negative G. I. series	Carcinoma of stomach	Re-examination
Syphilis of stomach	Gastritis	Operation

Summarizing this section of our work in gastrointestinal studies (exclusive of gall bladder) we note, therefore, that this work forms 14 per cent of the total work, that 55 percent of the stomachs and 75 percent of the colons are reported as anatomically normal, and that the percentage of error is quite small. Compared with other institutions we note a report by Mooney, *Canadian Medical Association Journal*, that in 1,700 examinations he found fifty-one gastric ulcers and 183 duodenal ulcers, and one by Merrill, back in 1925, who reported 5,000 consecutive examinations, finding 173 gastric ulcers and 617 duodenal ulcers. In both cases the total number of duodenal ulcers and the ratio of duodenal to gastric ulcers is definitely lower than in our series. In the recent monograph of Buckstein, however, is the statement that duodenal ulcers occur six times as frequently as gastric ulcers. Various inferences may be made. The most probable basis of difference is that a more or less accurate selection of cases for X-ray examination has been made accounting for the difference in incidence of the various lesions.

After watching such a steady stream of ulcers passing through this department for the past eight years there are bound to be certain reactions in the observer. Most of them are pessimistic as regards *cure* of the ulcer, either by medicine or surgery, as the disease seems to be a chronic one characterized by remissions and recurrences. But relief of symptoms in both duo-

REPORT OF THE ROENTGENOLOGIST

denal and gastric ulcers and disappearance of the gastric ulcers certainly occur with great regularity on proper medical treatment. Conversely it has seemed to us that the field for surgery has constantly been narrowed until it is now practically limited to the relief of mechanical obstruction. Recurrent hemorrhage was thought to be another indication for surgical intervention but the ulcers will and do bleed after any or all forms of operation so far devised, and the added risk of gastro-jejunal ulcer makes operations of election unwise.

There are certain suggestions which appeal to us in neutral territory, one of them is that patients who have been operated upon for ulcer should have careful medical treatment after operation in an attempt to prevent recurrence and to avoid if possible the formation of a gastro-jejunal ulcer by controlling the acid secretion of the stomach. This could easily be accomplished in the special clinic now functioning in the Out-Door Department under Doctors Emery and Monroe, whence several interesting and valuable papers have emerged as by-products. This clinic could easily be enlarged and made more valuable in two ways: (a) By referring to it all gastro-intestinal cases both medical and surgical, including gall bladder disease, excepting those sent in by outside physicians, and (b) by adding a surgeon of rank and experience equal to that of the present members for advice and decision as to relief by operative procedures. This would save time and trouble for the patients, would establish a closer and more permanent contact between patient and hospital, would prevent some of the shifting of patients to other hospitals when the regular shift of House Officers in the Out-Door Department takes place, and it would

PETER BENT BRIGHAM HOSPITAL

throw more light on both medical and surgical failures in this class of cases. Gall bladder cases are included because these patients frequently suffer from obscure gastro-intestinal disorders after removal of a diseased gall bladder, and it has been shown that careful control of the diet is of considerable benefit in this group. One thing to avoid is the withdrawal of all such cases from the general clinics and the loss of valuable teaching material of benefit to the House Officer who originally saw the patient and referred him to the hospital for operation. This could be avoided by discharging the patient from the wards to the clinic of the Out-Door Department whence he came, for the benefit of the House Officer, who, on leaving that clinic, could then refer the patient to the special Gastro-Intestinal Clinic for permanent follow-up.

To return to more general considerations, we note another small increase in the work done during the year, a total of 11,518 patients having passed through this department during 1929. Coincident with this, there has been another drop in the cost per case and a corresponding rise in revenue available for the general funds of the hospital, over and above the total operating expenses and salaries. The personnel has undergone further changes, Mrs. Smith having resigned after fifteen months' service. Miss Mildred Johnson now replaces Mrs. Smith, and Mr. Bruya has been added to the staff of technicians. The usual succession of House Officers has resulted in Doctor Dyke's transfer to the X-ray Department of the Neurological Institute in New York, after completing his second year in this department. His place has been filled by Dr. Erskine R. Pickwick, who came to us from Worcester. Doctor Rublee resigned to return to private

REPORT OF THE ROENTGENOLOGIST

practice in Newport, Vermont, and his mantle fell upon the shoulders of Dr. Howard L. Jackson of Springfield.

The physical side of the department remains unchanged, and there has been no notable accretion of material or equipment—the complete overhauling two years ago having taken care of all immediate needs. Eventually, however, the present quarters will be outgrown and then we hope to get up out of the basement, inhabited now only by ourselves, the druggists, the guinea pigs, and the pathologists. When that time comes we hope that room can be assigned and equipped for experimental work, much of which is waiting to be done, impossible at present because of lack of space and equipment as well as time.

The growth of the work in the past 10 years can be determined by a study of the figures in Table 7, below.

TABLE 7
TABULATION OF DATA, TEN CONSECUTIVE YEARS

YEAR	Ward Cases	O. D. D. Cases	Private	All Others	Totals	X-ray Treatments	Films Taken	Dental Films	Alpine Lamp Treatments
1920	2,919	2,896	409	140	6,364	609	7,180	942	....
1921	3,076	3,038	579	195	6,888	739	11,404	1,850	....
1922	3,200	3,207	698	191	7,296	629	13,696	2,457	....
1923	3,702	2,835	960	210	7,707	764	14,144	2,506	467
1924	3,869	3,283	1,031	200	8,383	916	15,408	3,530	1,097
1925	3,948	3,479	1,163	228	8,818	809	18,366	2,905	1,487
1926	4,299	3,420	1,269	214	9,202	618	21,575	2,928	765
1927	4,307	3,924	1,061	477	9,769	490	24,270	3,019	1,264
1928	4,846	4,307	1,112	607	10,872	1,162	26,172	2,941	1,719
1929	5,092	4,606	1,296	524	11,518	1,277	27,842	3,603	1,476

M. C. SOSMAN,

DECEMBER 31, 1929.

Roentgenologist.

Report of the School of Nursing

THE year ends with the following staff of graduate and student nurses:

Superintendent of Nurses and Principal, School of Nursing	1
Assistant Superintendent of Nurses	1
Instructors	2
Supervisors	4
Night Supervisors	2
Graduate Head Nurses and Assistants in Departments	18½
Graduate Floor Duty Nurses	4
Graduate Nurse Anesthetists	3
Student Nurse Anesthetist	1
Masseuse	1
Student Nurses	103
Preliminary Student Nurses	29
	<hr/>
	169½

Sixty-three students entered and one was readmitted. Forty-four students graduated, twenty-one have withdrawn, and one has died.

It is with regret and sorrow that we record the death of Ethel Mary Byrne who entered the school in September, 1927. She died in Milwaukee, Wisconsin, August 27, of a ruptured appendix, after having made a successful fight against tuberculosis. She was an exceptional young woman, educated, intelligent, generous, and filled with the spirit of service. She would have been an honor to the school and the profession.

Since March 1 there have been seventeen affiliating students from the Children's Hospital for six-month periods.

REPORT OF THE SCHOOL OF NURSING

The total number of student sick days was 1,293—one hundred less than the previous year.

Graduation for the fifteenth class occurred December 6 in Assembly Hall, Simmons College, with Mr. Curtis, president of the corporation, presiding. The address of the evening was made by Elizabeth C. Burgess, R.N., A.M., Associate Professor, Nursing Education, Teachers College, Columbia University, and president of the National League of Nursing Education.

The Dr. John P. Reynolds gold medal was awarded to Frances Margaret Daggett.

The John P. Reynolds scholarship was awarded to Dorothy Gertrude Corbett with an average of 93 per cent.

Comparatively few changes have occurred in the graduate staff. Anne P. Washburn resigned as medical supervisor, and Gertrude M. Gerrard, P. B. B. H. 1915, was transferred from surgical supervisor to the work which she is peculiarly well qualified to do, the teaching and administration of anesthetics. Elsa Storm, P. B. B. H. 1927, after a summer course at Teachers College took up the work of medical supervisor, and Helen A. Newhall, P. B. B. H. 1920, was transferred from night supervisor to surgical supervisor. Vera B. Griffin, P. B. B. H. 1927, returned as night supervisor.

In February, Mary C. Gilmore, assistant superintendent of nurses, returned after three months' leave of absence to accept a fellowship from the Rockefeller Foundation for study at the Yale University School of Nursing and in two other centers. She gained much from her experiences and we believe the school has profited as a result.

PETER BENT BRIGHAM HOSPITAL

Since Ward A ground was opened about a year and a half ago, adding another private ward floor, too large a proportion of students' time has had to be allotted to private wards. The introduction of four graduate general duty nurses to Ward A has slightly reduced the amount of this service. This is a first step toward a more stable graduate nursing service and should provide more satisfactory service to private patients.

The curriculum has been strengthened by some readjustments in the lecture courses and by the addition of lectures in diseases of eye, ear, nose, and throat.

Hours of duty for student nurses have been reduced from 52½ to 50 hours per week.

During the year the pamphlet, from which practical nursing procedures are taught, has been revised by Cecile Authier, P. B. B. H. 1921, and a new edition printed. This is the second revision. Miss Authier did a splendid piece of work in reorganizing the material and in bringing it up to date. She was careful to see that classroom teaching agrees with ward practices in certain procedures in which technics must be dictated by the staff. She also did a good piece of work in standardizing some of the equipment. Miss Authier resigned as instructor September 1, and the work is being carried on by Bernice Sinclair, P. B. B. H. 1924, who brings to it enthusiasm, a fresh point of view and the results of a summer course at Simmons College.

In March we participated in the Committee's study on Grading of Nursing Schools by carefully filling out and returning all the blanks which were provided. About half the schools in the country responded. The committee will require a long time to tabulate the returns and make the completed reports.

REPORT OF THE SCHOOL OF NURSING

Much is being said at present concerning the need and value of staff education. This year a committee, composed of one supervisor and two head nurses, has arranged a program of staff conferences—meeting once a month. One-half hour is given to discussion of one or more assigned topics, and a half hour to a speaker, either a member of the staff of the hospital or head of some department. These have proved to be very helpful.

In our professional relationships, this has been a year of internationalism. The first international hospital conference was held in Atlantic City in June and in July the sixth international Nursing Congress was held in Montreal. We were fortunate in being able to entertain visitors from both groups. These visits were full of inspiration through interchange of ideas and experiences.

It is now six years since the addition to the Nurses Home was built. When plans were in preparation, I stated that for the next ten years of development the building would need one hundred additional bedrooms with improved classrooms, libraries, and decent recreation space. Seventy bedrooms and bathrooms to correspond were built. None of the other necessary adjuncts were provided. One hundred and sixty girls and young women live in that building. One hundred and thirty of them are students. The library consists of one small room on the main floor opposite the elevator where there is not space enough to have reading and study tables and no opportunity for quiet. Our classroom and laboratory are dark, unattractive and cramped. There is one small reception room only and this is a thoroughfare. There are four small sitting rooms which may be used by small groups for recrea-

PETER BENT BRIGHAM HOSPITAL

tional purposes. Twice during the year, when new classes are admitted, these rooms have to be converted into double bedrooms for a period of one month to two months. The reason is that in the School of Nursing the school year is made up of three hundred and sixty-five days, not an academic year as in other kinds of schools. Students also make up time which is lost. The result is that the members of outgoing classes have not completed their work when it is time for the incoming classes to arrive. This means weeks of overlapping.

Last year I referred to reforms which are indicated in Nursing Education in general throughout the country and made some suggestions for a reorganization of Nursing Education in this hospital and in this medical center, without result of any kind.

If the School of Nursing is to continue on its present basis for only a few years longer it ought to be recognized that the present building is not suited to its needs. Teaching and recreational facilities are far below those provided in other schools in hospitals comparable to this.

The science laboratory is dark and crowded even with a group of only twelve students. A suitable office for instructors is needed. The utility room connected with the demonstration room is badly congested owing in part to the immunization program which must be carried on to safeguard the health of student nurses. The medical residents have been most patient, helpful and cooperative with relation to health and illness of students. There are but few mornings during the year that some students do not respond to sick call at 8.15. Some days there are as many as eight. A consultation room and examining room are much needed. Such rooms could be used for the immunization work and

REPORT OF THE SCHOOL OF NURSING

relieve the cramped condition in the teaching suite. A library in any school would seem to be essential, and this should be, not merely a collection of books, but a quiet room with sufficient reading and study tables and good lighting, so that students may use to the best advantage the books, magazines, papers, and reference material which are provided. At present there is little incentive on the part of the faculty of the school to assemble such material because of no satisfactory place to make it available.

A reception room, large enough to give dances and entertainments in a school with 130 students, is badly needed with some smaller rooms where students may receive their friends in some degree of privacy, at least not in a thoroughfare as at present. Nurse students are young women who need recreational facilities quite as much as other types of students.

CARRIE M. HALL,

Principal.

DECEMBER 31, 1929.

Report of the Social Service Department

SIX HUNDRED AND EIGHTY-SIX (686) new patients were referred to the Social Service Department during the past year. One hundred and eight (108) were reinstated and four hundred and thirty-one (431) brought forward from the previous year, which makes a total of twelve hundred and twenty-five (1,225) for whom some service was given.

This does not include the patients in the various special clinics (with exception of Cardiac Clinic) where workers are stationed to assist in the clinic and do a follow-up and educational job.

There has been a definite increase in the work of the Department. Five hundred and twenty-five (525) patients were active in the Cardiac Clinic in 1929, as against four hundred and six (406) patients in 1928.

Five thousand seven hundred and forty-four (5,744) visits were made to Leutic Clinics, an increase from two thousand six hundred and eight (2,608) in 1927.

The work on the Medical and Surgical Services remains about the same not because there is not more that could be done, but from sheer inability of our small staff of workers to carry a larger load.

It is difficult to classify the individual problems of our patients and to routinely describe the social treatment accorded them. It is with the idea of showing more clearly the work of this department that the following cases are given.

REPORT OF THE SOCIAL SERVICE DEPARTMENT

Reason for Refer: A twenty-two year old Canadian girl with incipient pulmonary tuberculosis was referred from the Out-Door Department for sanatorium care.

Social: Patient was living in a lodging house. She had no savings, but position would be held for her. As she had been in America only four years and as she had taken out only her first naturalization papers she could go to no State Sanatoria except that at Tewksbury which would make her subject to deportation as a State charge.

Action Taken: Money raised through Boston Provident Association to provide a period of rest and building-up in country. Later she was admitted to the Sharon Sanatorium, partly at the expense of her employer. Patient returned about nine months later first to a part-time job and then to a full-time job. She is apparently in very good condition.

Reason for Refer: An eighteen-year-old boy with pulmonary tuberculosis on the medical ward was referred for sanatorium care.

Social: Patient's mother was a widow whose husband had died of tuberculosis in 1927. A sister of nineteen was working under poor conditions in a bakery. Another sister of fourteen was nervous and undernourished. A brother of seven was also nervous and underweight.

Action Taken: Arrangements made for patient to go to sanatorium from hospital. Family were persuaded to have physical examinations. As a result, youngest boy was sent to preventorium maintained by Boston Tuberculosis Association at Mattapan. The fourteen-year-old girl was found to be a potential heart case and a vacation at Farrington Memorial, Lexington, was arranged in the summer and on her return she was referred to the Cardiac Clinic to be observed from time to time for any further symptoms of cardiac trouble.

A factory inspector from State Board of Labor and Industry was asked to visit bakery where nineteen-year-old sister worked. As a result of his visit conditions were improved. Family will be followed through Cardiac Clinic.

Reason for Refer: A twenty-year-old colored girl was brought into hospital suffering from iodine poisoning, question of suicide. Patient was referred for aftercare.

Social: Patient a stranger in city with no resources. However, a cheerful individual with no care for the morrow. She had been working at various places through the United States since she was thirteen years old. Parents were dead. She came to Boston and on leaving station she left suitcase and started out to find a job. She said she drank the iodine mistaking it for liquid cascara which she had in a small bag with the iodine. She was picked up on street and rushed to hospital.

Action Taken: A psychiatric examination was made. This examination showed no outstanding mental abnormality. It was thought that pa-

PETER BENT BRIGHAM HOSPITAL

tient's attitude was the result of the untutored, unsupervised life she had led. Patient was referred to the Bethesda Society, a society especially interested in the problems of older girls. She was placed in a temporary home and later in a more permanent home at housework where on last report she was doing satisfactorily. She had saved \$100 which the Society had put in the bank for her. She appeared to be happy and contented.

Reason for Refer: A man on the surgical ward who had a second amputation of leg was referred for a new artificial leg.

Social: A middle-aged man with no resources and no relatives who could aid.

Action Taken: The money for the leg was raised from a private fund and from the Rehabilitation Section of the State. Patient is now working and earning regular wages.

Reason for Refer: A woman on medical ward with an obscure, non-contagious skin disease was referred to Social Service for convalescent care.

Social: Patient a single woman whose savings were gone on account of periods of unemployment due to her disfiguring and painful skin condition.

Action Taken: Arrangements made for patient to go to a nursing home. A niece paid for this care. Patient reported regularly for treatment at Out-Door Department. When patient's condition was sufficiently improved she was referred to Rutland Corner House, a temporary boarding home for working women, and to the Women's Educational and Industrial Union for work. Suitable work was obtained and at her last visit to Out-Door Department, her physical condition was much improved.

Reason for Refer: A colored girl of thirteen on medical wards recovering from a severe case of pleurisy was referred to Social Service for sanatoria.

Social: Father absolutely refused to allow patient to be sent away. Family large and easy going living in crowded section of Boston.

Action Taken: Arrangements made for family to rent extra sunny room from woman upstairs for patient. Calls were made almost weekly for a year by either student dietitian or social service worker to encourage family and patient to carry out directions given by doctor regarding good hygiene and care. Patient returned to school and when last examined was in good condition.

Reason for Refer: An Italian woman speaking little English brought her eight-year-old boy who was desperately ill from Northern Vermont to Boston for medical care. She had a letter addressed to "whom it might concern" stating boy's symptoms. The Travellers'

REPORT OF THE SOCIAL SERVICE DEPARTMENT

Aid worker at North Station took mother and boy to Children's Hospital from where child was transferred to Neurological Service at Peter Bent Brigham Hospital. Question of brain abscess. Patient referred to Social Service by Travellers' Aid to send reports to Travellers' Aid and help mother meet the situation.

Social: Father, mother and seven children, the oldest twelve years, had recently bought a small farm in Vermont. The father worked in a local factory as farm was not very productive. Mother wished to stay in Boston at least until boy improved, but had no money.

Action Taken: Arrangements were made for mother to sleep at City Temporary Home. She spent the days at the hospital. An Italian minister saw mother almost daily and kept father in Vermont informed as to condition of boy. After a successful operation child was sent to the Wellesley Convalescent Home where he made a remarkable gain, and when discharged home was in excellent condition. Vermont Children's Aid worker was asked to call on family occasionally.

Reason for Refer: A sixteen-year-old Jewish boy was underweight and had a cardiac condition which needed watching. He was referred by the doctor in the Out-Door Department for a vacation.

Social: Boy's mother had died of cancer six years before. Father was an itinerant carpenter moving from town to town living with the boy in various lodging houses.

Action Taken: Through the Council of Jewish Juniors, a three months' vacation was provided in their convalescent home at Walpole and with the local Jewish organization the father was helped to establish a more permanent home. Boy is to be supervised through the Cardiac Clinic.

Reason for Refer: A twenty-seven-year-old woman with tubercular peritonitis on medical ward. She was referred for sanatorium care.

Social: Family consisted of husband who was a longshoreman and four small children, one of whom was in Children's Hospital. There were kindly relatives who had large families but small incomes.

Action Taken: Application for State sanatorium care filed. Due to long waiting list patient could not be admitted for months. Plan worked out with family and doctor for patient to return home pending admission to sanatorium. Relatives here cared for children temporarily until an unmarried sister in Newfoundland came to help care for the family.

Patient remained in bed except for trips to hospital three times a week for Alpine light treatment. Small grants of money were made by Boston Provident Association to pay for taxies when Red Cross could not provide car. Dietitian from hospital called often and supervised diet. Children were examined either at Children's Hospital or Health Unit and were doing well. Patient has done well during the past five months and no longer needs to go away.

PETER BENT BRIGHAM HOSPITAL

Reason for Refer: A fifteen-year-old Chinese boy with empyema on the medical ward was referred to Social Service for a long period of bed care, nourishing food, good hygiene and medical supervision.

Social: Patient's parents had returned to China for a visit, leaving boy with unmarried Chinese friends until their return. Father a naturalized citizen. Patient lived in men's boarding house in Chinese quarter. He had been working in a laundry all day with little recreation. He could not read nor write English and spoke very brokenly although a bright appearing boy.

Action Taken: Consulted worker at Denison House who knows many Chinese and Chinese friends. Every one felt that boy could not get the care and supervision that he needed with friends. Patient referred to Robert Brigham Hospital and was accepted by them. Besides getting the medical care there he needed he had the advantage of regular instruction from a public school teacher.

Cardiac Clinic

With a clinic membership increased from 406 patients in 1928 to that of 525 patients in 1929 nearly 1,200 visits were made at the Cardiac Clinic during the past year. This is a considerable increase over that of any previous year.

In October, 1929, the weekly attendance had grown to such unwieldly proportions that it was thought advisable to hold two clinics each week rather than one as heretofore. This plan has accordingly been put into operation and has thus far proved satisfactory.

It has of necessity, however, required more of the social worker's time in the increased amount of clerical follow-up work connected with the clinic. Likewise with the greater number of patients there is naturally a proportionate increase of social problems. Many of these are not evident at the time of the patient's initial clinic visit but appear only after a call at the home has been made and upon further acquaintanceship.

Following the doctor's medical recommendations, continuous social treatment through the years is an important factor in the care of the cardiac patients.

REPORT OF THE SOCIAL SERVICE DEPARTMENT

Patients having either chorea or rheumatic fever remain on the wards during the most active stage and are later referred by the doctor to the cardiac social worker for suitable aftercare.

Education is a most important factor in the lives of cardiac patients and every effort is made to keep them in school as long as possible. Later on trade schools or vocational training is considered in order that the patients may choose work adapted to their heart capacity.

Cardiac patients cannot adopt all trades but there are many open to them and when properly adjusted in industry they are at least able to support themselves if not others and to lead happier and more useful lives than would be otherwise possible.

A large part of the time of the social worker in the Cardiac Clinic is spent in the consideration of these work adjustments.

During the past year thirty-one patients were referred to the various placement agencies for advice and assistance in obtaining either training for work or work itself. Nearly half this number were young women referred to the Placement Bureau of the Women's Educational and Industrial Union for whom the following types of work were found:

Home sewing; cashiering; bookkeeping; stenography and typing; store examiners and checking of clothing; light factory work such as sewing labels on neckties; fastening cheap jewelry on cards; packing razor blades, etc.

Other agencies used were the Placement Bureau of the Public Schools; the Co-operative Workrooms and the Industrial Aid Society. Several cardiac boys were sent to the Rehabilitation Section under the Depart-

PETER BENT BRIGHAM HOSPITAL

ment of Education at the State House for training and to be placed in industry on completion of their training period. Such training comprised blue print reading; architectural drafting and linotyping.

In a recent bulletin issued by the American Heart Association entitled "Requirements for an Ideal Cardiac Clinic" it is stated that one hundred cardiac patients for each social worker is a suitable case load. With our present clinic attendance of 525 patients and one social worker, there must obviously be left untreated many social problems.

Cases brought forward from January 1, 1929..	327
New cases referred	173
Reinstated	25
	<hr/>
Total membership during year	525
Closed during year	144
	<hr/>
Present number of visits to clinic	381
Total number of visits to clinic	1,197
Average number at clinic	20
Largest number at any one time	34
Smallest number at any one time	5
Of the 173 new cases referred (age division being made at 18 years) there were:	
42 men, 56 women, 37 boys, 36 girls	
Referred from Medical O. D. D.	116
Referred from House Medical	27
Referred from outside (including Children's Hospital)	30
Of the present clinic of 381 members, there are:	
63 men, 111 women, 100 boys, 107 girls	

Luetic Clinic

Since the year 1927 the number of visits of patients to the Luetic Clinic has increased from 2,608 visits

REPORT OF THE SOCIAL SERVICE DEPARTMENT

to 5,744 visits which shows that the number of treatments given has grown considerably and that the patients have been cooperative and conscientious in following out their treatment.

Three clinics are held each week—on Mondays and Fridays the treatments are given and Wednesdays the patients report for consultation with the doctor regarding their condition and are advised as to further medication and treatment.

Patients are asked to have blood tests taken on the members of their families. The children under twelve years are taken to the Children's Hospital for these tests and treatments if necessary.

Follow-up letters are sent to patients when they have lapsed treatment and all infectious cases of syphilis and gonorrhea are reported to the Board of Health. A careful follow-up is kept on these cases to be certain that they come in regularly.

For the coming year a new ruling has been adopted by the Board of Health requiring that all cases of syphilis and gonorrhea in any form or stage be reported. If any cases under treatment lapse for two weeks' time during the prescribed course it is necessary to report the patient by name. If the patient is in the infectious stage he is to be reported in one week's time. This, with the increased number of visits to the clinic, places a great deal more work on the social worker and clerical assistant.

Illustrations of the work done on the medical and surgical services are given in the form of cases on the first pages of this report. In the Diabetic Clinic the social worker with the help of the student dieti-

PETER BENT BRIGHAM HOSPITAL

tian, tries to bring to the patients a closer feeling of relationship in the clinic and visits to the home.

The student dietitian has been of great service in the home as well as in the clinic because of her especial fitness to help the patients in an understanding of the diets prescribed. The patients have expressed great appreciation of this service.

Cases brought forward from January 1, 1929..	370
New cases referred	97
Reinstated	33
<hr/>	
Total membership during year	500
Closed during year	218
<hr/>	
Present attendance January 1, 1930	282
Total number of visits to clinic	1,132
Average number at clinic	22
Largest number at any one time	42
Smallest number at any one time	12
Letters to patients	366
Calls at homes by dietitians	172

Arthritic Clinic

During the year the arthritic patients have shown considerable improvement under Doctor Hall's treatment. Several of the patients have been able to continue with their work and have been able to carry out the rest and diet as recommended.

Since September there has been a special study clinic held for new cases with Doctor Munroe who is interested in studying the gastro-intestinal symptoms affecting the arthritic patient.

Transportation of the patients to and from the clinic is one of the problems brought to the social worker. The Red Cross Motor Corp has been of great serv-

REPORT OF THE SOCIAL SERVICE DEPARTMENT

ice with these patients. Occasionally when they have been unable to send a car, money has been raised for taxi fares. Financial aid has been obtained through outside agencies for diet and for convalescent care when the patient was unable to meet these expenses.

Including social contacts in clinics and follow-up, over 4,200 patients have had some service from the Social Service Department. Patients referred for some definite social problem.

Brought forward from previous year	431
New cases referred	686
Reinstated	108

These patients were referred from:

	House	O. D. D.	Total
Medical service	204	298	502
Surgical service	120	86	206
Outside agencies .....	..	..	46
Appointment office .....	..	..	3
Admitting office .....	..	..	4
Patient .....	..	..	26
L. M. D. ....	..	..	6
Training school office .....	..	..	1

STEERING AND FOLLOW-UP

Outside agencies, steering and follow-up service	305
Follow-up letters and postcards	3,000
Visits to homes of patients	620

Occupational Therapy

For two years Occupational Therapy has been on a prescription basis, and it has proved to be by far the most satisfactory system, and it is earnestly hoped that the future will find it firmly established.

The statistics show there has been a decrease in the number of patients to receive Occupational Ther-

PETER BENT BRIGHAM HOSPITAL

apy. The worker feels the reason for this discrepancy is that under the prescription basis more patients who are doomed to a long convalescence in the hospital are referred, consequently the turn over has not been so great. The major crafts used in the department were leather work, knotting and basketry.

Number of patients from January 1 to October 1	101
Number of patients on the surgical wards	32
Number of patients on the medical wards	69

On October 1, Miss Anna P. Revere resigned. Her resignation was accepted with regret but owing to illness it was impossible for her to continue. This department has been closed for the present due to lack of funds.

An attempt to strengthen international relationship in social work was made last year by inviting a worker from St. Thomas' Hospital, London, England, to join the staff in this department. Miss A. E. Cummins, Head Lady Almoner to St. Thomas' Hospital, cordially cooperated and let us the services of Miss Freda Long for one year. This worked out very happily. Miss Long made a warm place for herself in the hospital and among a circle of friends outside.

The last of the year she was called back to England on account of the serious illness of her mother.

Miss Olga Alexieff, graduate of Radcliffe College and Simmons College School of Social Work, joined the staff in October.

Charitable agencies of Boston and vicinity have given us as usual splendid cooperation. Over 125 agencies were listed in the resources used last year. There is not room to name them all but among those

REPORT OF THE SOCIAL SERVICE DEPARTMENT

to whom we turn the most often are: Chickering House; St. Luke's Home; Jewish Convalescent Home; Farrington Memorial and Country Week who provided convalescent care for over eighty patients; seventy-four patients needing prolonged hospital care were sent to Robert Breck Brigham Hospital, the House of the Good Samaritan and other hospitals; fifty-one were transferred to sanatoria for tuberculosis; the Community Health Association and other district nursing organizations were asked to visit fifty or more patients; 102 patients were referred to Family Welfare Societies. Fifty-four patients were referred from the Cardiac Clinic for convalescent care or vacations to Children's Aid Association; Children's Friend Society; Children's Mission to Children; New England Home for Little Wanderers; Jewish Children's Bureau. The Red Cross Motor Service has given our patients much help in bringing to the hospital for treatment those unable to travel by street cars. An average of eight trips a week was made.

Over \$2,500 was raised for patients needing special nursing and outside hospital care, extra nourishment, apparatus, dentistry, glasses and transportation, from the following sources:

"Divers Good Causes," <i>Boston Transcript</i> ..	\$ 613.00
Friends	1,000.00
Boston Provident Association	111.90
Lend A Hand Society	187.61
Weber Charities, Inc.	40.00
Churches	94.14
Eckley Fund	10.00
Benton Fund	40.00
Invalid Aid Society	44.02
Industrial Aid Society	50.00
State and City Departments	209.33
Ladies Committee	100.00

PETER BENT BRIGHAM HOSPITAL

It is apparent from this report that more workers are urgently needed in this department. There should be at least the services of a part-time worker in the Cardiac Clinic and clerical assistance for the Luetic Clinic. Also help is needed on some of the wards and with the arthritic patients. We sincerely hope that the means may be found to increase our usefulness to patients of this hospital and thus to the community.

As in previous years, we have given supervised field work to students from the Simmons College School of Social Work. The social worker in the Cardiac Clinic was asked again this year to discuss with a group of the Summer Institute conducted by Simmons College School of Social Work, the technique of social work in a cardiac clinic.

We take this opportunity to gratefully acknowledge the help and assistance given us by the Social Service Committee the past year. The Committee had charge of the Christmas celebration on the wards of the hospital, which was enjoyed by patients and members of the hospital staff.

We also wish to express our appreciation for the financial aid which the Permanent Charity Fund, Inc., has given.

REPORT OF THE SOCIAL SERVICE DEPARTMENT

STAFF OF WORKERS

General Service

ALICE M. CHENEY, R.N.

Cardiac Clinic

THEKLA ANDREN

KATHARINE A. HOMANS (volunteer)

Surgical Service

FREDA M. LONG (began June 10, 1929)
(resigned October 1, 1929)

OLGA ALEXIEFF (began October 14, 1929)

Goiter Clinic

ESTHER W. ATWILL (volunteer)

Medical Service—Diabetic Clinic

MARGERY L. CROTHERS

MRS F. C. JILLSON (volunteer)

Luetic Clinic—Arthritic Clinic

GERTRUDE ABERCROMBIE KEACH

Occupational Therapy

ANNA P. REVERE (resigned October 1, 1929)

Clerical Staff

AGNES F. DAY

ADDIE M. COOLIDGE

Appointment Office, Out-Door Department

(Salaries paid by hospital and not included in Social Service Budget)

MARY A. SULLIVAN

MRS. FLORENCE MOORE

ALICE M. CHENEY, R.N.,

Director Social Service Department.

DECEMBER 31, 1929.

Report of the Pathologist

THE figures for the department are as follows:

Autopsies, medical service	127
Autopsies, done outside for medical service...	2
Autopsies, surgical service	53
Autopsies, done outside for surgical service....	2
Autopsies, neurological service	37
Autopsies, done outside for neurological service	19
<hr/>	
Total number of autopsies recorded	240
General autopsies recorded	203
Neurological autopsies	56
<hr/>	
	259
Recorded autopsies	259
Cases counted twice	19
<hr/>	
Actual total	240
Reports on surgical specimens	1,198
Reports on neurological specimens	172
Reports on bacteriological specimens	1,105
Guinea pig inoculations for suspected tubercu- losis	174
<hr/>	
Total	2,649

There were 329 deaths in the hospital, of which 192 were medical, 98 were surgical and 39 were neurological. Thirteen deaths, eight surgical and five medical, were investigated by the Medical Examiner.

The percentage of autopsies for the year after deducting the thirteen cases taken over by the Medical Examiner proves to be 68.6 per cent. The percentage

REPORT OF THE PATHOLOGIST

of autopsies for the various services after making corrections for autopsies twice entered is:

Medical, 67.9 per cent; surgical, 58.9 per cent; neurological, 94.9 per cent.

The number and percentage of autopsies for all years are:

Year	Number	Per cent
1929.....	240.....	68.6
1928.....	219.....	59.6
1927.....	196.....	63.4
1926.....	179.....	62.0
1925.....	204.....	70.7
1924.....	177.....	70.0
1923.....	153.....	58.0
1922.....	174.....	68.0
1921.....	158.....	62.8
1920.....	155.....	58.2
1919.....	102.....	40.0
1918.....	145.....	40.0
1917.....	114.....	55.6
1916.....	113.....	49.5
1915.....	101.....	47.6
1913 and 1914.....	147.....	58.5

The number of surgical and bacteriological examinations made each year are:

Year	Number
1929.....	2,649
1928.....	3,497
1927.....	2,821
1926.....	3,101
1925.....	2,613
1924.....	2,819
1923.....	2,708
1922.....	2,391
1921.....	1,984
1920.....	1,826
1919.....	1,628
1918.....	2,224

PETER BENT BRIGHAM HOSPITAL

1917.....	1,248
1916.....	1,140
1915.....	1,030
1914.....	847

In previous reports I have discussed important problems of organization and personnel. The only result has been to discover that both University and Hospital insist upon direction of the Pathological Service by the administrative head of the Medical School Department of Pathology. The logical outcome will be greater delegation of routine responsibilities to a former resident, now full-time member of the Medical School Department. The creation of the position of Assistant Pathologist will probably be advisable in order to instill in him a feeling of proprietary interest. The inadequacies of the laboratory quarters were made painfully apparent during the International Physiological Congress held in Boston last summer, by the reactions of several distinguished foreign pathologists who requested to see the department. The animal room was kept concealed but the post mortem room with its festoons of overhead pipes and columns and fixtures, which no amount of scrubbing can prevent creating an appearance of messiness, had to be exhibited. The contrast with important hospitals in Europe having university affiliations was too striking to escape notice. Well-kept, typed and bound records and complete histological collections were the ameliorating conditions in our shame.

I again call attention to the more than 100 per cent increase in numbers of post-mortem examinations and other routine involving technical and secretarial work as compared with 1917. An additional employee who can do both types of work is a genuine necessity, but

REPORT OF THE PATHOLOGIST

where to place this person at work is a problem because of lack of working space unless the teaching of fourth-year students in pathology is abandoned so that the room reserved for that purpose can be utilized. Where to house our growing collection of stored specimens (kept for future reference and study), our records and histological slide collections is another problem that can be solved only by enlarging the laboratory wing of the hospital, unless space in the Medical School buildings (Warren Museum?) is utilized, a solution involving inconveniences to all concerned, laboratory and clinical staffs, though insuring greater safety of the collection.

The laboratory record and histological slides are used so extensively by the clinical staffs of the hospital and also by workers in other hospitals that the task of taking care of them has become a real problem consuming considerable of the departmental secretary's time. Recently it was decided to abandon the open-house policy and to permit access to our collections and records only by special permission from the Pathologist. This is the first step necessary involving a loss of usefulness and prestige in the meeting of present problems. Other more serious losses will follow as we become forced to meet the issues mentioned.

Changes in the staff in the last year are as follows:

Dr. Reuben Z. Schulz succeeded Dr. Granville A. Bennett as Resident Pathologist July 1, 1929.

Dr. Rudolf Osgood succeeded Dr. J. Mott Rawlings July 1, 1929, and Dr. George M. Hass succeeded Dr. Arthur C. Taylor January 1, 1930, in the positions of Pathological House Officers.

Dr. Charlotte L. Maddock was appointed Voluntary Graduate Assistant in February, 1930, for six months.

Doctor Bennett is now Instructor in Pathology in Harvard Medical School.

PETER BENT BRIGHAM HOSPITAL

Doctor Rawlings became Resident Pathologist at the Children's Hospital, Boston.

Doctor Taylor is Surgical House Officer in the State of Wisconsin General Hospital at Madison.

Publications

WOLBACH, S. B. and BLACKFAN, KENNETH D. Clinical and Pathological Studies on Tubular Nephritis (Nephrosis). Trans. Assoc. of American Physicians, vol. xlv, pp. 77-118, 1929.

BENNETT, G. A. Sick Cell Anemia—Further Investigation of a Case of Splenic Atrophy with Calcium and Iron Incrustations (Nodular Splenic Atrophy). Archives of Pathology, May, 1929, vol. 7, pp. 801-803.

S. BURT WOLBACH,
Pathologist.

DECEMBER 31, 1929.

Report of the Surgeon-in-Chief

PROPOSAL FOR SEPARATE CLINICAL SCHOOLS. Under this caption in the Annual Report for 1926 (p. 74 *et seq.*), attention was called to three sources of uneasiness, felt by the clinical teachers in the hospitals affiliated with the Medical School because of: (1) The increasing emphasis laid on pure research in the fundamental courses and, as a corollary, the want of emphasis on the application of the subjects taught to the practice of medicine and surgery; (2) the existing curricular arrangement which obliged the distracted students in their clinical years to flit in small groups from instructor to instructor and from one hospital to another; (3) the unfortunate system whereby the senior student must, largely on his own initiative, scramble for the post-graduate house officer-ship which boards of licensure demand of him.

Though an educational mill is a cumbersome apparatus and in the nature of things grinds slowly, it is encouraging to note that a change for the better, at least in the second of these sources of dissatisfaction, has partially been brought about, and it is with this change and further proposals in the same direction that something may deserve being said.

It is a conviction shared by many that the growing size of the school has made the old-time plan of organization in the major clinical departments not only unsatisfactory, but, in view of the administrative tendency to deal independently with the staff of each hospital rather than through a departmental organization, wholly unworkable. Criticisms are of little avail unless

they are accompanied by suggestions for betterment. Accordingly, as provocative of discussion, it was proposed, in the Annual Report of last year under the caption " 'House Plan' for Hospitals," that the three general hospitals affiliated with the School should be officially recognized as independent clinical units, each with its independent budget and permanently apportioned group of students, rather than as loosely coordinated teaching units over which the entire student body was spread thin. At the same time reasons were given why this would be equally advantageous both to hospitals and students.

To meddle with a long established medical curriculum is a ticklish matter, but a committee to rearrange the teaching of the third-year students was finally appointed and certain changes which may be interpreted as having been made in the direction of the establishment of separate units have been brought about. This modified program has now been in operation for several months and, though extra labor thereby has been thrown upon the teaching staff of the several hospitals, it is fair to say that it is working well and, as we all become adjusted to it, will work still better.

Under this new arrangement, instead of coming to one or another hospital in small sections for a few days, the third-year students are apportioned to each of the three hospitals either in medicine or surgery, for a more or less uninterrupted period of sixty-three days. During this period it becomes possible for each hospital staff to become fairly well acquainted with the individuals of their apportioned group and for the students, on the other hand, to come into more intimate contact with certain of their teachers. It is

earnestly to be hoped that before many years have passed the School may have the courage to go still further in this matter and allow students for the entire year, or perhaps even for their full two years of clinical instruction, to remain continuously allocated to one or another of the three or possibly four major hospitals that are closely associated with the School. Should this proposal ever be brought about, the third of the dissatisfactions mentioned above, namely, that concerning house officer appointments, will come to settle itself, for the responsibility for securing appropriate positions for its particular group of students could well enough be left to the staff of the hospital in which the students have had their training.

It is greatly to be hoped, too, that a compromise in regard to the first of the sources of uneasiness may some day be reached which will permit those of the students who are looking forward to medical or surgical practice to have some manner of contact with patients during their entire four years in the School. During their first two years, as things now stand, undue stress is laid on matters which are beyond the grasp of most students and at best are only of transient importance. What is more, the practical minded among them find that the school authorities meanwhile are inclined to place great emphasis from the outset on the prevention of disease examples of which they have never seen and would not know how to recognize.

It cannot be denied that many most desirable men are kept out of the profession of medicine because of the present-day pre-medical requirements, particularly in chemistry, which practically restrict medical candidates to that small group of collegians who will have

made up their sophomoric minds as to what walk in life they shall pursue two years before their graduation. In consequence, these two pre-medical years in addition to the two pre-clinical years mean three and one-half to four years of preparation for an aspirant to medical practice before he ever comes in contact with a patient. The old elbow-to-elbow apprentice system was probably a much better preparation for medical and certainly for surgical practice than this.

In the effort to capture the rare man with investigative tendencies, the entire student body in our School, as in others, must, as things now stand, arduously plow through a science training of which only a favored few can take real advantage. Certainly for those who are looking forward to the life of a practitioner, and this means the great majority of students, their time could be spent more profitably in other ways. Meanwhile, those of them who may show investigative tendencies would be just as likely—perhaps more likely—to make themselves known if the system were reversed with emphasis laid from the beginning on the patient and the application of what is already known to his particular malady, the more gifted students, those capable of making contributions to knowledge, being sent to the science laboratories subsequently.

Some such program as this would vastly simplify our educational machinery and be a great saving of time and money to the School no less than to the student. There is an old saying that money makes the mare go, and the emphasis in the School on preventive medicine — on keeping people well — is transparently due to the fact that large funds have been put at the disposal of this particular movement. It is a movement that deserves all praise, but there is no gainsay-

ing that however much we may prevent disease in the mass, just so many more people will be kept alive some day to suffer accident or ill health requiring the attention of a conscientious and experienced physician or surgeon or both.

Big business and politics look forward to the ultimate industrialization of medicine, but the profession need not be too greatly disturbed by these tendencies knowing, as it does, that the very people who talk most about life extension and the high cost of medical attention are the ones to clamor most loudly for an experienced practitioner at any price to care for their individual ailment when something goes wrong with them as one day or another it is certain to do. One would suppose, accordingly, that the training of capable practitioners would be the primary object of our leading medical schools, but it is highly doubtful if the existing educational procedures are well adapted either for this purpose or for bringing genius to the light. Jenner was a general practitioner. So was Robert Koch. Lister installed a small laboratory off his consulting room and came to make one of the greatest contributions of all time to the saving of lives. He nevertheless was primarily a practicing surgeon and had he not been, we may well have doubt whether he would have had the urge and opportunity to attack the problem which has immortalized his name.

Such stress has been laid on the subject of prevention that under the aegis of our School a book has been published which has chapters on preventive surgery, preventive obstetrics, and so on. The effort, in short, is to raise the banner of prevention over all departments and under this shibboleth to discount the importance of cure. An ancient proverb tells us that

prevention is the better of the two and there is no belittling the fact that the greatest triumphs of modern medicine lie at its door; but to point out that the surgeon washes his hands to prevent infection, takes out an appendix to prevent peritonitis, gives an anesthetic to prevent pain, and so on, by confusing prevention with prophylaxis and therapeutics bewilders the students and lays preventive medicine open to ridicule.

A TRAINING IN SURGERY. In all of this I am perhaps unduly considering the educational needs of clinicians of my own species. Still, all said and done, possibly 50 per cent of our students at some time or other aspire to become surgeons and perhaps four out of five of them do so. One sometimes is driven to feel that it would not be at all a bad thing for the future of surgical therapeutics if, foregoing the degree of M.D. as the surgeon does in England, he might have a separate school where his particular form of endeavor could from the outset be emphasized and all else remain subsidiary—a school in which, around a highly developed course of operative surgery on animals, the principles only of applied anatomy, applied physiology, applied bacteriology, and applied pathology would be taught. But this is idle talk; the existing laws regarding licensure unfortunately block the way to many worthwhile experiments in professional education.

Young surgeons need to have their manual dexterity with the tools of their craft highly developed, to have the ritual of the operating room so drilled into them that its observances come to be second nature, to have their resourcefulness so developed that they instinctively know just what to do when confronted by the fireman with a bad burn, by the comatose victim of an

REPORT OF THE SURGEON-IN-CHIEF

automobile accident, by the child with a foreign body in its bronchus, by the young wife with a ruptured tubal pregnancy, by persons with strangulation of the bowel, perforations of an ulcer, acute empyema and a host of other emergencies — mostly preventable, of course, if one keeps away from fires, avoids crossing the street, refrains from matrimony, and so on. These and countless other emergencies that demand prompt surgical intervention will continue to occur in spite of all precaution till the end of time, let alone those far more numerous and equally unavoidable disorders with which the path of life is strewn and for which corrective procedures are constantly being devised and perfected in the many subdivisions of surgery.

The surgeon's job is not learnable from a textbook or from looking on. It is a matter of slowly gained and hard-won experience through the close contact of apprenticeship. In my day here as a student it was possible for those of us who were interested to get into a surgical atmosphere through the prosectors of anatomy on first entering the dissecting room, and we had four years of it. No such opportunities lie before the student today and our School need scarcely expect to produce, other than by accident, worthy successors to those Boston surgeons who established and handed on the fine traditions of their craft for a century or more in this community.

Whether we, as a hospital, are doing our part in making up for this defect in a belated way by the effort to hand on to certain few of our house officers academic aspirations in surgery is a matter that deserves looking into. A reason for doing so was provided by a recent request from the Dean's Office stating:

PETER BENT BRIGHAM HOSPITAL

I have a letter from Mr. Abraham Flexner saying that he is compiling a list of persons who have graduated from the leading medical schools of the country and who have within the past fifteen or twenty years attained professorial rank in other institutions than the institutions from which they were graduated, and he requests a list of such men from here.

Will you be kind enough to send me at once a statement as to all the men who have attained professorial rank in other institutions than the Harvard Medical School within the last twenty years in your subject, and who were graduates of the Harvard Medical School, stating what their positions now are.

Please send me also a list separate from the other of the men in your subject who have had training in your department, from which they went to professorial positions elsewhere but who were not graduates of the Harvard Medical School.

The answer to this letter, so far as the Brigham Hospital is concerned, may be dug out of the directory that subjoins these annual reports. Although the hospital is still young, twenty-six of those who have received part of their training while connected in one capacity or another with the surgical department have attained professorial rank in other universities, twenty of them having been graduates of schools *other* than the Harvard Medical School. One might be led to conclude from this that conditions elsewhere are more favorable than here for such preliminary training in surgery as would render candidates more eligible for the junior surgical positions we have to offer; but the explanation is not quite so simple. Six of the twenty-six men have attained professorial rank in subjects other than surgery (two in anatomy, two in neurology, one in physiology and one in medicine); and it must be borne in mind also that we incline to leaven our loaf by taking a goodly proportion of men from other schools under the belief that multiple contacts are a

REPORT OF THE SURGEON-IN-CHIEF

good thing for the hospital and also for the development of the individual.

THE SEARCH FOR LEADERS. I once heard it stated before a committee, which had been appointed to consider possible candidates for a professorship of surgery, that there were seven essential qualifications and only those possessed of them need be considered: (1) The candidate must primarily have shown capacity for independent investigative work; (2) he must also be able to inspire others to engage in research; (3) he must possess the administrative gifts needed for the organization and conduct of a department; (4) he must be an inspiring teacher of his subject; (5) he must have amiability to insure cooperation with his colleagues; (6) he should, moreover, be a gentleman, be happily married and radiate hospitality from his home; and lastly (7), rather as an afterthought, it was mentioned that he of course should be a skillful operating surgeon. For a school in quest of a surgical leader, this would appear to be in the nature of an anticlimax, and yet it about represents the sequence on which emphasis is now laid. Of course there are no people with these seven qualities equally balanced. A candidate with any two of them (and the fourth and seventh are the important ones), if well-supported by his school, could well make a success of the position. He might indeed do so if an inspiring teacher alone, and yet in our scrutiny of credentials at meetings of the medical faculty, almost the only thing that is stressed is the number of papers the candidate has written.

My lamented friend, the late Richard M. Pearce, sent me a few weeks before his death the following letter:

PETER BENT BRIGHAM HOSPITAL

At no time in the history of the world has progress in medicine been so rapid or have such fundamental changes taken place as in the United States in the last twenty years. The change of attitude both in laboratory and clinical medicine with the great increment of financial aid will result undoubtedly in the emergence of a different type of leader. Those who have watched the changes in the past twenty years are perhaps best fitted to give an opinion as to the probable leaders of the next generation.

It would be interesting to get opinions concerning probable future leaders from those who in the next ten or fifteen years are to pass on leadership to others and who presumably have this question very much at heart at this time. Do you care therefore to give me the names of a few individuals representing your field (surgery) who now thirty to thirty-five years of age will in your opinion represent such leadership fifteen to twenty years hence? A collection of such names in the various fields of medicine would indicate presumably the value or weaknesses of the present system and be a guide to those who are influencing tendencies at the present time.

This letter is going to five other individuals, your contemporaries in the field of surgery. It is not intended to publish the results or to use them in any public way. All replies will be considered as confidential except for such discussion as may necessarily arise in connection with the groups receiving these letters. If you can assist me in this matter, which is purely one of personal interest and not a study by the Foundation, I should consider it a very great favour. If you care to do so, I should be very glad to have a similar opinion concerning men in neurology. I am sending a similar letter to three non-surgical neurologists.

To this I inadequately replied:

I have your letter of January 13. I am not a prophet and would not venture to pick out the leaders of the next generation, either in surgery or neurology. Leadership depends mainly on personality, as it always has and always will. I could name for you easily five surgeons and as many neurologists who from training and ability might be expected to be the

REPORT OF THE SURGEON-IN-CHIEF

future leaders, but any one of them may be stricken down by some stroke of ill luck or make some *faux pas* which will serve to block their career. * * * * I recommend for your perusal what Lord Haldane says in his autobiography in regard to the haphazard way by which people arrive at eminence and leadership.

Nevertheless I very much wish that Richard Pearce might have lived to carry this study through and that 15 or 20 years hence he with the six surgeons might have come together to see what meanwhile had happened to the "probable leaders."

THE SURGICAL CLINIC AND ITS LABORATORIES. Any clinic comes inevitably to be colored by what happens to be the special interest of the person in charge and at the Brigham Hospital what may seem like over-emphasis is laid on the surgical treatment of intracranial disorders. It is by no means overlooked, meanwhile, that the sturdiness of a clinic wholly depends on the perfection and detail with which the general surgical work is carried on and the manner in which its fundamental principles are taught. Without sufficient ballast no boat can carry racing sails, and were it not that the burdensome surgical routine of the ambulatory service, of the wards and of the operating room is most capably covered, the clinic could scarcely weather the strain put upon it by its balloon-jibs of neurosurgery and urology.

The chief burden of the work in general surgery, together with the teaching of students and training of house officers that goes with it, continues to be cheerfully borne by Doctor Cheever, Doctor Homans and the Doctors Newton of whose activities all too little is said in these annual reports. A surgical textbook in the preparation of which Doctor Homans has

been long engaged is now in press and should soon be available to our students. Dr. Francis Newton conducts in the laboratory at the School the highly popular course of operative surgery on animals—a course which should be a part of the surgical training of every medical student. Dr. Harlan Newton continues to have general supervision of the surgical ambulatory clinic in addition to which he has arranged the schedule for our group of third-year students and gives abundantly of his time to their affairs.

In these modern days, a clinic without laboratories both for teaching and research scarcely deserves the name, and there are two surgical laboratories with which we have contact, one in the School, a departmental laboratory meagerly supported out of school funds, the other in the hospital toward the financial support of which the School makes no contribution. The former of these two laboratories came into existence thirty years ago when the present Medical School was built at which time, on Dr. J. C. Warren's insistence, a generous suite of rooms was set aside on the second floor of Building E for experimental surgery and for a departmental library. To this suite just before the opening of the Brigham Hospital suitable animal quarters were added. This School laboratory, as told in a previous report (1924) has suffered some vicissitudes, but it is there that the elementary course in surgical therapeutics has always been conducted, and, so far as budget and space have permitted, the facilities of the laboratory for investigative purposes have been open to all members of the surgical department as well as to others with surgical problems to solve.

REPORT OF THE SURGEON-IN-CHIEF

In the use of this laboratory at the School the Brigham group has chiefly profited owing partly to our geographical proximity and partly to the fact that the Arthur Tracy Cabot Fellow, an annual appointee by the Moseley Professor of Surgery, has from the outset been officially put in charge of the laboratory and its activities. The present incumbent of this fellowship is Dr. Paul Martin of Brussels, a former Assistant Resident at the Brigham Hospital who has dropped his practice as a busy neurological surgeon in Belgium to return here for a period of uninterrupted laboratory work. He succeeds the youngest of the men to have held this fellowship, Dr. Harold M. Teel, whose brilliant record as an undergraduate fully entitled him to the position, and who is now taking his house officership at the Lakeside Hospital in Cleveland under Dr. E. C. Cutler.

For obvious reasons, investigations necessitating the employment of animals are unsuited to the surroundings of a hospital. There nevertheless are many opportunities for advancing knowledge in surgical subjects that lie apart from actual experimentation, and though no provision was made for a surgical laboratory when the Brigham Hospital was built, a modest space in the basement of the surgical building was utilized for the purpose. It was there that Doctor Boothby and his assistant, Miss Sandiford, began their early studies on metabolism, a subject which has since grown to such proportions that the determination of the basal metabolic rate is almost routine for a considerable percentage of patients in all hospitals. Needless to say, medical research of any sort is a highly expensive pursuit and in what is left of this most modest laboratory where a technician, an artist,

a photographer, and half a dozen others engaged in special problems work practically elbow to elbow, we manage to expend, on what we like to think is productive work, a budget that has been most generously provided on solicitation from the relatives of patients who have been under treatment in the hospital. We are therefore fortunately exempt from the necessity of having to appeal to reluctant hospital or school administrators for the luxuries we enjoy. This laboratory at the present time, largely as the outgrowth of Dr. Percival Bailey's activities during the past few years, happens to be given over chiefly to neuropathology and more particularly to the study of brain tumors.

As stated in the last report, Dr. Richard C. Buckley succeeded to Doctor Bailey's position as Junior Associate in charge of this laboratory in the hospital, and after acceptably filling the post for a year he was then on November 1 moved back in the clinic to gain some experience in urology as Doctor Quinby's assistant, the supervision of the laboratory having been put in the no less capable hands of Dr. Louise Eisenhardt. Doctor Eisenhardt has for several years kept "score" of our neurosurgical cases—an arduous task and one which requires the greatest exactitude since there are constant revisions of old material with necessary changes in diagnosis that make it a difficult matter to keep the statistical feature of the work well in hand. Not only this, but the responsible duty of tumor classification devolves upon the person in charge of this laboratory; and Doctor Eisenhardt has so developed and perfected the technique of supravital preparations that during the course of an operation an almost immediate report upon the cell types of gliomas and other tumors can be given to the surgeon. These diag-

REPORT OF THE SURGEON-IN-CHIEF

noses are in some respects more dependable than those we have heretofore been able to make after long delay by the customary methods of tissue examination which entail fixation, sectioning and staining.

That the laboratory, however, is not wholly given over to neuropathology can be drawn from the papers by Dr. Boris Fried who for several years has held space there. Doctor Fried's contributions, particularly to the pathology of the lung, have begun to receive recognition and it is gratifying to note that his vigorous claims that the alveoli of the lungs are lined by histiocytes rather than by epithelial cells have come to be accepted, both at home and abroad, by pathologists who at first were disinclined to agree with his novel views.

Bibliography for 1929

BAGDASAR, DIMITRI. Le traitement chirurgical des gommes cérébrales. *Rev. neurol.*, July, 1929, ii, 1-30.

BAILEY, PERCIVAL. Intracranial sarcomatous tumors of leptomeningeal origin. *Arch. Surg.*, April, 1929, xviii, 1359-1402.

— A propos d'une forme speciale de meningiome angio-blastique. *J. de neurol. et phychiat.*, November, 1929, xxix, 577-581.

BAILEY, PERCIVAL and BAGDASAR, DIMITRI. Intracranial choroidoblastoma. *Am. J. Path.*, September, 1929, v, 439-449.

BAILEY, PERCIVAL (with Paul C. Bucy). Oligodendrogliomas of the brain. *J. Path. and Bacteriol.*, October, 1929, xxxii, 735-751.

BIRD, CLARENCE E. Tumors which may expand the curvature of the duodenum, particularly tumors and infections of the retroperitoneal lymph nodes. *Ann. Surg.*, January, 1929, lxxxix, 12-29.

PETER BENT BRIGHAM HOSPITAL

- Transfusions in acute loss of blood. *Arch. Surg.*, April, 1929, xviii, 1646-1658.
- BOWEN, J. A. Malignant undescended testicle. *New England J. Med.*, February 28, 1929, cc, 418-420.
- Obstructing papilla of the ureter; the result of infection and calculus. *Ibid.*, May 23, 1929, cc, 1091-92.
- BRADLEY, J. I. Congenital absence of the vermiform appendix. *Arch. Surg.*, April, 1929, xviii, 1904-1908.
- BUCKLEY, R. C. Tissue culture studies of the glioblastoma multiforme. *Am. J. Path.*, September, 1929, v, 467-472.
- BUCKLEY, R. C. and DEERY, E. M. Abnormality of the cerebrum and leptomeninges simulating an intracranial tumor. *Ibid.*, 459-465.
- BUCKLEY, R. C. and EISENHARDT, LOUISE. Study of a meningioma in supravital preparations, tissue culture and paraffin sections. *Am. J. Path.*, November, 1929, v, 659-664.
- CAIRNS, HUGH. Observations on the localisation of intracranial tumours: The disclosure of localising signs following decompression or ventriculography. *Lancet (Lond.)*, March 23, 1929, i, 600-603; also *Arch. Surg.*, April, 1929, xviii, 1936-1944.
- CHEEVER, DAVID. Instrumental dilatation of the papilla of Vater and the dislodgment of calculi by retrograde irrigation. A contribution to the surgery of the bile passages. *Arch. Surg.*, April, 1929, xviii, 1069-1077.
- The Warren stock and some of its scions. *New England J. Med.*, April 25, 1929, cc, 857-863.
- A surgeon's views of the treatment of peptic ulcer. *Ann. Int. Med.*, August, 1929, iii, 144-152.
- CRUMP, CURTIS. Histologie der allgemeinen Osteophytose (Ostéoarthropathie hypertrophiante pneumique). *Virchow's Arch.*, 1929, cclxxi, 467-511.

REPORT OF THE SURGEON-IN-CHIEF

CUSHING, HARVEY. The medical career. An address delivered at Dartmouth College, November 20, 1928. Privately printed (Hanover), 1929, 53 pp.

— The chiasmal syndrome of primary optic atrophy and bitemporal field defects in adult patients with a normal sella turcica. Transactions of the XIIIth International Ophthalmological Congress, Amsterdam, 1929, 97-184.

— The binding influence of a library on a subdividing profession. Address at the dedication of the William H. Welch Medical Library, Baltimore, October 17, 1929. Science, November 22, 1929, lxx, 485-491.

CUSHING, HARVEY, and EISENHARDT, LOUISE. Meningiomas arising from the tuberculum sellae: with the syndrome of primary optic atrophy and bitemporal field defects combined with a normal sella turcica in a middle-aged person. Arch. Ophth., January and February, 1929, i, 1-41, 168-205.

CUSHING, HARVEY (with Drs. L. M. S. Miner, W. P. Coues, A. V. Bock, F. T. Lewis and W. M. Wheeler). Exercises in celebration of the bi-centenary of the birth of John Hunter. New England J. Med., April 8, 1929, cc, 810-823.

CUSHING, HARVEY and TEEL, HAROLD M. Concerning the hypophyseal (pars distalis) hormones for growth and reproductive processes. [Abstract.] Am. J. Physiol., October, 1929, xc, 323-324.

DAY, H. F. (with W. R. Sisson and E. C. Vogt). Acute pulmonary edema of anaphylactic shock. Am. J. Roentgen., October, 1929, xxii, 349-351.

DEERY, E. M. Note on calcification in pituitary adenomas. Endocrinology, September-October, 1929, xiii, 455-458.

EISENHARDT, LOUISE. The operative mortality in a series of intracranial tumors. Arch. Surg., April, 1929, xviii, 1927-1935.

PETER BENT BRIGHAM HOSPITAL

- FALLON, JOHN. Hemolytic streptococcal subcutaneous gangrene. Report of a case. *Arch. Surg.*, April, 1929, xviii, 1817-1824.
- FRIED, B. M. Hilum tuberculosis in an old man. *New England J. Med.*, January 31, 1929, cc, 233-237.
- Subacute combined degeneration of the spinal cord in pernicious anemia. Treatment with the liver diet. *J. Am. M. Ass.*, April 13, 1929, xcii, 1260-1263.
- Phloridzin diabetes and vital staining. *Proc. Soc. Exper. Biol. and Med.*, June, 1929, xxvi, 809-810.
- Primary carcinoma of the lungs. III. Histogenesis and metaplasia of bronchial epithelium. *Arch. Path.*, July, 1929, viii, 46-67.
- FULTON, J. F. Horner and the syndrome of paralysis of the cervical sympathetic. *Arch. Surg.*, April, 1929, xviii, 2025-2039.
- FULTON, J. F. and BAILEY, PERCIVAL. Contribution to the study of tumors in the region of the third ventricle: their diagnosis and relation to pathological sleep. *J. Nerv. and Ment. Dis.*, January, February and March, 1929, lxi, 1-25, 145-164, 261-277.
- FULTON, J. F. and INGRAHAM, F. D. Emotional disturbances following experimental lesions of the base of the brain (pre-chiasmal). *J. Physiol.*, 1929, lxvii, *Proc. Physiol. Soc.*, April 27, 1929, xxvii-xxviii.
- FULTON, J. F. (with J. Pi-Suner). The influence of the proprioceptive system upon the crossed extensor reflex. *Am. J. Physiol.*, April, 1929, lxxxviii, 453-467.
- GREENE, THEODORE C. The ability to localize sound. A study of binaural hearing in patients with tumor of the brain. *Arch. Surg.*, April, 1929, xviii, 1825-1841.
- HOMANS, JOHN. The operative treatment of varicose veins, varicose ulcers and phlebitis. *New England J. Med.*, May 9, 1929, cc, 965-971.

REPORT OF THE SURGEON-IN-CHIEF

- HOMANS, JOHN and ZOLLINGER, ROBERT. Experimental thrombophlebitis and lymphatic obstruction of the lower limb. A preliminary report. Arch. Surg., April, 1929, xviii, 992-997.
- HORRAX, GILBERT. Experiences with cordotomy. Arch. Surg., April, 1929, xviii, 1140-1164.
- INGRAHAM, FRANC D. Local morphologic changes following section of the thoracic sympathetic nerve trunk. Arch. Surg., April, 1929, xviii, 1857-1862.
- KREDEL, FREDERICK E. Intracranial tumors in tissue culture. Arch. Surg., April, 1929, xviii, 2008-2018.
- MCLEAN, A. J. The Bovie electrosurgical current generator. Some underlying principles and results. Arch. Surg., April, 1929, xviii, 1863-1873.
- MEAGHER, R. H. and INGRAHAM, F. D. The relation of the cervical sympathetic trunk to cerebral angiospasm. Arch. Neurol. and Psychiat., September, 1929, xxii, 570-574.
- MORELLE, JEAN. Tumors of the acoustic nerve. Arch. Surg., April, 1929, xviii, 1886-1895.
- NEWTON, FRANCIS C. Acquired diverticula of the colon. A study of the end-results in forty-four cases. Arch. Surg., April, 1929, xviii, 1339-1358.
- NEWTON, HARLAN F. The effect of ultraviolet light on corneal tuberculosis in rabbits. Arch. Surg., April, 1929, xviii, 1542-1551.
- NEWTON, H. F. (with W. B. Cannon, E. M. Bright, V. Menkin and R. M. Moore). Some aspects of the physiology of animals surviving complete exclusion of sympathetic nerve impulses. Am. J. Physiol., June, 1929, lxxxix, 84-107.
- NEWTON, H. F. (with O. Kirchner). I. Vergleichende Schutzimpfungsversuche an Meerschweinchen mit BCG, Schröderschem Impfstoff und abgetöteten Tuberkelbacillen. Beitr. z. klin. d. Tuberk., 1929, lxxii, 97-108.

PETER BENT BRIGHAM HOSPITAL

- OLJENICK, IGN. Parinaud's syndrome. Report of a case of traumatic origin. *Trans. Am. Neurol. Assn.*, 1928, 362-406.
- Bilateral cervical rib. Clinical and experimental observations on a case. *Arch. Surg.*, April, 1929, xviii, 1984-2007.
- OUGHTERSON, A. W. The hypertrophy of fascia and its use in the repair of large scrotal herniae. *Surg., Gynec. and Obst.*, September, 1929, xlix, 387-391.
- OUGHTERSON, ASHLEY W. and CHEEVER, DAVID. Recurring intussusception caused by intestinal neoplasms, requiring multiple operations for its relief. *Surg., Gynec. and Obst.*, April, 1929, xlviii, 682-686.
- OUGHTERSON, ASHLEY W. and POWERS, JOHN H. The relationship of the toxin of bacillus Welchii to the toxemia of intestinal obstruction. *Arch. Surg.*, April, 1929, xviii, 2019-2024.
- PILCHER, COBB. The surgical significance of coronary occlusion. Reports of two cases. *Arch. Surg.*, April, 1929, xviii, 2040-2045.
- POWERS, JOHN H. The experimental production of mitral stenosis. *Arch. Surg.*, April, 1929, xviii, 1945-1959.
- POWERS, JOHN H. (with William P. Murphy). The value of liver in the treatment of anaemia due to haemorrhage. *Surg., Gynec. and Obst.*, April, 1929, xlviii, 480-486.
- PUTNAM, TRACY JACKSON. Separation of growth-promoting hormone from that inducing premature estrus in the anterior pituitary gland. *Arch. Surg.*, April, 1929, xviii, 1699-1707.
- PUTNAM, TRACY J., BENEDICT, EDWARD B. and TEEL, HAROLD M. Studies in acromegaly. VIII. Experimental canine acromegaly produced by injection of anterior lobe pituitary extract. *Arch. Surg.*, April, 1929, xviii, 1708-1736.
- QUINBY, WILLIAM C. The teaching of urology in the surgical curriculum. *Arch. Surg.*, April, 1929, xviii, 1256-1258.

REPORT OF THE SURGEON-IN-CHIEF

- Prostatectomy. *New England J. Med.*, May 23, 1929, cc, 1077-1080.
- The operative treatment of renal lithiasis. *Am. J. Surg.*, August, 1929, vii, 234-238.
- Factors influencing the operative procedure in hydro-nephrosis. *J. Am. M. Ass.*, November 30, 1929, xciii, 1709-1710.
- Clinic on malignant disease of the genito-urinary organs. Tumors of the prostate. *New England J. Med.*, December 26, 1929, cci, 1280-1284.
- Urinary stone in some of its aspects (Diagnostic Clinic). *Proc. Interstate Post-Graduate Medical Assn. of N. Am.*, Detroit, 1929.
- The relation of urology to Medicine and Surgery. *Ibid.*
- QUINBY, WILLIAM C. Carcinoma of the trigone of the bladder. *Tr. Am. Assn. Gen.-Urin. Surg.*, 1929, xxii, 307-312.
- RICHARDS, LYMAN. Mastoiditis in acute nutritional disturbance. *Arch. Surg.*, April, 1929, xviii, 1774-1782.
- SCARFF, JOHN E. The experimental production of pulmonary abscess. Etiologic factors. *Arch. Surg.*, April, 1929, xviii, 1960-1983.
- SCHREIBER, FREDERIC. Meningioma with bruit: a report of four cases. *New England J. Med.*, December 26, 1929, cci, 1290-1291.
- TEEL, CHARLES. Diverticulum of the bladder. An analysis of thirty-one cases. *Arch. Surg.*, April, 1929, xviii, 1896-1903.
- TEEL, HAROLD M. A method for purification of extracts containing the growth-promoting principle of the anterior hypophysis. *Science*, April 12, 1929, lxix, 405-406.
- Diuresis in dogs from neutralized alkaline extracts of the anterior hypophysis. *J. Am. M. Ass.*, September 7, 1929, xciii, 760-761.

PETER BENT BRIGHAM HOSPITAL

- The effect of the growth principle of the hypophysis on the female genital tract; with the report of the hypertrophic changes in a case of acromegaly. *Endocrinology*, November-December, 1929, xiii, 521-528.
- TEEL, HAROLD M. and WATKINS, O. The effect of extracts containing the growth principle of the anterior hypophysis upon the blood chemistry of dogs. *Am. J. Physiol.*, August, 1929, lxxxix, 662-685.
- TEEL, H. M. (with M. O. LEE and J. GAGNON). Basal gaseous metabolism in giant rats. *Proc. Soc. Exper. Biol. & Med.*, October, 1929, xxvii, 23-24.
- VAN WAGENEN, WILLIAM P.¹ The incidence of intracranial tumors without "choked disk" in one year's series of cases. *Am. J. Med. Sc.*, September, 1928, clxxvi, 346-366.
- WHITAKER, LESTER R. Problems in normal and in abnormal physiology of the gallbladder. *Arch. Surg.*, April, 1929, xviii, 1783-1802.

VISITING SURGEONS PRO TEMPORE. The names of two distinguished visitors have been added, one in the spring and one in the autumn of 1929, to our list of those who have been appointed as temporary Surgeons-in-Chief to the Hospital. Professor René Leriche, formerly of Lyons, was chosen after the war by the French Government to reorganize the surgical clinic of the University of Strasbourg. To this already famous clinic he has added new laurels through his contributions to the surgery of the autonomic nervous system. A friend of many years' acquaintanceship, advantage in our favor was taken of the fact that he had been invited to this country to attend a surgical congress and to receive a degree at Harvard. During his all too brief sojourn from June 13 to June 20, he entered with great spirit into the institutional life of the hospital internes and it is most pleasant to feel that we have established contact with

¹ Overlooked in last year's report.

REPORT OF THE SURGEON-IN-CHIEF

the celebrated Alsatian clinic which our graduates during their travels abroad will be certain to visit in years to come.

Our affiliation with the University of Edinburgh which dates back to the memorable visit of Sir Harold Stiles seven years ago, has now been happily continued by Prof. D. P. D. Wilkie who acted as Surgeon *pro tem* from October 6 to October 14. Mr. Wilkie exemplifies at their best the traditions of a famous anatomical School of Surgery and it was a great stimulus to us all to have had this intimate and delightful contact with him. In Colonial days and long afterward, such American medical students as could afford to leave this part of the world flocked to Edinburgh to supplement their meagre training acquired here solely in the process of apprenticeship. That a large number of them received their medical degrees in Edinburgh is a debt the American profession never can fully repay, but it is one we nevertheless need not forget. The visits here of Sir Harold Stiles and of Mr. Wilkie have merely served to increase our local obligations to Scottish medicine, for these gentlemen taught us far more than they learned.

Only in the case of younger men who come here to study can we possibly make some partial repayment of this long-standing indebtedness. It is a great satisfaction, therefore, that Mr. Norman M. Dott of Edinburgh was an Assistant Resident Surgeon here in 1923-1924 and that his assistant, Mr. W. R. Henderson, is at the present time a volunteer worker on the staff. Mr. Dott, moreover, returned to the clinic last August for a period of a few weeks just before the meeting of the International Physiological Congress, and as his visit happened to coincide with Doctor Hor-

PETER BENT BRIGHAM HOSPITAL

rax's vacation, he volunteered to act as his substitute. It is gratifying that a former member of the staff who has subsequently made a name for himself elsewhere should have cared to resume, even for a short period, the confinement of institutional life in the expectation that further study of our clinical and operative procedures might be worth his while. It is a compliment which implies that considerable progress may have been made here in the intervening six years.

CHANGES IN PERSONNEL. During the year, Dr. Harold A. Kent, who since November of 1922 has faithfully served as dental surgeon to the hospital, tendered his resignation and was put on the consulting staff. His place has been filled by Dr. M. S. Strock, a graduate of the Harvard Dental School in 1923, who has made himself a most agreeable member of our household. He has entered into his new duties with enthusiasm and interest in spite of the inadequate facilities which the hospital as yet can offer for the development of a proper dental clinic. An innovation has been made by Doctor Strock in association with Dr. LeRoy Miner, the Dean of the Dental School, in that certain exercises have been given in the wards to the third-year medical students. The need of a systematic examination of all patients in a general hospital from the standpoint of dental prophylaxis cannot be too greatly emphasized. It should be no less beneficial to patients than highly informing to students.

RESIDENTIAL POSITIONS. The blue-ribbon post of Resident Surgeon is being most acceptably filled for a second year by Dr. John H. Powers. The usual shifts meanwhile have occurred among the officers of the next grade. Dr. Arthur J. McLean, after a year as senior Assistant Resident in general surgery was

REPORT OF THE SURGEON-IN-CHIEF

enabled to go abroad for a year of study with Prof. Otfried Foerster in Breslau, on a travelling fellowship newly established by Mr. George Gorham Peters to whom public expression of appreciation and gratitude may be here recorded. Doctor McLean's position was taken over by Dr. John E. Scarff on the completion of his year as Assistant Resident in charge of the neurosurgical cases. Dr. J. L. Maupin at the conclusion of his year on the general surgical service in September resigned to resume his practice in Fresno, California. Dr. Frederick Schreiber, who after acting for a time as a voluntary assistant in neurosurgery was promoted to a supplementary assistant residency in neurosurgery, resigned this position in July to resume his practice in connection with the Harper Hospital in Detroit. On July 1, Dr. J. Andrew Bowen relinquished the assistant residential post on Doctor Quinby's service in urology to enter practice in Louisville, Kentucky. He was succeeded by Dr. William V. Cox, a Harvard medical graduate in 1925, who had served as a house officer and subsequently an assistant resident at the Lakeside Hospital in Cleveland to which institution he returned as resident surgeon at the end of this year.

House-Officer Positions. Dr. William T. Green, a medical graduate of the University of Indiana, after a house officership at the Henry Ford Hospital in Detroit, with the expectation of securing an assistant residential position here later on, volunteered to fill out the term of Dr. R. B. Brigham who had been obliged to resign.

Those members of our junior staff of internes whose terms expired at successive three-month periods during 1929 have separated as follows: Of the January

PETER BENT BRIGHAM HOSPITAL

graduates: Dr. A. C. Ormond secured a position at the Peck Memorial Hospital in Brooklyn; and Dr. James L. Sagebiel after a six-month house officership at the Boston Lying-In Hospital has gone into practice in Dayton, Ohio. Of the April graduates: Dr. Eric Oldberg was given an assistant residentship on the general service and then on October 1 took over the supervision of the neurosurgical patients in succession to Doctor Scarff; Doctor Oldberg's team-mate, Dr. Robert Zollinger, was given an assistant residential position at the Lakeside Hospital in Cleveland. Of the July graduates: Dr. George C. Crump, who unhappily had not been in the best of health after his two years in Vienna, nevertheless courageously completed his term of service before going to spend a year in the Adirondacks; Dr. Richard Meagher was made Assistant Resident on the general surgical service for three months after which time he was transferred to supplement Doctor Oldberg in the care of the neurological cases. Of the October graduates: Dr. W. G. Crutchfield went abroad for a period of study, and Dr. Robert Harbin left us to take a position with his father at the Harbin Hospital, Rome, Georgia.

Voluntary Assistants. Mention should also be made of those medical graduates who were officially given the privilege of the clinic during the year most of them having come here to familiarize themselves with problems relating to neurological surgery. Among those mentioned in last year's report, Doctor Schreiber has been accounted for. Dr. E. M. Deery has returned to New York where he holds a junior position at the Neurological Institute. Doctor Oljenick at the expiration of his second year returned to Holland to take his place as surgeon in Professor Brouwer's newly

REPORT OF THE SURGEON-IN-CHIEF

organized Institute of Neurology in the University of Amsterdam.

At the beginning of the School year, the following persons, all of them holding travelling fellowships, were appointed as voluntary assistants: Dr. Attracta Halpenny, a graduate of the Royal College of Physicians and Surgeons at Dublin and pathologist to the Richmond Hospital, Dublin, here as Purefoy Memorial Scholar from the College of Surgeons, Dublin; Mr. F. A. R. Stammers, a graduate in medicine of the University of Birmingham who had also served at the London Hospital and had recently been appointed Assistant Surgeon at the Birmingham General Hospital, here on a Rockefeller Fellowship; Mr. William R. Henderson, graduate of the University of Edinburgh and recent House Surgeon in the Royal Infirmary, also here on a Rockefeller Fellowship on the recommendation of the British Research Council; Mr. George Armitage, a graduate of Leeds, 1921, recommended by Lord Moynihan, here on a Rockefeller Fellowship; Dr. Gaston De Coppet, a medical graduate, 1924, of the University of Berne and now *Chef de clinique* in Professor de Quervain's surgical service at the Insulspital, likewise holding a Rockefeller Fellowship. This last appointment has given the writer particular gratification for the reason that he owes so much to the clinic in Berne where thirty years ago he spent a happy and most profitable year as a student under Theodore Kocher who was also Professor de Quervain's teacher; he feels therefore that his professional relation to Doctor De Coppet is that of uncle to nephew.

THE BRIGHAM'S MOST PRESSING NEED. This unquestionably is a new or renovated laboratory building

for all services. The present building on Van Dyke Street, in which a centrally placed amphitheatre and record room separate the surgical operating wing from the wing containing the medical and pathological laboratories, has gradually become outworn and outgrown. In convenience of situation and in its accessibility to the medical and surgical wards, this building leaves nothing to be desired, and I know of no hospital in which a comparable concentration of its more important activities happens, by good fortune as much as by wise planning, to have been brought about. But this very fact of concentration has brought us little by little to the point where the shoe confines the growing foot to the point of insufferability.

In improving the situation the three services, pathological, medical and surgical, are equally concerned. The pathological department from the outset has been greatly handicapped through the inadequacy of its quarters, and without question, if we are to justify ourselves in retaining the Shattuck Professor as our Pathologist-in-Chief, this long-time defect must soon be remedied. There has been talk of extending the present building to the west and of erecting a pathological institute to give proper opportunity for development of this fundamentally important subject. Were this done, space in the present building would be vacated into which the department of medicine could expand its laboratories. But as Doctor Christian has emphasized in his recent reports, when alterations in the building come to be made, they should include provision for a new and adequate record room, the present quarters used for this purpose having been in the nature of a makeshift from the outset. And while we are about all this, it would seem to be a proper time

REPORT OF THE SURGEON-IN-CHIEF

to remodel the surgical wing as well so that we might have a completed building which, so far as can be foreseen, would serve the purposes of the hospital for another generation.

The surgical needs are in their own way no less pressing than are those in pathology and medicine, though my short remaining tenure of office has made me somewhat diffident about stressing the matter. As a matter of fact, the entire operating plant has become antiquated. The sterilizing room and its equipment need complete replacement; our staff dressing rooms are overcrowded; the noisy corridor now used for general traffic that passes through the operating suite should be done away with; more preparatory rooms and more recovery rooms should be provided; and separate rooms for our dental and laryngological consultants are urgently needed if we are to do justice to the men we have appointed to these positions. These are but a few of the alterations in the operating plant itself that a new surgical incumbent would certainly insist upon.

Of the laboratory space on the ground floor of the surgical wing I have spoken with feeling and attachment in a previous section. Half of the space has been occupied for the past few years by the department of medicine for the metabolism laboratory which was originally started under the wing of surgery. The remaining space is scarcely adequate for our studies in neuropathology alone, and those interested in other surgical subjects have in consequence no laboratory facilities whatsoever in the hospital for the furtherance of their work. Attention should also be drawn to the fact that in connection with this small laboratory which is run almost wholly on privately solicited funds, there

PETER BENT BRIGHAM HOSPITAL

are an artist and a photographer for whose activities in the original hospital organization there was no provision.

We are all of us well aware that it is not surroundings so much as spirit and industry that favor progress. There are many elaborate plants, the last word in architectural detail, in which there is little evidence of productive activity; and conversely, most excellent work often comes from what appear to be the humblest quarters. Nearly twenty years ago the original Board of Hospital Trustees took a courageous step in stripping the hospital, as originally designed, of its architectural adornments in order that we might have the more money to spend on our work. To a continuance of this principle the present board will doubtless subscribe. The character of the work done within the walls of an institution is vastly more important than the walls themselves. Even so, it must not be overlooked that if the work is good, it grows, and the time comes when walls must expand in correspondence.

As things stand, therefore, with the building in question, only one feature appears at present to be reasonably adequate: namely, the central amphitheatre which has come to be requisitioned by the School for a daily 8.30 to 9.30 exercise for third-year teaching. In connection with this central portion of the building, there should be an enlarged department of records in which our invaluable clinical histories can be made more accessible, where the present scattered departmental stenographers can be brought together, where provision can be made for a hospital library both for general and professional reading, where suitable quarters can be set aside for our apportionment of undergraduate students, and where possibly provision should

REPORT OF THE SURGEON-IN-CHIEF

also be made for a hospital rather than a departmental artist and photographer. This, the core of the general laboratory building, must be, as it is now, common property used equally by all departments present and future, and in drawing up plans for the remodeling of the building as a whole it should be the first thing to be seriously considered. Whether the alterations needed independently by the separate departments should then be undertaken piecemeal or at one bite must necessarily depend upon factors which the Officers of the Corporation must themselves decide.

SURGICAL TABULATIONS. The accompanying table will show that, with our present bed capacity and with

YEAR	Total Discharges	Deaths	General mortality %	Diagnoses	Excess % of Diagnoses	Patients operated upon	Case % operated upon	Operations recorded	Post-operative deaths	Case mortality %	Operative mortality %
1913	690	35	5.00	690	0	477	69.1	693	29	6.0	4.2
1914	1474	83	5.63	1474	0	992	67.3	1361	61	6.1	4.5
1915	1869	89	4.76	2366	26.5	1328	71.2	1526	72	5.4	4.7
1916	2014	93	4.61	2348	16.5	1422	70.6	1632	68	4.8	4.1
1917	2021	74	3.66	2533	25.3	1457	72.0	1639	54	3.7	3.2
1918	1856	71	3.82	2315	24.7	1304	70.2	1474	61	4.7	4.1
1919	2123	102	4.80	2659	25.2	1411	66.4	1563	79	5.6	5.1
1920	2090	91	4.35	2604	24.5	1399	66.8	1602	69	4.9	4.3
1921	2195	107	4.87	2640	20.2	1405	64.0	1591	86	6.1	5.3
1922	2274	110	4.83	2692	18.3	1517	67.1	1552	71	4.7	4.5
1923	2397	135	5.62	3084	28.2	1646	68.6	1713	81	4.9	4.7
1924	2508	144	5.74	3462	38.0	1783	71.1	1843	75	4.2	4.1
1925	2578	134	5.19	3629	40.7	1667	64.6	1762	72	4.3	4.1
1926	2415	143	5.92	3565	32.2	1663	68.8	1789	87	5.2	4.8
1927	2474	135	5.95	3715	31.5	1735	69.9	1858	79	4.5	4.3
1928	2577	135	5.24	3737	45.0	1750	67.8	1930	89	4.5	4.2
1929	2574	136	5.28	3822	45.5	1708	66.3	1874	80	4.7	4.3

the type of serious cases that are by preference admitted to the wards, the annual figures and percentages have become essentially stabilized. It is perhaps re-

markable that they should have come to vary so little from year to year.¹ During the past five years an average of 318 more cases, including transfers, have been admitted to the surgical than to the medical wards. Each year about twice as many patients are transferred from medicine to surgery than the reverse, and the monthly slips supplied by the Superintendent show that during 1929 there was an average of 26.5 more surgical than medical cases continually in the hospital, which corresponds practically to a ward full. Since the medical and surgical staffs are of equal composition, these figures indicate that the surgeons shoulder a considerably greater amount of work; this, however, is not a complaint, it is merely a statement of fact.

A FUSION OF SERVICES. My medical colleague has brought up again, in his report of last year, the question of fusion of the clinical departments with the proposal that a common diagnostic service be organized. That some such program would be time-saving and avoid duplication of effort there can be little doubt. It would unquestionably speed up our work and were Henry Ford one of our trustees I am sure he would look upon the plan with favor. Surgeons are selectively persons of quite different type and reaction from physicians, else they would not be engaged in such widely differing kinds of therapeutic work; and so long as they are what they are, it is difficult to believe that a common guiding hand would ever satisfy either group, for it would have to be the hand of a superman. There

¹ The discrepancy between the figures in this table during the past several years and in those in the Superintendent's report is due to the fact that the administrative office bases its statistics on the number of *patients admitted* whereas these clinical tables are based on the number of *patients discharged*, for it otherwise would be impossible for the clinician to calculate mortality percentages and to record diagnoses. In the footnote to the Superintendent's report of late years calling attention to this discrepancy, there has been a typographical error. The pages referred to, in which the condensed tables of medical and surgical statistics appear, are to be found on the last page of the Physician's and of the Surgeon's reports.

are such people, to be sure, but they are rare. Many years ago on Osler's departure from the Johns Hopkins it was proposed, by certain persons who wanted to see a change in the organization, that all clinical departments be unified under a single head and Doctor Welch, though a pathologist, was thought to be the only possible candidate for such a Hippocratic position. He flatly refused even to allow the proposal to be given consideration.

The surgeon has emerged from the lowly position he once held in the profession when he was called in by the physician to bleed or cut under direction. All too many surgeons today are still satisfied to operate on this basis without further responsibility. The dangers of Doctor Christian's proposal seem to me to lie in the elaboration of a piece-work system, the patient being passed along through a succession of diagnostic experts who doubtless know their own small part of the subject well but are prone to lose the general perspective of the patient as a whole. Some large medical organizations are successfully and profitably run in this way, there being a super-diagnostician who acts as integrator of the accumulated facts.

For a hospital where teaching is emphasized and research engaged in, I doubt very much whether the system is appropriate. Should the surgeon come to take over a patient for operation on whom the diagnosis has been made by others without a thorough personal study of the case, he will inevitably retrograde into a pure handicraftsman. Unquestionably there is considerable wasted motion in our insistence on taking a new history and on thoroughly reexamining the patients that are transferred to us from the medical wards, but it is proper that we should do so and a good example

PETER BENT BRIGHAM HOSPITAL

to our students. Surgical procedures, even the simplest ones, are not to be undertaken lightly, and only those surgeons who before operating bring themselves to take an independent history, to make an independent examination and to arrive at an independent diagnosis, properly safeguard their patients and indirectly themselves so far as possible against errors of judgment.

I am often asked by students whether I think it is worth their while to take a double house officership, medical and surgical. To this I am apt to reply: "If you are going to be a surgeon, it doesn't much matter for you will have to treat every surgical patient medically as you go along but if you are going to be a physician, by all means take a surgical house officership first, for you will not only learn what the surgeon can and cannot do but you will acquire sufficient confidence and judgment to spare yourself from holding a surgical consultation whenever one of your patients gets a belly ache.

HARVEY CUSHING,

Surgeon-in-Chief.

DECEMBER 31, 1929.



REPORT OF THE SURGEON-IN-CHIEF

Surgical Diagnoses and Operations

JANUARY 1, 1929, TO JANUARY 1, 1930

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
SECTION I				
SPECIFIC INFECTIOUS DISEASES, GENERAL DISEASES (See also SPECIAL ORGANS)				
Coryza	4	..	..	..
Gonorrheal complications (varia)	9	..	..	..
Infection, acute respiratory	5	..	..	..
Measles	1	..	..	..
Pneumonia	16	2	..	..
Poliomyelitis	2	..	..	..
Septicaemia <i>Amputation</i>	6	1	1	..
Syphilis (varia) <i>Wiring of aneurysm</i>	41	..	1	..
Tuberculosis, miliary	1	..	..	..
Typhoid fever	2	..	..	..
SECTION II				
DISEASES DUE TO ANIMAL PARA- SITES				
Oxyuria vermicularis	3	..	..	..
Pediculosis	4	..	..	..
Scabies	1	..	..	..
Tinea "Epidermophytosis"	1	..	..	..
SECTION III				
DISEASES OF METABOLISM AND DEFICIENCY				
Diabetes insipidus	3	..	..	..
Diabetes mellitus	26	1	..	..
Obesity	7	..	..	..
Osteoarthropathy, hypertrophic pulmonary	1	..	..	..

PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
SECTION IV				
DISEASES PECULIAR TO INFANCY				
No cases indexed				
SECTION V				
DISEASES DUE TO PHYSICAL AGENTS				
Burns, varia	6	..	..	..
SECTION VI				
POISONINGS. INTOXICATIONS				
Alcoholism	12	..	..	..
Poisonings, acute	2	..	..	..
SECTION VII				
TUMORS, BENIGN OR MALIGNANT (See SPECIAL ORGANS)				
SECTION VIII				
CONGENITAL MALFORMATIONS				
Absence of splenic flexure	1	..	..	..
Adhesions, congenital	1	..	..	..
Branchial cyst <i>Excision</i>	1	..	1	..
Cervical rib <i>Excision</i>	2	..	1	..
Cleft palate	1	..	..	..
Craniopharyngeal pouch cyst (cf. Section XIV, PITUITARY GLAND)				
Diverticulum, Meckel's <i>Resection</i> ...	2	..	2	..
Double uterus <i>Hemihysterectomy</i> ..	1	..	1	..
Heart disease	1	..	..	..
Lumbarization of vertebra	1	..	..	..
Meningomyelocele	1	..	..	..
Pilonidal sinus <i>Excision</i>	13	..	11	..
Situs transversus	1	..	..	..
Spina bifida	5	..	..	..
Supernumerary breast <i>Excision</i>	1	..	1	..
Thyroglossal cyst <i>Excision</i>	2	..	2	..

REPORT OF THE SURGEON-IN-CHIEF

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths

SECTION IX

INJURIES

Abrasions and contusions	36	..	..	..
Bite	1	..	..	..
Crush	3	..	..	..
Dislocation of elbow <i>Reduction</i>	1	..	1	..
Dislocation of hip	1	..	..	..
Dislocation of humerus	2	..	..	..
Dislocation of sacro-iliac joint	1	..	..	..
Dislocation of scaphoid <i>Excision</i>	1	..	1	..
Dislocation of semilunar bone <i>Excision</i> ..	1	..	1	..
Dislocation of shoulder <i>Reduction</i> ..	5	..	4	..
Dislocation of vertebra	1	..	..	..
Foreign body <i>Removal</i>	7	..	2	..
Fractures:				
Lower extremity	45	3	..	..
Skull <i>Decompression</i>	22	4	1	1
Trunk:				
Clavicle	6	..	..	..
Pelvis	6	..	..	..
Ribs	5	..	..	..
Scapula	2	..	..	..
Spine	8	..	..	..
Sternum	1	..	..	..
Upper extremity	25	..	..	..
Hematoma <i>Removal of clot</i>	8	..	4	..
Rupture	1	..	..	..
Separation of epiphysis	1	..	..	..
Severed nerve <i>Suture</i>	1	..	1	..
Severed tendon <i>Suture</i>	4	..	3	..
Sprain	3	..	..	..
Strain	1	..	..	..
Wound, lacerated and gunshot <i>Suture</i> ..	32	..	4	..

SECTION X

DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE

Abscess <i>Incision—drainage</i>	22	..	14	..
Acne rosacea	1	..	..	..
Acne vulgaris	1	..	..	..

PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	DIAGNOSIS		OPERATIONS	
	Total	Deaths	Total	Deaths
Carbuncle, varia <i>Incision—drainage</i> ..	17	..	10	..
Cellulitis, varia <i>Incision—drainage</i> ..	30	1	13	1
Cicatrix <i>Excision</i>	2	..	1	..
Condyloma acuminatum of vulva <i>Excision</i>	2	..	2	..
Eczema	2	..	..	..
Erysipelas	1	..	..	..
Erythema nodosum	1	..	..	..
Furunculosis <i>Incision—drainage</i>	5	..	2	..
Nevus pigmentosus <i>Excision</i>	1	..	1	..
Paronychia	1	..	..	..
Psoriasis	2	..	..	..
Tuberculosis <i>Excision</i>	3	..	2	..
Tumors:				
Carcinoma, epidermoid <i>Excision</i> ..	1	..	1	..
Cyst, dermoid <i>Excision</i>	1	..	1	..
Cyst, sebaceous <i>Excision</i>	2	..	2	..
Fibrosarcoma <i>Excision</i>	1	..	1	..
Lipoma <i>Excision</i>	8	..	5	..
Melanoma, malignant	1	..	..	..
Neurofibroma <i>Excision</i>	1	..	1	..
Neuroma	1	..	..	..
Ulcer	4	..	..	..
Vitiligo	1	..	..	..
Wound, infected, varia <i>Incision—drainage</i>	30	..	5	..

SECTION XI

DISEASES OF THE CIRCULATORY SYSTEM

A. ARTERIES

Aneurysm	5	..	..	..
Arteriosclerosis	47	..	..	..
Embolism	2	1	..	..
Gangrene, senile and diabetic <i>Amputation</i>	17	3	15	2
Hypertension	49	..	..	..
Thromboangitis obliterans	1	..	..	..
Thrombosis	6	..	..	..
Tumor:				
Tumor: unclassified of carotid body	2	2	..	..
<i>Extirpation</i> .....	..	..	2	2

REPORT OF THE SURGEON-IN-CHIEF

DISEASES AND CONDITIONS	DIAGNOSIS		OPERATIONS	
	Total	Deaths	Total	Deaths
B. HEART				
Angina pectoris	4	..	..	..
Aortic and mitral insufficiency and mitral stenosis	1	..	..	..
Aortic insufficiency and stenosis	1	..	..	..
Auricular ectopic beats or extrasystoles ...	2	..	..	..
Auricular fibrillation	9	..	..	..
Endocarditis, acute	2	..	..	..
Heart block	1	..	..	..
Heart disease, hypertensive with nephritis	1	..	..	..
Heart disease, hypertensive without nephritis	1	..	..	..
Heart disease, rheumatic	1	..	..	..
Heart disease, thyroid	2	..	..	..
Infarct of heart	7	1	..	..
Mitral insufficiency and stenosis	17	1	..	..
Myocarditis, chronic	47	..	..	..
Pericarditis, acute fibrinous	1	..	..	..
Pericarditis, chronic <i>Cardiolysis</i>	1	..	1	..
Sinus arrhythmia	1	..	..	..
Tricuspid insufficiency and mitral stenosis	1	..	..	..

C. VEINS

Thrombophlebitis <i>Excision</i>	25	1	4	..
Tumors:				
Hemangioma <i>Excision</i>	4	..	2	..
Hematoma	2	..	..	..
Varix <i>Excision</i>	25	..	19	..
Varix with ulcers <i>Excision—skin graft</i>	4	..	5	..

SECTION XII

DISEASES OF THE LYMPHATIC SYSTEM

Lymphadenitis, suppurative	32	..	..	..
<i>Incision—drainage</i> .....	..	..	11	..
Lymphadenitis, tuberculous <i>Excision</i>	9	..	7	..
Lymphangitis <i>Incision—drainage</i>	15	..	1	..
Tumors:				
Carcinoma <i>Excision</i>	3	..	2	..
Lipoma <i>Excision</i>	1	..	1	..
Lymphoma malignant <i>Excision</i>	3	..	2	..

PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths

SECTION XIII

DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS

Anemia, pernicious	1	..	..	..
Anemia, secondary	38	..	..	..
Purpura	1	..	..	..
Purpura hemorrhagica <i>Splenectomy</i> ..	1	1	1	1
Splenomegaly <i>Biopsy</i>	1	..	1	..

SECTION XIV

DISEASES OF THE DUCTLESS GLANDS

Endocrinopathy, pluriglandular	2
--------------------------------------	---	----	----	----

C. PITUITARY GLAND

Acromegaly <i>Transphenoidal operation</i>	22	..	1	..
Dwarfism	2	..	..	..
Dyspituitarism with craniopharyngioma (cf. Section XV, A, Tumors)				
Dyspituitarism without tumor	10	..	..	..
Hypopituitarism with chromophobe adenoma	23	1	..	..
<i>Transfrontal operation</i> .....	..	..	16	1
<i>Transphenoidal operation</i> .....	..	..	1	..

E. THYROID GLAND

Cretinism	1	..	..	..
Goitre, diffuse colloid	3	..	..	..
Goitre, exophthalmic	20	1	..	..
<i>Subtotal thyroidectomy</i> .....	..	..	13	..
Tumors:				
Adenoma <i>Partial thyroidectomy</i> ..	11	..	11	..
Cyst <i>Excision</i>	1	..	1	..

SECTION XV

DISEASES OF THE NERVOUS SYSTEM

A. BRAIN

Abscess <i>Drainage or extirpation</i>	9	3	5	2
Apoplexy	2	..	..	..

REPORT OF THE SURGEON-IN-CHIEF

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
Arteriosclerosis, cerebral	7	..	..	..
Concussion	8	..	..	..
Edema, cerebral	1	..	..	..
Embolism, cerebral	1	..	..	..
Encephalomalacia	1	..	..	..
Epilepsy	21	..	..	..
Hemiplegia	5	..	..	..
Hydrocephalus	5	..	..	..
Thrombosis, cerebral	2	..	..	..
Tumors, intracranial:				
(1) Pituitary adenoma (cf. Section XIV, C, DUCTLESS GLANDS)				
(2) Cerebral tumors, verified:				
Carcinoma, metastatic	5	3	..	..
<i>Exploration</i> .....	..	..	2	1
<i>Extirpation, total</i> .....	..	..	1	..
Cholesteatoma <i>Extirpation, total</i>	1	..	1	..
Chordoma <i>Exploration</i>	1	1	1	1
Craniopharyngioma	12	1	..	..
<i>Extirpation, partial or total</i> .....	..	..	7	1
Glioma (varia)	65	10	..	..
<i>Exploration</i> .....	..	..	7	3
<i>Extirpation, partial or total</i> .....	..	..	48	4
<i>Ventriculograms</i> .....	..	..	16	1
Hypernephroma, metastatic	1	1	..	..
<i>Extirpation</i> .....	..	..	1	1
Melanosarcoma	1	..	..	..
<i>Cervical adenectomy</i> .....	..	..	1	..
Meningioma	35	8	..	..
<i>Extirpation, partial or total</i> .....	..	..	34	7
Teratoma <i>Ventriculogram</i>	1	1	1	1
(3) Cerebellar tumors, verified:				
(a) Intracerebellar tumors:				
Carcinoma, metastatic <i>Extirpation</i>	1	..	1	..
Glioma	23	6	..	..
<i>Exploration</i> .....	..	..	4	..
<i>Extirpation, partial or total</i> .....	..	..	17	5
Hemangioblastoma	5	1	..	..
<i>Extirpation, partial</i> .....	..	..	2	..
Xanthoma <i>Extirpation, total</i> ..	1	..	1	..
(b) Extracerebellar tumors:				
Acoustic neurinoma	14	1	..	..
<i>Extirpation, partial or total</i> .....	..	..	13	1

PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
Glioma <i>Extirpation, partial</i> ...	1	..	1	..
Meningioma <i>Extirpation, total</i>	1	..	1	..
(4) Unverified tumors:				
(a) Cerebral	64	..	..	..
<i>Exploration</i> .....	..	..	24	..
<i>Ventriculograms</i> .....	..	..	26	..
(b) Cerebellar <i>Exploration</i>	7	..	5	..
(5) Tumor suspects:				
(a) Cerebral	95	4	..	..
<i>Exploration</i> .....	..	..	15	3
<i>Ventriculogram</i> .....	..	..	17	..
(b) Cerebellar <i>Exploration</i>	14	..	4	..
(c) Pontine	1	..	..	..
B. MENINGES				
Arachnoiditis, chronic	9	..	..	..
Meningitis, acute varia	4	..	..	..
Meningitis, encephalo-	1	..	..	..
C. MENTAL AFFECTIONS				
Dementia, senile	1	..	..	..
Feeble-mindedness	1	..	..	..
Paranoia	1	..	..	..
Psychoneuroses	29	..	..	..
D. MISCELLANEOUS				
Aphasia	1	..	..	..
Cephalalgia	7	..	..	..
Chorea, Sydenham's	2	..	..	..
Convulsions	5	..	..	..
Hypersomnia	1	..	..	..
Migraine	3	..	..	..
Oxycephaly <i>Decompression</i>	1	..	1	..
Paralysis agitans (post encephalitic)	2	..	..	..
E. PERIPHERAL AND CRANIAL NERVES				
Neuralgia	5	..	..	..
Neuralgia, trigeminal, major	26	..	..	..
<i>Alcohol injection</i> .....	..	..	9	..
<i>Avulsion of sensory root</i> .....	..	..	12	..
Neuralgia, trigeminal, minor	17	..	..	..
<i>Alcohol injection</i> .....	..	..	10	..
<i>Avulsion of nerve fibers</i> .....	..	..	3	..

REPORT OF THE SURGEON-IN-CHIEF

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
Neuritis, multiple	2	..	..	..
Paralysis of peripheral nerves	2	..	..	..
Torticollis, spasmodic <i>Avulsion nerve</i>	2	..	1	..
Tumors:				
Neurofibromatosis <i>Extirpation, partial</i>	1	..	1	..
F. SPINAL CORD				
Atrophy, progressive muscular	1	..	..	..
Herpes zoster	1	..	..	..
Myelitis, diffuse	1	..	..	..
Myelitis, transverse	1	..	..	..
Sclerosis, amyotrophic lateral	3	..	..	..
<i>Laminectomy</i> .....	..	..	1	..
Sclerosis, multiple	4	..	..	..
Syringomyelia	1	..	..	..
Tumors:				
(1) Verified:				
Angioma	1	..	..	..
Carcinoma, metastatic <i>Cordotomy</i>	1	..	1	..
Meningioma <i>Laminectomy</i>	1	..	1	..
Neurofibroma <i>Laminectomy</i>	1	..	1	..
(2) Unverified <i>Laminectomy</i>	7	..	1	..
(3) Suspect	5	..	..	..
G. SYMPATHETIC NERVOUS SYSTEM				
Dysfunction <i>Sympathectomy</i>	1	..	1	..
Gangrene, multiple neurotic <i>Ramisection</i>	1	..	2	..
Raynaud's disease <i>Ramisection</i>	3	..	1	..
H. MYOPATHIES				
Myositis	1	..	..	..
SECTION XVI				
DISEASES OF THE BONES, JOINTS, MUSCLES, TENDONS, AND FASCIA				
A. DISEASES OF THE BONES AND CARTILAGES				
Exostosis <i>Excision</i>	3	..	3	..
Fracture, pathological	4	..	..	..
Hyperostosis	3	..	..	..

PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
Leontiasis ossea	1	..	..	..
Osteitis	1	..	..	..
Osteitis deformans	1	..	..	..
Osteomyelitis (varia) <i>Operations (varia)</i>	17	1	13	1
Periostitis, non-traumatic	5	..	..	..
<i>Incision—drainage</i> .....	..	..	1	..
Scoliosis	3	..	..	..
Tuberculosis of bone	6	1	..	..
Tumors:				
Chondroma	1	..	..	..
Osteoma	1	..	..	..
Sarcoma of vertebra <i>Laminectomy</i>	1	..	1	..
Sarcoma, osteogenic <i>Amputation</i> ..	4	..	3	..
Tumor: unclassified	2	..	..	..
B. DISEASES OF THE JOINTS				
Ankylosis	2	..	..	..
Arthritis, acute <i>Incision—drainage</i> ..	1	..	1	..
Arthritis, chronic	13	..	..	..
Arthritis deformans	2	..	..	..
Postural deformity	2	..	..	..
Rickets	2	..	..	..
Synovitis <i>Arthrotomy</i>	2	..	1	..
Tuberculosis of joint	2	..	..	..
C. OTHER DISEASES				
Amputation stump, painful <i>Excision</i>	1	..	1	..
Bursitis <i>Excision</i>	9	..	7	..
Contraction, cicatricial	3	..	..	..
Hallux valgus <i>Excision</i>	3	..	2	..
Pes planus	1	..	..	..
Pronated feet	1	..	..	..
Tenosynovitis	3	..	..	..
Wrist-drop	1	..	..	..

SECTION XVII

DISEASES AND INJURIES OF THE EYE AND EAR

DISEASES OF THE EYE

Miscellaneous	28
---------------------	----	----	----	----

REPORT OF THE SURGEON-IN-CHIEF

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths

DISEASES OF THE EAR

Miscellaneous	8	..	..	..
Mastoiditis <i>Mastoidectomy</i>	3	..	2	..
Otitis media <i>Myringotomy</i>	7	..	1	..

SECTION XVIII

DISEASES OF THE NOSE AND ACCESSORY SINUSES

Deviation of nasal septum	5	..	..	..
<i>Submucous resection</i> .....	..	..	4	..
Epistaxis	2	..	..	..
Infection of antrum <i>Drainage</i>	1	..	1	..
Perforated nasal septum	1	..	..	..
Sinusitis <i>Drainage</i>	18	..	16	..
Tumors: Polyp <i>Excision</i>	2	..	2	..

SECTION XIX

DISEASES OF THE MOUTH, LIPS, CHEEKS, PHARYNX, TONSILS, AND PALATE

Abscess, varia <i>Incision—drainage</i> ..	6	..	1	..
Adenoids, hypertrophied <i>Adenoidectomy</i>	1	..	1	..
Fistula into mouth	1	..	..	..
Inflammation of salivary glands	2	..	..	..
Pharyngitis, acute	4	..	..	..
Stomatitis, ulcerative	1	..	..	..
Tonsillitis, acute and chronic	126	..	..	..
<i>Tonsillectomy</i> .....	..	..	119	..
Tumors:				
Adenocarcinoma of parotid <i>Excision</i>	1	..	1	..
Carcinoma of lip <i>Excision</i>	3	..	3	..
Lymphosarcoma of nasopharynx	1	..	..	..
<i>Tracheotomy</i> .....	..	..	1	..
Papilloma of tonsil	1	..	..	..
Tumor of parotid gland <i>Excision</i> ..	5	..	5	..

PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
SECTION XX				
DISEASES OF THE JAW, TEETH, AND GUMS				
Abscess, alveolar	6	..	..	..
<i>Incision—drainage</i> .....	..	..	2	..
<i>Teeth extraction</i> .....	..	..	4	..
Caries of teeth <i>Teeth extraction</i>	28	..	26	..
Impacted tooth <i>Tooth extraction</i>	3	..	3	..
Pyorrhea alveolaris <i>Teeth extraction</i>	1	..	1	..
Tumors:				
Adamantinoma of jaw <i>Excision</i> ..	1	..	1	..
Cyst of jaw <i>Excision</i>	1	..	1	..
SECTION XXI				
DISEASES OF THE TONGUE				
Tuberculosis <i>Resection</i>	1	..	1	..
Tumor: Carcinoma <i>Excision</i>	4	1	3	..
Ulcer <i>Resection</i>	1	..	1	..
SECTION XXII				
DISEASES OF THE ESOPHAGUS				
Cardiospasm	2	..	..	..
Diverticulum	1	..	..	..
Esophagismus <i>Esophagoscopy</i>	1	..	1	..
Foreign body in esophagus	1	..	..	..
Stricture <i>Esophagoscopy</i>	2	..	3	..
Tumor:				
Carcinoma	6	1	..	..
<i>Esophagoscopy</i> .....	..	..	4	..
<i>Gastrostomy</i> .....	..	..	3	1
SECTION XXIII				
DISEASES OF THE STOMACH				
Motor and secretory disturbances	5	..	..	..
Tumor:				
Carcinoma	23	4	..	..
<i>Gastrectomy, partial</i> .....	..	..	11	2
<i>Gastro-enterostomy</i> .....	..	..	6	1

REPORT OF THE SURGEON-IN-CHIEF

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
Ulcer, gastric	9	3	..	..
<i>Gastro-enterostomy</i> .....	..	..	3	1
<i>Resection</i> .....	..	..	4	1

SECTION XXIV

DISEASES OF THE INTESTINES

Adhesions, intestinal <i>Lysis</i>	6	..	2	..
Appendicitis, acute and chronic	160	3	..	..
<i>Appendicectomy</i> .....	..	..	126	..
<i>Appendicectomy with drainage for abscess or peritonitis</i> .....	..	..	23	3
Colic, appendiceal <i>Appendicectomy</i> ...	12	..	9	..
Colitis, acute	2	..	..	..
Colitis, ulcerative <i>Colostomy</i>	3	..	1	..
Constipation	13	..	..	..
Diverticulitis	10	1	..	..
Diverticulosis	7	..	..	..
Enteritis, acute	3	..	..	..
Fistula, fecal	3	..	..	..
Gastro-enteritis	5	..	..	..
Hemorrhage, intestinal	1	..	..	..
Indigestion, intestinal	2	..	..	..
Intussusception <i>Resection</i>	1	..	1	..
Obstruction, intestinal <i>Enterostomy</i> ..	17	4	9	3
Paralytic ileus	1	..	..	..
Tuberculosis <i>Appendicectomy</i>	4	1	1	..
Tumors:				
Carcinoma of appendix <i>Appendicectomy</i>	2	..	2	..
Carcinoma of colon <i>Resection</i>	5	..	3	..
Carcinoma of recto-sigmoid	6	1	..	..
<i>Sigmoidostomy</i> .....	..	..	6	1
Lipoma of colon <i>Resection</i>	1	..	1	..
Polyp of sigmoid	1	..	..	..
Ulcer, appendiceal <i>Appendicectomy</i> ..	1	..	1	..
Ulcer, duodenal	24	1	..	..
<i>Closure of perforation and gastro-enterostomy</i> .....	..	..	1	..
<i>Gastro-enterostomy</i> .....	..	..	9	..
<i>Resection of pylorus and gastro-enterostomy</i> .....	..	..	3	..

PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
Ulcer, gastro-jejunal <i>Resection</i>	3	1	2	1
Volvulus <i>Resection</i>	3	1	1	..

SECTION XXV

DISEASES OF THE LIVER AND BILIARY TRACT

Adhesions about gall bladder <i>Lysis</i> ..	2	..	1	..
Atrophy of liver	1	..	..	..
Cholecystitis, acute and chronic	37	..	..	..
<i>Cholecystectomy</i> .....	..	..	12	..
Cholelithiasis with cholecystitis, acute and chronic	92	3	..	..
<i>Cholecystectomy</i> .....	..	..	58	1
<i>Cholecystectomy—choledochostomy</i> ..	..	..	20	2
Cirrhosis of liver <i>Cholecystoduodenostomy</i>	4	1	2	1
Hepatitis	3	..	..	..
Jaundice, infectious and toxic	2	..	..	..
Stenosis of common bile duct	1	1	..	..
Tumors:				
Adenocarcinoma of liver	1	1	..	..
Carcinoma of gall bladder	5	..	..	..
Malignant disease of liver	1	..	..	..

SECTION XXVI

DISEASES OF THE PANCREAS

Tumor: Carcinoma <i>Cholecystogastrostomy</i>	1	..	1	..
---	---	----	---	----

SECTION XXVII

DISEASES OF THE ABDOMEN, ABDOMINAL WALL, AND PERITONEUM IN GENERAL

Abdominal pain	2	..	..	..
Abscess of abdomen	2	..	..	..
Abscess, pelvic <i>Incision—drainage</i> ...	2	..	1	..
Abscess, subphrenic <i>Incision—drainage</i>	3	..	2	..
Adhesions, pelvic <i>Lysis</i>	6	..	5	..
Diastasis of recti	1	..	..	..
Endometriosis	2	..	..	..

REPORT OF THE SURGEON-IN-CHIEF

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
Foreign body in abdomen	1	..	..	..
Hernia, diaphragmatic	2	..	..	..
Hernia, epigastric <i>Repair</i>	1	..	1	..
Hernia, femoral <i>Repair</i>	6	..	6	..
Hernia, femoral, strangulated <i>Repair</i>	6	..	6	..
Hernia, inguinal <i>Repair</i>	101	..	93	..
Hernia, umbilical <i>Repair</i>	8	1	6	..
Hernia, umbilical, strangulated <i>Repair</i>	1	1	1	1
Hernia, ventral <i>Repair</i>	17	..	11	..
Peritonitis, acute <i>Drainage</i>	11	2	2	1
Relaxed abdominal wall	1	..	..	..
Sinus, abdominal <i>Excision</i>	1	..	1	..
Tuberculosis of peritoneum	6	1	..	..
Tumors:				
Carcinomatosis, abdominal	3	..	..	..
Fibroma of abdominal wall	1	..	..	..
Lipoma of abdominal wall <i>Excision</i>	1	..	1	..
Perithelioma, retroperitoneal <i>Excision</i>	1	..	1	..

SECTION XXVIII

DISEASES OF THE RECTUM AND ANUS

Abscess, perirectal <i>Incision—drainage</i>	9	1	5	..
Anal fissure <i>Dilatation or excision</i> ...	11	..	6	..
Fistula in ano <i>Excision</i>	13	..	12	..
Hemorrhoids, external and internal	57	..	..	..
<i>Hemorrhoidectomy</i> .....	..	..	48	..
Prolapse of rectum <i>Excision</i>	3	..	2	..
Stricture of rectum (non-malignant)	6	..	..	..
<i>Dilatation</i> .....	..	..	3	..
Tumors:				
Adenocarcinoma of rectum	15	3	..	..
<i>Excision and sigmoidostomy</i> .....	..	..	11	2

SECTION XXIX

DISEASES OF THE LARYNX

Laryngitis, acute	1	..	..	..
Paralysis of vocal cord <i>Bronchoscopy</i>	1	..	1	..
Tumors: Carcinoma <i>Tracheotomy</i> ..	2	..	1	..

PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
SECTION XXX				
DISEASES OF THE TRACHEA AND BRONCHI				
Asthma	16	..	..	..
Bronchiectasis	6	..	..	..
<i>Bronchoscopy</i> .....	..	..	2	..
<i>Thoracoplasty</i> .....	..	..	2	..
Bronchitis, acute and chronic	13	..	..	..
Fistula, bronchial	1	..	..	..
SECTION XXXI				
DISEASES OF THE LUNGS				
Abscess <i>Bronchoscopy</i>	8	1	2	..
Atelectasis (post-operative)	6	..	..	..
Bronchopneumonia (post-operative)	24	1	..	..
Embolism, pulmonary	7	1	..	..
Emphysema of lungs	1	..	..	..
Infarct of lung	22	..	..	..
Thrombosis, pulmonary	2	..	..	..
Tuberculosis, pulmonary	19	..	..	..
Tumor: Carcinoma	2	..	..	..
SECTION XXXII				
DISEASES OF THE PLEURA AND MEDIASTINUM				
Empyema <i>Thoracostomy</i>	25	3	23	2
Pleurisy, sero-fibrinous	17	..	..	..
Pleuritis	2	..	..	..
Pneumothorax	1	..	..	..
Tuberculosis	3	..	..	..
SECTION XXXIII				
DISEASES OF THE KIDNEY AND URETER				
Abscess, perinephric <i>Incision—drainage</i>	6	..	3	..
Calculus, ureteral <i>Ureterotomy</i>	23	..	10	..
Colic, renal	3	..	..	..

REPORT OF THE SURGEON-IN-CHIEF

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
Hydronephrosis <i>Nephrectomy</i>	4	..	2	..
Infarct of kidney	1	..	..	..
Nephritis, acute and chronic	6	..	..	..
Nephrolithiasis	23	1	..	..
<i>Nephrectomy</i> .....	..	..	5	..
<i>Nephrotomy, pyelotomy, or both</i> .....	..	..	7	1
Nephroptosis	2	..	..	..
Pyelitis	22	..	..	..
Pyelonephritis <i>Nephrectomy</i>	4	..	2	..
Pyonephrosis <i>Nephrectomy</i>	4	1	1	..
Rupture of kidney	2	..	..	..
Stricture of ureter <i>Dilatation</i>	1	..	1	..
Tuberculosis of kidney <i>Nephrectomy</i>	9	3	4	3
Tumors:				
Carcinoma of kidney	3	..	..	..
Hypernephroma <i>Nephrectomy</i>	2	1	2	1

SECTION XXXIV

DISEASES OF THE BLADDER

Calculus, vesical <i>Removal</i>	1	..	1	..
Cystitis <i>Cystotomy</i>	14	..	3	..
Diverticulum of bladder <i>Excision</i>	3	..	2	..
Incontinence of urine	2	..	..	..
<i>Cystotomy</i> .....	..	..	1	..
<i>Plication</i> .....	..	..	1	..
Retention of urine	2	..	..	..
Tuberculosis <i>Cystotomy</i>	2	..	1	..
Tumors:				
Carcinoma	7	1	..	..
<i>Cystotomy</i> .....	..	..	1	..
<i>Excision</i> .....	..	..	2	..
Papilloma <i>Excision</i>	5	..	4	..
Tuberculoma <i>Excision</i>	1	..	1	..

SECTION XXXV

DISEASES OF THE URETHRA, MALE AND FEMALE

Abscess, periurethral <i>Incision—drainage</i>	2	..	1	..
Caruncle of urethra <i>Excision</i>	2	..	1	..
Fistula, urethral <i>Excision</i>	2	..	1	..

PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
Prolapse of urethra	1	..	..	..
Stricture	9	..	..	..
<i>Dilatation</i> .....	..	..	3	..
<i>Urethrotomy</i> .....	..	..	3	..

SECTION XXXVI

DISEASES OF THE MALE GENERATIVE ORGANS

B. PENIS

Phimosis	<i>Circumcision</i>	2	..	2	..
----------	---------------------------	---	----	---	----

C. PROSTATE

Abscess	<i>Prostatectomy, perineal</i>	2	..	1	..
Calculus, prostatic		1	..	..	..
Prostate, obstructing		62	9	..	..
<i>Cystostomy, suprapubic</i> .....		..	..	4	2
<i>Prostatectomy, perineal or suprapubic</i> .....		..	..	43	4
<i>Prostatectomy, punch</i> .....		..	..	4	..
Prostatitis		8	..	..	..
Tumors:					
Carcinoma		11	3	..	..
<i>Cystotomy, suprapubic</i> .....		..	..	2	1
<i>Implantation of radium</i> .....		..	..	2	..
<i>Prostatectomy, perineal or suprapubic</i> .....		..	..	2	1
<i>Prostatectomy, punch</i> .....		..	..	1	..

D. SCROTUM

Hydrocele	<i>Excision</i>	12	..	10	..
Spermatocele	<i>Excision</i>	1	..	1	..
Varicocele	<i>Excision</i>	7	..	6	..

E. SEMINAL VESICLES

Vesiculitis	<i>Injection</i>	3	..	1	..
-------------	------------------------	---	----	---	----

F. TESTICLE

Epididymitis		3	..	..	..
Tumors: Carcinoma	<i>Orchidectomy</i> ..	3	..	3	..
Undescended testicle		7	..	..	..
<i>Orchidectomy</i> .....		..	..	4	..
<i>Orchidopexy</i> .....		..	..	2	..

REPORT OF THE SURGEON-IN-CHIEF

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths

SECTION XXXVII

DISEASES OF THE FEMALE GEN- ERATIVE ORGANS

A. GENERAL AND FUNCTIONAL

Abscess, pelvic	<i>Drainage</i>	4	..	3	..
Amenorrhea		1	..	..	..
Dysmenorrhea	<i>Dilatation—curettage</i>	2	..	1	..
Menorrhagia	<i>Dilatation—curettage</i>	11	..	7	..
Relaxed pelvic floor		56	..	..	..
<i>Local repair</i>		..	..	15	..
<i>Local repair with suspension of uterus</i>		..	..	23	..
<i>Local repair with hysterectomy</i>		..	..	4	..
Sterility		2	..	..	..

F. FALLOPIAN TUBES

Atrophy of Fallopian tubes		1	..	..	..
Hematosalpinx	<i>Salpingectomy</i>	1	..	1	..
Hydrosalpinx	<i>Salpingectomy</i>	2	..	1	..
Salpingitis, acute and chronic		33	..	..	..
<i>Salpingectomy</i>		..	..	23	..
Tuberculosis	<i>Salpingectomy</i>	2	..	1	..

C. OVARY

Abscess	<i>Oophorectomy</i>	4	..	2	..
Ruptured Graafian follicle	<i>Oophorectomy</i>	3	..	1	..
Tumors:					
Cyst of ovary (varia)	<i>Excision</i>	21	1	12	1
Tumor: unclassified	<i>Excision</i>	1	..	1	..

D. UTERUS

Endocervicitis, chronic		68	..	..	..
<i>Curettage or excision</i>		..	..	48	..
Endometritis (varia)		49	..	..	..
<i>Dilatation—curettage</i>		..	..	36	..
<i>Hysterectomy, supravaginal</i>		..	..	3	..
Hypertrophy of uterus		2	..	..	..
<i>Hysterectomy, supravaginal</i>		..	..	2	..
Laceration of cervix-uteri		45	..	..	..
<i>Trachelorrhaphy</i>		..	..	32	..

PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths
Metrorrhagia	8	..	..	..
<i>Dilatation—curettage with implanta-</i> <i>tion of radium or supravaginal hys-</i> <i>terectomy</i> .....	..	..	7	..
Retroversion of uterus <i>Suspension</i> ...	47	..	32	..
Stricture of cervical canal	3	..	..	..
<i>Dilatation—curettage</i> .....	..	..	3	..
Tumors:				
Adenocarcinoma of uterus	1	..	..	..
<i>Dilatation—curettage</i> .....	..	..	1	..
Carcinoma of cervix-uteri	12	..	..	..
<i>Excision</i> .....	..	..	4	..
<i>Hysterectomy</i> .....	..	..	1	..
Carcinoma of uterus <i>Hysterectomy</i>	1	..	1	..
Fibromyoma of uterus	47	2	..	..
<i>Hysterectomy, supravaginal</i> .....	..	..	29	..
<i>Myomectomy</i> .....	..	..	5	..
Papilloma of cervix-uteri	1	..	..	..
Polypus of cervix-uteri <i>Excision</i> ..	23	..	11	..
E. VAGINA				
Abscess of recto-vaginal septum	1	..	..	..
Atrophy of vaginal mucosa	1	..	..	..
Fistula, vesico-vaginal <i>Repair</i>	3	1	2	1
Tumor: Lipoma <i>Excision</i>	1	..	1	..
Vaginitis	1	..	..	..
F. VULVA				
Abscess of Bartholin's gland <i>Excision</i>	5	..	4	..
Kraurosis vulvae <i>Excision</i>	1	..	1	..
Tumor: Lipoma of vulva <i>Excision</i> ..	1	..	1	..
SECTION XXXVIII				
PUERPERAL STATE				
Abortion, complete and incomplete	24	1	..	..
<i>Dilatation—curettage</i> .....	..	..	14	..
Newborn infant	1	1	..	..
Pregnancy, normal	7	..	..	..
Pregnancy, extrauterine	3	..	..	..
<i>Dilatation—curettage</i> .....	..	..	1	..
<i>Salpingo-oophorectomy</i> .....	..	..	3	..
Subinvolution of uterus	1	..	..	..

REPORT OF THE SURGEON-IN-CHIEF

DISEASES AND CONDITIONS	DIAGNOSES		OPERATIONS	
	Total	Deaths	Total	Deaths

SECTION XXXIX

DISEASES OF THE BREAST, MALE AND FEMALE

Abscess	<i>Incision—drainage</i>	3	..	3	..
Cystic disease of breast	<i>Amputation</i>	13	..	10	..
Hyperplasia of breast	<i>Amputation</i>	2	..	2	..
Mastitis, acute		1	..	..	..
Paget's disease of nipple	<i>Amputation</i>	1	..	1	..
Tumors:					
Adenofibroma	<i>Excision</i>	6	..	6	..
Adenoma	<i>Amputation</i>	1	..	1	..
Carcinoma	<i>Radical amputation</i>	21	1	18	1
Lipoma	<i>Excision</i>	2	..	2	..

SECTION XLI

ABNORMALITIES OF URINE

Glycosuria	1	..	..	..
Hematuria	4	..	..	..
Polyuria	2	..	..	..

SECTION XLII

ILL-DEFINED OR UNCLASSIFIED DISEASES

Decubitus	8	..	..	..
Fever, cause unknown	1	..	..	..
Gangrene (unqualified) <i>Incision—drainage</i>	4	1	1	..
Hemorrhage, post-operative	3	..	..	..
Ingrowing toenails <i>Excision</i>	1	..	2	..
Shock, surgical	2	..	..	..
Shock, traumatic	2	..	..	..
Undiagnosed <i>Exploratory laparotomy</i>	30	..	2	..
Wound of operation	10	..	..	..
	3822	136	1874	80

PETER BENT BRIGHAM HOSPITAL

Summary of Statistics

JANUARY 1, 1929, TO JANUARY 1, 1930

Total number of surgical admissions in 1929	2,580	
Total number of cases remaining in wards, Jan. 1, 1929	114	
	<hr/>	2,694
		<hr/>
Total number of surgical cases discharged or transferred	2,438	
Total number of deaths	136	
(Post-operative 80—Non-operative 56—total 136)		
	<hr/>	2,574
Total number of cases remaining in wards, Jan. 1, 1930	120	
	<hr/>	2,694
		<hr/>
Total number of operations	1,874	
Incidental operations	136	
	<hr/>	2,010
		<hr/>

Report of the Physician-in-Chief

Changes in Staff

DURING 1929 staff changes in personnel have been confined to the junior and resident staff. As junior associates in medicine Dr. Esley J. Kirk has resigned to enter practice in Omaha, Nebraska; Dr. W. Carter Smith to become resident physician at the Grady Hospital, Atlanta, Georgia, and Dr. Greene S. FitzHugh to become assistant resident physician under Doctor Minot at the Thorndike Memorial Laboratory of the Boston City Hospital.

Dr. Howard L. Alt, resident physician, has ended a service which began with his appointment as assistant resident physician on July 1, 1925, being the 9th resident physician since the medical service received its first patient on March 30, 1913. Doctor Alt rendered to the hospital a valued service. The residents, who have served us, beginning with the late lamented Francis W. Peabody, have established themselves, even in this short period of time, as a notable group in American medicine of which the Peter Bent Brigham Hospital justly is proud. We flatter ourselves that we have had much to do with moulding these men; probably we have been but fortunate in having had men of their calibre think the Peter Bent Brigham Hospital a good place in which to work. Certain it is, that from them the medical staff of the Peter Bent Brigham has gained much that we cherish. Doctor Alt is now in Germany working under Professor Warburg, continuing in metabolism studies begun here.

PETER BENT BRIGHAM HOSPITAL

Doctor Alt has been succeeded by Dr. Marshall N. Fulton, as 10th resident physician. Doctor Fulton was medical house-officer March 1, 1926, to July 1, 1927, and assistant resident physician, July 1, 1927, to 1929 at the Peter Bent Brigham Hospital. He graduated from Johns Hopkins Medical School, which he entered after completing two years of medical study while a Rhodes scholar at Oxford.

Of the other assistant resident physicians Dr. W. R. Kennedy has returned to Montreal to begin practice and become a member of the junior medical staff at the Montreal General Hospital; Dr. A. D. Nichol has begun practice in Cleveland, Ohio, being on the medical staff at the Lakeside Hospital and an assistant in medicine at Western Reserve University; Dr. M. Herbert Barker has become first resident physician at the new Passavant Hospital, closely affiliated with the Medical School of Northwestern Medical University at Chicago and Dr. George D. Walker has become resident physician on the Cornell Division of Bellevue Hospital in New York City.

These vacancies have been filled by the appointment as assistant resident physician of Dr. Stuyvesant Butler, M.D., Rush Medical College, formerly interne at St. Luke's and Presbyterian Hospitals, Chicago; Dr. Neil Feeney, M.D., C.M., McGill University, formerly interne at the Montreal General Hospital; Dr. S. Marion Salley, M.D., Emory University, formerly interne at Grady Hospital, Atlanta, Georgia; Dr. Samuel A. Shelburne, M.D., University of Pennsylvania, formerly interne University Hospital, Philadelphia, and Dr. Francis M. Thurmon, M.D., Harvard, formerly interne, Wesley Memorial Hospital,

REPORT OF THE PHYSICIAN-IN-CHIEF

Chicago, and research fellow in medicine, Mass. General Hospital, Boston.

As medical house officers in 1929 the following men completed their services and commenced new work as follows: Dr. John M. Flynn to enter practice in Boston and to serve as voluntary graduate assistant at the Peter Bent Brigham Hospital; Dr. Oliver J. Menard to enter practice in connection with the Lahey clinic, Boston; Dr. George H. Houck to become assistant resident physician at the Lane Hospital of Stanford Univ. Med. School at San Francisco, Cal.; Dr. Harry A. Derow to become resident physician at the Beth Israel Hospital, Boston; Dr. Daniel V. Troppoli to become neurological house officer at the Mass. General Hospital and then resident at the Rhode Island General Hospital, Providence; Dr. Thomas H. McEachern to become house officer at the New York Nursery and Child's Hospital; Dr. William D. Strayhorn to become an assistant at the Vanderbilt Hospital, Nashville, Tenn.; Dr. Friedrich Engelbach to work at Ann Arbor, Michigan; Dr. David L. Halbersleben to begin practice at Roslindale, Mass.

During 1929 there have been attached to the medical service as graduate students with the title of voluntary graduate assistants Dr. Heinrich Brugsch of Halle, Germany, a former student at the Universities of Tübingen, München and Berlin, formerly medizinalklinikant at the medical klinik at Freiburg and volontärassistent at the medical klinik at Halle, sent to us by the Akademischer Austauschdienst at Berlin; Dr. Clyde W. Holland of Halifax, Nova Scotia, M.D., C.M., of Dalhousie University, formerly interne, Victoria General Hospital, assistant in anatomy, later in pathology and bacteriology at Dalhousie University,

PETER BENT BRIGHAM HOSPITAL

at present a holder of a fellowship of the Rockefeller Foundation, and Robert F. McGrath, M.D., Northwestern University, formerly interne, St. Luke's Hospital, Chicago.

Physician-in-Chief, Pro Tempore

The University of Toronto this year gave us our Physician-in-Chief, *pro tempore*. Duncan Graham, professor of medicine at the University of Toronto and physician-in-chief at the Toronto General Hospital served during 1929 as our fifteenth physician-in-chief, *pro tempore*. With a modest, quiet manner Doctor Graham showed us a fine clinical technique of thoroughness, more English than is our American practice and yet in no sense an English imitation but rather a Canadian form which we on this side of the border value highly. With Doctor Graham living among us we saw quickly why he had been selected to preside over the destinies of a very important chair of medicine, that in one of Canada's two great universities, and to direct the medical service in a large, splendidly housed and finely equipped hospital. We are grateful to him for his instruction and the stimulus he was to all on the staff from junior house officer to chief.

Twice now Toronto has honored us by sending chiefs, *pro tempore*, for the late, much loved, Clarence Starr had been surgeon-in-chief *pro tempore* in 1926. His death on December 25, 1928, was the third break in our list of visiting physicians and surgeons, A. Walter Hewlett, physician-in-chief, *pro tempore*, in 1915-16 having died November 10, 1923, and Charles F. Hoover, surgeon-in-chief, *pro tempore* in 1924 having died on June 15, 1927, as appears in the roster in the back of each annual report. These deaths of former

REPORT OF THE PHYSICIAN-IN-CHIEF

valued colleagues are another evidence that the Peter Bent Brigham Hospital no longer is an infant institution though still in the adolescent stage.

The Changing Hospital Population

Hospital types seem to change from period to period. Not the same sort of man or woman populates our wards as the years go by and not the same sorts of sickness plague the inmates of our institutions. These are impressions that clinicians hold very generally, and these changes, if they occur, undoubtedly have various causes. One would expect that change in types of patients and of disease would occur gradually, and it would take long periods of time for these changes to be very evident. However, judging from the experience at the P. B. B. H. these changes are really quite rapid.

I have the impression that in ten to fifteen years in our wards foreigners have increased and native New Englanders approached the vanishing point. No figures to check this impression can be given, for we have not tabulated our patients in relation to origin and to know only the place of birth would not help. The patient of Italian parentage, for example, if born in this country, is not of Italian birth, though he possesses the racial characteristics and many of the habits and customs of the Italians. He is an American, but no one would regard him as of New England stock. The changing nationality in our wards certainly should introduce changes in type of individual patient, in diseases and in reaction to disease, all of which must play some part in our professional work.

We have perhaps reliable data in regard to shifting numbers of different diseases among our patients,

PETER BENT BRIGHAM HOSPITAL

though we may not know just what factors have caused the change.

Typhoid fever, already a relatively rare disease in Boston by the time the P. B. B. H. was opened, shows a further decline in admissions to our wards as follows:

In 1916, 15 out of 1994 admissions.	
" 1917, 13	" " 2058 "
" 1928, 7	" " 2343 "
" 1929, 5	" " 2362 "

Lobar pneumonia, too, has declined in our admissions:

In 1916, 68 out of 1994 admissions.	
" 1917, 78	" " 2058 "
" 1928, 43	" " 2343 "
" 1929, 44	" " 2362 "

Nephritis, also, appears to have decreased in our admissions:

In 1916, 234 out of 1994 admissions.	
" 1917, 143	" " 2058 "
" 1928, 64	" " 2343 "
" 1929, 47	" " 2362 "

In contrast we now admit to our wards more patients with pulmonary tuberculosis:

In 1916, 45 out of 1994 admissions.	
" 1917, 64	" " 2058 "
" 1928, 75	" " 2343 "
" 1929, 93	" " 2362 "

and more with chronic arthritis:

In 1916, 42 out of 1994 admissions.	
" 1917, 65	" " 2058 "
" 1928, 95	" " 2343 "
" 1929, 104	" " 2362 "

REPORT OF THE PHYSICIAN-IN-CHIEF

while the number of patients with ulcer of the stomach and duodenum has greatly increased:

In 1916, 25 out of 1994 admissions.

“ 1917, 28 “ “ 2058 “

“ 1928, 130 “ “ 2343 “

“ 1929, 111 “ “ 2362 “

as has the number of cardiac patients, in a very surprising degree:

In 1916, 307 out of 1994 admissions.

“ 1917, 230 “ “ 2058 “

“ 1928, 595 “ “ 2343 “

“ 1929, 610 “ “ 2362 “

On the other hand some diseases have shown very little change in rate of admission, with no definite tendency one way or the other, as:

Acute articular rheumatism, in 1916, 43 out of 1994 admissions.

“ “ “ “ 1917, 32 “ “ 2058 “

“ “ “ “ 1928, 14 “ “ 2343 “

“ “ “ “ 1929, 34 “ “ 2362 “

Diabetes mellitus, in 1916, 70 out of 1994 admissions.

“ “ “ 1917, 73 “ “ 2058 “

“ “ “ 1928, 82 “ “ 2343 “

“ “ “ 1929, 77 “ “ 2362 “

Anemia, in 1916, 88 out of 1994 admissions.

“ “ 1917, 90 “ “ 2058 “

“ “ 1928, 109 “ “ 2343 “

“ “ 1929, 99 “ “ 2362 “

Cancer of the stomach, in 1916, 20 out of 1994 admissions.

“ “ “ “ 1917, 27 “ “ 2058 “

“ “ “ “ 1928, 31 “ “ 2343 “

“ “ “ “ 1929, 24 “ “ 2362 “

Cirrhosis of the liver, in 1916, 16 out of 1994 admissions.

“ “ “ “ 1917, 24 “ “ 2058 “

“ “ “ “ 1928, 15 “ “ 2343 “

“ “ “ “ 1929, 16 “ “ 2362 “

PETER BENT BRIGHAM HOSPITAL

Cholecystitis and cholelithiasis, in 1916, 23 out of 1994 admis's.

"	"	"	"	1917, 41	"	"	2058	"
"	"	"	"	1928, 44	"	"	2343	"
"	"	"	"	1929, 36	"	"	2362	"

It is to be added that these changes have occurred in a hospital in a period in which no change in construction, no change in the hospital's relations to other institutions, no change in staff organization and relatively little change in staff personnel (the physician-in-chief remains the same except for the ageing of a thirteen-year period) and no conscious change in staff policy have occurred. Is this a purely local change in medical fashions or a real local change in disease in relation to a community and its need for hospital care? It would be of much interest could these figures be compared with those of other hospitals in this or other communities. A general survey of this sort might give help in forming plans to fit the Peter Bent Brigham Hospital to meet in a better way the needs of this community in the next fifteen or twenty years.

Some of the trends here fit with statistical evidence as to changing incidence of certain diseases; others do not. Typhoid and tuberculosis both are declining in the community, but only one is declining within the hospital. Cancer in general is said to be increasing in the community but cancer of the stomach is not changing in incidence within the hospital. Cardiac disease is believed to be increasing in the community but at no such rate as it seems to be increasing in our admissions. Diabetes mellitus appears to be on the increase in the community, but hospital admission rate runs very evenly from year to year, probably because increasingly a smaller proportion of these patients need other than treatment as ambulatory patients.

REPORT OF THE PHYSICIAN-IN-CHIEF

Varying interest in special studies of disease by staff members or new forms of treatment naturally would explain an increased admission of a disease thus invoking particular interest, but our figures do not entirely fit such an explanation. Chronic arthritis has had a recent special interest at the Peter Bent Brigham Hospital in its treatment, and the number of admissions has increased. Anemia has had an intensely increased interest in its study in the same recent period, and yet admissions run unchanged. The marked increase in ulcer of stomach and duodenum has come with a coordinate stimulated interest in its treatment, but the rate of hospital admission seems out of proportion to this factor.

Diseases change in their severity as well as in their incidence. The decreasing severity of rheumatic fever strikingly illustrates this. Such changes could influence hospital admissions. A new method of treatment might necessitate bed treatment, where ambulatory management previously was considered adequate. This naturally would bring these patients into the hospital in increasing numbers. Just the opposite might happen. Though we cannot explain why many changes in hospital incidence of disease occur, we should bear in mind that such changes do occur and so not be too certain that any hospital policy of a given period will fit the next period.

The Obligation to Medical Societies

Many societies composed of physicians exist whose purpose is, in major part, educational. These societies are national, state, or local in scope. In the meetings of these societies members come together to listen to papers and to participate in discussions of medical

topics. Discussions are not only formal but informal; often more is learned from informal groups talking over a paper or a topic after adjournment than from the formal meeting. Members of a hospital staff should attend the meetings of medical societies, in part to learn and in part to teach.

The Brigham Hospital staff always has participated actively in medical meetings. Twice a month there is a medical meeting at the hospital to which all members of the profession and medical students as well as the Brigham Hospital staff and nurses are cordially invited. Invited guests give the larger number of papers, but the staff contributes often. At each meeting a medical and surgical case is presented by one of the house officers.

How actively the medical staff participates in medical meetings outside of Boston and immediate vicinity is shown by the following figures for 1929. Of national societies, the meeting of the American Society for Clinical Investigation was attended by 10, the Association of American Physicians by 6, the American Neurological Association by 1, the American Climatological and Clinical Association by 1, the American College of Surgeons by 1, the American Medical Association by 2 (the distance to Portland, Oregon, where the A. M. A. met accounts for this small number). The American College of Physicians met in Boston and almost all of the staff gave papers or clinics. Of state societies those of Maine, New York and Rhode Island were attended each by 1 member of the staff who gave a paper. Detroit, Mich., Passaic, N. J., Nashville, Tenn., Lucerne-in-Maine, Brooklyn, N. Y., New Haven, Hartford and Norwich, Conn., Buffalo, N. Y., Montreal, New York and Washington,

REPORT OF THE PHYSICIAN-IN-CHIEF

D. C., were visited by at least one member of the staff, giving a paper before a local medical society. Within the state Brockton, Beverly, Malden, New Bedford, Athol, Braintree, Worcester, Springfield and Haverhill were visited by one or more staff members giving papers.

Changing Hospital Costs in Relation to the Community

Much discussion at present concerns itself with medical costs, largely costs of hospitalization, and various commissions and philanthropic organizations are investigating this problem from different angles. From these investigations will come reports with accumulated data on which to base conclusions and determine what, if any, remedies can be suggested for discovered defects. These studies may or may not lead to radical changes in medical practice including hospital relationships to patient, physician, nurse, budget, etc. Certainly the Peter Bent Brigham Hospital must conform itself to such resultant changes, as become generally applied. No one at present is in a position to prophesy what will be the outcome. After all studies are finished, no marked changes may be advised. We are only too familiar with agitations and much talk in the past which have led to little, if any, change in previous practices. However, certain features already have appeared in these discussions, and certain developments are going on in hospitals, often with very considerable publicity. In view of these, it may not be amiss to comment on them from one individual's viewpoint.

The statement often appears that a large proportion of the public, grouped together as those of moderate means, desire to be able to utilize a hospital with-

out feeling that they are objects of charity and for them accommodations should be provided within their ability to pay, in which they pay for the cost of their care. For this end buildings for this class of patients are being added to some of our hospitals. Do they accomplish what they purport to do? In other words do they remove the stigma, so-called, of charity? Obviously they do not, unless the receipts from patients completely pay for the patients' care, and apparently this is not contemplated in most of these recent developments. These receipts must, if they are to be considered as covering costs completely, include an income from patients sufficient to cover all charges incident to the care of the patient, upkeep charges including heating, lighting, repairs, depreciation of plant and a return on the invested capital, which would make of it a fair investment of the funds held by the institution for endowment. For example, let us say it costs \$1,500,000 to build and equip such a building for patients of moderate means. This fund at $4\frac{1}{2}$ per cent interest would yield \$67,500 per annum. If the patients in it do not pay enough to cover such a return, as well as all expenses incident to the upkeep of the building and their own food, care, etc., they are still charity patients receiving in the aggregate \$67,500 a year as a gift and in the abstract only differ from ward patients, who pay from \$21.00 to \$27.00 per week (these are ward charges for such as can pay them in Boston hospitals including the Peter Bent Brigham Hospital), by the difference between their payments and that of the latter in relation to the cost of the care of the individual patient in each type of accommodation. Because they have a single room or part of a room in a part of a hospital, where all

REPORT OF THE PHYSICIAN-IN-CHIEF

patients pay and which is called a private ward, and because they pay their doctor some fee, they are none the less charity patients and this part of the argument, namely ceasing to be a charity patient, as one of the desiderata for patients of moderate means is not being accomplished by adding to hospitals buildings obtained by individual gifts or campaigns for funds, unless an adequate income is available from patients' charge to make a fair business return on the invested capital.

This is not to say that such patients are not deserving of charity; many of this class undoubtedly are deserving of charity, and we need accommodations for this group of patients. Nothing, however, is gained by the fiction that the man of moderate means no longer is receiving charity, when he enters one of this newer type of hospital building. It is better by far to recognize this element of charity and ask the patient in the future, if able, to repay by contribution what the hospital has given him toward the cost of his care while a patient.

There is, however, one change accomplished by the proposed arrangement for people of moderate means. This type of patient now is to pay a fee to his doctor for professional care, and no longer will he be in a charity obligation to those who care for him professionally. In the past the medical profession has contributed largely of the time of its members to the care of hospital patients, and even when the patient paid to the hospital as much as \$21 to \$27 per week, the professional care was given free, or the staff member received only a small salary for the care of these patients as part of his various hospital duties. In terms of hours of professional service measured in dollars of value at accepted rates of professional serv-

PETER BENT BRIGHAM HOSPITAL

ice the medical profession in the past has been the greatest single contributor to the charity work of the hospital. This to me always has seemed unfair; it is only reasonable that the hospital should pay a reasonable sum to its professional staff. This arrangement by which patients of moderate means pay a certain amount to their doctors should be extended to the care of ward patients, the hospital assuming the payment of some remuneration to all of its staff engaged in the care of patients.

Uncertainty of the professional charges to hospital private patients too has been a source of criticism, and the new plan proposed in some places calls for fixed charges for special examinations and a definite understanding as to payment for professional fees with collection of these professional fees by the hospital. This is a desirable arrangement but presents no new principle. This plan has been in effect in the medical service of the Peter Bent Brigham Hospital since the opening of the hospital in 1913 and was based on a prior successful trial of five years at the Carney Hospital in Boston.

Hospital conditions have changed much in recent years. Now very few patients in most hospitals actually pay the complete cost of their care, while on the other hand most patients pay a considerable proportion of the cost of their care, and fewer receive a complete charity. (In 1928 at the P. B. B. H. 55 per cent of the patients paid full charges, 20 per cent part of the full charge and 25 per cent were free patients, whether a patient paid and how much, being adjusted as carefully as possible on the basis of such information as can be obtained of the patients' economic status.) At the P. B. B. H. for example in 1928 it

REPORT OF THE PHYSICIAN-IN-CHIEF

cost \$636,392.29 to maintain the hospital patients, and patients paid toward this expense, \$431,017.71 (see report of superintendent, page 35 of the fifteenth annual report) or 67 per cent of this cost, a cost which includes merely actual expenses of the year apart from any return on invested capital. In other words for our average patient charity contributed 33 per cent of what it cost him to be cared for in buildings erected by a charity fund, while he himself paid 67 per cent of this cost. From this it would seem that the hospital no longer is a complete charity and with ward charges as they are (\$24 to \$27 at the P. B. B. H.) the man of moderate means already is a ward patient, and the new provisions being made in various places only provide him with more private accommodations at a somewhat enhanced cost, for which he pays only a part of the cost, while paying something to his physician for professional care, but this is a natural outgrowth from what is already going on very generally in our hospitals, and it is a desirable development, because many patients, purely from a medical aspect, will do better under private room conditions than in public wards. In fact one wonders whether the next natural step in hospital developments will not be toward single rooms for the greater part of our patients, small wards for a smaller group and no large wards at all.

To me this seems both a desirable and a logical development, but to bring it about other modifications in hospital régime will need to be made. A hospital to house the majority of patients on a single room basis will cost more to construct for a given number of patients and more to maintain with its increased overhead. Should the institution contribute this large sum as a charity or should patients pay for this increased

cost? If the latter, then some sort of insurance or savings-bank arrangement, will need to become general; if the former, then hospitals will require larger endowments provided by generous benefactors. It seems to me that the former plan is the desirable one. After all, the burden of illness and its costs falls heavily on the man of moderate means, because the man of moderate means makes no anticipatory provision for an almost inevitable event, namely illness. Fewer luxuries while well would be the price of a provision for future illness, which very few can expect to escape. The future must decide how these increased costs are to be met.

Another consideration is whether hospital costs can be reduced, while providing in a professional sense just as good treatment as is possible? Such studies, as are available so far, seem to show that hospital costs per diem in general are not excessive and perhaps on present bases are more likely to increase rather than decrease. Some economies can be brought about but no great ones. Is it possible then in any way to reduce the cost of hospital illness? It seems possible to shorten the period of stay in the hospital from present conditions by extending a process already under way, *i.e.*, by arriving at a complete diagnosis for non-acute illness in ambulatory patients prior to hospital admission as a result of utilizing more extensively methods of diagnosis applicable to out-patient clinics and only putting the patient into the hospital to carry out appropriate treatment, medical or surgical, when it cannot be carried out at home. Already a very large percentage of our own medical ward admissions of patients that have come to our out-door department enter the wards completely diagnosed in order to receive

REPORT OF THE PHYSICIAN-IN-CHIEF

appropriate treatment. This should be extended and can be, especially if physicians referring patients for diagnosis, would be willing to utilize more extensively the out-door department for diagnosis. The same principle easily can be applied more widely for patients of moderate means, possibly with a need for more pay clinics of the general type of a well-organized hospital out-patient department. I can see no reason for admitting to a hospital, until after the diagnosis is made, other than the exceptional patient that is ambulatory.

Then better methods of managing ambulatory patients has increased greatly the number of patients who can be treated with excellent results without admission to the hospital. In fact better treatment of these ambulatory patients, too, has actually reduced the occurrence of conditions formerly requiring hospital care. The group management of diabetics is an excellent example of both of these things, for many of them not only are treated from the beginning as ambulatory patients but also are treated so well that fewer developments in the disease occur to require hospitalization. These methods can be applied more extensively even than at present.

By better organization within the hospital, including enlarged facilities for some of the special methods of study, the time of patients within the hospital may be shortened further for numerous patients by expediting the process of diagnosis and the beginning of treatment. As already touched on in previous annual reports reorganization of the hospital into a general diagnostic service rather than as at present into medical and surgical services would work in this direction.

Finally hospital stay can be shortened for many patients by having a place for convalescent care organ-

ized very differently from the present type of convalescent home, though of this latter in most cities the supply is too inadequate to furnish much of the help that might come even from this source. A hospital, primarily of single rooms, as already stated, will cost more than a ward type of institution. It should be utilized for such forms of diagnostic procedures not as yet applicable to ambulatory patients, for the care of those acutely and seriously ill, for surgical operations and the immediate post-operative care of surgical patients. On cheaper land, differently constructed, there should be a hospital to which patients easily can be transferred, and from which they easily can be returned. Here, after a few days following operation, many surgical patients may be sent. Some patients with milder forms of acute non-surgical illness can be sent to such an institution as soon as the diagnosis is well established. Many forms of bed treatment requiring some duration easily can be carried out in such an institution. The ordinary form of convalescent care is an obvious use of such a hospital. In addition there is needed, closely connected with the convalescent hospital, accommodations for the chronically ill, whose proper disposal at present makes long delays in discharge from acute hospitals.

Such a type of convalescent and chronic hospital should be under the same staff as the acute hospital. All internes should have a service in it. Records should be a unit, whether the patient is in one place or another. Transfer should involve a minimum of effort and should be just as easy in one direction as the other, and it needs to be recognized that not only will most patients in the acute hospital go to the convalescent or chronic hospital, but that from both patients fre-

REPORT OF THE PHYSICIAN-IN-CHIEF

quently will be returned to the acute hospital by reason of unexpected developments requiring diagnosis or treatment, for second stage operations, etc. So far as I know this arrangement, as I have visualized it in general terms, nowhere exists at present; its provision would shorten stay in the acute hospital, and early place the patient where costs will be less, thereby decreasing the cost of hospital care to the individual patient.

Publications for 1929

During 1929 certain lines of investigation have been pursued by the members of the staff, as shown by the following list of publications. Some of these represent work actually done in the preceding year, but, according to our custom, are noted in the Annual Report only after their completion and publication, thereby avoiding duplication in being noted once when the work is under way and the second time when completed and published.

CHRISTIAN, HENRY A. Some Missed Pedagogic Opportunities Incident to Usual Organization of Resident Staff of a Hospital. *Bull. Am. Coll. Surg.*, 13:19, 1929.

— Nephrosis: A Critique. *Jour. Am. Med. Assoc.*, 93:23, 1929.

FROTHINGHAM, CHANNING. A Case of Extensive Bilateral Progressive Thrombosis of the Smaller Branches of the Pulmonary Arteries. *Am. Jour. Path.*, 5:11, 1929.

— Recent Advances in the Classification and Treatment of Acute and Chronic Nephritis. *Rhode Island Med. Jour.*, 12:17, 1929.

FITZ, REGINALD. Diagnosis of Lobar Pneumonia. *New Eng. Jour. Med.*, 200:1015, 1929.

PETER BENT BRIGHAM HOSPITAL

- Periodic Health Examinations as a Part of a Medical Student's Curriculum. *Jour. Am. Med. Assoc.*, 92:1645, 1929.
- Diabetic Coma—Then and Now. *New Eng. Jour. Med.*, 201:967, 1929.
- DERICK, C. L. and SWIFT, H. F. Reactions of Rabbits to Non-hemolytic streptococci; General Tuberculin-like Hypersensitiveness, Allergy or Hyperergy following Secondary Infection. *Jour. Exp. Med.*, 49:615, 1929.
- DERICK, C. L., HITCHCOCK, C. H. and SWIFT, H. F. Allergic Conception of Rheumatic Fever. *Can. Med. Assoc. Jour.*, 20:349, 1929.
- O'HARE, J. P. and HOYT, L. Surgery in Nephritic and Hypertensive Patients. *New Eng. Jour. Med.*, 200:1292, 1929.
- LEVINE, S. A. and FULTON, M. C. Effect of Quinidine Sulphate on Ventricular Tachycardia; Clinical Observations. *Jour. Am. Med. Assoc.*, 92:1162, 1929.
- LEVINE, SAMUEL A. Case of Ulcer of Esophagus with Extraordinary Medical Experiences. *Med. Clin. No. America*, 13:189, 1929.
- LEVINE, S. A. and BENNETT, G. A. Two Cases of Periarteritis Nodosa; One with Unusual Manifestations (Meningeal Form). *Am. Jour. Med. Sc.*, 177:853, 1929.
- LEVINE, S. A. and ERNSTENE, A. C. Comparison of Records taken with Einthoven String Galvanometer and Amplifier-type of Electrocardiograph. *Am. Heart Jour.*, 4:725, 1929.
- LEVINE, S. A. and WALKER, G. L. Further Observations on Latent Hyperthyroidism Masked as Heart Disease: Angina Pectoris. *New Eng. Jour. Med.*, 201:1021, 1929.
- ALT, HOWARD L. The Metabolism in Pernicious Anemia. *Arch. Int. Med.*, 43:488, 1929.
- BLOTNER, HARRY. The Use of Insulin in an Out-Patient Department. *New Eng. Jour. Med.*, 200:491, 1929.

REPORT OF THE PHYSICIAN-IN-CHIEF

- BLOTNER, H. and MURPHY, W. P. The Effect of Liver on the Blood Sugar Level. *Jour. Am. Med. Assoc.*, 92:1332, 1929.
- BLOTNER, HARRY. The Effect of Liver on the Blood Sugar in Diabetic Patients. *Jour. Am. Diet. Assoc.*, 5:102, 1929.
- EMERY, E. S. and MONROE, R. T. Peptic Ulcer; a Study of Five Hundred and Fifty-six Cases. *Arch. Int. Med.*, 43:846, 1929.
- HALL, F. C. The Treatment of Arthritis. *New Eng. Jour. Med.*, 200:369, 1929.
- HOYT, L. H. and FAIRHALL, L. T. The Excretion of Zinc in Health and Disease. *Jour. Clin. Invest.*, 7:537, 1929.
- MARLOW, F. W., JR. Miliary Tuberculosis of the Lungs with Recovery: A Report of Two Cases. *Amer. Rev. Tuberculosis*, 19:529, 1929.
- Meningococcemia; Report of Case with Recovery. *Jour. Am. Med. Assoc.*, 92:619, 1929.
- MONROE, R. T. and EMERY, E. S. The Effect of Irritation of the Colon on the Emptying Time of the Stomach. *Am. Jour. Med. Sc.*, 77:389, 1929.
- MUNTER, E. J. The Hinton Glycerol-Cholesterol Precipitation Test for Syphilis; a Comparative Study with the Wassermann Test in 2120 Cases. *Jour. Lab. Clin. Med.*, 14:665, 1929.
- MURPHY, W. P. and POWERS, J. H. The Value of Liver in the Treatment of Anemia due to Hemorrhage. *Surg., Gyn. and Obst.*, 48:480, 1929.
- ROOT, H. F., JOSLIN, E. P., WHITE, P., CURTIS, W. S. and ADAMS, H. D. Diabetic Coma. *Med. Clin. No. America*, 13:11, 1929.
- WALKER, I. C. Colds, and Asthma Associated with Colds; Preventive Treatment with Vaccines. *Arch. Int. Med.*, 43:429, 1929.

PETER BENT BRIGHAM HOSPITAL

— The Curative and Possibly Specific Effect Upon Colds of Vaccines Consisting of the Streptococci Prevalent During that Period. *Am. Jour. Med. Sc.*, 78:645, 1929.

Out-Door Department

During the year beginning September 1, 1929, Dr. Channing Frothingham, physician to the Peter Bent Brigham Hospital, has been in general charge of the Medical Out-Door Department. His report follows.

Dr. Frothingham's Report on General Medical Clinic.—On returning to the medical Out-Door Department in September, 1929, after several years' absence from it, I was struck with several features which seemed a distinct improvement over the earlier methods of handling patients. Most striking was the appointment system, which produces a steady flow of patients in and out of the clinic in contrast to periods with no patients and other periods with intense congestion. One feature of the appointment system, however, needs attention, and that is the tendency for patients to be late to their appointments or to give them up without notice. Possibly a small deposit at the time of making the appointment, to be refunded provided the patient is on time for the appointment, would correct this trouble. Although many appointments are made by telephone, most of the patients live near enough for someone in the family to come to the Out-Door Department to make the deposit.

Another new feature is the increase in the number of special clinics for the treatment of patients. Fortunately the days have gone by when treatment in the Out-Door Department consisted of giving the patient a prescription for medicine and little else. The education of the patient in regard to the disease and its

REPORT OF THE PHYSICIAN-IN-CHIEF

proper handling is an important feature of present-day treatment, and this can be done much better and with less expenditure of energy by grouping the patients with the same disease and by having them under the supervision of someone especially interested and skilled in treating that disease.

The physical condition of the Out-Door Department also is distinctly improved in that the number of places for taking histories in privacy and for making thorough examinations of patients have increased considerably. The home environment and particular worries of patients play a tremendous part in many of their symptoms, and one can hardly expect to make any progress in finding out about the intimate life of a patient, if the history is taken under any other circumstances than those of privacy. Still in our medical Out-Door Department there are some rooms in which only a sheet separates two patients whose histories are being taken. This should be corrected. On the floor where the medical Out-Door Department is conducted, there are two large end-rooms which could be subdivided further so that more individual units for history taking and physical examination could be had. On the second floor, where many of the special clinics are conducted, the opportunity for privacy is distinctly limited and this should be corrected by division of the larger rooms into smaller units. On the ground floor the appointment office is quite inadequate in size.

A new feature of the work in the medical Out-Door Department this academic year is the admission of third year medical students to active participation in the clinic. These students are under the direct supervision of one of the younger members of the staff, and each student takes a new case each day. The result is

that these new cases are particularly well worked up and the work is checked by a man of experience. Although this takes perhaps somewhat more time for the patient than would be the case if the patient was studied by the house-officer, I have heard no complaints from the patients about the time spent, and the extra attention given them I am sure works for their benefit and apparently is appreciated by them.

The method of admission of new patients to the Out-Door Department seems to me to be quite unsound and should be changed. At the present time both the surgical and medical Out-Door Departments are looked upon as diagnostic clinics as well as clinics for the treatment of disease. Therefore, new patients for diagnosis and treatment are referred to either the medical or surgical clinic. The decision as to which clinic the patient should be referred is left to the discretion of a clerk in the admission office, or if she is in doubt, to the nurse in charge of the Out-Door Department. Under this arrangement frequently patients with the same disorder or with practically the same complaints are assigned to either clinic. The procedures, however, in regard to the diagnosis of new patients are quite different in the two departments. This difference is so marked that it raises the question whether the patients are receiving appropriate consideration in both clinics. If they are, the question arises whether the clinics are being run as economically as possible as is consistent with efficiency. An example of what I mean is shown in two records taken at random from the files. Both of these patients complained of some abdominal discomfort. Their numbers are 138,872 and 138,584. One was admitted to the surgical Out-Door Department and one to the medical. Both apparently

REPORT OF THE PHYSICIAN-IN-CHIEF

were worked up from the point of view of diagnosis. The record of the first visit consisted of about 350 words in one case and of less than 100 in the other. In the longer record there was a report on the family history and the past history as well as the present illness of the patient. On the shorter one there was nothing of importance mentioned in regard to the past or family history. On the longer record there was a report of the urine examination, the blood-pressure, the pulse and the temperature with the height and the weight of the patient; on the shorter record none of these points was recorded. It seems evident that either one was unnecessarily complete or the other somewhat incomplete. It would seem desirable to have more similarity between the methods of the two clinics in working up new cases.

In the annual report for 1928 the Physician-in-Chief called attention to the need for one diagnostic service for the cases admitted to the wards of the hospital with the subsequent divergence of these cases to special groups, if they needed special treatment. He also emphasized the importance of having all the members of the staff, whether surgically inclined, so-called specialists, or internists, working together in this diagnostic group. In the same way it seems that one diagnostic group should exist in the Out-Door Department in which are included the surgeons, so-called specialists and internists so that there could be a uniform procedure inaugurated for the diagnosis of new patients. Obviously a new patient with a burn or a cut to be dressed should not have to delay for any appreciable time over the diagnosis, but such a patient could pass through the diagnostic service for the sake of uniformity with perhaps a stamp placed upon the card

explaining that for obvious reasons the case was not thoroughly studied but referred immediately for special treatment. In connection with the inauguration of this diagnosis group more and more expansion of the plan of grouping patients for treatment could be planned.

I find that the Social Service Department is cooperating in an excellent manner with the various groups in the Out-Door Department, and although it has never had to refuse assistance in a case because of lack of workers and equipment, it has not been able to do as much for certain patients as it would like because of an insufficient number of social workers. The importance of this work in adding to the efficiency of the treatment for many types of out-patients can hardly be over-emphasized and it is hoped that more funds may be made available for it.

*Reports from Special Classes or Clinics in the
Out-Door Department*

After being studied in the wards of the hospital or in the general medical clinic of the Out-Door Department patients may be referred for further study and continued management to one of a number of special classes or clinics. Some of these are planned as an easy way of giving adequate treatment to large numbers of patients with a single dominant disease; others are utilized for the intensive study of therapeutic results or the prolonged investigation of a relatively small group of patients. All add to the efficiency of our care of patients.

Anemia.—*Doctor Murphy*—During the year 388 patients were seen. It has been the object of the clinic to treat carefully and successfully a relatively small

REPORT OF THE PHYSICIAN-IN-CHIEF

number of patients rather than to attempt the management of large numbers. The primary purpose of the clinic has been a follow-up of pernicious anemia patients under treatment by Doctor Minot and Doctor Murphy with liver or liver extract, in order to keep the patients in as good condition as possible and to determine what the prolonged use of liver will do. Fifty-three such patients were followed during the year. Only two of the pernicious anemia patients during the year had what might be termed a relapse; one was a patient with other complications unable to obtain liver or liver extract on account of financial circumstances, which fact was not known early enough to prevent relapse. An inadequate intake of liver or liver extract appeared to explain the other case. The majority of the patients have been able to keep their blood counts at an essentially normal level and have kept in excellent condition. One patient with pernicious anemia died during the year from sepsis resulting from an injury. Other blood conditions than pernicious anemia too have been followed. Doctor Murphy has been assisted by Doctor Fitzhugh and Doctor McGrath, by Miss Howard, a technician, and by Miss Robertson, a dietitian.

Arthritis.—*Doctor Hall*—The average attendance has been fifteen patients. The intent of the clinic has been to study thoroughly the disease in a relatively few patients. Dr. Robert T. Monroe has been conducting studies on the diet of these patients in relation to changes in the gastro-intestinal tract. The treatment has been based largely on the application of a large number of methods intending to improve the general health of the patient and specific measures to correct any deviations from normal function that have been

found. Atrophic arthritis has received considerable attention, particularly a group of patients with no history of infection in relation to the onset of the arthritis and no convincing evidence of any focus of infection. Dietary deficiencies here have been particularly considered, and these patients seem to improve definitely on a complete diet plus rest. In these patients there are certain resemblances to rickets. It would seem that in arthritic patients that the disease can be arrested in a large per cent, if advised treatment is possible to carry out, involving as it does often considerable economic considerations.

Asthma and Hay Fever.—*Doctor Walker*—This is a good example of the group handling of many patients. In 1929 in this clinic there were 11,556 visits. The work involved skin testing for protein sensitivity of 860 patients. Many of the patients here received protective or curative injections of protein material to which they were sensitive or of bacterial vaccines.

Diabetes Mellitus.—*Doctor Fitz*—During the last year, the Diabetic Clinic has run prosperously on an even keel and has done its usual amount of work. The following statistics illustrate this:

	1929	1928	1927
New Patients	97	97	125
Number of Clinics	51	49	50
Average Attendance	22	19	20
<hr/>			
Total Number of Patients			
Visiting the Clinic	1132	921	995

The Clinic has become fairly well routinized. At each meeting, a surprisingly constant proportion of the patients are sugar-free and well. There are always the newcomers who have to be taught the essentials of

REPORT OF THE PHYSICIAN-IN-CHIEF

what every diabetic must learn and the old offenders who have to be encouraged and jacked up. But the results on the whole are satisfactory. It makes but little difference as to what medical man runs the Clinic. The dietitian, the social service department and the laboratory staff do the hard work and the doctor acts as director. I am sure that the intelligent patients are very appreciative of the efforts made in their behalf.

Anyone who visits the Clinic must be impressed by the opportunities for constructive research which stare him in the face. The ward treatment of diabetes, after all, is merely an episode in the patient's life and is of relatively little importance. It is in the Out-Door Department and by follow-up methods that we have the best opportunity for learning more of the life history of diabetes and how it can be modified by therapy. All of us who have worked in the Clinic have been struck by this, and each year we try to accomplish something which may lead to results.

During the past year in the Clinic, for example, Doctor Murphy and Doctor Blotner have studied the effect of liver feeding continued for a long period of time. They have obtained very encouraging results in some cases and have been able to maintain certain patients sugar-free and with normal blood sugar levels on liver when previously large amounts of insulin were required. Their work at least is suggestive and promises something in the nature of a substance to be taken by mouth which may have an insulin-like action.

Doctor Flynn is engaged in the time-consuming but important work of analyzing the records of our completed cases. Before insulin was available, Doctor Murphy and I studied various causes of death in our fatal cases trying to determine why our patients with

diabetes died. Insulin has changed so greatly the clinical features of diabetes that it has seemed important to study again the causes of our diabetic fatalities in order to discover the ultimate effect of the new drug on the course and pathology of the disease. Doctor Flynn, too, has directed the Clinic for the last several months. He has introduced ingenious methods for simplifying the diets ordered and for teaching patients that diabetes is not too difficult a disorder with which to live happily.

The cause of arterial disease so constantly met with in our elderly patients has interested Doctor Blotner. He has studied the heart lesions of the patients observed in the wards and has found that angina pectoris and thrombosis of the coronary artery are not uncommon complications of diabetes. Perhaps, he hopes, some method can be discovered in the Out-Door Clinic for retarding the development of arteriosclerosis in diabetes, or at least for measuring its rate of development and, knowing this, for protecting patients against its ravages.

Recently I have started a new branch of the Clinic. Certain of our juvenile patients have grown and developed normally, and others have not. The question is why there should be such a striking difference. One can only find the answer to such a problem by observing young patients carefully for several years. Mrs. Currier has been kind enough to assign to me a dietitian, Miss Hall a nurse, Miss Cheney a social worker and our laboratory a technician. With such a staff it should be possible to carry out in the due course of time a valuable critical study on the physical development of a group of young diabetics treated in various ways.

REPORT OF THE PHYSICIAN-IN-CHIEF

These are merely samples of the sort of research that can be carried along in a Diabetic Clinic such as ours. We know from many years of practical experience that our "Class" method for treating diabetics is satisfactory. The patients like to come to our hospital, to be checked up, to gossip, to see their friends, perhaps to hear something in the nature of a simple lecture on the cause and treatment of their disorder. I believe, however, that the class offers something more than a practical division of applied therapeutics in the out-door department scheme of organization and something more than a means of teaching young doctors or pupil dietitians how to manage diabetes. It affords an almost unique chance for studying carefully for a long time interval a group of patients with a chronic illness frequently encountered in all classes of society. Therefore, in order completely to justify our labors, we clearly owe it to other doctors who do not have our equipment and our facilities, that we encourage in ourselves the spirit of clinical investigation and that we place on record from time to time our experience with whatever new observations or new methods are developed.

Gastro-Intestinal Disease.—*Doctors Emery and Monroe*—During 1929, the Gastro-Intestinal Clinic, in the Out-Door Department, has treated an increasing number of patients. One thousand visits were made to the Clinic during the year. Dr. Lyman Hoyt has been giving his services since June. In spite of the extra held, there has been too much to do, and it has become necessary to limit the number of patients desiring to return. The growth of the Clinic has been gratifying. It is evident that the patients feel that they are obtaining satisfactory services and that the

Clinic is fulfilling the need of the community. Patients suffering from a chronic disease with frequent recrudescence of symptoms, require continuous supervision. When they cannot afford a private physician, the Clinic, the personnel of which is not constantly changing, grants them an opportunity to consult the physicians conversant with their history.

Keeping in touch with the patients suffering from peptic ulcer permits the recording of valuable statistics for a better understanding of the disease. The Clinic has attempted to do this by sending the patients follow-up letters at least once a year. As there are now about fifteen hundred patients on the list, the task has become too large for the physicians working in the Clinic to handle. The services of some one who could take care of the secretarial work would, therefore, be of great value and thoroughly appreciated.

The Clinic affords much valuable material for study to anyone interested in gastro-intestinal disorders. A full-time worker in the hospital, such as an assistant resident, who could see patients on other days of the week, should find many interesting problems to investigate. At present, the Clinic allows us to follow cases with ulcer. This in itself is satisfactory, as it is the only way to obtain an adequate idea of the results which are being obtained in the treatment of this disease. Unfortunately, it limits the amount of time available for making special studies of other problems.

Heart Disease.—Doctor Levine—The Cardiac Clinic has had a constant growth in its activities in recent years. During 1925 the average daily attendance in our clinic was 11. The total number enrolled at the end of that year was 187. This has constantly grown so that on January 1, 1930, the total number

REPORT OF THE PHYSICIAN-IN-CHIEF

attending our clinic was 381. The average daily attendance was 20. We, therefore, found it necessary in the fall of 1929 to give over two mornings a week for heart cases, rather than one morning as was done in former years. We now, therefore, have a heart class Monday and Friday mornings. On Monday morning Dr. Marshall Fulton is officially in charge, and the cases that bring up special problems are seen Friday morning, when I am in charge. Doctors Flynn, Butler and Feeney assist at these clinics. It has been very satisfactory and pleasant for me as well as for the clinic to have the cooperation of these other men.

Apart from the routine clinical care of these patients, the clinic has served a very useful purpose from a teaching point of view. Some of the fourth year students have come over to learn something about heart disease in recent months. Assistant medical residents have also come out to gain further instruction in heart disease. In addition there have also been several practicing physicians who come in from neighboring towns spending greater or lesser time at the clinic, to learn methods of diagnosis and treatment. Miss Andren continues to prove herself a most invaluable social service worker. With the growth of the clinic, which really has doubled in the past five years, her work has necessarily increased, and I fear that she must find it impossible to apply the same attention that she formerly did to her patients. I wonder whether the Social Service Department could give her some aid.

The type of patients that we see in the clinic is mostly young rheumatic valvular heart patients, although a small number of other heart cases that have special interest are being followed. The patients as a group cooperate quite satisfactorily with our directions and

advice. I think that the efforts spent in the Out-patient care of these cases is well directed from every point of view.

Nutritional Disturbances.—*Mrs. Currier*—As in past years Mrs. Currier has been supervising the diet of a group of patients with nutritional disturbances, chiefly those with obesity. Six hundred and one patients were followed in this way during the year. This is a group of patients difficult to make persist in their treatment, which involves a definite personal inconvenience, and the difficulty of compelling patients to adhere to a diet not in accordance with their own inclinations as to eating, is great; nevertheless many of them are benefited.

Renal Disease.—*Doctor O'Hare*—During 1929, 110 patients were followed, 48 of which were added during the year. Three of the patients under observations during the year died, two outside of the hospital. The purpose of this clinic is to accumulate repeated observations on patients with nephritis, including studies of the urine, tests of renal function and various methods of general physical examination, in order to accumulate data to give a better understanding of the life history of the various types of renal disease. These patients not infrequently are sent into the wards for the treatment of complications as they develop or exacerbations of their disease. At times they are admitted to the hospital for forms of observations not possible of carrying out in the Out-Door Department. Year by year there is being accumulated an increasingly valuable amount of data about this disease to which much is added by the work of the renal clinic.

Syphilis.—*Doctor Thurmon*—During 1929, 443 patients were treated, of which 165 were new. These

REPORT OF THE PHYSICIAN-IN-CHIEF

patients made 5,744 visits to the clinic, a number greatly increased by the plan now in vogue of carrying out all except intraspinous forms of treatment in the Out-Door Department. The number of visits also is enhanced by the effective follow-up system under the direction of the Social Service Department. In the syphilis cases the Wassermann reaction is determined frequently, and in recent years the Hinton test also has been applied. The latter has proved to be a very valuable test, and the use of each in a given patient has a distinct advantage. During the year seven of the syphilis patients died, on three of whom permission for autopsy was obtained. The major cause of death was as follows: chronic valvular heart disease not of syphilitic origin, hemiplegia, probably of arteriosclerotic origin, paresis, multiple myeloma, tabes dorsalis, syphilis of the liver, and syphilis of the aorta with aortic aneurysm. It is to be noted that of the seven fatal cases, death in three resulted from causes probably in no wise related to syphilis.

Report of the Metabolism Laboratory

During 1929, 1,353 basal metabolism determinations were made in this laboratory under the supervision of Doctors Alt, Fulton and Feeney. Of these 82 per cent were on medical and 18 per cent on surgical cases. There were 422 determinations on Out-Door Department patients, 719 on hospital patients, 177 on outside patients and 35 on individuals participating in certain special studies. Of these determinations 220 were +21 or higher, 69 were -21 or lower, while 1,064 ranged between -20 and +20, of which 646 were between -10 and +10, showing that a relatively large percentage of tested patients had normal

PETER BENT BRIGHAM HOSPITAL

or only slightly elevated or lowered basal metabolic rates. This percentage is actually higher than these figures indicate, since the numbers are of tests and not patients and more repeated tests were done on patients with abnormal than normal metabolism.

In concluding the annual report of 1929 the Physician-in-Chief takes pleasure in acknowledging a splendid spirit of cooperative effort on the part of the members of all departments of the hospital, which has enhanced the value of the work of the medical service. Many individuals have done well their part and to them cordial thanks are extended.

HENRY A. CHRISTIAN,

Physician-in-Chief.

DECEMBER 31, 1929.

REPORT OF THE PHYSICIAN-IN-CHIEF

Summary of Medical Statistics

JANUARY 1, 1929, TO JANUARY 1, 1930

Total number of admissions in 1929	2,274	
Total number of medical cases remaining in wards, January 1, 1929	88	
	<hr/>	2,362
Total number medical readmissions discharged in 1929	271	
Total number of medical new cases discharged in 1929	1,991	
	<hr/>	2,262
Total number of medical cases remaining in the wards, January 1, 1930	100	
	<hr/>	2,362
Results on medical cases discharged in 1929 were as follows:		
Total number discharged well	129	
Total number discharged improved	1,216	
Total number discharged unimproved	216	
Total number discharged untreated	261	
Total number transferred to Surgical Service	247	
Total number dead	193	
	<hr/>	2,262
Total number of medical cases remaining in the wards, January 1, 1930	100	
	<hr/>	2,362

Visiting Physicians and Surgeons *Pro Tempore*

SIR CHARLES BALLANCE

K.C.M.G., C.B.; Consulting Surgeon to British Army, 1914-19; Col., R.A.M.C.; Consulting Surgeon to St. Thomas Hospital and to the National Hospital for Paralysis and Epilepsy; *Surgeon-in-chief pro tem.*, *P. B. B. H.*, October 15 to October 25, 1928.

DR. FRANK BILLINGS

M.D., Northwestern Univ., 1881; M.S., *ibid.*, 1890; Sc.D., Harvard, 1915; Professor of Medicine, Northwestern Univ., 1891-98; Professor of Medicine, Rush Medical College, 1898-1905; Professor of Medicine, Univ. of Chicago, 1905-24; *Physician-in-chief pro tem.*, *P. B. B. H.*, May 15 to May 20, 1916.

DR. LEWIS A. CONNER

Ph.B., Yale Univ., 1887; M.D., Columbia Univ., 1890; Physician, New York Hospital, 1905; Professor Clinical Medicine, Cornell Univ. Med. School, 1905-16; Professor of Medicine, *ibid.*, 1916; *Physician-in-chief pro tem.*, *P. B. B. H.*, April 8 to April 15, 1923.

MR. GEORGE E. GASK

Graduate of St. Bartholomew's Hospital, London, England; Consulting Surgeon, B. E. F., receiving C.M.G. and a D.S.O.; Surgeon and Director of Surg. Unit to St. Bartholomew's Hosp.; Professor of Surgery, Univ. of London; *Surgeon-in-chief pro tem.*, *P. B. B. H.*, March 20 to April 3, 1921.

DR. DUNCAN GRAHAM

M.D., Univ. of Toronto, 1905; Professor of Medicine, Univ. of Toronto; *Physician-in-chief*, Toronto General Hospital; *Physician-in-chief pro tem.*, *P. B. B. H.*, March 3 to March 10, 1929.

DR. EVARTS GRAHAM

M.D., Rush Medical College, 1907; Professor of Surgery, Washington Univ., St. Louis, Mo.; *Surgeon-in-chief pro tem.*, *P. B. B. H.*, April 26, 1925-May 3, 1925.

DR. JAMES B. HERRICK

A.B., Univ. of Mich., 1882 (Hon. A.M., *ibid.*, 1907); M.D., Rush Medical College, 1888; Interne, Cook County Hospital, 1888-89; Instructor in Medicine, Rush Medical College, 1890-93; Adjutant Professor, *ibid.*, 1894-1900; Professor, *ibid.*, 1900; Attending Physician, Presbyterian Hospital, Chicago, Illinois, 1895; *Physician-in-chief pro tem.*, *P. B. B. H.*, Feb. 15 to Feb. 21, 1924.

VISITING PHYSICIANS AND SURGEONS

DR. ALBION WALTER HEWLETT

B.S., Univ. of Cal., 1895; M.D., Johns Hopkins Medical School, 1900; Professor of Internal Medicine, Univ. of Mich., 1908-16; Professor of Medicine, Leland-Stanford Jr. Univ., San Francisco, 1916-25; *Physician-in-chief pro tem.*, P. B. B. H., May 1 to May 4, 1915, and Jan. 2 to Jan. 8, 1916. Died Nov. 10, 1925.

DR. CHARLES F. HOOVER

M.D., Harvard, 1892; Professor of Medicine, Western Reserve Univ., Cleveland, Ohio; *Surgeon-in-chief pro tem.*, P. B. B. H., Feb. 3 to Feb. 9, 1924. Died June 15, 1927.

DR. SAMUEL W. LAMBERT

A.B., Yale, 1880; Ph.B., *ibid.*, 1882; M.D., Columbia, 1885; A.M., Yale, 1905; D.Sc., Columbia, 1921; Professor Clinical Medicine, Columbia, 1903-19; Dean, Coll. Phys. and Surgs. (Columbia), 1904-19; Attending Physician, New York Hosp., 1896-1909; Attending Physician, St. Luke's Hosp., 1906; *Physician-in-chief pro tem.*, P. B. B. H., Jan. 24 to Jan. 30, 1926.

DR. HENRY ROBERT MURRAY LANDIS

A.B., Amherst, 1894; M.D., Jefferson Med. Coll., 1897; Director, Clinical and Sociological Departments, Henry Phipps Institute, Philadelphia, Pennsylvania; *Physician-in-chief pro tem.*, P. B. B. H., Jan. 18 to Jan. 25, 1919.

PROF. RENE LERICHE

Professor of Surgery, University of Strasbourg; *Surgeon-in-chief pro tem.*, P. B. B. H., June 12 to June 20, 1929.

DR. DEAN DEWITT LEWIS

A.B., Lake Forest Univ., 1895; M.D., Rush Med. Coll., 1899; Associate Professor of Surgery, Rush Medical College, 1919-25; Attending Surgeon, Presbyterian Hosp., Chicago; Professor of Surgery, Johns Hopkins Univ., 1925; *Surgeon-in-chief, pro tem.*, P. B. B. H., March 15 to March 24, 1920.

SIR THOMAS LEWIS

C.B.E.; F.R.C.S.; M.D., University College, London, England, 1906; Physician, University College, London, England; Physician to Staff of Med. Research Comm.; *Physician-in-chief pro tem.*, P. B. B. H., Oct. 26 to Nov. 2, 1914.

DR. WARFIELD T. LONGCOPE

A.B., Johns Hopkins Univ., 1897; M.D., Johns Hopkins Univ., 1901; Bard Professor of Medicine, Columbia Univ., New York, 1914-21; Professor of Medicine, Johns Hopkins Univ., and Physician-in-chief, Johns Hopkins Hospital, 1922; *Physician-in-chief pro tem.*, P. B. B. H., Jan. 13 to Jan. 20, 1917.

PETER BENT BRIGHAM HOSPITAL

DR. WILLIAM DE B. MACNIDER

M.D., Univ. of N. C., 1903; Professor of Pharmacology, Univ. of N. C., 1905; *Physician-in-chief pro tem.*, P. B. B. H., April 13 to April 17, 1925.

DR. THOMAS McCRAE

A.B., Univ. of Toronto, 1891; M.B., *ibid.*, 1895; M.D., *ibid.*, 1903; Fellow of Biology, Univ. of Toronto, 1892-94; Associate in Medicine, Johns Hopkins Hosp., 1904-12; Associate Professor of Medicine, Johns Hopkins Univ., 1906-12; Professor of Medicine, Jefferson Med. Coll., 1912; Physician to Jefferson and Penn. Hosps.; Fellow Royal Coll. of Phys. (England); American Philosophical Society; Lieut. Col., Canadian Army Med. Corps; *Physician-in-chief pro tem.*, P. B. B. H., March 13 to March 19, 1921.

SIR D'ARCY POWER, K.B.E.

M.A., M.B., Univ. of Oxford, 1882; F.R.C.S. (England), 1883; Consulting Surgeon, St. Bartholomew's Hospital, London, England; *Surgeon-in-chief pro tem.*, P. B. B. H., April 20 to May 5, 1924.

DR. DAVID RIESMAN

M.D., Univ. of Pa., 1892; Prof. Clin. Med., *ibid.*; Physician, Philadelphia General Hospital and University Hospital, Pa.; Clinician, Philadelphia; *Physician-in-chief pro tem.*, P. B. B. H., April 25 to May 2, 1927.

DR. EMMET RIXFORD

M.D., Cooper Medical College, San Francisco, 1891; Professor of Surgery, Leland-Stanford Jr. Univ.; *Surgeon-in-chief pro tem.*, P. B. B. H., April 25 to May 9, 1927.

SIR HUMPHRY ROLLESTON, Bart.

G.C.V.O.; K.C.B.; M.A. and M.D., Cambridge University; Fellow and sometime resident of the Royal College of Physicians of London; Hon. D.Sc., D.C.L., LL.D.; Fellow and sometime President of the Royal Society of Medicine; Consulting Physician (Temporary Surgeon Rear-Admiral) to the Royal Navy, 1914-19; Emeritus Physician, St. George's Hospital, London; Physician in Ordinary to H. M., the King; Regius Professor of Physic, University of Cambridge, Cambridge, England; *Physician-in-chief pro tem.*, P. B. B. H., March 25 to April 1, 1928.

DR. CLARENCE L. STARR

M.B., Univ. of Toronto; M.D., Univ. of New York; LL.D.; Professor of Surgery, Univ. of Toronto; Surgeon-in-chief, Toronto General Hosp.; *Surgeon-in-chief pro tem.*, P. B. B. H., March 7 to March 16, 1926. Died Dec. 25, 1928.

SIR HAROLD J. STILES

Kt., cr. 1918; K.B.E., cr. 1919; M.B., C.M., F.R.C.S., Edinburgh; British Colonel, R.A.M.C.; Mem. Army Med. Advisory Board;

VISITING PHYSICIANS AND SURGEONS

Surgeon, Royal Edinburgh Hosp. for Sick Children, and Chalmers Hosp.; Professor of Clinical Surgery, 1919-25; Late Lecturer on Applied Anatomy, Univ. of Edinburgh; *Surgeon-in-chief pro tem.*, *P. B. B. H.*, April 8 to April 21, 1923.

DR. WILLIAM S. THAYER

A.B., Harvard, 1885; M.D., *ibid.*, 1889; LL.D., Washington Coll., 1907; Hon. F.R.C.P.I., 1912; Brig. General, U. S. A. M. C., 1918-19; Professor of Medicine, Johns Hopkins Univ., 1919-21; Physician-in-Chief, Johns Hopkins Hosp., 1919-21; Visiting Physician, Johns Hopkins Hosp., 1921; *Physician-in-Chief pro tem.*, *P. B. B. H.*, Nov. 14 to Nov. 21, 1913.

SIR CUTHBERT WALLACE

C.B., 1918; K.C.M.G., 1916; M.B., B.S., London; F.R.C.S., Eng.; Surgeon to St. Thomas' Hosp.; Dean, St. Thomas' Hosp. Med. School; Late Surgeon, East London Hosp. for Children; Lecturer on Surgery, St. Thomas' Hosp.; served in South Africa as Surgeon to Portland Hosp., 1900; European War, 1914-18; Maj. Gen., A. M. S.; Consulting Surgeon, B. E. F., France; *Surgeon-in-Chief pro tem.*, *P. B. B. H.*, April 24 to May 8, 1922.

PROF. DAVID PERCIVAL DALBRECK WILKIE

O.B.E., M.D., M.Ch., F.R.C.S. (Edin. and Eng.); Professor of Surgery, University of Edinburgh; Surgeon to the Edinburgh Royal Infirmary; *Surgeon-in-chief pro tem.*, October 8 to October 11, 1929.

DR. ROLLIN TURNER WOODYATT

B.S., Univ. of Chicago, 1896; M.D., Rush Med. Coll., 1902; Clin. Professor of Medicine, Univ. of Chicago; Attending Physician, Presbyterian Hosp., Chicago; *Physician-in-Chief pro tem.*, *P. B. B. H.*, Dec. 16 to Dec. 23, 1921.

Traveling Fellows in Surgery

LEO M. DAVIDOFF	1926
HARLAN F. NEWTON	1927
FRANC D. INGRAHAM	1928

George Gorham Peters Traveling Fellow

ARTHUR J. McLEAN	1929
------------------------	------

Register of Present Members of the Staff

ABBREVIATIONS

P. B. B. H.—Peter Bent Brigham Hospital	M. G. H. —Massachusetts General Hospital
B. C. H. —Boston City Hospital	Harv. —Harvard University
J. H. H. —Johns Hopkins Hospital	H. O. —House Officer

ALT, HOWARD L.

B.S., Northwestern Univ., 1923; M.D., *ibid.*, 1924; H. O. in med. and surg., *ibid.*, July, 1923-July, 1925; *Asst. Res. Phys.*, P. B. B. H., July 1, 1925-Sept. 1, 1927; *Res. Phys.*, *ibid.*, Sept. 1, 1927-Sept. 1, 1929; Mitarbiter in Laboratorium, von Professor Warburg im Kaiser Wilhelm Institute for Biologie, Berlin.

AUB, JOSEPH C.

A.B., Harv.; M.D., *ibid.*, 1916; Physician-in-Chief, Huntington Memorial Hospital; Assoc. Prof. of Med., Harv.; *Sr. Assoc. in Med.*, P. B. B. H.

BARKER, M. HERBERT

B.S., Univ. of Chicago, 1923; M.D., Rush. Med. College, 1925; H. O., Wesley Memorial Hosp., 1925-27; *Med. H. O.*, P. B. B. H., Jan. 1-March 1, 1927; *Asst. Res. Phys.*, *ibid.*, July 1, 1927-July 1, 1929.

BENNETT, GRANVILLE A.

B.S., Univ. of Iowa, 1923; M.D., *ibid.*, 1925; Surg. Interne, Iowa State Univ. Hosp., 1925-26; Clin. Asst. Pathol., Bacteriol. and Surgery, 1926-27; *Res. Pathol.*, P. B. B. H., Sept. 1, 1927-Sept. 1, 1929.

BLAIN, DANIEL

B.A., Wash. and Lee Univ., 1921; M.D., Vanderbilt, 1929; *Med. H. O.*, P. B. B. H.

BLOTNER, HARRY H.

Two yrs. pre-med. work, Tufts, 1918-20; M.D., Tufts, 1924; Gen. Interne, Eastern Maine Gen. Hosp., July 1, 1924-July 1, 1925; *Asst. Res. Phys.*, P. B. B. H., Dec. 8, 1925-Dec. 1, 1926; Asst. in Med., H. M. S.; *Jr. Assoc. in Med.*, P. B. B. H., Dec. 1, 1926-Sept. 1, 1927; Asst. in Med., Harv.; *Jr. Assoc. in Med.*, P. B. B. H.

BOWEN, JOSEPH ANDREW

M.D., Univ. of Cincinnati, 1925; Interne, Cinn. Gen. Hosp., 1925-26; Fellow in Surg., Cleveland Clin., 1926-28; *Asst. Res. Surg.*, P. B. B. H., July 15, 1928-July 15, 1929.

PETER BENT BRIGHAM HOSPITAL

BOWIE, MORRIS A.

A.B., Univ. of Col., 1925; M.D., Harv., 1929; *Med. H. O., P. B. B. H.*

BOYD, WALTER WILLARD

E.E., Univ. of Va., 1920; M.S., M. I. T., 1922; M.D., Harv., 1928; *Surg. H. O., P. B. B. H.*

BRIGHAM, ROBERT B.

A.B., Williams, 1924; M.D., Harv., 1928; *Surg. H. O., P. B. B. H., Oct. 1, 1928-June 1, 1929 (resigned)*; H. O., Good Samaritan Hosp., Portland, Ore.

BUCKLEY RICHARD COTTER

B.S., Trinity, 1919; M.D., Yale, 1924; Res. Pathol., New Haven Hosp., 1924-27; Instr. in Pathol., Yale Medical School, 1924-27; *Surg. H. O., P. B. B. H., June 15, 1927-Nov. 1, 1928; Jr. Assoc. in Surg., ibid., Nov. 1, 1928-Nov. 1, 1929; Asst. Res. Surg., ibid., Nov. 1, 1929-April 1, 1930; in practice, Hartford, Conn.*

BUTLER, STUYVESANT P.

Ph.B., Yale, 1924; M.D., Univ. of Chicago, 1928; Interne, Presbyterian Hosp., Chicago, Ill.; *Asst. Res. Phys., P. B. B. H.*

CANNON, WALTER BRADFORD

A.B., Harv., 1896; A.M., *ibid.*, 1897; M.D., *ibid.*, 1900; S.D., Yale, 1923; LL.D., Wittenberg, 1927; C.B. (military), 1919; D.S.M., 1922; Instr. in Zoölogy, Harv., 1899-1900; Instr. in Physiol., *ibid.*, 1900-02; Asst. Prof. Physiol., *ibid.*, 1902-06; George Higginson Prof. Physiol., *ibid.*; Fellow, Am. Acad., 1906; Mem. Am. Philos. Soc., 1908; Mem. Nat. Acad. of Sciences, 1914; Croonian Lecturer, Royal Society, London, 1918; Corr. Mem., Société de Biologie, Paris, 1919; Reale Accademia delle Scienze, Bologna, 1921; Honorary Member, Sociedad de Biologia, Buenos Aires, 1922; Assoc. Mem., Société Belge de Biologie; *Consult. Physiol., P. B. B. H.*

CASTLE, EDWARD B.

B.S., Univ. of Mich., 1927; M.D., *ibid.*, 1929; *Surg. H. O., P. B. B. H.*

CHEEVER, DAVID

A.B., Harv., 1897; M.D., *ibid.*, 1901; *Surg. H. O., B. C. H., 1901-03; Asst. in Anat., Harv., 1903-08; Asst. Visit. Surg., B. C. H., 1905-12; Demonstr. in Anat., Harv., 1908-13; Asst. Prof. Surg. Anat., Harv.; Chief Surg., 2d Harv. Unit, B. E. F., France, 1915-16; Assoc. Prof. of Surg., Harv.; Surg., P. B. B. H.*

CHRISTIAN, HENRY ASBURY

A.B., and A.M., Randolph-Macon, 1895; Grad. Stud., *ibid.*, 1895-96; LL.D., *ibid.*, 1923; M.D., Johns Hopkins, 1900; A.M., Harv., 1903; Sc.D. (Hon.) Jefferson, 1928; Asst. Pathol., B. C. H., 1900-02; Asst. Visit. Pathol., *ibid.*, 1902-05; Asst. Visit. Pathol., Children's

REGISTER OF PRESENT MEMBERS OF THE STAFF

Hosp., Boston, 1902-05; Instr. in Pathol., Harv., 1902-05; Asst. Visit. Phys., Long Island Hosp., Boston, 1905; in charge of med. students, M. G. H., 1905-07; Instr. in Theory and Practice of Physic, Harv., 1905-07; Asst. Prof. in Theory and Practice of Physic, *ibid.*, 1907-08; Phys.-in-Chief, Carney Hosp., Boston, 1907-12; Dean, Faculty of Med. and of Med. Sch., Harv., 1908-12; Fellow, Am. Acad.; Corr. Mem., Wiener Gesellschaft. f. innere Medizin, etc.; formerly Major, M. R. C., U. S. Army; (on leave of absence Oct. 1, 1919-Oct. 1, 1920, as Chairman, Div. of Med. Sciences, Nat'l Research Council, Washington, D. C.); Hersey Prof., Theory and Practice of Physic, Harv., since 1908; *Physician-in-Chief*, P. B. B. H.

CLAY, CHARLES L.

B.S., Dart., 1919; M.D., Columbia Univ., Coll. of Phys. and Surgs., 1921; Interne, Lawrence General Hosp., 1921-22; Member, Med. Staff, Danvers State Hosp., 1922-28; *2nd Asst. Supt.*, P. B. B. H.

COCHRAN, H. WALTON

B.A., Univ. of Texas, 1924; M.D., Johns Hopkins, 1928; *Surg. H. O.*, P. B. B. H.

COX, WILLIAM V.

A.B., Univ. of Mich., 1921; M.D., Harv., 1925; H. O. and Asst. Res., Lakeside Hosp.; *Asst. Res. Surg.*, P. B. B. H., July 15, 1929-Jan. 6, 1930.

CRUMP, GEORGE CURTIS

B.S., Dartmouth, 1923; M.D., Harv., 1926; *Surg. H. O.*, P. B. B. H.

CRUTCHFIELD, WILLIAM G.

A.B., Univ. of Ky., 1923; M.D., Johns Hopkins, 1927; *Surg. Interne*, Women's Hosp., Baltimore, Md., 1927-28; *Surg. H. O.*, P. B. B. H.

CUSHING, HARVEY

A.B., Yale, 1891; A.M. and M.D., Harv., 1895; Hon. F. R. C. S., London, 1913, Ireland, 1918, and Edinburgh, 1927; Hon. A. M., Yale, 1913; D.Sc., Washington Univ., 1915, and Yale, 1919; LL.D., Western Reserve Univ., 1919, Cambridge, 1920, Glasgow, 1927, and Edinburgh, 1927; House Pupil, M. G. H., 1895-96; Res. Surg., J. H. H., 1896-1900; Litt. B., Jefferson, 1926, and Dartmouth, 1929; Docteur, Univ. Strasbourg, 1929; successively Asst. Instr. and Assoc. Prof. in Surg., Johns Hopkins, 1898-1912; Fellow, Am. Acad., 1914; Mem. Wash. Acad. Sciences, 1916; Nat'l Acad. Sciences, 1917; Director U. S. Army Base Hosp. No. 5, 1916-19; Col., M.C., U. S. Army; Companion of the Bath; D.S.M.; Offic. Legion d'Honneur; Stud., St. Bartholomew's Hosp., 1922; Mickle Fellow, Univ. of Toronto, 1922; Cameron Prize, Univ. of Edinburgh, 1924; Macewen Lecturer, Univ. of Glasgow, 1927; Moseley Prof. of Surg., Harv.; *Surg.-in-Chief*, P. B. B. H.

PETER BENT BRIGHAM HOSPITAL

DAY, HILBERT FRANCIS

Ph.B., Yale, 1901; M.D., Harv., 1905; Surg. H. O., B. C. H., 1905-07; House Phys., Boston Lying-in-Hosp., 1907-08; 3rd Asst. Visit. Surg., B. C. H. (Gynecol. Dept.), 1908-09; 4th Asst. Visit. Surg., B. C. H., 1909; District Phys., Boston Disp., 1909-12; Asst. to Surgs., Boston Disp., 1911-12; Surg., Maverick Disp., East Boston, 1913-14; Asst. Surg., Boston Disp., 1912-14; Surg., *ibid.*, 1914-19; 1st Asst. Surg., Beth Israel Hosp., 1917-18; Asst. in Surg., Harv., 1919-21; Instr. in Surg., *ibid.*; Surg.-in-Chief, Boston Disp.; Visiting Surg., Cambridge Hosp.; *Assoc. in Surg.*, P. B. B. H.

DENNY, GEORGE PARKMAN

A.B., Harv., 1909; M.D., *ibid.*, 1913; *Med. H. O.*, P. B. B. H., June 1, 1913-July 1, 1914; Vol., Lab. of Physiol. Research, Johns Hopkins, 1914-15; Capt., M. C., U. S. Army; Alumni Asst. in Med., Harv., 1915-16; Phys. to Med. Students, *ibid.*; Director of Scholarships, *ibid.*; Attend. Phys., Channing Home, Boston; Assoc. Chief, Med. Dept., Boston Disp.; *Assoc. in Med.*, P. B. B. H.

DERICK, CLIFFORD L.

M.D., McGill Univ., 1918; H. O., Montreal Gen. Hosp., 1919-22; Fellow, Nat. Research Council, 1922-23; *Asst. Res. Phys.*, P. B. B. H., 1923-24; Asst. in Med. and Research Fellow in Bio-Chemistry, Harv., 1923-24; Asst. Res. Phys., Rockefeller Hosp., N. Y., 1924-28; Asst. Prof. Med., Harv.; *Physician*, P. B. B. H.

DEROW, HARRY A.

M.B., Boston Univ., 1926; M.D., *ibid.*, 1927; Pathol. H. O., M. G. H., June, 1927-Jan., 1928; *Med. H. O.*, P. B. B. H., March 1, 1928-July 1, 1929; Teach. Fellow in Med., Harv.; Res. Phys., Beth Israel Hosp., Boston.

DOTT, NORMAN McOMISH

M.B., Ch.B., Edinburgh; F.R.C.S., Edinburgh; *Jr. Assoc. in Surg.*, P. B. B. H., Nov., 1923-June, 1924; Surg., Royal Edinburgh Hosp. for Sick Children; Surg., Deaconess Hosp., Edinburgh; Lect. in Surg. Diseases of Children, Edinburgh Univ.; *Acting Asst. Res. Surg.*, P. B. B. H., July-Aug., 1929.

DOZIER, PAUL C.

A.B., Univ. of Calif., 1926; M.D., Harv., 1929; *Med. H. O.*, P. B. B. H.

DYKE, CORNELIUS

B.S., Univ. of Iowa, 1926; M.D., *ibid.*, 1926; Interne, Chelsea Naval Hosp., 1926-27; H. O., Roent., P. B. B. H., 1927-28; *Asst. Res. in Roent.*, *ibid.*, 1928-29.

EGLOFF, WILLIAM C.

S.B., Univ. of Chicago, 1923; M.D., *ibid.*, 1927; Interne, St. Luke's Hosp., Chicago, 1926-28; Med. service, Billings Memorial Hosp., Univ. of Chicago, Jan.-July, 1928; *Jr. Assoc. in Med.*, P. B. B. H.

REGISTER OF PRESENT MEMBERS OF THE STAFF

EISENHARDT, LOUISE

M.D., Tufts, 1925; Interne, N. E. Hosp. for Women and Children, 1925-26; Attend. Phys., *ibid.*, 1926-29; Consult. Neurol., *ibid.*; *Jr. Assoc. in Neurol. Surg., P. B. B. H.*

EMERY, JR., EDWARD STANLEY

A.B., Harv., 1916; M.D., *ibid.*, 1920; *Med. H. O., P. B. B. H., Nov. 1, 1920-March 1, 1922; H. O. X-ray Dept., ibid., July 1, 1922-July 1, 1923; Stud. in Clin. of Dr. Sippy, Presbyterian Hosp., Chicago, 1923-24; Asst. in Med., Harv.; Phys. to Boston Disp.; Jr. Assoc. in Med., P. B. B. H., April 24, 1924-May 10, 1926; Assoc. in Med., ibid.*

ENGELBACH, FRIEDRICH

A.B., Illinois College, 1924; M.D., Harv., 1928; *Med. H. O., P. B. B. H., July 1, 1928-Nov. 1, 1929.*

FARNSWORTH, RICHARD WIGGIN

A.B., Univ. of Wis., 1924; M.D., Harv., 1928; *Surg. H. O., P. B. B. H.*

FARRELL, JAMES IRVING

A.B., Hamilton, 1925; M.D., Harv., 1929; *Med. H. O., P. B. B. H.*

FEENEY, NEIL

M.D., McGill Med. School, 1927; Interne, Montreal Gen. Hosp.; *Asst. Res. Phys., P. B. B. H.*

FENDER, FREDERICK ALLEN

A.B., Univ. of Calif., 1924; M.D., Harv., 1929; *Surg. H. O., P. B. B. H.*

FITZ, REGINALD

A.B., Harv., 1906; M.D., *ibid.*, 1909; Med. House Pupil, M. G. H., 1910-11; Vol. Asst. in Pharmacol. and in Med. Clinic, J. H. H., 1911-12; *Sr. Med. H. O., P. B. B. H., Nov. 1, 1912-July 1, 1913; Asst. Res. Phys., ibid., July 1, 1913-Sept. 1, 1915 (granted leave of absence to Dec. 31, 1916); Fellow in Physiol., Harv., 1914-15; Asst. Res. Phys., Rockefeller Inst. Hosp., New York City; Major, M. C., U. S. Army, 1917-19; Assoc. in Med. and Act. Res. Phys., East Med. Serv., M. G. H., 1919-20; Mayo Clinic and Mayo Foundation, 1920-22; Assoc. Prof. of Med., Harv.; *Phys., P. B. B. H.**

FITZHUGH, GREENE S.

B.S., Univ. of Illinois, 1921; M.D., Harv., 1927; *Med. H. O., P. B. B. H., July 1, 1927-Nov. 1, 1928; Jr. Assoc. in Med., ibid., Nov. 1, 1928-Sept. 15, 1929; Asst. Res. Phys., Thorndike Lab., B. C. H.*

FLYNN, JOHN MOLLOY

A.B., Boston College, 1923; M.D., Harv., 1927; *Med. H. O., P. B. B. H., Nov. 1, 1927-March 1, 1929; Asst. in Med., Harv.; in practice, Boston.*

PETER BENT BRIGHAM HOSPITAL

FOLIN, OTTO

S.B., Univ. of Minn., 1892; Ph.D., Univ. of Chicago, 1898; Sc.D., Washington Univ., 1915; Sc.D., Univ. of Chicago, 1916; Hon. M.D., Lund, 1918; Mem. Nat. Acad., 1916; Stud., Univs. of Sweden and Germany, 1897 and 1898; Asst. Prof. of Physiol. Chem., Univ. of W. Va., 1899-1900; Research Chem., McLean Hosp., Waverley, 1900-08; Assoc. Prof. of Biol. Chem., Harv., 1907-09; Hamilton Kuhn Prof. of Biol. Chem., *ibid.*; Chem., M. G. H.; *Consult. Chem.*, P. B. B. H.

FRIEDGOOD, HARRY B.

A.B., Univ. of Mich., 1924; M.D., Johns Hopkins, 1928; Act. Interne, Simpson Memorial Hosp., Ann Arbor, Mich., 1927-28; *Med. H. O.*, P. B. B. H., Nov. 1, 1928-March 1, 1930; Jr. Instr. in Med., Univ. of Mich.

FROTHINGHAM, CHANNING

A.B., Harv., 1902; M.D., *ibid.*, 1906; Med. H. O., B. C. H., 1906-07; Asst. Visit. Phys., Carney Hosp., O. P. D., Boston, 1908-12; Sec'y, Faculty of Med., Harv., 1908-13; Asst. in Theory and Practice of Physic, *ibid.*, 1908-12; Instr. in Med., *ibid.*, 1913-22; Lieut. Col., M. C., U. S. Army, June 1, 1917-Dec. 5, 1918; Asst. Prof. of Med., Harv., 1922-28; Assoc. Clin. Prof. of Med., Harv.; Chairman, Dept. of Med., *ibid.*; *Physician*, P. B. B. H.

FULTON, MARSHALL N.

Ph.B., Brown Univ., 1920; Rhodes Scholar, Oxford; A.B., Oxford Univ., 1922; M.D., Johns Hopkins, 1925; Vol. Asst. in Pathol., Johns Hopkins, Sept., 1925-Feb., 1926; *Med. H. O.*, P. B. B. H., March 1, 1926-July 1, 1927; Asst. Res. Phys., *ibid.*, Sept. 1, 1927-Sept. 1, 1929; *Res. Phys.*, *ibid.*

GLENN, FRANK N.

M.D., Washington Univ., 1927; Med. Service, Strong Mem. Hosp., July, 1927-July, 1928; *Surg. H. O.*, P. B. B. H.

GRABFIELD, GUSTAVE PHILIP

A.B., Williams, 1912; M.D., Harv., 1915; Teaching Fellow, Dept. of Pharmacol., *ibid.*, 1915-16; *Med. H. O.*, P. B. B. H., March 1, 1916-June 17, 1917; Capt., M. C., U. S. Army, 1917-19; Asst. in Roent., Univ. of Mich. Hosp., 1919-20; Instr. in Pharm., Harv., 1920-21; Asst. in Pharm., *ibid.*, 1921-22; Instr. in Pharm. and Asst. in Med., *ibid.*; Jr. Assoc. in Med., P. B. B. H., July 1, 1922-Nov. 12, 1925; *Assoc. in Med.*, *ibid.*

GREEN, WILLIAM T.

A.B., Indiana Univ., 1921; A.M., *ibid.*, 1922; M.D., *ibid.*, 1925; Interne, Indiana Univ. Hosp.; Asst. Res. Surg., Henry Ford Hospital, Detroit; *Surg. H. O.*, P. B. B. H., Aug. 1, 1929-Feb. 1, 1930; *Asst. Res. Surg.*, *ibid.*

REGISTER OF PRESENT MEMBERS OF THE STAFF

HAHN, RICHARD G.

B.S., Lafayette; M.D., Harv., 1928; *Med. H. O.*, *P. B. B. H.*

HALBERSLEBEN, DAVID L.

A.B., Univ. of Nebraska, 1924; M.D., Harv., 1928; *Med. H. O.*, *P. B. B. H.*, July 1, 1928-Nov. 1, 1929.

HALL, FRANCIS C.

Litt.B., Princeton, 1913; M.D., Harv., 1917; H. O., M. G. H., 1918; M.C., U. S. Army, 1918-19; Asst. Visit. Phys. and Visit. Phys. to O. P. D., M. G. H., 1920-22; *Assoc. in Med.*, *P. B. B. H.*

HARBIN, JR., ROBERT MAXWELL

B.S., Univ. of Ga., 1925; M.D., Emory Univ. Med. School, 1928; *Surg. H. O.*, *P. B. B. H.*, July 1, 1928-Nov. 1, 1929.

HARRISON, JR., WILLIAM GROCE

A.B., Univ. of Mich., 1924; M.D., Johns Hopkins, 1928; *Med. H. O.*, *P. B. B. H.*

HARVEY, EARLE A.

B.S., Univ. of Wash., 1925; M.D., Harv., 1929; *Med. H. O.*, *P. B. B. H.*

HASS, GEORGE MARVIN

M.D., Harv., 1929; *Pathol. H. O.*, *P. B. B. H.*

HOEN, THOMAS I.

A.B., Johns Hopkins, 1924; M.D., *ibid.*, 1928; Fellow in Surg., *ibid.*; *Surg. H. O.*, *P. B. B. H.*

HOMANS, JOHN

A.B., Harv., 1899; M.D., *ibid.*, 1903; House Pupil, M. G. H., 1903-04; Asst. in Hunterian Lab., Johns Hopkins, 1908-09; Vol. Asst. Surg., Children's Hosp., Boston, 1909-10; Surg., M. G. H., O. P. D., 1910-12; Asst. in Surg., Harv., 1910-13; Surg., Boston Dispensary, 1913-14; Assoc. in Surg., Harv., 1914-15; Major, M. C., U. S. Army, 1918-19; Asst. Prof. Surg., Harv.; *Surg.*, *P. B. B. H.*

HORRAX, GILBERT

A.B., Williams, 1909; M.D., Johns Hopkins, 1913; *Surg. H. O.*, *P. B. B. H.*, July 1, 1913-Nov. 1, 1914; Arthur Tracy Cabot Fellow in charge of Lab. of Surg. Research, Harv., 1914-15; *Asst. Res. Surg.*, *P. B. B. H.*, 1915-16; Res. Surg., M. G. H., 1916-17; Major, M. C., U. S. Army, 1917-19; Instr. in Surg. and Chairman, Dept. of Surg., Harv.; Neurol. Surg., Children's Hosp., Boston; Consult. Neurol. Surg., N. E. Deaconess Hosp.; *Assoc. in Neurol. Surg.*, *P. B. B. H.*, Oct., 1919-March, 1928; *Sr. Assoc. in Neurol. Surg.*, *ibid.*

PETER BENT BRIGHAM HOSPITAL

HOUCK, GEORGE H.

A.B., Univ. of Oregon, 1923; M.D., Harv., 1927; *Med. H. O., P. B. B. H.*, Nov. 1, 1927-March, 1929; Asst. Res. in Med., Lane Hospital and Stanford Univ. Med. Sch.

HOWLAND, JOSEPH BRIGGS

M.D., Harv., 1896; Surg. House Pupil, M. G. H., 1896-97; Asst. Phys., State Hosp., Tewksbury, Massachusetts, 1898-1901; Asst. Supt., *ibid.*, 1901-02; Supt., State Colony for the Insane, Gardner, Massachusetts, 1902-07; Asst. Res. Phys., M. G. H., 1907-17; Asst. Administrator, *ibid.*, 1908-17; Act. Administrator and Res. Phys., *ibid.*, 1917-19; Pres., American Hosp. Assoc., 1919-20; Mem. Mass. State Bd. of Reg. of Nurses, 1919-24; Pres., N. E. Hosp. Assoc., 1921-22; Trustee, *ibid.*; Lecturer, Hosp. Adm., Harv.; Secretary, Harvard Cancer Comm.; Administrator, Collis P. Huntington Mem. Hosp. (Harv.); Supt., *P. B. B. H.*

HOYT, LYMAN HOWARD

B.S., Univ. of Iowa; M.D., *ibid.*, 1925; Med. Interne, Univ. Hosp., Iowa City, 1925-26; Asst. in Med., Harv.; *Asst. Res. Phys., P. B. B. H.*, Aug. 1, 1926-Nov. 1, 1927; *Jr. Assoc. in Med.*, *ibid.*

JACKSON, HOWARD L.

M.D., Tufts, 1918; Interne, Springfield Hosp.; in practice, Springfield, Mass.; *H. O., Roent., P. B. B. H.*

KENNEDY, W. ROLAND

B.Sc., McGill, 1922; M.D., C.M., *ibid.*, 1925; Interne, rotating service, Montreal Gen. Hosp., 1925-26; Pathol. service, *ibid.*, 1926; Sr. in Med., *ibid.*, 1927-28; *Asst. Res. Phys., P. B. B. H.*

KENT, HAROLD A.

H.D.S., 1919; Assoc. to Dr. Miner, Prof. of Oral Surg. and Dean, H.D.S.; *Dental Surg., P. B. B. H.*, 1922-29; Dental Surg., Forsyth Dental Infirmary; Instr. Oral Surg., H.D.S.; Dental Surg., N. E. Deaconess Hosp.; *Consult. Dental Surg., P. B. B. H.*

KIRK, ESLEY J.

M.D., Univ. of Nebraska, 1926; H. O., Douglas Co. Hosp., Omaha, Nebraska, 1926-27; *Asst. Res. Phys., P. B. B. H.*, Aug., 1927-Aug., 1928; *Jr. Assoc. in Med.*, *ibid.*, Aug., 1928-July, 1929.

KLUMPP, THEODORE G.

B.S., Princeton, 1924; M.D., Harv., 1928; *Med. H. O., P. B. B. H.*

LEVINE, SAMUEL ALBERT

A.B., Harv., 1911; M.D., *ibid.*, 1914; *Assoc. in Med., P. B. B. H.*, July 1, 1914-July 1, 1915; *Med. H. O., ibid.*, July 1, 1915-Nov. 1, 1916; Moseley Travelling Fellow, Harv., 1916-17; Asst., Rockefeller Inst. Hosp., New York, 1916-17; Capt., M. C., U. S. Army, 1917-19; Instr. in Med., Harv., 1919; Consult. Phys., Boston Psychopathic Hosp., 1921-24; Phys. to Boston Disp., 1924-26; Visit.

REGISTER OF PRESENT MEMBERS OF THE STAFF

Phys., Beth Israel Hosp.; *Assoc. in Med., P. B. B. H., Aug., 1919-March, 1928; Sr. Assoc. in Med., ibid.*

LIGHT, RICHARD U.

Ph.B., Yale, 1924; M.D., Univ. of Mich., 1928; *Surg. H. O., P. B. B. H.*

MACPHERSON, DONALD JOHN

B.S., Univ. of Rochester, 1911; M.D., Harv., 1915; *Med. H. O., P. B. B. H., July 1, 1915-Nov. 1, 1916; Asst. Res. Phys., ibid., Nov., 1916-June 22, 1917; Capt., M. C., U. S. Army, 1917-19; Assoc. in Med., P. B. B. H.*

MAHONEY, WILLIAM DE G.

A.B., Holy Cross, 1925; M.D., Harv., 1929; *Surg. H. O., P. B. B. H.*

MARTIN, PAUL

S.B., Brussels, 1911; M.D., *ibid.*, 1920; Med. Interne, Hosp. St. Pierre, Brussels, 1919-20; Surg. Interne, New Haven Hosp., 1920-21; *Assoc. in Surg., P. B. B. H., Sept. 1, 1921-March 1, 1922; Asst. Res. Surg., ibid., March 1-Nov. 1, 1922; Asst. in Surg., Brussels Univ. Hosp.; in practice, Brussels, Belgium; Arthur Tracy Cabot Fellow, Harv., 1929-30; Assoc. in Surg., P. B. B. H., Jan.-April, 1930.*

MAUPIN, JR., JAMES L.

A.B., Univ. of Calif., 1921; M.D., Stanford, 1926; Interne, Lane and Stanford Hosp., 1925-27; in practice, Fresno, Calif., 1927-28; Member, Fresno Co. Gen. Hosp. Staff, 1927-28; *Asst. Res. Surg., P. B. B. H., Sept. 1, 1928-March 1, 1929; Surg. Staff, Fresno Gen. Hosp.*

MCEACHERN, THOMAS H.

B.A., Univ. of Mich., 1925; M.D., *ibid.*, 1927; Vol. Asst., Pathol. Dept., Univ. of Mich., July-Nov., 1927; *Med. H. O., P. B. B. H., March 1, 1928-July 1, 1929; Pediatric H. O., N. Y. Nursery and Child's Hosp.*

MCGRATH, ROBERT F.

M.D., Northwestern, 1928; Interne, St. Luke's Hosp., Chicago; *Jr. Assoc. in Med., P. B. B. H.*

MCLEAN, ARTHUR JOHN

A.B., Reed Coll., Portland, Oregon, 1921; M.D., Johns Hopkins, 1925; *Surg. H. O., P. B. B. H., July 1, 1925-Nov. 1, 1926; Assoc. in Surg., ibid., Jan. 10-Sept. 23, 1927; Arthur Tracy Cabot Fellow, Harv., 1926-27; Asst. Res. Surg., P. B. B. H., Sept., 1927-June, 1929; Act. Res. Surg., ibid., June-Sept., 1929; George Gorham Peters Traveling Fellow, 1929-30.*

PETER BENT BRIGHAM HOSPITAL

MEAGHER, RICHARD

Ph.B., Yale, 1921; M.D., Cornell, 1927; *Pathol. H. O.*, *P. B. B. H.*, Sept. 1, 1927-Jan. 1, 1928; *Surg. H. O.*, *ibid.*, April 1, 1928-Aug. 1, 1929; *Asst. Res. Surg.*, *ibid.*

MENARD, OLIVER J.

B.S., Colgate, 1922; M.D., Jefferson Med. College, 1926; Interne, Rochester General Hosp., July 1, 1926-July 1, 1927; *Asst. Clin. Phys.*, Rome State School, July 1, 1927-Oct. 15, 1927; *Med. H. O.*, *P. B. B. H.*, Nov. 1, 1927-March 1, 1929; *Asst. Res. in Med.*, Long Island Hosp., Nov.-July, 1929; *Asst. in Med.*, Lahey Clinic, Boston.

MINOT, GEORGE R.

A.B., Harv., 1908; M.D., *ibid.*, 1912; S.D., Harv., 1928; *Med. H. O.*, East Med. Serv., M. G. H., July, 1912-Dec., 1913; *Asst. Res. Phys.*, Johns Hopkins, 1913-14; *Asst. in Med.*, Johns Hopkins, 1914-15; Special Research Worker, Johns Hopkins, 1914-15; *Asst. in Med.*, Harv., 1915-18; *Asst. in Med.*, M. G. H., 1915-18; *Asst. in Chem.*, Harv., 1915-16; Dalton Scholar, M. G. H., 1916-20; *Visit. Phys.*, St. Luke's Convalescent Home, Boston, 1916-18; *Assoc. in Med.*, M. G. H., 1918-23; *Asst. Consult. Phys.*, Huntington Mem. Hosp., 1917-19; *Phys.*, *ibid.*, 1919-23; *Contract Surg.*, U. S. A., Sept., 1917, and Sept. 15-Nov. 10, 1918; *Consult. Phys.*, Mass. Eye and Ear Infirmary, 1922-24; *Phys. to Special Clinic*, M. G. H., 1923-25; *Asst. Prof. of Med.*, Harv., 1918-27; *Clin. Prof. of Med.*, *ibid.*, 1927-28; *Phys. and Chief of Med. Labs.*, Huntington Mem. Hosp.; *Assoc. in Med.*, *P. B. B. H.*, Feb. 12, 1925-March 8, 1928; Member, Board of Consultation, M. G. H.; Director, Thorndike Mem. Lab., B. C. H.; *Visit. Phys. and Chief of 4th Med. Serv.*, B. C. H.; *Consult. Phys.*, Beth Israel Hosp.; *Prof. of Med.*, Harv.; *Consult. Phys.*, *P. B. B. H.*

MONROE, ROBERT THORNHILL

A.B., Univ. of Mich., 1918; M.D., *ibid.*, 1924; *Med. H. O.*, *P. B. B. H.*, July 1, 1924-Nov. 1, 1925; *Asst. Res. Phys.*, *ibid.*, Nov. 1, 1925-Sept. 1, 1926; *Asst. in Med.*, Harv., 1926-28; *Instr. in Med.*, *ibid.*; *Jr. Assoc. in Med.*, *P. B. B. H.*

MURPHY, WILLIAM P.

A.B., Univ. of Ore., 1914; M.D., Harv., 1922, as of 1920; *H. O.*, R. I. Hosp., 1920-22; *Asst. Res. Phys.*, *P. B. B. H.*, 1922-23; *Asst. in Med.*, Harv., 1924-28; *Instr. in Med.*, *ibid.*; *Jr. Assoc. in Med.*, *P. B. B. H.*, July 10, 1923-May 10, 1926; *Assoc. in Med.*, *ibid.*

NEWTON, FRANCIS CHANDLER

A.B., Amherst, 1915; M.D., Harv., 1919; *Surg. H. O.*, *P. B. B. H.*, March 15, 1919-July 1, 1920; *Asst. Res. Surg.*, *ibid.*, July 1, 1920-Sept. 1, 1921; *Res. Surg.*, *ibid.*, Sept. 1, 1921-July 1, 1923; *Jr. Assoc. in Surg.*, *ibid.*, July 1-Sept. 15, 1923; *Asst. in Surg.*, Harv., 1920-23; Moseley Trav. Fellow, *ibid.*, 1923-24; Vol. Asst., Phys. Inst., Berne,

REGISTER OF PRESENT MEMBERS OF THE STAFF

Switzerland, 1923-24; Instr. in Surg., Harv., 1924-28; Faculty Instr. in Surg., *ibid.*; *Assoc. in Surg., P. B. B. H., 1924-28; Sr. Assoc. in Surg., ibid.*

NEWTON, HARLAN FAY

A.B., Yale, 1916; M.D., Harv., 1920; Pathol. H. O., B. C. H., 1920-21; *Surg. H. O., P. B. B. H., Nov. 1, 1921-March 1, 1923; Asst. Res. Surg., ibid., Oct. 1, 1923-July 1, 1924; Res. Surg., ibid., July 1, 1924-Oct. 1, 1926; Austin Teach. Fellow in Surg., Harv., 1924-27; Workman Fellow in Physiol., ibid., 1926-27; Moseley and P. B. B. H. Travel. Fellow in Surg., 1927-28; Asst., first Med. Clin., Hamburg-Eppendorf, Germany, 1927-28; Austin Teach. Fellow in Surg., Harv.; *Jr. Assoc. in Surg., P. B. B. H.**

NICHOL, ARTHUR D.

M.D., Ohio State Univ., 1926; Interne, St. Luke's Hosp., Cleveland, 1926-28; *Asst. Res. Phys., P. B. B. H., Aug., 1928-Aug., 1929.*

O'HARE, JAMES PATRICK

A.B., Harv., 1908; M.D., *ibid.*, 1911; Med. H. O., B. C. H., So. Dept., 1911; Med. H. O., Carney Hosp., Boston, 1912-13; Fellow in Med., Harv., 1913-15; *Asst. Visit. Phys., Carney Hosp., 1913-15; Asst. Visit. Phys., B. C. H., 1915-17; Asst. in Med., Harv., 1915-18; Assoc. in Med., P. B. B. H., July 1, 1915-Aug. 1, 1917; Act. Phys., ibid., Aug. 1, 1917-Feb. 1, 1918; Assoc. in Med., ibid., Feb. 1-April 1, 1918; Act. Phys., ibid., April 1, 1918-Jan. 1, 1919; Assoc. in Med., ibid., Jan. 1, 1919-March 8, 1928; Instr. in Med., Harv.; *Sr. Assoc. in Med., P. B. B. H.**

OLDBERG, ERIC

B.S., Northwestern, 1923; M.S., *ibid.*, 1926; M.D., *ibid.*, 1927; Ph.D., *ibid.*, 1928; *Asst. in Physiol. and Pharmacol., ibid., 1923-27; Instr. in Physiol., ibid., 1927-28; Elizabeth J. Ward Fellow in Physiol., ibid., 1928; Surg. H. O., P. B. B. H., Jan. 1, 1928-April, 1929; Asst. Res. Surg., P. B. B. H.*

ORMOND, JR., ALFRED CURTIS

A.B., Davidson, 1922; M.D., Harv., 1927; *Surg. H. O., P. B. B. H., Oct. 1, 1927-Feb. 1, 1929.*

OSGOOD, RUDOLPH

S.B., Harv., 1924; M.D., Univ. of Chicago, 1921; *Pathol. H. O., P. B. B. H.*

PICKWICK, ERSKINE R.

M.D., Tufts, 1924; Interne, Newton Hosp.; *Asst. Res. (Exec.) Worcester City Hosp., 1927-29; H. O., Roent., P. B. B. H.*

POWERS, JOHN HOWARD

A.B., Bates, 1919; B.A., Oxon, 1923; M.D., Harv., 1925; *Surg. H. O., Lakeside Hosp., Cleveland, Ohio, 1925-26; Asst. Res. Surg., P.*

PETER BENT BRIGHAM HOSPITAL

B. B. H., Oct. 15, 1926-Sept. 15, 1927; Arthur Tracy Cabot Fellow in charge of Lab. of Surg. Research, Harv.; *Assoc. in Surg.*, *P. B. B. H.*, Sept., 1927-Oct., 1928; *Res. Surg.*, *ibid.*

QUINBY, WILLIAM CARTER

A.B., Harv., 1899; M.D., *ibid.*, 1902; House Pupil, M. G. H., 1902-03; Asst. G. U. Surg., Boston Disp., 1907-09; Asst. Surg., N. E. Baptist Hosp., Boston, 1908-14; in charge of Experimental Surg., Brady Clin., J. H. H., 1914-16; *Assoc. in Urol.*, *ibid.*, 1915-16; Clin. Prof., G. U. Surg., Harv.; *Urol. Surg.*, *P. B. B. H.*

RAWLINGS, J. MOTT

B.S., Princeton, 1921; M.D., Johns Hopkins, 1925; Interne, *ibid.*, 1925-26; Instr. in Pathol., *ibid.*, 1926-27; H. O. Med. Serv., Baltimore City Hosp., 1927-28; *Pathol. H. O.*, *P. B. B. H.*, July 1, 1928-July 1, 1929.

RAY, BRONSON S.

B.S., Templeton College, 1924; M.D., Northwestern, 1928; Interne, Wesley Mem. Hosp., 1928-29; *Surg. H. O.*, *P. B. B. H.*

RENNIE, THOMAS A. C.

B.S., Univ. of Pittsburgh, 1924; M.D., Harv., 1928; *Med. H. O.*, *P. B. B. H.*, Nov. 1, 1928-March 1, 1930.

RICHARDS, LYMAN G.

A.B., Harv., 1916; M.D., *ibid.*, 1919; in Smyrna with Near East Relief, 1919; Surg. H. O., St. Luke's Hosp., New York, 1920-22; Mass. Eye and Ear Infirmary, Ear, Nose and Throat Serv., 1922-24; Chief in Otolaryngology, Children's Hosp., Boston; *Assoc. in Otolaryngology*, New England Deaconess Hosp.; Consultant in Bronchoscopy, Union Hosp., Fall River; Permanent Staff, Baptist Hosp., Boston; *Assoc. in Otolaryngology*, *P. B. B. H.*

ROOT, HOWARD FRANK

A.B., Harv., 1913; M.D., *ibid.*, 1919; *Med. H. O.*, *P. B. B. H.*, Feb. 13, 1919-Jan. 1, 1920; Clin. Lab., J. H. H., 1920; Phys., N. E. Deaconess Hosp.; *Assoc. in Med.*, *P. B. B. H.*

RUBLEE, C. D.

M.D., Univ. of Vt., 1922; in practice, 1922-28; *Roent. H. O.*, *P. B. B. H.*, Nov. 1, 1928-Feb. 1, 1929.

SAGEBIEL, JAMES LAMBERT

B.S., Denison Univ., 1924; M.D., Harv., 1927; *Surg. H. O.*, *P. B. B. H.*, Oct. 1, 1927-Feb. 1, 1929; H. O., Boston Lying-In Hosp., March 1, 1929-Sept. 15, 1929; in practice, Dayton, Ohio.

SALLEY, S. MARION

B.S., Emory Univ., Atlanta, 1924; M.D., *ibid.*, 1928; Interne, Grady Hosp., July 1, 1928-July 1, 1929; *Asst. Res. Phys.*, *P. B. B. H.*

REGISTER OF PRESENT MEMBERS OF THE STAFF

SCARFF, JOHN E.

B.S., Princeton, 1920; M.D., Johns Hopkins, 1924; experimental lab. work, *ibid.*, 1924-25; H. O., *ibid.*, 1925-27; *Surg. H. O.*, P. B. B. H., March 1, 1927-July 1, 1928; *Asst. Res. Surg.*, *ibid.*

SCHREIBER, FREDERIC

A.B., Univ. of Mich., 1918; M.D., Harv., 1923; Interne, Harper Hosp., 1923-25; Asst. to Dr. Max Ballin, 1925-28; Asst. in Surg., O. P. D., Harper Hosp., 1926; *Asst. Res. Surg.*, P. B. B. H., Oct. 1, 1928-Aug. 1, 1929; Asst. Surg. (Neurosurgery) Harper Hosp., 1929; Neurosurgeon, Children's Hosp. of Mich., Evangelical Deaconess Hosp.

SCHULZ, REUBEN Z.

A.B., Central Wesleyan Coll., Warrenton, Missouri, 1921; M.A., Univ. of Nebraska, 1926; M.D., *ibid.*, 1927; Fellow and Asst., Dept. of Anat., *ibid.*, 1924-25; Asst. in Bact. and Immunology, *ibid.*, 1925-26; *Pathol. H. O.*, P. B. B. H., July 1, 1927-July 1, 1928; Res. Pathol., Children's Hosp., 1928-29; *Res. Pathol.*, P. B. B. H.

SHAMBAUGH, JR., GEORGE E.

A.B., Amherst, 1924; M.D., Harv., 1928; *Med. H. O.*, P. B. B. H., Nov. 1, 1928-March 1, 1930.

SHELBURNE, SAMUEL A.

B.A., Rice Inst., Houston, Texas; M.D., Univ. of Pa., 1928; H. O., Univ. Hosp., Phil.; Lab. work, Shreveport Charity Hosp.; *Asst. Res. Phys.*, P. B. B. H.

SMITH, W. CARTER

B.S., Emory Univ., 1924; M.D., *ibid.*, 1926; Interne, Grady Hosp., Atlanta, Ga., 1926-27; Asst. Res. Phys., Vanderbilt Univ. Hosp., 1927-28; *Jr. Assoc. in Med.*, P. B. B. H.; Res. Phys., Grady Hosp. (Emory Univ.).

SOSMAN, MERRILL C.

A.B., Univ. of Wis., 1913; M.D., Johns Hopkins, 1917; Res. Phys., Soldiers' Home Hosp., Washington, D. C., 1917-18; entered U. S. A., M. C.; Army Med. Sch., X-ray Dept., Walter Reed Hosp., 1919-21; X-ray Dept., M. G. H., 1921; Consult. Roent., C. P. Huntington Mem. Hosp.; Consult. Roent., Peabody Home for Crippled Children; Assoc. in Roent., Children's Hosp.; *Roentgenologist*, P. B. B. H.

STRAYHORN, JR., WILLIAM DAVID

B.A., Vanderbilt, 1925; M.D., *ibid.*, 1928; *Med. H. O.*, P. B. B. H., July 1, 1928-Nov. 1, 1929.

STROCK, MOSES SOLOMON

D.M.S., Harv., 1923; Instr. in Extracting and Oral Surg., *ibid.*; *Dental Surg.*, P. B. B. H.

PETER BENT BRIGHAM HOSPITAL

TAYLOR, ARTHUR C.

B.A., Univ. of Wisconsin, 1921; M.A., *ibid.*, 1924; M.D., Harv., 1927; *Med. H. O., P. B. B. H., July 1, 1927-Nov. 1, 1928; Pathol. H. O., ibid., Jan., 1929-Jan., 1930; Asst. Res. in Surg., Wis. Gen. Hosp.*

TEEL, HAROLD M.

M.D., Harv., 1929; Arthur Tracy Cabot Fellow, Harv., Jan.-Sept., 1929; *Jr. Assoc. in Surg., P. B. B. H., July 1-Sept. 1, 1929.*

THOMPSON, KENNETH WADE

A.B., Leland Stanford, 1926; M.D., Harv., 1929; *Surg. H. O., P. B. B. H.*

THURMON, FRANCIS M.

B.S., Illinois Coll., 1922; M.D., Harv., 1926; Interne, Wesley Mem. Hosp., 1926-28; Fellow in Med., Harv., 1928-29; *Asst. Res. Phys., P. B. B. H.*

TOLLMAN, JAMES PERRY

B.S., Univ. of Neb., 1927; M.D., *ibid.*, 1929; *Med. H. O., P. B. B. H.*

TROPPOLI, DANIEL V.

A.B., A.M., Brown Univ., 1923; M.D., Harv., 1927; Neurol. H. O., M. G. H., June, 1927-Jan., 1928; *Med. H. O., P. B. B. H., March 1, 1928-July 1, 1929; Res. Phys., R. I. Hosp.*

VOGT, EDWARD C.

M.D., Univ. of Iowa, 1923; Interne, St. Vincent's Hosp., Toledo, Ohio, 1923-24; *H. O., X-ray Dept., P. B. B. H., Sept. 12, 1924-March 1, 1925; Asst. Res. in Roent., ibid., March 1-Sept., 1925; Res. in Roent., New Haven Hosp., Oct., 1925-July, 1926; Roent., Children's Hosp., Boston; Roent., Huntington Mem. Hosp., 1928; Assoc. in Roent., P. B. B. H.*

WALKER, JR., GEORGE L.

B.S., Emory Univ., 1924; M.D., *ibid.*, 1926; H. O., Grady Hosp., 1926-27; House Phys., *ibid.*, 1927-28; *Res. Phys., P. B. B. H., Sept. 1, 1928-Sept. 1, 1929; Res. Phys., Cornell Div., Bellevue Hosp., N. Y.*

WALKER, ISAAC CHANDLER

A.B., Johns Hopkins, 1905; M.D., *ibid.*, 1909; Grad. Stud., Lab. of Theory and Practice of Physic, Harv., 1910-11; *Med. H. O., Carney Hosp., Boston, 1910-11; Lect. on Clin. Microscopy and Phys. Diag., Univ. of Iowa, 1911-12; Stud. of Prof. Morawitz, Freiburg, Germany, 1912; Research, Rockefeller Hosp., New York, 1912; Sr. Med. H. O., P. B. B. H., Nov. 1, 1912-March 1, 1913; Asst. Res. Phys., ibid., March 1, 1913-March 1, 1914; Act. Res. Phys., ibid., March 1, 1914-Jan. 1, 1915; Asst. Res. Phys., ibid., Jan. 1, 1915-March 1, 1915 (granted leave of absence from March 1, 1915-Sept. 1, 1915); Med. Chief, Hosp. Ab. 32^{bis} Passy Yonne, France, 1915;*

REGISTER OF PRESENT MEMBERS OF THE STAFF

Asst. in Pharmacol., Harv.; Alumni Asst. in Med., *ibid.*; *Act. Phys.*, *P. B. B. H.*, Aug. 1, 1917-Feb. 1, 1918, and April 1, 1918-Dec. 16, 1918; Asst. Prof. of Med., Harv., 1918-19; *Assoc. in Med.*, *P. B. B. H.*

WOLBACH, SIMEON BURT

Stud., Harv., 2 yrs.; M.D., *ibid.*, 1903; 2nd Asst. in Pathol., B. C. H., 1903-04; 1st Asst. in Pathol., *ibid.*, 1904-05; 2nd Asst. Visit. Pathol., *ibid.*, 1905-08; Pathol., Long Island Hosp., Boston, 1905-08; Pathol., Boston Floating Hosp., 1905-08; Pathol., Mass. Infants' Asylum, 1905-08; Asst. in Pathol., Harv., 1905-06; Instr. in Pathol., *ibid.*, 1906-08; Adjunct Prof. of Pathol. and Bacteriol., Albany Med. Coll., 1908-09; Director, Bender Hygienic Lab., Albany, New York, 1908-09; Pathol., Albany City Hosp., 1908-09; Pathol., St. Peter's Hosp., Albany, 1908-09; Pathol., St. Margaret's House, Albany, 1908-09; Lecturer in Pathol., McGill Univ., 1909-11; Director, Histol. Lab., *ibid.*, 1909-11; Director, Montreal Gen. Hosp. Lab., 1909-11; Asst. Prof. of Bacteriol., Harv., 1910-14; Assoc. Prof. of Bacteriol., *ibid.*, 1914-16; Pathol., Children's Hosp., Boston; in charge of Typhus Research Hosp., Poland, Jan.-Aug., 1920; Fellow, Am. Acad. of Arts and Sciences, 1914; Visit. Pathol., Children's Hosp., Boston, 1915; Corr. Mem. Société de Pathologie Exotique, Paris; Commander, Order of Polonia Restituta; Shattuck Prof. Pathol. Anat., Harv.; *Pathologist*, *P. B. B. H.*

WOOD, NATHANIEL KNIGHT

A.B., Harv., 1897; M.D., *ibid.*, 1901; H. O., B. C. H., 1902-04; H. O., Boston Lying-In Hosp., 1904; Visit. Phys., Carney Hosp., O. P. D., 1907-12; Visit. Phys., Boston Consumptives' Hosp., O. P. D., 1909-17; Phys., Boston Disp., 1912-18; *Assoc. in Med.*, *P. B. B. H.*

WRIGHT, LESLIE H.

M.D., Univ. of Vt., 1918; H. O., Naval Hosp., Chelsea, 1918-19; Transport Serv., May 1, 1919-Sept. 1, 1919; Asst. Phys., Conn. State Hosp., Sept., 1919-July, 1920; Private Practice, July, 1920-May, 1922; Pathol., Monson State Hosp., May, 1922-Dec., 1924; Asst. in Hosp. Adm., Harv. Sch. Public Health, 1927-28; *Second Asst. Supt.*, *P. B. B. H.*, Dec. 1, 1924-Dec. 1, 1927; *First Asst. Supt.*, *ibid.*

ZINSSER, HANS

A.B., Columbia, 1899; A.M., M.D., *ibid.*, 1903; Asst. Prof. Bacteriol., Leland-Stanford, 1910-11; Prof., *ibid.*, 1911-13; Prof. Bacteriol., Columbia Univ., 1913-23; Bacteriol., Presbyterian Hosp., 1913-23; Prof. of Bacteriol., Harv.; *Consult. Bacteriol.*, *P. B. B. H.*

ZOLLINGER, ROBERT

B.S., Ohio State Univ., 1924; M.D., *ibid.*, 1927; H. O., Inst. for Feeble-Minded, Columbus, Ohio, 1925-27; *Surg. H. O.*, *P. B. B. H.*, Jan. 1, 1928-May 1, 1929; Asst. Res. Surg., Lakeside Hosp.

Register of Former Members of the Staff

ADAMS, FRANK DENNETTE

Litt.B., Princeton, 1913; M.D., Harv., 1917; Med. H. O., M. G. H., 1917-18; 1st Lieut., M. C., U. S. Army, 1918-19; *Pathol. H. O.*, *P. B. B. H.*, Oct. 1, 1919-March 15, 1920; *Act. Res. Pathol.*, *ibid.*, March 15-July 1, 1920; Res. Phys., B. C. H., 1920-22; Lect. in Med., Univ. of N. C., Extension Div., 1922 and 1923; H. O., So. Dept., B. C. H., 1922; Assoc. in Therapeutics, George Washington Univ.; Instr. in Med., Georgetown Univ., 1923; Assoc. Phys., M. G. H.; Asst. in Med., Harv., 1923-29; Instr. in Med., Harv.; in practice, Boston.

ALEXANDER, HARRY LOUIS

A.B., Williams, 1910; M.D., Columbia, 1914; H. O., Presbyterian Hosp., New York, 1914-16; *Asst. Res. Phys.*, *P. B. B. H.*, Sept. 15, 1916-July 6, 1917; Major, M. C., U. S. Army; Instr. in Med., Cornell, 1919-24; Asst. Adjunct Attend. Phys., 2nd Med. Div., Bellevue Hosp., New York, 1919-24; Attend. Phys. and Visit. Pathol., Overlook Hosp., Summit, New Jersey, 1920-24; Chief of Asthma Dept., Cornell Pay Clin., New York, 1921-24; Assoc. Prof. Med., Washington Univ., and Assoc. Phys., Barnes Hosp., and St. Louis Maternity Hosp., St. Louis.

ALTNOW, HUGO OSKAR

M.D., Univ. of Mich., 1907; Interne and Asst. Surg., Northern Pac. Ry. Hosp., Brainerd, Minnesota, 1907-09; Surg., Northern Pac. Ry., and Private Practice, Mandan, North Dakota, 1909-24; Visit. Phys., Mandan Deaconess Hosp., 1919-24; Grad. Asst. in Neurol., O. P. D., M. G. H., May 1-July 1, 1924; *Jr. Assoc. in Med.*, *P. B. B. H.*, July 11, 1924-July 1, 1925; Asst. in Med., Dept. of Med., Univ. of Minn.; in practice, Minneapolis, Minnesota.

ARMSTRONG, WILBER P.

A.B., Univ. of Ill., 1920; M.D., Harv., 1923; Interne, Fifth Ave. Hosp., New York; *Surg. H. O.*, *P. B. B. H.*, Jan. 6-July 1, 1925; in practice, Springfield, Illinois.

ATWATER, REGINALD MYERS

A.B., Colorado Coll., 1914; M.D., Harv., 1918; C.P.H., Johns Hopkins, 1920; Dr. P.H., *ibid.*, 1921; *Med. H. O.*, *P. B. B. H.*, March 1, 1918-April 15, 1919; Dept. of Hygiene, Hunan-Yale College of Med., Changsha, Hunan, China, 1921-25; Inst. Epidemiology, Harv. Sch. Public Health, 1925-27; County Health Officer, Cattaraugus Co. Dept. of Health, Olean, New York.

REGISTER OF FORMER MEMBERS OF THE STAFF

BAGLEY, JR., CHARLES

M.D., Univ. of Md., 1904; A.B., Loyola, 1911; Asst. Res. Phys., Univ. Hosp., Baltimore, 1904-05; Asst. Res. Surg., *ibid.*, 1905-06; Med. Supt., Hebrew Hosp., Baltimore, 1906-10; *Asst. Res. Surg., P. B. B. H., Jan. 1, 1913-Jan. 1, 1914*; Major, M. C., U. S. Army, 1917-19; Visit. Surg. Sinai Hosp., Church Home and Infirm., St. Agnes' Hosp., Bon Secours Hosp.; W. Baltimore Gen. Hosp., Maryland Gen. Hosp., and Union Mem. Hosp., Baltimore; Consult. Surg., Baltimore Eye, Ear and Throat Charity Hosp., etc.; Assoc. in Exper. Neurol., Johns Hopkins; Asst. Psychiatrist, J. H. H., Baltimore; Consult. Neuro-Surgeon, U. S. P. H. S.; in practice, Baltimore.

BAILEY, PERCIVAL

B.S., Univ. of Chicago, 1914; Ph.D., *ibid.*, 1918; M.D., Northwestern Univ., 1918; Asst. in Embryology, Univ. of Chicago, 1914; Asst. in Anatomy, *ibid.*, 1914-15; Asst. in Anatomy, Northwestern Univ., 1915-17; Assoc. in Anat., Univ. of Chicago, 1917-18; Surg. H. O., Mercy Hosp., Chicago, 1918-19; *Asst. Res. Surg., P. B. B. H., April 1-Dec. 19, 1919*; Res. Phys., Neurol. Service, Cook County Hosp., Chicago, 1920; Res. Phys., Psychopathic Hosp., Chicago, 1920; Arthur Tracy Cabot Fellow, Harv., 1920-21; *Assoc. in Surg., P. B. B. H., Sept. 1, 1920-July 1, 1921*; Asst. Etranger à la Salpêtrière, service du Prof. Pierre Marie, 1921-22; *Jr. Assoc. in Surg., P. B. B. H., July, 1922-Sept., 1923*; Asst. Etranger à l'hospice Sainte Anne, service du Prof. Henri Claude, 1925-26; Instr. in Surg., Harv.; *Assoc. in Surg., P. B. B. H., 1926-28*; Assoc. Prof. Surg., Univ. of Chicago.

BALDWIN, LOUIS B.

Litt. B., Princeton, 1915; M.D., Columbia, 1919; Interne, Presbyterian Hosp., New York, April, 1919-July, 1920; Interne, Sloane Hosp., New York, Sept., 1920-Dec., 1920; Assoc. in Med., Presbyterian Hosp., New York, Jan., 1921-July, 1921; *Asst. Res. Phys. (acting) P. B. B. H., Dec. 20, 1921-Feb. 1, 1922*; Asst. Prof. and Instr. in Med., Strong Mem. Hosp., Rochester, N. Y.; Phys., Rochester Gen. Hosp., Rochester, N. Y.

BALYEAT, RAY MORTON

A.B., Oklahoma Univ., 1912; B.S., *ibid.*, 1915; M.A., *ibid.*, 1916; M.D., *ibid.*, 1918; *Med. H. O., P. B. B. H., Nov. 1, 1916-Oct. 1, 1919*; Instr. in Med. and Allergy, Univ. of Oklahoma Med. School; Consult. Phys., St. Anthony's Hosp. and State Univ. Hosp., Oklahoma City; in practice, Oklahoma City, Oklahoma.

BARR, JOSEPH SEATON

B.S., College of Wooster, Wooster, Ohio, 1922; M.D., Harv., 1926; Stud. H. O., Huntington Mem. Hosp., 1924-25; *Surg. H. O., P. B. B. H., July 1, 1926-Nov. 1, 1927*; P. G. course, Orth. Surg., Children's Hosp. and M. G. H., Jan., 1928-Sept., 1929; Asst. to Out-Patients, M. G. H.

PETER BENT BRIGHAM HOSPITAL

BARROW, WILLIAM HULBERT

A.B., Harv., 1908; M.D., *ibid.*, 1916; *Med. H. O., P. B. B. H., Nov. 1, 1916-June 17, 1917*; Lieut. and Capt., M. C., U. S. Army, 1917-21; Med. Advisor, Middlesex School, Concord, Massachusetts, 1921-22; Med. Advisor and Prof. of Phys. Education, Stanford Univ., 1922-27; Asst. Clin. Prof. Med., *ibid.*, 1926-27; Assoc. Clin. Prof. Med., *ibid.*, 1927-28; Staff member, Mercy and Scripps Memorial Hospitals; Member, Visiting and Consult. Staff, San Diego Co. Hosp.; Lect. in Prev. Med., State Teachers' Coll., San Diego, Calif.; Chairman, Med. Section and Member, Exec. Comm., Mercy Hosp.; in practice, San Diego, Calif.

BECK, CLAUDE S.

A.B., Franklin and Marshall College, 1916; Grad. Sch., Univ. of Pittsburgh, 1916-17; M.D., Johns Hopkins, 1921; Res. H. O., J. H. H., 1921-22; Asst. Res. Surg., New Haven Hosp., 1922-23; Arthur Tracy Cabot Fellow, Harv., and *Assoc. in Surg., P. B. B. H., 1923-24*; in charge Surg. Lab., Western Reserve Univ., Cleveland, Ohio, 1924-25; Instr. in Surg., Western Reserve Med. School; Res. Surg., Lakeside Hosp., Cleveland, 1925-26; *Asst. Res. Surg., P. B. B. H., April 9-June, 1927*; Instr. in Surg., Western Reserve Univ. School of Med.; Asst. Surg., Lakeside Hosp., 1927-28; Assoc. Surg., *ibid.*; Asst. Prof. Surg., Western Reserve Univ. Sch. of Med.

BELT, A. ELMER

M.D., Univ. of Cal., 1920; Fellow, Hooper Research Laboratories, *ibid.*; Asst. in Urol. Surg., Univ. Hosp., for a year; *Asst. Res. Surg., P. B. B. H., July 1, 1922-July 1, 1923*; in practice, Los Angeles.

BENET, GEORGE

Student for 3 yrs., Univ. of S. C., and Univ. of Va.; M. D., Harv., 1913; *Med. H. O., P. B. B. H., June 1, 1913-July 1, 1914*; Sr. Surg. H. O., St. Luke's Hosp., Chicago, July 1, 1914-Jan. 1, 1915; Lab. Asst., Harv. Unit, Am. Ambulance Hosp., Paris, France, 1915; Surg. at French Hosp. near Annel, 1915-16; Capt. and Asst. Surg., 2nd Harv. Unit, B. E. F., France, 1916; Res. Phys., Collis P. Huntington Mem. Hosp., 1916-17; Surg., Fulham Military Hosp., London, England, 1917; M. R. C., U. S. Army, 1917-18; Capt., M. C., U. S. Army; Battalion Med. Officer to 16th Devons Infantry Reg., (British) 1918; Awarded British Military Cross, 1918; Asst. Visit. Surg., Richland Co. Hosp.; Chief Surg., South Carolina State Hosp.; Attend. Surg., Newberry Co. Hosp.; Assoc. Staff, Marlboro Co. Hosp.; in practice, Columbia, S. C.

BENTON, ROY WILMOT

Ph.B., Brown Univ., 1918; M.D., Harv., 1922; *Med. H. O., P. B. B. H., Nov. 1, 1922-March 1, 1924*; H. O., New York Nursery and Child's Hosp., 1924-25; H. O., Providence City Hosp., 1925; Resi-

REGISTER OF FORMER MEMBERS OF THE STAFF

dent Phys., *ibid.*, 1925-26; Asst. Supt., *ibid.*, 1926-28; Asst. Director, A. O. Smith Diag. Clin., Milwaukee, Wis.

BERGLUND, HILDING

M.D., Univ. of Stockholm, 1916; S.D., *ibid.*, 1920; Asst. Phys., Stockholm Hosp., 1915-19; Asst. Prof. Int. Med., Univ. of Stockholm, 1920; *Asst. Res. Phys., P. B. B. H., July 5, 1921-Sept. 1, 1923*; Asst. Prof. Medicine, Harv.; *Assoc. in Med., P. B. B. H., Sept. 1, 1923-Nov. 1, 1925*; Prof. of Med., Univ. of Minn., and Chief, Dept. of Med., Univ. Hosp.

BERRY, FRANK BROWN

A.B., Harv., 1914; M.D., *ibid.*, 1917; Pathol. H. O., B. C. H., July-Dec., 1917; *Med. H. O., P. B. B. H., Jan. 9-March 1, 1918*; 1st Lieut. and Capt., M. C., U. S. Army, 1918-19; 1st Asst. Pathol., B. C. H., 1919-20; Surg. H. O., Presbyterian Hosp., New York, 1920-21; Practicing Med., Providence, Rhode Island, 1921-23; Res. Surg., Bellevue Hosp., New York, 1923-24; Instr. in Surg., Columbia; Adjunct Attend. Surg., Bellevue Hosp.; Asst. Surg., Polyclinic Hosp., New York; in practice, New York City.

BIRD, CLARENCE EDWARD

A.B., Univ. of Cal., 1920; M.D., Harv., 1923; Interne, Indian Harbor Hosp., Labrador, with Grenfell Mission, 1922; *Surg. H. O., P. B. B. H., July 1, 1923-Nov. 1, 1924*; Asst. in Surg. and Pathol., Yale, 1924-25; *Asst. Res. Surg., P. B. B. H., July 1, 1925-Oct. 1, 1926*; *Res. Surg., ibid., Oct. 1, 1926-Sept. 12, 1928*; in practice, Los Angeles, Calif.

BLAKE, FRANCIS GILMAN

A.B., Dart., 1908; M.D., Harv., 1913; *Med. H. O., P. B. B. H., July 1, 1913-Nov. 1, 1914*; *Asst. Res. Phys., ibid., Nov. 1, 1914-Sept. 1, 1915*; *Res. Phys., ibid., Sept. 1, 1915-Oct. 1, 1916*; Moseley Travelling Fellow (Harv.), 1916-17; Asst., Rockefeller Inst. Hosp., 1916-17; Asst. Prof. of Med., Univ. of Minn., 1917-19; Visit. Phys., Elliott Mem. Hosp., Univ. of Minn., 1917-19 (leave of absence Feb. 11, 1918-July 1, 1919); *Assoc. in Med., Rockefeller Inst. Hosp., 1919-20*; *Assoc. Mem. in Med., Rockefeller Inst. Hosp., 1920-21*; Mem., Board Scientific Directors, Rockefeller Inst. for Med. Research; Sterling Prof. of Med., Yale Univ., School of Med.; Phys.-in-Chief, New Haven Hosp., New Haven, Connecticut.

BLOSSER, HAROLD L.

A.B., Grinnell Coll., Grinnell, Iowa; M.D., Harv., 1925; *Pathol. H. O., P. B. B. H., Jan. 1, 1925-Jan. 1, 1926*; Grad. Asst. Roent., M. G. H., 1926; Surg. H. O., Lakeside Hosp., 1926-27; Asst. Res. Surg., *ibid.*, 1927-29; in practice, Norfolk, Nebraska.

BLUMGART, HERRMANN

B.S., Harv., 1917; M.D., *ibid.*, 1921; *Med. H. O., P. B. B. H., July 1, 1921-Nov. 1, 1922*; Moseley Traveling Fellow, Harv., 1923; Asst.,

PETER BENT BRIGHAM HOSPITAL

Thorndike Mem. Lab., B. C. H., 1924-28; Asst. in Med., Harv., 1924-27; Faculty Instr., *ibid.*, 1927-28; Asst. Prof. of Med., *ibid.*; 1928-29; Assoc. Prof. of Med., *ibid.*; Visit. Phys., Beth Israel Hosp.; Director, Med. Research, *ibid.*

BOEHM, JULIUS BENJAMIN

B.S., St. Louis Univ., 1910; M.D., Johns Hopkins, 1914; *Surg. H. O., P. B. B. H., Nov. 1, 1914-Nov. 1, 1915*; Res. Surg., Greenpoint Hosp., Brooklyn, New York, 1915-18; Surg. Serv., Walter Reed Hosp.; in practice, Brooklyn, New York.

BOGGS, ARTHUR GORDON

A.B., Dart., 1915; M.D., Harv., 1919; *Surg. H. O., P. B. B. H., March 15, 1919-July 1, 1920*; New Haven Hosp., New Haven, Connecticut; Med. Missionary, Clough Mem. Hosp., Ongole, South India.

BOOTH, GEORGE

B.S., Allegheny Coll., 1922; M.D., Harv., 1926; *Med. H. O., P. B. B. H., March 1, 1927-July 1, 1928*; in practice, Pittsburgh, Pa.

BOOTHBY, WALTER MEREDITH

A.B., Harv., 1902; M.D., *ibid.*, 1906; A.M., *ibid.*, 1907; European clinics for 8 mos., 1907-08; *Surg. H. O., B. C. H., 1908-09*; Asst. in Anat., Harv., 1910-14; Asst. in Anesthesia, Harv. Grad. School of Med., 1912-13; Sheldon Travelling Fellow, Harv. (Oxford Univ., largely); Anesthetist, B. C. H., 1912; *Supervisor of Anesthesia, P. B. B. H., Dec. 11, 1913-Nov. 14, 1916*; Lect. on Anesthesia and Instr. in Anat., Harv., 1914-16; Capt. and Major, M. C., U. S. Army, 1917-19; Assoc. Prof. of Med., Mayo Foundation, Univ. of Minn.; Head of Sect. of Clin. Metabolism, Mayo Clinic, Rochester, Minnesota.

BOYD, DOUGLAS

Univ. of Ga.; M.D., Harv., 1922; H. O., Robert Brigham Hosp., Boston, 1921-22; Asst. Res. Phys., Boston Sanatorium, 1922-23; *Surg. H. O., P. B. B. H., March 1, 1923-July 1, 1924*; *Act. Asst. Res. Surg., ibid., July 1-Aug. 1, 1924*; Asst. in Med., Rockefeller Inst., 1924-25; Asst. Res. Phys., Hosp. of Rockefeller Inst.; Asst. Res. Surg., Lakeside Hosp., 1925-26; Res. Orthopedic Surg., Rainbow Hosp., Cleveland, Ohio, 1926; in practice, Evanston and Chicago, Ill.

BRADLEY, JOHN I.

A.B., Georgetown Univ., 1920; M.D., Harv., 1925; Pathol. Interne, B. C. H., 1925; *Surg. H. O., P. B. B. H., Nov. 1, 1925-March 1, 1927*.

BREWSTER, ALBERT H.

B.A., Univ. of Va., 1914; M.D., J. H. M. S., 1918; M. C., U. S. Army, 1917-19; Children's Hosp. Sch., Baltimore, Maryland, 1919-

REGISTER OF FORMER MEMBERS OF THE STAFF

20; *Surg. H. O., P. B. B. H., Feb. 15, 1920-July 1, 1921*; Orthopedic Service, Children's Hosp., Boston; Instr., Orthopedic Surg., Harv.; Visit. Orth. Surg., N. E. Peabody Home for Crippled Children, and Industrial School for Crippled and Deformed Children; in practice, Boston.

BRIGHAM, FERDINAND

A.B., Tufts Coll., 1912; D.M.D., H.D.S., 1915; *Dental Surg., P. B. B. H., March 13, 1919-Jan. 20, 1920*; Capt., R. A. M. C., 1915-19; Degree, Dental Surg., Fac. of Med., Paris; in practice, 95 Ave. des Champs Elysees, Paris.

BRILL, SELLING

A.B., Stanford, 1920; M.A., *ibid.*, 1922; M.D., Harv., 1924; *Surg. H. O., P. B. B. H., Nov. 1, 1924-March 1, 1926*; Hunter Fellow in Surg., Univ. Hosp., Philadelphia, Pennsylvania.

BRITTINGHAM, HAROLD HIXON

A.B., Yale, 1916; M.D., Harv., 1920; *Med. H. O., P. B. B. H., July 1, 1920-Nov. 1, 1921*; *Asst. Res. Phys., ibid., Nov. 15-Dec. 6, 1921*; Demonstr. Physiol., Western Reserve Univ., 1922-23; Demonstr. in Med., *ibid.*; Asst. Visit. Phys., Cleveland City Hosp.; in practice, Cleveland, Ohio.

BROWN, CHARLES LEONARD

B.S., Univ. of Oklahoma, 1919; M.D., *ibid.*, 1921; *Med. H. O., P. B. B. H., March 1, 1922-July 1, 1923*; Res. Pathol., Children's Hosp., 1923-24; Instr. in Pathol., Harv.; *Res. Pathol., P. B. B. H., July 1, 1924-Sept. 1, 1925*; Teaching Fellow in Med., Harv.; *Res. Phys., P. B. B. H., Sept. 1, 1925-Sept. 1, 1927*; Instr. in Med., Harv.; *Jr. Assoc. in Med., P. B. B. H., Sept., 1927-July, 1928*; Asst. Prof. Int. Med., Univ. of Mich., July, 1928-July, 1929; Assoc. Prof. Int. Med., *ibid.*

BROWN, WILLIAM EUSTIS

Ph.B., Lafayette Coll., 1909; C.P.H., Harv.-M. I. T., Sch. of Public Health, 1915; M.D., Harv., 1920; *Surg. H. O., P. B. B. H., Oct. 15, 1920-Feb. 20, 1922*; Surg.-in-Chief, N. J. Zinc Co. Hosp., Franklin, New Jersey, 1922-24; Asst. Prof. Preventive Med., Univ. of Cinn., 1924-26; Assoc. Prof. Preventive Med., *ibid.*

BRYANT, JOHN

A.B., Harv., 1903; Asst. Res. Surg., Free Hosp. for Women, Brookline, 1905-06; M.D., Harv., 1907; Instr. in Pathol. and Neuropathol., *ibid.*, 1907-08; Surg. House Pupil, M. G. H., 1908-10; Private Asst. to Dr. S. J. Mixter, 1910-12; Research in Europe, 1912, 1913, and 1914; Asst. in Anat., Harv., 1913-18; Grad. Asst., M. G. H., O. P. D., 1915-16; Asst. to Phys.-in-Chief, Robert B. Brigham Hosp., 1915-16; *Vol. Asst., P. B. B. H., July, 1916-Jan., 1917*; *Assoc. in Med., ibid., Jan. 1, 1917-Jan. 1, 1918*; Major, M. C., U. S. Army, 1917-19; Secretary, American Gastro-Enterological

PETER BENT BRIGHAM HOSPITAL

Assn., 1923-27; Medical Asst. in Problems of Convalescence, M. G. H.; Consultant to Burke Foundation for Convalescents, New York; in practice, Internal Medicine, Boston.

BUCK, ROBERT WILLIAM

A.B., Butler Coll., 1914; A.M., Columbia, 1915; M.D., Harv., 1921; Asst. Res., Boston Hosp. for Consumptives, 1921; *Med. H. O.*, *P. B. B. H.*, Nov. 1, 1921-March 1, 1923; H. O., Boston Lying-In Hosp., 1923; Assoc. Chief, Med. Dept., Boston Disp.; in practice, Boston.

BURLINGHAM, LOUIS HERBERT

A.B., Yale, 1902; M.D., Johns Hopkins, 1906; House Pupil, M. G. H., 1906-07; Asst. Res. Phys., *ibid.*, 1907-12; Asst. Adm., *ibid.*, 1912; *First Asst. Supt.*, *P. B. B. H.*, Oct. 19, 1912-April 30, 1917; *Curator*, *ibid.*, May 8, 1913-May 10, 1917; Lect. on Hosp. Adm., Washington Univ. Med. Sch.; Assoc. Editor, *Modern Hosp.*; Supt., Barnes Hosp., St. Louis, Missouri; Administrator, St. Louis Children's Hosp., 1917-25; Mem., Med. Council to U. S. Vet. Bureau; Pres., Mo. Hosp. Assoc., 1921-22; Trustee, Mid-West Hosp. Assoc.; Director, Central Bureau for Homeless Men, St. Louis; Trustee, A. H. A., 1919-21; President, A. H. A., 1928-29.

CADBURY, WILLIAM WARDER

A.B., Haverford, 1898; A.M., *ibid.*, 1899; M.D., Univ. of Pa., 1902; Res. Phys., Pa. Hosp., 1903-05; Stud. in Vienna, 1905; Grad., London Sch. of Hygiene and Trop. Med., 1928; Instr. in Pathol. and Pharmacodynamics, Univ. of Pa., 1906-07; Pathol., St. Mary's Hosp., Philadelphia, 1906-07; Pathol., Henry Phipps Inst. for the Study, Treatment and Prevention of Tuberculosis, 1908-09; Visit. Phys., Free Hosp. for Poor Consumptives, White Haven, Pennsylvania, 1908-09; *Asst. Res. Phys.*, *P. B. B. H.*, Nov. 1, 1915-March 1, 1916; College Phys., Lingnan Univ., Canton, China.

CAIRNS, HUGH WILLIAM BELL

M.B., B.S., Univ. of Adelaide, 1917; Rhodes Scholar, Oxford, 1919-20; F.R.C.S., England, 1921; War service, 1915-18; House Surg., Radcliffe Infirmary, Oxford, 1920-21; House Surg., London Hosp., 1921; Pathol. Asst., *ibid.*, 1921-22; House Phys., *ibid.*, 1922; Asst. in Surg. Unit, London Hosp., 1923; Surg. First Asst., *ibid.*, 1924-25; Asst. Surg., *ibid.*, 1926; Hunterian Prof., R. C. S., 1925-26; *Asst. Res. Surg.*, *P. B. B. H.*, Oct. 1, 1926-Sept. 15, 1927; Asst. Surg., London Hosp., London, England.

CALHOUN, ABNER W.

A.B., Univ. of Ga., 1918; M.D., Harv., 1923; 2 mos. in tuberculosis work, Ray Brook, New York; Med. H. O., B. C. H., March 1, 1924-Nov. 15, 1925; *Asst. Res. Phys.*, *P. B. B. H.*, Nov. 15, 1925-Sept. 1, 1927; Chief Res., Grady Hosp., Atlanta, Ga., 1927-28; in practice, Atlanta, Ga.

REGISTER OF FORMER MEMBERS OF THE STAFF

CARR, GLADYS LYDIA

M.D., Tufts, 1906; H. O., N. E. Hosp. for Women and Children, 1906-07; Asst. on Maternity Staff, *ibid.*, 1907-08; Gen. Practice, Boston, 1907-08; Private Practice, Lynn, 1908-14; Head of Roent. and Electrotherapeutic Depts., N. E. Hosp. for Women and Children; *Roentgenologist, pro tempore, P. B. B. H., June 1, 1914-Feb. 1, 1916; Roentgenologist, ibid., Feb. 1, 1916-Oct. 31, 1917; Roentgenologist, American Comm. for Relief in the Near East, Asia Minor; Roentgenologist, Finley Hosp., Dubuque, Iowa.*

CARTER, JR., DAVID WENDEL

A.B., Southwestern Univ., 1909; A.M., *ibid.*, 1910; M.D., Johns Hopkins, 1914; H. O., Clifton Springs Sanitarium, 1914; *Med. H. O., P. B. B. H., Jan. 4, 1915-July 1, 1916; Asst. Res. Phys., J. H. H., 1916-17; Res. Phys. in charge of Private Wards, ibid., 1917-18; 1st Lieut., M. C., U. S. Army, 1917-19; Visit. Phys., Parkland Hosp., Dallas; Assoc. Prof. of Med., Baylor Univ., Dallas; Mem. Staff, Baylor Hosp.; Chairman, Med. Advisory Comm., Dallas Methodist Hosp.; in practice, Dallas, Texas.*

CARTY, JOHN RUSSELL

B.S., Princeton, 1917; M.D., Cornell, 1921; House Phys., New York Hosp., 1921-23; *X-ray H. O., P. B. B. H., July 1, 1923-July 1, 1924; Asst., Dept. of Radiology, M. G. H., April-Oct., 1925; Chief of Clin. in Roent., Cornell Univ. Med. Sch. Clin., New York; Asst. Prof. Roent., ibid.*

CHASE, HENRY MELVILLE

S.B., Dart., 1897; M.D., Harv., 1901; House Pupil, M. G. H., 1901-02; Asst. Surg., Boston Disp., 1906-14; Surg., Boston Disp.; Surg., Berkeley Infirmary; *Assoc. in Surg., P. B. B. H., Nov. 17, 1914-July 11, 1919; in practice, Boston.*

CHELEY, GLEN EVAN

A.B., Colorado Coll., 1916; M.D., Harv., 1920; *Surg. H. O., P. B. B. H., July 1, 1920-Nov. 1, 1921; H. O., Boston Lying-In Hosp., 1921-22; Instr. in Surg., Colorado Med. Sch.; Surg. to Out-Patients, Colorado Gen. Hosp.; in practice, Denver, Colorado.*

CHRISTIAN, JR., THOMAS D.

M.D., Harv., 1923; Med. H. O., B. C. H.; *Asst. Res. Phys., P. B. B. H., Jan. 1, 1925-Nov. 15, 1925; Jr. Assoc. in Med., ibid., Nov. 15, 1925-Oct. 1, 1926; in practice, Greensboro, North Carolina. Died January 12, 1929.*

CLARK, JR., BURTON

B.S., Univ. of Wis., 1921; M.D., Harv., 1923; Interne, St. Luke's Hosp., Chicago, July 1, 1923-April 1, 1925; *Surg. H. O., P. B. B. H., May 1-Nov. 1, 1925; Pathol. H. O., B. C. H., Nov. 1, 1925-Jan. 1, 1926; in practice, Oshkosh, Wisconsin.*

PETER BENT BRIGHAM HOSPITAL

COBB, STANLEY

A.B., Harv., 1910; M.D., *ibid.*, 1914; *Surg. H. O., P. B. B. H., July 1, 1914-July 1, 1915*; Vol., Lab. of Physiol. Research, Johns Hopkins, 1915-16; Asst. in Physiol., *ibid.*; Asst. in Psychiatry, *ibid.*, 1916-17; Asst. in Psychiatry and Physiol. of the Nervous System, *ibid.*; Asst. Psychiatrist, *ibid.*, 1917-18; Assoc. in Psychiatry, *ibid.* (on leave of absence); 1st Lieut., M. C., U. S. Army, 1917-19; Asst. Neurol., M. G. H., 1919-20; Dalton Scholar, *ibid.*; Instr. in Neurol. and Physiol., Harv., 1919-23; Asst. Neurol., M. G. H.; Asst. Prof. of Neuropathol., Harv., 1923; Rockefeller Fellow in Europe, 1923-25; Assoc. Prof. Neuropathol., Harv., 1926; Prof. Neuropathol., *ibid.*

COLBY, FLETCHER H.

S.B., Dartmouth, 1914; M.D., Harv., 1918; served with B. C. H. unit, Evacuation Hosp. No. 110, during war; *Surg. Interne, M. G. H., 1919-21*; Ludlow-Jute Co., Ltd., Calcutta, India, 1921-23; *Asst. Res. Surg., P. B. B. H., Jan. 1, 1924-Jan. 1, 1925*; *Jr. Assoc. in Urol., ibid., Jan. 22, 1925-Oct. 1, 1926*; *Act. Assoc. in Surg., ibid., July-Sept., 1927*; Asst. Urologist, M. G. H.; Asst. in G. U. Surg., Harv.; *Surg. to Out-Patients, Palmer Mem. Hosp.*

CONNOR, CHARLES LLOYD

Univ. Pittsburgh, 1913-17; M.D., Baylor Univ., Coll. of Med., 1920; *Interne, St. Joseph's Hosp., Pittsburgh, 1920-21*; *Gen. Practice, Montana, 1921-23*; Fellow in Med., Nat. Research Council, 1923-25; Research Fellow, Pathol., Harv., 1923-25; Instr. in Pathol., *ibid.*, 1925; Faculty Instr., *ibid.*, 1926-28; *Res. Pathol., P. B. B. H., Sept. 1, 1925-Sept. 1, 1926*; Acting Director, Pathological Laboratories, Montreal General Hosp. (leave of absence from Harvard, 1926-27); Assoc. Prof. Pathol. and Ex. Head, Dept. of Pathol., Univ. of Calif. Med. Sch.; Prof. Pathol., *ibid.*

COOK, WARD HANCE

A.B., Univ. of Kans., 1909; A.M., *ibid.*, 1910; Fellow in Zoölogy, *ibid.*, 1909-10; Instr. in Embryology and Histology, *ibid.*, 1910; M.D., Harv., 1914; *Med. H. O., P. B. B. H., July 1, 1914-July 10, 1915*; 2nd Asst. in Pathol., B. C. H., 1915-16; 1st Asst. in Pathol., *ibid.*, 1916-17; Pathol., Long Island Hosp., Boston, 1917-21; Instr. in Pathol., Harv., 1917-21; Prof. of Pathol., Med. Coll. of Va., Richmond, Virginia, 1921-24; Assoc. Director, Wm. H. Singer Mem. Research Lab., Pittsburgh, Pennsylvania; Pathol., New York Post Grad. Med. School and Hosp.; Director, Bureau of Labs., Dept. of Health, Yonkers, N. Y.; Pathol., St. John's Riverside, Yonkers General, and St. Joseph's Hospitals, Yonkers, N. Y.

COULTER, A. BARKLIE

A.B., Catholic Univ. of America, 1918; M.D., Johns Hopkins, 1924; Asst., Trudeau Sanatorium, Saranac, 1924-25; Asst. in Med., Royal Victoria Hosp., Montreal, 1925-26; *Jr. Assoc. in Med., P. B. B. H.,*

REGISTER OF FORMER MEMBERS OF THE STAFF

Oct. 1, 1926-Sept. 1, 1927; Instr. in Med., George Washington Univ. and Georgetown Univ., Washington, D. C.; Visit. Phys., Gallinger Hosp., Washington, D. C.; Jr. Visit. Phys., Garfield Mem. Hosp.

COUNCILMAN, WILLIAM THOMAS

M.D., Univ. of Md., 1878; Stud., Univs. of Vienna and Leipzig; Hon. A.M., Harv., 1899; Hon. A.M., Johns Hopkins, 1902; LL.D., Univ. of Md., 1907; LL.D., McGill Univ., 1911; LL.D., Western Reserve Univ., 1929; Asst. Prof. in Anat., Johns Hopkins, 1890-91; Shattuck Prof. of Pathol. Anatomy, Harv., 1892; Emeritus Prof., *ibid.*; *Consult. Pathol., P. B. B. H., March 25, 1912-Aug. 14, 1913; Pathol., ibid., Aug. 14, 1913-Dec. 1, 1916 (granted leave of absence from Nov. 9-Dec. 1, 1916)*; Mem., Dr. Hamilton Rice's Expedition to South America; Fellow, Am. Acad., 1895; Mem., Nat. Acad. of Sciences, 1904; Fellow, Philosophical Society, Philadelphia, 1918.

CRISLER, JR., JOSEPH AUGUSTUS

B.S., Univ. of Va., 1917; M.D., Harv., 1921; F.A.C.S.; *Surg. H. O., P. B. B. H., Nov. 1, 1921-March 1, 1923*; in practice, Memphis, Tenn.

CROCKETT, EUGENE ANTHONY

Act. Consult. Otologist and Laryngologist, P. B. B. H., June 13, 1918-Dec. 31, 1919.

CUNNINGHAM, THOMAS DONALD

B.S., Dart., 1913; M.D., Harv., 1918; House Pupil, M. G. H., 1917-18; *Asst. Res. Phys., P. B. B. H., March 1, 1919-July 1, 1920*; House Pupil, Children's Med. Serv., M. G. H., 1920-21; Mem., Med. Staff, Denver City and County Hosp., St. Joseph's Hosp., St. Luke's Hosp., and Children's Hosp., Denver, Colorado; Staff, Colorado Gen. Hosp.; Asst. Prof. Med., Univ. of Col.; in practice, Denver, Col.

CURTIS, ROBERT DUDLEY

A.B., Harv., 1914; M.D., *ibid.*, 1918; *Med. H. O., P. B. B. H., July 1, 1918-July 1, 1919*; Pediatric H. O., M. G. H., 1918; Asst. Visit. Phys., *ibid.*, O. P. D., 1919; Med. Director, Boston Baby Hygiene Assoc.; Asst. in Pediatrics, Harv.

CURTISS, ARTHUR NILES

A.B., Oberlin Coll., 1918; M.D., Syracuse Univ., 1923; Instr. in Physiol., Coll. of Med., Syracuse Univ., 1918-24; *Med. H. O., P. B. B. H., Nov. 1, 1924-March 1, 1926*; Asst. Attend., Univ. Hosp., Syracuse, N. Y.; Asst. Attend., Gen. Hosp. of Syracuse; in practice, Syracuse, New York.

CUTLER, ELLIOTT CARR

A.B., Harv., 1909; M.D., *ibid.*, 1913; *Surg. H. O., P. B. B. H., Nov. 1, 1913-March 1, 1915*; Res. Surg., Harv. Unit, Am. Ambulance Hosp., Paris, France, 1915; Res. Surg., M. G. H., 1915-16; Alumni

PETER BENT BRIGHAM HOSPITAL

Asst. in Surg., Harv., 1915-16; Vol. Asst., Rockefeller Inst., New York, 1916-17; Major M. C., U. S. Army; D.S.M., 1917-19; Instr. in Surg., Harv., 1921-24; *Res. Surg., P. B. B. H., Aug. 1, 1919-Sept. 1, 1921; Assoc. in Surg., ibid., Sept. 1, 1921-July 1, 1924;* Chairman, Dept. of Surg., and Director of Lab. of Surg. Research, Harv., 1922-24; Prof. of Surg., Western Reserve Univ. Med. Sch., and Chief Surg., Lakeside Hosp., Cleveland, Ohio.

DAVIDOFF, LEO MAX

Two yrs. pre-med. work, Harv.; M.D., *ibid.*, 1922; Stud. Interne, Boston Psychopathic Hosp., April, 1921-June, 1922; Pediatric Serv., B. C. H., July-Nov., 1922; Med. Serv., New Haven Hosp., Nov. 1, 1922-Nov. 1, 1923; *Surg. H. O., P. B. B. H., March 1, 1924-June 20, 1925;* Surg., MacMillan Arctic Expedition, June 20, 1925-Oct. 1, 1925; *Asst. Res. Surg., P. B. B. H., Nov. 1, 1925-Oct. 1, 1926; P. B. B. H. Travelling Fellowship, 1926-27;* Asst. Neuro-Pathol., Psychiatric Inst. of the State of New York, 1927-28; Attend. Neuro-Surg., N. Y. Neurol. Inst.; Asst. Neuro-Surg., Montefiore Hosp., N. Y.; Instr. in Neurol., Coll. of Phys. and Surg., Columbia Univ.; Asst. Attend. Surg., Div. of Neuro-Surg., Fifth Avenue Hosp.

DAVIDSON, LEONARD TOMB

A.B., Oberlin, 1912; M.D., Johns Hopkins, 1919; *Med. H. O., P. B. B. H., Sept. 15, 1919-Nov. 1, 1920;* Asst. Res. Phys., Presbyterian Hosp., New York, 1920-21; Res. Phys., St. Louis Children's Hosp., St., Louis, 1921-23; Assoc., Diseases of Children, Col. Physicians and Surgeons, New York; Asst. Attend. Phys., Babies' Hosp., N. Y.

DAVIS, LOYAL

M.D., Northwestern Univ., 1918; M.S., *ibid.*, 1921; Ph.D. in Surg., *ibid.*, 1923; Nat. Research Council Fellow, 1922-24; *Jr. Assoc. in Surg., P. B. B. H., March-Oct., 1924;* Assoc. Prof. Surg., Chief, Neuro-Surg. Div., Director, Lab. Exp. Research, Northwestern Univ. Med. Sch.; Attend. Neurol. Surg., Wesley Mem. Hosp., Pasavant Mem. Hosp., Michael Reese Hosp., Chicago; Attend. Surg., Cook Co. Hosp., and Children's Mem. Hosp., Chicago.

DAWSON, ROGER PAUL

A.B., Holy Cross, 1907; M.D., Harv., 1911; Med. H. O., Carney Hosp., Boston, 1911-12; *Med. H. O., P. B. B. H., Nov. 1, 1912-Nov. 1, 1913;* Fellow in Med., Harv., 1914-15; Phys., Carney Hosp., O. P. D., 1914-15; *Assoc. in Med., P. B. B. H., July 1, 1915-Dec. 31, 1916;* Asst. Phys., Boston Disp., O. P. D.; Phys. to O. P. D., M. G. H.; Asst. in Med., Harv.; in practice, Boston.

DAYTON, THEODORE READ

A.B., Amherst, 1916; M.D., Harv., 1925; *Surg. H. O., P. B. B. H., March 1, 1926-July 1, 1927.*

REGISTER OF FORMER MEMBERS OF THE STAFF

DEAN, JR., ARCHIE LEIGH

B.S., Cornell, 1913; M.D., *ibid.*, 1917; *Surg. H. O.*, *P. B. B. H.*, May, 1917-Feb., 1918; 1st Lieut., M. C., U. S. Army, 1918-19; Assoc. Surg., Mem. Hosp., N. Y.; Assoc. Urol., Fifth Ave. Hosp., N. Y.; Visit. Urol., Reconstruction Hosp., N. Y.; Consult. Urol., Somerset Hosp., N. Y.; in practice, New York.

DEVAN, THOMAS ALAN

B.S., Rutgers, 1906; M.D., Johns Hopkins, 1910; H. O., Presbyterian Hosp., New York, 1911-13; *Second Asst. Supt.*, *P. B. B. H.*, Aug. 1, 1913-May 1, 1917; *First Asst. Supt.*, *ibid.*, May 1, 1917-July 1, 1919; 1st Lieut., M. C., U. S. Army, Nov. 5, 1918-Dec. 6, 1918; College Phys. and Prof. of Hygiene, Rutgers Coll., New Brunswick, New Jersey, July, 1919-July, 1925; Asst. Director, Strong Mem. Hosp., Rochester, New York.

DOCK, WILLIAM

B.S., Wash. Univ., 1920; M.D., Rush Med. Coll., 1922; *Med. H. O.*, *P. B. B. H.*, July 1, 1922-Nov. 1, 1923; *Asst. Res. Phys.*, *ibid.*, Nov. 1, 1923-Nov. 1, 1924; Grad. Stud., Vienna, Austria; Med. Res., Lane and Stanford Hosp., San Francisco, Calif.; Asst. Clin. Prof. Med., Stanford Univ.; Asst. Prof. Med., *ibid.*; Assoc. Prof., *ibid.*

DOEGE, PAUL FREDERICK

Univ. of Wis., 1917-20; Western Reserve Univ., 1920-22; M.D., Harv., 1926; *Pathol. H. O.*, *P. B. B. H.*, Oct. 1, 1926-Jan. 1, 1927.

DONALD, DOUGLAS

B.S., Univ. of Mich., 1916; M.D., Harv., 1918; *Med. H. O.*, *P. B. B. H.*, Feb. 12, 1918-March 1, 1919; *Asst. Res. Phys.*, *ibid.*, March 1-June 16, 1919; Henry Ford Hosp., 1919-20; Asst. Prof. Med., Detroit Coll. of Med.; in practice, Detroit, Michigan.

DRINKER, CECIL KENT

B.S., Haverford, 1908; M.D., Univ. of Pa., 1913; Vol. Asst., Dept. of Pharmacology, Univ. of Pa. Med. Sch., 1913-14; *Med. H. O.*, *P. B. B. H.*, March 1, 1914-July 1, 1915; Asst. in Physiol., Johns Hopkins, 1915-16; Instr. in Physiol., Harv., 1916-18; *Res. Phys.*, *P. B. B. H.*, July 10-Oct. 15, 1917; Asst. Prof. Physiol., Harv., 1918-19; Assoc. Prof. Applied Physiol., *ibid.*, 1919-23; Asst. in Med., M. G. H., 1922; Asst. to the Visit. Phys., B. C. H., 1922-24; Special Research, Lab. of Zoöphysiology, Univ. of Copenhagen, Denmark, 1926-27; Prof. of Physiol., Harv.; Asst. Dean, Harv. Sch. Public Health.

DRINKER, KATHERINE ROTAN

A.B., Bryn Mawr, 1910; M.D., Women's Med. Coll. of Pa., 1914; *Asst. Res. Phys.*, *P. B. B. H.*, July 7-Sept. 24, 1917; Research Worker in Physiol., 1914-15, 1916-17; *ibid.*, Johns Hopkins, 1915-16; Managing Ed., Journal Indust. Hygiene, 1918-21; Lect. in Hy-

PETER BENT BRIGHAM HOSPITAL

giene, Bryn Mawr Coll., 1921-23; Research Worker in Physiol., Harv., 1921-26.

EDSON, PHILIPS JOSIAH

A.B., Univ. of Cal., 1920; M.A., *ibid.*, 1921; M.D., *ibid.*, 1924; Stud. Interne, Hahnemann Hosp., summer 1922; Med. Officer to Sierra Club Outings, 1921-22; Interne, Yosemite Hosp., Cal., 1923; *Med. H. O.*, *P. B. B. H.*, Nov. 1, 1923-March 1, 1925; *H. O.*, X-ray Dept., *ibid.*, March 1-Sept. 1, 1925; Jr. Member of Staff in Med., Pasadena Hosp.; Roentgenologist, Pasadena Disp., and Pasadena Chest Clin.; in practice, Pasadena, California.

EDWARDS, SUMNER

A.B., Bowdoin, 1910; Stud., Hebron Acad., Me., 1910-11; M.D., Harv., 1915; *Med. H. O.*, *P. B. B. H.*, Nov. 1, 1915-Jan. 6, 1916. Died Jan. 6, 1916.

ELIOT, MARTHA MAY

A.B., Radcliffe, 1913; M.D., Johns Hopkins, 1918; *Med. H. O.*, *P. B. B. H.*, June 15, 1918-July 1, 1919; St. Louis Children's Hosp., 1919-20; Phys., Boston, Massachusetts, 1920-21; Dept. of Pediatrics, New Haven Hosp., New Haven, Connecticut, 1921-23; Asst. Clin. Prof., Pediatric Dept., Yale, 1927-29; Director, Div. of Child Hygiene, U. S. Children's Bureau, Washington, D. C., 1924-30.

ELKIN, DANIEL COLLIER

A.B., Yale, 1916; M.D., Emory Univ., 1920; Asst. Res. Surg., New York Lying-In Hosp., 1920; *Surg. H. O.*, *P. B. B. H.*, March 1, 1921-July 1, 1922; Asst. Res. Surg., *ibid.*, July 1, 1922-July 1, 1923; *Res. Surg.*, *ibid.*, July 1-Sept. 1, 1923; Asst. in Surg., Harv., 1923; Instr. in Surg., Emory Univ. Sch. of Med., 1924; Assoc. in Surg., *ibid.*; Surg., Steiner Mem. Clin., Grady Hosp., and Wesley Mem. Hosp., Atlanta; Surg. in Chief, Henrietta Egleston Hosp. for Children, Atlanta; in practice, Atlanta, Ga.

EVANS, JAMES A.

A.B., Univ. of Wis., 1917; M.D., Harv., 1920; Med. Interne, Barnes Hosp., St. Louis; Group Practice, 1 yr.; St. Frances Hosp., La Crosse, Wisconsin; June, 1922, holder of Scholarship in France under Professors Gilbert and Widal and Dr. Bensaude; Asst. Res. Phys., *P. B. B. H.*, July 10, 1923-July 1, 1924; Asst. Preceptor in Med., Univ. of Wis. Med. School; Vice-Chairman, Wis. Radiological Section; Mem., Central Soc. for Clin. Research; in practice, La Crosse, Wis.

FALK, EMIL A.

A.B., Univ. of Minn., 1921; M.D., Harv., 1925; *Med. H. O.*, *P. B. B. H.*, July 1, 1925-Nov. 1, 1926; Pathology, B. C. H., 1927; Med. Res., Second (Cornell) Med. Div., Bellevue Hosp., New York, 1927-29; Instr., Clin. Med., Cornell Univ.; in practice, New York.

REGISTER OF FORMER MEMBERS OF THE STAFF

FALLON, JOHN

A.B., Holy Cross, 1919; M.D., Harv., 1923; Asst. in Anat., Harv., 1923-25; Surg. H. O., St. Vincent Hosp., Worcester, 1924-25; *Surg. H. O., P. B. B. H., March 1, 1925-July 1, 1926*; Fellow in Surg., Mayo Clin., Rochester, Minnesota, 1927-29; (on leave of absence, 1927); Surg. Res., St. Vincent Hosp., Worcester, 1927; Surg., *ibid.*

FALLON, LOUIS

M.D., Univ. of Pa., 1916; F.A.C.S.; *Surg. H. O., P. B. B. H., July 1, 1916-Nov. 15, 1916*; M. C., U. S. Army 1918-19; Capt. with Base Hosp. 51 and 69 and Gen. Hosp. 31, Carlisle, Pennsylvania; in practice, Augusta, Maine.

FARBER, SIDNEY

B.S., Univ. of Buffalo, 1923; M.D., Harv., 1927; *H. O., Pathol., P. B. B. H., Jan. 1-Sept. 1, 1927*; Res. Pathol., Children's Hosp., Sept. 1, 1927-Sept. 1, 1928; Guest Asst., Univ. of Munich Pathol. Inst., 1928-29; Instr. in Pathol., Harv.; Asst. Pathol., Children's Hosp.

FARBER, WILLIAM P.

A.B., Univ. of Cal., 1922; M.A., *ibid.*, 1923; M.D., Harv., 1927; *Surg. H. O., P. B. B. H., March 1, 1927-July 1, 1928.*

FETNER, L. M.

M.D., Med. Coll. of Va., 1915; in practice, Charlotte, N. C.; *H. O. Roentgenology, P. B. B. H., Oct. 1, 1926-Oct. 1, 1927*; Asst. Res. Roent., *ibid.*, 1927-28.

FISHBACK, FRED C.

A.B., Harv., 1919; M.D., *ibid.*, 1922; H. O., St. Francis Hosp., Jersey City, New Jersey; *Pathol. H. O., P. B. B. H., May 15, 1923-Feb. 1, 1924*; 1 yr. at Women's Hosp., New York; New York Lying-In Hosp., 1925; Fellow in Surg., Mayo Clinic, Rochester, Minnesota, 1925-28; in practice, Washington, D. C.

FISHER, RIVINGTON H.

M.B., Queen's Univ., 1915; M.D., *ibid.*; C.M., *ibid.*; Asst. Res. Surg., *P. B. B. H., July 13, 1923-Jan. 1, 1924.*

FISKE, SEYMOUR

A.B., Univ. of Wis., 1916; M.D., Univ. of Pa., 1920; *Med. H. O., P. B. B. H., April 1, 1920-July 1, 1921*; Out-Patient Attend., Babies' Hosp., New York, 1921-22; Attend. Phys., Cornell Clin., 1921-23; Attend. Gastro-Enterologist, Vanderbilt Clin., New York, 1923-24; Chief, G. I. Clin., Midtown Hosp., New York, 1925-26; Asst. Attend. Phys., Lutheran Hosp. of Manhattan; Asst. Attend. Phys., Presbyterian Hosp., O. P. D., New York; in practice, New York.

FLEMING, HOWARD

A.B., Univ. of Cal., 1914; M.D., *ibid.*, 1917; Med. and Surg. H. O., San Francisco Hosp. for 8 mos; Capt., M. C., U. S. Army; Asst.

PETER BENT BRIGHAM HOSPITAL

Res. Surg., San Francisco Hosp., 1919; *Asst. Res. Surg., P. B. B. H., Dec. 20, 1919-Feb. 1, 1921*; Asst. Prof., Univ. of Cal.; Visit. Neuro-Surg., St. Luke's, Mt. Zion, and San Francisco Hospitals; in practice, San Francisco.

FLEMING, LEROY NEWTON

A.B., Miami, 1910; M.D., Johns Hopkins, 1914; Asst. in Surg., *ibid.*, 1915; *Surg. H. O., P. B. B. H., Nov. 1, 1915-March 1, 1916*; Special Stud., Univ. of Mich., 1915-16; Surg. Research, Detroit, Michigan.

FOLEY, FREDERIC E. B.

Ph.B., Yale, 1913; M.D., Johns Hopkins, 1918; Asst. in Pathol., *ibid.*, 1918-19; Lab. for Surg. Research, Harv., 1919-20; *Surg. H. O., P. B. B. H., March 1, 1920-July 1, 1921*; Instr. in Urol., Univ. of Minn. Med. Sch.; Genito-urinary Surg., Ancker Hosp., St. Paul, Minnesota; Visit. Surg., Miller Hosp.; Urologist, *ibid.*; in practice, St. Paul, Minnesota.

FORBES, HENRY STONE

A.B., Harv., 1905; Philippine Islands, 1905-06; M.D., Harv., 1911; Med. H. O., B. C. H., 1911-13; *Sr. Med. H. O., P. B. B. H., June 1-Nov. 1, 1913*; Phys. for Men, Infirmary, Univ. of Cal., Berkeley, Cal., 1914-15; Am. Red Cross, Serbia, 1915-16; Asst. Phys., M. G. H., O. P. D.; Lieut. and Capt., M. C., U. S. Army, 1917-19; Research Work, Cancer Commission, Harv.; Lab. and Field Work, Div. Industrial Hygiene, *ibid.*; Hon. Research Fellow, Applied Physiol., Yale Univ., New Haven, Connecticut; Research Work, Neuropathol., Harv.; Research Fellow Neuropathol., *ibid.*

FORT, JR., LYNN

B.S., Univ. of Ga., 1921; M.D., Emory Univ., 1925; Interne, Cincinnati Gen. Hosp., July, 1925-Feb., 1926; *Surg. H. O., P. B. B. H., March 1, 1926-July 1, 1927*; Asst. Res. Surg., Strong Mem. Hosp., Rochester, N. Y., 1927-28; in practice, Atlanta, Ga.

FOSTER, JOHN HESS

B.S., Colby, 1913; M.D., Univ. of Pa., 1917; *Med. H. O., P. B. B. H., July 1, 1917-June 15, 1918*; 1st Lieut., M. C., U. S. Army, 1918-19; Instr. in Med., Hunan-Yale Coll. of Med., Changsha, China; Vol. Asst., Thorndike Mem. Lab., B. C. H., 1923-24; Asst. in Med., Harv., 1924; Asst. Prof. in Med., Hunan-Yale Coll. of Med., Changsha, China; Assoc. Prof. of Med., *ibid.*, 1924-27; Attend. Phys., Waterbury Hosp.; in practice, Waterbury, Conn.

FOSTER, LEWIS CHANDLER

A.B., Univ. of Kansas, 1919; M.D., Harv., 1923; Substitute, Med. Serv., New York Hosp., 2 mos., 1922; *Surg. H. O., P. B. B. H., July 1, 1923-Nov. 1, 1924*; Asst. Res. Surg., New Haven Hosp., 1924-25; Res. Surg., *ibid.*, 1925-27; Instr. Surg., Yale Med. School, 1925-28; Asst. Clin. Prof. Surg., *ibid.*

REGISTER OF FORMER MEMBERS OF THE STAFF

FREMONT-SMITH, FRANK

M.D., Harv., 1921; *Pathol. H. O., P. B. B. H., July 1, 1921-July 1, 1922*; Med. H. O., B. C. H., 1922-23; Asst. in Neuropathol., Harv., 1923-24; Asst. in Neurol., M. G. H.; Asst. in Neuropathol., Harv., 1924-25 and 1925-26; John White Brown Scholar, Harv., 1924-25 and 1925-26.

FREMONT-SMITH, MAURICE

A.B., Harv., 1913; M.D., *ibid.*, 1918; *Surg. H. O., P. B. B. H., March 1, 1918-Feb. 7, 1919*; in charge of hosp. at Sivas, Armenia, 1919-20; in practice, Boston.

FULTON, JOHN

B.A., Oxon, 1923; M.A. and Ph.D., *ibid.*, 1925; M.D., Harv., 1927; Rhodes Scholar, Magdalen College, Oxford Univ., 1921-23; *Jr. Assoc. in Neurol, Surg., P. B. B. H., March-June, 1928*; Research Fellow, Madgalen College, Oxford, England, 1928-30; Prof. of Physiology, Yale Med. School.

GABE, WILLIAM EDWIN

M.D., Harv., 1918; *Surg. H. O., P. B. B. H., March 1, 1918-March 31, 1919*; Instr. in Surg., Indiana Univ. Sch. of Med.; Visit. Staff in Gynecology, Indianapolis City Hosp.; Staff, Methodist Episcopal Hosp., and St. Vincent's Hosp., Indianapolis; in practice, Indianapolis, Indiana.

GERMAN, WILLIAM J.

A.B., Univ. of Calif., 1922; M.A., *ibid.*, 1923; M.D., Harv., 1926; *Surg. H. O., P. B. B. H., July 1, 1926-Nov. 1, 1927*; Fellow in Plastic Surg., Johns Hopkins; Asst. in Surg., Yale Univ. School of Med., and Asst. Res. in Surg., New Haven Hosp., 1928-29; William Harvey Cushing Fellow in Surg., Yale Univ. School of Med.

GILE, HAROLD H.

A.B., Princeton, 1915; M.D., Columbia (Coll. of Phys. and Surgs.), 1922; Surg. Interne, Presbyterian Hosp., New York, 1922-24; *Asst. Res. Surg., P. B. B. H., Jan. 1-Nov. 1, 1925*; Asst. Visit. Urologist, Presbyterian Hosp., New York (one year's leave of absence).

GOETSCH, EMIL

S.B., Univ. of Chicago, 1903; Ph.D., *ibid.*, 1906; Fellow Asst. and Assoc. in Anat., *ibid.*, 1904-08; Research Asst., Dept. of Exp. Therapeutics, *ibid.*, 1908-09; Rush Med. Coll., 1906-07; M.D., Johns Hopkins, 1909; Asst. in Surg., *ibid.*, 1909-10; Asst. Res. Surg., *ibid.*, 1910-12; *Res. Surg., P. B. B. H., Sept. 1, 1912-Sept. 1, 1915*; Asst. in Surg., Harv., 1912-15; Assoc. in Surg., Johns Hopkins, 1915-18; Assoc. Prof. of Surg., *ibid.*, 1918-19; Prof. of Surg. and Surg.-in-Chief, Long Island Coll. Hosp., Brooklyn, New York; in practice, Brooklyn, New York.

PETER BENT BRIGHAM HOSPITAL

GOLDEN, ROSS

A.B., Cornell (Mt. Vernon, Iowa), 1912; M.D., Harv., 1916; *Med. H. O., P. B. B. H., July 1, 1916-July 18, 1917*; Capt. and Major, M. C., U. S. Army, 1917-20; House Phys., X-ray Dept., M. G. H., 1920-21; *Asst. Res. Phys., P. B. B. H., July 1, 1921-April 15, 1922*; Visit. Phys., Roentgen-ray Dept., Presbyterian Hosp., New York; Assoc. Prof. of Med., Columbia Univ.

GOODALL, HARRY WINFRED

A.B., Dart., 1898; M.D., Harv., 1902; House Pupil, M. G. H., 1902-03; House Pupil, Boston Lying-In Hosp., 1903; *Assoc. in Med., P. B. B. H., Dec. 12, 1912-Dec. 31, 1917*; Lieut. Col., M. C., U. S. Army, 1917-19; Instr. in Med., Harv. Grad. Sch. of Med.; Phys., Boston Dispensary; Asst. Visit. Phys., N. E. Baptist Hosp.; in practice, Boston.

GOODPASTURE, ERNEST WILLIAM

A.B., Vanderbilt, 1907; M.D., Johns Hopkins, 1912; Rockefeller Fellow in Pathol., Johns Hopkins, 1912-14; Pathol., Union Protest. Infirmary, Baltimore, 1913-14; Asst. Res. Pathol., J. H. H., 1913-14; Act. Res. Pathol., *ibid.*, 1914-15; Instr. in Pathol., Johns Hopkins, 1914-15; *Res. Pathol., P. B. B. H., Sept. 1, 1915-Oct. 1, 1917*; Asst. Prof. Pathol., Harv.; Fellow in Pathol., Cancer Comm., *ibid.*; Lieut. (j. g.) M. C., U. S. N. R. F.; *Act. Pathol., P. B. B. H., Feb. 1-Aug. 15, 1920*; Chief, Dept. of Pathol. and Bacteriol., Univ. of Philippines, 1922; Pathol., Phil. Gen. Hosp., Manila, 1922; Director, William H. Singer Mem. Research Lab., Pittsburgh, 1922-24; Scholarship, Gen. Education Board of the Rockefeller Found. Inst. for Gen. and Exp. Pathol., Vienna, 1924-25; Prof. of Pathol., Vanderbilt Univ.

GORDON, BURGESS

A.B., Gonzaga Univ., 1912; M.D., Jefferson Med. Coll., 1919; Interne, Jefferson Hosp., 1919-21; *Asst. Res. Phys., P. B. B. H., Sept. 15, 1921-Aug. 1, 1922*; *Res. Phys., ibid., Aug. 1, 1922-Sept. 1, 1925*; Asst. Prof. Med., Jefferson Med. College; Asst. Phys., O. P. D., Pennsylvania Hosp.; Med. Director and Phys. in charge, Dept. for Diseases of Chest, Jefferson Hosp., Philadelphia; in practice, Philadelphia, Pa.

GRAHAM, WILLIAM RANDOLPH

M.D., Med. Coll. of Va., 1925; Interne, Johnston-Willis Hosp., Richmond, Va., 1925-26; *Jr. Assoc. in Med., P. B. B. H., 1926-27*.

GRANT, SAMUEL BECKER

B.S., Washington Univ., 1918; M.D., *ibid.*, 1920; *Med. H. O., P. B. B. H., Oct. 16, 1920-March 1, 1922*; Med. H. O., J. H. H., March 1, 1922-May 1, 1922; *Asst. Res. Phys., P. B. B. H., April 15, 1922-Sept. 15, 1923*; Asst. in Clin. Med., Wash. Univ.; Asst. in Med., Barnes Hosp.; in practice, St. Louis, Missouri.

REGISTER OF FORMER MEMBERS OF THE STAFF

GRAVES, EDWIN G.

A.B., Univ. of Texas, 1920; M.D., Harv., 1924; *Med. H. O., P. B. B. H.*, July 1, 1924-July 1, 1925; in practice, Houston, Texas.

GRAVES, ROGER COLGATE

A.B., Syracuse Univ., 1913; M.D., *ibid.*, 1918; *Surg. H. O., P. B. B. H.*, Aug. 15, 1918-Oct. 19, 1919; Asst. Res. Surg., New Haven Hosp., New Haven, Connecticut, 1919-20; *Asst. Res. Surg., P. B. B. H.*, July 15, 1920-Aug. 1, 1921; *Assoc. in Surg., ibid.*, Sept. 1, 1921-April, 1923; Cabot Fellow, Harv., in charge of Lab. of Surg. Research, Sept. 1, 1921-Sept. 1, 1922; Urologist, Carney Hosp.; Genito-Urinary Surg., Pondville State Hosp. for Cancer; *Assoc. Consult. Urologist*, Brockton Hosp.; *Consult. Urol.*, Quincy and Winchester Hospitals; in practice, Boston.

GRAY, HORACE

A.B., Harv., 1909; M.D., *ibid.*, 1914; *Med. H. O., P. B. B. H.*, Nov. 1, 1914-March 1, 1916; 1st Lieut., M. C., U. S. Army, 1917-19; Investigation in field of growth and diseases of metabolism and ductless glands, Inst. for Juv. Research, Chicago, Ill.; Inst. for Juv. Research, Chicago, 1926-29; *Assoc. Clin. Prof. Med.*, Stanford Univ.

GREEN, GEORGE F.

B.S., Univ. of Mich., 1922; M.D., *ibid.*, 1924; M.S., Univ. Minn., 1929; Asst. in Physiol., *ibid.*; Asst. in Med., B. C. H., IV Med. Serv.; *Jr. Assoc. in Pathol., P. B. B. H.*, Oct. 1, 1924-Jan. 15, 1925; Fellow in Surg., Mayo Foundation.

GREENE, JAMES A.

M.D., Harv., 1925; *Med. H. O., P. B. B. H.*, Nov., 1925-March, 1926.

GREENE, THEODORE C.

A.B., Harv., 1920; M.D., *ibid.*, 1924; Asst. in Pathol., Johns Hopkins, Sept., 1924-Jan., 1925; *Surg. H. O., P. B. B. H.*, March 1, 1925-July 1, 1926; Presbyterian Mission, Peking, China.

GREENSPON, EDWARD A.

M.D., McGill Univ., 1916; House Bacteriol., Royal Victoria Hosp., Montreal, 1916-17; Asst. Res. Pathol., Johns Hopkins, 1917-18; Capt., Canadian Army Med. Corps; *Res. Pathol., P. B. B. H.*, Oct. 1, 1919-April 1, 1920; *Med. H. O., ibid.*, April 1, 1920-July 1, 1921; May Fellow in Med. Research, Johns Hopkins; Asst. in Med., *ibid.*, 1921-23; Jr. Attend. Phys., Montreal Gen. Hosp.; Chief, Med. Dept., Women's Gen. Hosp., Montreal, Canada; in practice, Montreal, Canada.

GREY, ERNEST

A.B., Univ. of Wis., 1907; Asst. in Anat., *ibid.*, 1907-08; Stud. in Med., *ibid.*, 1907-08; M.D., Johns Hopkins, 1911; *Res. H. O., ibid.*, 1911-12; *Surg. H. O., P. B. B. H.*, Nov. 1, 1912-Feb. 12, 1914; Asst.

PETER BENT BRIGHAM HOSPITAL

Res. Surg., ibid., Feb. 12, 1914-Sept. 1, 1916; Asst. in Surg., Harv., 1915-16; Instr. in Surg., Johns Hopkins. Died Oct. 12, 1918.

GUNDERSEN, TRYGVE

M.D., Harv., 1926; *Surg. H. O., P. B. B. H., Nov. 1, 1926-March 1, 1928.*

HAIGHT, L. CAMERON

A.B., Univ. of Calif., 1923; M.D., Harv., 1926; *Surg. H. O., P. B. B. H., Nov. 1, 1926-March 1, 1928; Asst. Res. Surg., New Haven Hosp.*

HALE, WORTH

A.B., Univ. of Mich., 1908; M.D., *ibid.*, 1904; *Assoc. in Med., P. B. B. H., Nov. 1, 1917-Dec. 31, 1918; Assoc. Prof. of Pharm. and Asst. Dean, Harv.*

HALLER, DAVID ALEXANDER

A.B., Hampden-Sidney, 1908; M.D., Columbia, 1913; *Med. H. O., P. B. B. H., Nov. 1, 1913-March 1, 1915; Asst. Res. Phys., ibid., March 1, 1915-Oct. 1, 1916; Res. Phys., ibid., Oct. 1, 1916-June 6, 1917; Major, M. C., U. S. Army, 1917-19; Junior Attend. Phys., Hahnemann Hosp., 1920-21; Internist for the Rochester Clinic, Rochester, New York, 1919-25; Asst. Phys., Rochester Gen. Hosp.; Phys. to Baden St. Disp., 1924-25; Instr. in Med., Univ. of Rochester Med. Sch., 1926-29; Asst. Prof. of Med., *ibid.*; Asst. Phys., Strong Mem. Hosp., Rochester, N. Y.; Chief, Med. Serv., Rochester Gen. Hosp.; in practice, Rochester, N. Y.*

HANSMANN, GEORGE H.

M.D., Univ. of Iowa, 1918; Hosp. Chem., Iowa Univ. Hosp., 1918-19; Clin. Asst., Dept. of Internal Med., *ibid.*, 1919-20; Lect. in Clin. Microscopy, *ibid.*, 1920-21; *Res. Pathol., P. B. B. H., Sept. 15, 1921-Sept. 15, 1923; Pathol., Iowa Univ. Hosp.*

HARBIN, MAXWELL

B.S., Univ. of Georgia, 1916; M.D., Harv., 1920; *Surg. H. O., P. B. B. H., Nov. 1, 1920-March 1, 1922; H. O., Children's Hosp., 1922-23; Surg., Harbin Hosp., 1923-25; Assoc. in Orthopedic Surg., Lakeside Hosp.; Surg. in Charge, Rainbow Hosp.; Asst. Prof. Orthopedic Surg., Western Reserve Univ. School of Med.*

HARRISON, TINSLEY RANDOLPH

A.B., Univ. of Mich., 1919; M.D., Johns Hopkins, 1922; *Med. H. O., P. B. B. H., Nov. 1, 1922-March 1, 1924; Asst. Res. Phys., ibid., March 1-Sept. 1, 1924; Asst. in Med., Johns Hopkins; Res. Phys., Vanderbilt Univ. Hosp., Nashville, Tennessee; Instr. in Med., ibid., 1926-27 (leave of absence, 1927-28); Asst. Prof. Med., ibid.*

HARVEY, SAMUEL CLARK

Ph.B., Yale, 1907; M.D., *ibid.*, 1911; Alonzo Clark Fellow, Columbia, 1911-12; Instr. in Pathol., *ibid.*, 1912-13; Asst. Res. Phys.,

REGISTER OF FORMER MEMBERS OF THE STAFF

Loomis Sanitarium, Loomis, New York, 1913-14; *Surg. H. O., P. B. B. H., Nov. 1, 1914-Nov. 1, 1915*; Arthur Tracy Cabot Fellow, in charge of Lab. of Surg. Research, Harv., 1915-16; *Asst. Res. Surg., P. B. B. H., Nov. 1, 1916-May 7, 1917*; Major, M. C., U. S. Army, 1917-19; Res. Surg., New Haven Hosp.; Instr. in Surg., Yale, 1919-20; Asst. Prof. of Surg., *ibid.*, 1920-21; Assoc. Prof. of Surg., *ibid.*, 1921-23; Surgeon-in-Chief, New Haven Hosp. and New Haven Disp.; Prof. of Surg., Yale.

HATCH, FLOYD FROST

A.B., Univ. of Utah, 1912; M.D., Harv., 1914; *Med. H. O., P. B. B. H., March 1, 1914-Jan. 4, 1915* (granted leave of absence from Jan. 4-Feb. 28, 1915); Surg. House Pupil, M. G. H., 1915-16; House Surg., *ibid.*, 1916-17; Surg. to G. U. Dept., Salt Lake County Hosp., 1917-18; Surg. to G. U. Dept., L. D. S., Hosp., Salt Lake City, Utah; 1st Lieut., M. C., U. S. Army, 1918-19; Asst. County Phys., Salt Lake County Hosp., and Asst. Visit. Surg., *ibid.*, 1921-22; Surg., Inter-Mountain Clin.; in practice, Salt Lake City, Utah; Post-Grad. study of Surg., Europe, 1926-27.

H'DOUBLER, FRANCIS TODD

B.A., Univ. of Wis., 1907; M.A., *ibid.*, 1908; Ph.D., *ibid.*, 1910; Stud., Univ. of Wis. Med. Sch., 1 year; Stud., Rush Med. Sch. and Univ. of Philippines, 1 year; M.D., Harv., 1915; H. O., Augustana Hosp., Chicago, 1915-16; *Med. H. O., P. B. B. H., Jan. 11, 1916-March 1, 1917*; H. O., Augustana Hosp., 1917-18; 1st Lieut. and Capt., M. C., U. S. Army, 1918-19; Moseley Travelling Fellow, Harv., 1919-20; Lakeside Hosp., Cleveland, Ohio, 1921; Instr. in Pathol. and Surg., Univ. of Ill., 1921-24; Jr. Attend. Surg., Augustana Hosp., Chicago; in practice, Chicago; Attend. Surg., St. John's, Burge Deaconess, and Springfield Baptist Hospitals; Instr., Bacteriol., S. W. T. Coll., Springfield, Missouri; in practice, Springfield, Missouri.

HEAD, JEROME R.

M.D., Harv., 1922; *Surg. H. O., P. B. B. H., July 1, 1922-Nov. 1, 1923*; Surg. Pathol., Mayo Clin., Rochester, Minnesota, 1924; Res. Surg., State of Wis. Gen. Hosp., Madison, 1924-26; Instr. in Surg., Univ. of Ill.; in practice, Chicago, Illinois.

HERRICK, THEODORE POMEROY

AB., Yale, 1915; M.D., Harv., 1919; *Med. H. O., P. B. B. H., Dec. 26, 1918-Jan. 1, 1920*; Med. H. O., Children's Hosp., Boston, 1920; H. O., Infants' Hosp., Boston, 1921; Res. Pediatrician, Rainbow Hosp., 1921-24; Asst. Visit. Pediatrician, St. Luke's Hosp., Cleveland, 1922-23; Asst. Visit. Pediatrician, St. Vincent's Charity Hosp., Cleveland, Ohio; in practice, Cleveland, Ohio.

HERRMANN, GEORGE R.

B.S., Univ. of Mich., 1916; M.D., M.S., *ibid.*, 1918; Ph.D., *ibid.*, 1922; *Med. H. O., P. B. B. H., Oct. 1, 1918-Oct. 1, 1919*; Asst. Res.

PETER BENT BRIGHAM HOSPITAL

Phys., Barnes Hosp., 1919-20; Res. Phys., *ibid.*, and Asst. in Med., Wash. Univ., St. Louis, 1920-21; Instr. in Med., Univ. of Mich., and Asst. Prof. Med., *ibid.*, 1921-25; Asst. Prof. of Med., Tulane Univ., New Orleans, Louisiana; Assoc. Prof. of Med., *ibid.*

HERRMANN, LOUIS G.

A.B., Univ. of Mich., 1920; M.D., Wash. Univ. Med. Sch., 1924; Interne, Maryland Gen. Hosp., Baltimore, July 1, 1924-March 1, 1925; *Med. H. O., P. B. B. H., March 1, 1925-July 1, 1926*; Asst. Res. Surg., Lakeside Hosp., Cleveland, Ohio, 1926-27; Crile Research Fellow in Surg. and Director, Lab. of Surg. Research, Western Reserve Univ. and Lakeside Hosp., 1927-28; Res. Surg., Lakeside Hosp.; Instr. in Surg., Western Reserve Univ., 1929-30; Asst. de Clinique Chirurgicale A (Prof. Leriche) Univ. de Strasbourg, Strasbourg, France.

HIGBEE, DANIEL RIGGS

A.B., Col. Coll., 1920; M.D., Harv., 1923; *Med. H. O., M. G. H., March, 1924-Nov., 1925*; *Surg. H. O., P. B. B. H., Nov. 1, 1925-March 1, 1927*.

HJORT, AXEL MAGNUS

A.B., Univ. of Ill., 1914; M.S., *ibid.*, 1915; Ph.D., Yale, 1918; M.D., Yale Univ. Med. Sch., 1921; *Med. H. O., P. B. B. H., July 1, 1921-Nov. 1, 1922*; Parke Davis & Co., Detroit, Michigan, 1923-26; Prof. Pharmacology, Dart. Med. Sch., Hanover, N. H., 1926-29; Toxicologist and Asst. Director of Med. Research, Med. Research Div., Chemical Warfare Service, Edgewood Arsenal, Edgewood, Md.

HODGSON, JOHN SPRAGUE

Ph.B., Brown, 1911; M.D., Harv., 1917; Surg. House Pupil, M. G. H., 1915-16; Res. Surg., *ibid.*, 1916; *Surg. H. O., P. B. B. H., Nov. 1, 1916-March 1, 1917*; *Asst. Res. Surg., ibid., March 1-June 22, 1917*; 1st Lieut., M. C., U. S. Army, 1917-19; Typhus Work in Macedonia, 1919; Res. Surg., M. G. H., 1920; Surg., O. P. D.; Second in Neurol. Surg., M. G. H.

HOLMAN, EMILE

A.B., Stanford Univ., 1911; Univ. of Oxford, 1916; Med. Stud., Oxford Univ., Royal College of Surgeons, Edinburgh, Rotunda Hosp., Dublin, National Hosp., London, 1914-17; M.D., Johns Hopkins, 1918; Res. Med. Officer, Children's Hosp. Sch., 1918-19; Asst. Res. Surg., J. H. H., 1919-21; Res. Surg., *ibid.*, 1921-23; Instr. in Surg., J. H. M. S., 1920-23; *Asst. Res. Surg., P. B. B. H., July 15-Sept. 1, 1923*; *Res. Surg., ibid., Sept. 1, 1923-July 1, 1924*; Austin Teach. Fellow, Harv., 1923-24; Attend. Surg., Lakeside Hosp. and Asst. Prof. of Surg., Western Reserve Univ., Cleveland, Ohio, July, 1924-Dec., 1925; Assoc. Prof. Surg., Stanford Univ. Med. Sch., 1925-26; Attend. Surg., Stanford Univ. Hosp., San Francisco; Prof. of Surg., Exec. Head, Dept. of Surg., Stanford Univ. Med. School.

REGISTER OF FORMER MEMBERS OF THE STAFF

HOUSTON, JR., DAVID WALKER

A.B., Princeton, 1912; M.D., Harv., 1916; *Surg. H. O., P. B. B. H., July 1, 1916-Nov. 1, 1917; Asst. Res. Surg., ibid., Nov. 1, 1917-Feb. 8, 1918; 1st Lieut., M. C., U. S. Army, 1918-19; Attend. Surg., Samaritan Hosp., Troy, New York; in practice, Troy, New York.*

HOWARD, HERBERT BURR

A.B., Harv., 1881; M.D., *ibid.*, 1884; Asst. Phys., State Infirmary, Tewksbury, Massachusetts, 1884-85; in practice, Idaho Springs, Colorado, 1885-87; Asst. Phys., State Infirmary, 1887-91; Supt., *ibid.*, 1891-97; Res. Phys., M. G. H., 1897-1908; *Supt., P. B. B. H., May 1, 1908-May 1, 1919 (retired—age limit); Mem., Mass. State Bd. of Insanity, 1898-1913 (Chairman, 1908-13); Pres., American Hosp. Assoc., 1909-10; Trustee, State Colony for the Insane, Gardner, Massachusetts. Died March 6, 1923.*

HUDSON, RICHARD T.

B.S., Univ. of Louisville, 1920; M.D., *ibid.*, 1924; 1 year rotating internship, Louisville City Hosp.; Asst. Res. Surg., Louisville City Hosp.; *H. O., Roentgenology, P. B. B. H., Aug. 1-Oct. 12, 1926.*

HUGGINS, HARRISON D.

Univ. of Oregon Med. School, 2 yrs.; M.D., Harv., 1926; Substitute *H. O., House of Good Samaritan; Med. H. O., P. B. B. H., Nov. 1, 1926-March 1, 1928; in practice, Portland, Ore.*

HUMISTON, HOMER W.

B.S., Univ. of Ill., 1923; M.D., Harv., 1925; *Med. H. O., P. B. B. H., July 1, 1925-Nov. 1, 1926; Fellow in Surg., Mayo Clin., Rochester, Minn., Nov. 1, 1926-April 1, 1929; in practice, Oak Park, Ill.*

HURWITZ, SAMUEL HAYMANN

A.B., Harv., 1907; A.M., *ibid.*, 1908; Special Stud., Univ. of Strassburg, Germany, 1909-10; Spec. Student, Inst. of Infectious Diseases, Berlin, Germany, summer of 1911; M.D., Johns Hopkins, 1912; Res. *H. O., J. H. H., 1912-13; Surg. H. O., P. B. B. H., Nov. 1, 1913-March 1, 1915; Instr. in Research Med., Univ. of Calif., 1915-17; Asst. Clin. Prof. of Med., ibid., 1917-26; Assoc. Clin. Prof. of Med., Stanford Univ. Med. School.*

INGRAHAM, FRANC DOUGLAS

A.B., Harv., 1922; M.D., *ibid.*, 1925; *Surg. H. O., P. B. B. H., July 1, 1925-Nov. 1, 1926; Fellow in Surg., Johns Hopkins Univ., Nov. 1, 1926-Sept. 1, 1927; Asst. Res. Surg., P. B. B. H., Sept., 1927-Sept., 1928; Res. Surg., ibid., Sept.-Oct., 1928; P. B. B. H. Traveling Fellow in Surg., 1928; Asst. Neurol. Surg., Children's Hosp., Boston; Asst. in Surg., Harv.*

PETER BENT BRIGHAM HOSPITAL

JACK, EDWIN EVERETT

A.B., Harv., 1884; M.D., *ibid.*, 1887; *Act. Consult. Ophthalmologist, P. B. B. H.*; Consult. Ophthalmologist, Mass. Eye and Ear Infirm.; in practice, Boston.

JACK, WILLIAM DAVID

A.B., Creighton, 1908; Grad. Stud., Univ. of Chicago, 1909-10; M.D., Johns Hopkins, 1914; *Surg. H. O., P. B. B. H., July 1, 1914-Nov. 1, 1915*; Capt. and Asst. Surg., 2nd Harv. Unit, B. E. F., France, 1915-16; Asst. Res. Urologist, J. H. H., 1916-17; Capt., M. C., U. S. Army and Consult. Urologist, A. E. F., 1917-19; Asst. Res. Surg., and Res. Urol., J. H. H., 1919-21; in practice, Chicago, Illinois.

JACKSON, HOWARD BURR

A.B., Harv., 1915; M.D., *ibid.*, 1919; *Med. H. O., P. B. B. H., March 15, 1919-April 1, 1920*; H. O., Surg. and Obstet. Services, Mass. Homœopathic Hosp., 1920; Asst. Phys. to Out-Patients, M. G. H.; Phys., Boston Dispensary; in practice, Jamaica Plain, Massachusetts.

JACOBSON, CONRAD

B.S., Beloit, 1900; Grad. Stud., 3 summer qrs., Univ. of Chicago; Asst. Prof. of Chem. and Bacteriol., Armour Inst. of Tech., 1903-05; Research Asst. in Pathol., Univ. of Chicago, 1907-08; M.D., Johns Hopkins, 1911; Asst. in Surg., Hunterian Lab., *ibid.*, 1911-12; *Asst. Res. Surg., P. B. B. H., Sept. 1, 1912-Sept. 1, 1915*; *Res. Surg., ibid., Sept. 1, 1915-July 1, 1920*; Asst. in Surg., Harv.; Assoc. Prof. of Surg., Univ. of Minn. Med. Sch., 1920-22; in practice, Seattle, Washington.

JACOBSON, VICTOR CLARENCE

B.S., Univ. of Wis., 1915; M.D., Harv., 1917; *Med. H. O., P. B. B. H., July 18, 1917-July 1, 1918*; 1st Lieut., M. C., U. S. Army, 1918; *Pathol. H. O., P. B. B. H., Jan. 1-July 1, 1919*; *Res. Pathol., ibid., July 1-Oct. 1, 1919*; Asst. Prof. of Pathol., Univ. of Wisconsin, 1919-20; *Res. Pathol., P. B. B. H., July 1, 1920-Sept. 1, 1921*; Instr. in Pathol., Harv., 1920-21; Pathol., Albany Hosp.; Prof. of Pathol., Union Univ., Albany, N. Y.

JAMESON, CHARLES HAROLD

A.B., Harv., 1916; M.D., *ibid.*, 1919; *Surg. H. O., P. B. B. H., June 15, 1919-Nov. 1, 1920*; Free Hosp. for Women, Brookline, 1920-21; *Asst. Res. Surg., P. B. B. H., Feb. 14-June 15, 1921*; *Asst. Res. Surg., ibid., Sept. 15, 1921-June 21, 1922*; in practice, Rockland, Maine.

JANNEY, JAMES CRAIK

A.B., Harv., 1911; M.D., *ibid.*, 1915; *Surg. H. O., P. B. B. H., July 1, 1915-Nov. 1, 1916*; Capt., M. C., U. S. Army; H. O., Boston Lying-In Hosp., 1923; Fellow, Am. Coll. Surgs., 1926; First Asst.

REGISTER OF FORMER MEMBERS OF THE STAFF

Obstetrician, Mass. Memorial Hosp.; Instr. in Gynæcology and Obstetrics, Boston Univ. Sch. of Med.; Obstetrician, Florence Crittendon Home; in practice, Boston.

JOELSON, JAMES J.

M.D., Columbia, 1920; Surg. Interne, Presbyterian Hosp., New York, 1920-22; *Asst. Res. Surg., P. B. B. H., July 15, 1922-July 26, 1923*; *Asst. Res. Surg., New Haven Hosp., and Instr. in Surg., Yale, 1923-24*; *Asst. Res. Surg. (G. U. Surg.) Lakeside Hosp., 1924-25*; *Demonstr. in G. U. Surg., Western Reserve Univ., Cleveland, Ohio, 1924-25*; *Instr. in G. U. Surg., ibid., 1925-27*; *Clin. Instr., G. U. Surg., ibid., 1927-28*; *Asst. G. U. Surg., Lakeside Hosp., 1926-28*; *Assoc. G. U. Surg., ibid.*; *Asst. Prof. G. U. Surg., Western Reserve Univ.*

JONES, MERRITT LACOUNT

S.B., Univ. of Wis., 1912; M.D., Harv., 1915; *Surg. H. O., P. B. B. H., July 1, 1915-Nov. 1, 1916*; *Asst. Res. Surg., ibid., Nov. 1, 1916-March 1, 1917*; *Capt., M. C., U. S. Army, 1917-19*; in practice, Wausau, Wisconsin.

JONES, WILFRED GRANT

B.S., College of Wooster, Wooster, Ohio, 1921; M.D., Harv., 1924; *Med. H. O., P. B. B. H., May 15, 1924-March 1, 1925*; *Missionary work, Miraj, India.*

KAZANJIAN, VARAZTAD H.

D.M.D., Harv., 1905; M.D., *ibid.*, 1921; F.A.C.S., 1928; *Mem. Harv. Unit, B. E. F., 1915-16*; *Surg. Specialist for Wounds of Jaws and Face, B. E. F., 1916-19*; *C. M. G.; Dental Surg., P. B. B. H., Jan. 22, 1920-Dec., 1922*; *Prof. of Clin. Oral Surg., Harv.*; *Visit. Surg., Oral and Plastic Surg., B. C. H.*; *Asst. Surg. in Oto-Laryngology, Mass. Eye and Ear Infirm.*; *Consult. Oral Surg., Camb. Hosp.*; *Mem. of Staff, Consult. Surgeons, Newport Hosp., Newport, Rhode Island*; *Attend. Specialist, U. S. P. H. S.*; *Asst. Laryngologist, Huntington Mem. Hosp.*; *Asst. Laryngologist, M. G. H.*; *Member of Staff, N. E. Deaconess Hosp.*; *Member, Consult. Staff, Beth Israel Hosp.*; in practice, Boston.

KEBABJIAN, HRANT SETRAG

A.B., Anatolia Coll. (Armenia), 1913; M.D., Harv., 1918; *Admitting Phys., Babies' Ward, Post Grad. Hosp., New York, 1918*; *Surg. H. O., P. B. B. H., Nov. 15, 1918-March 1, 1920*; *City Phys., Buffalo, New York, 1920-21*; *Director, Comm. on Hosps. in Cilicia, 1921-22*; *Asst. Res., Long Island Hosp., Boston Harbor, 1922-26*; in practice, Boston.

KEEGAN, JOHN JAY

A.B., Univ. of Neb., 1912; A.M., *ibid.*, 1914; M.D., *ibid.*, 1915; *Instr. in Anat., ibid., 1915-17*; *Pathol. H. O., P. B. B. H., June 15, 1917-Dec. 15, 1917*; *Lieut., M. C., U. S. Navy, 1917-19*; *Surg. H. O.,*

PETER BENT BRIGHAM HOSPITAL

P. B. B. H., Aug. 13, 1919-Nov. 1, 1920; Asst. Prof. of Pathol., Univ. of Neb., 1920-23; Prof. Clin. Pathol., Director of Clinics, Sec. of the Faculty, *ibid.*, 1923; Neuro-surg., Univ. Hosp.; Dean, Coll. of Med., Univ. of Nebraska; in practice, Omaha, Nebraska.

KEYSER, LINWOOD DICKENS

B.A., Virginia, 1914; M.D., Johns Hopkins, 1918; F.A.C.S., 1928; H. O., J. H. H., 1918-19; *Asst. Res. Surg.*, *P. B. B. H.*, July 1-Nov. 1, 1919; Res. Surg., New York Post Grad. Hosp., New York City, 1920; Fellow, Mayo Foundation, Rochester, Minnesota, 1920-23; M.S., Mayo Foundation; Univ. of Minn Grad. Sch. in Med., 1921; Attend. Surg. and Surg. Pathol., Roanoke Hosp., Roanoke, Va.

KING, DONALD STORRS

A.B., Oberlin, 1912; M.D., Harv., 1918; H. O., Orthopedic Serv., Children's Hosp.; 1st Lieut., M. C., U. S. Army, 1918-19; Med. H. O., M. G. H., 1919-21; *Assoc. in Pathol.*, *P. B. B. H.*, May 24, 1921-May 24, 1922; Fellow in Med., Harv., 1923; Asst. in Med., *ibid.*; Asst. in Med., M. G. H.; Asst. Phys. to Out-Patients, M. G. H.; Asst. Phys., Channing Home; Consult. Phys., Mass. Eye and Ear Infirm.; in practice, Boston.

KING, WILLIAM ROBERT

B.S., Univ. of Minn., 1913; M.D., Harv., 1917; *Med. H. O.*, *P. B. B. H.*, July 1, 1917-Feb. 1, 1918; *Asst. Res. Phys.*, *ibid.*, Feb. 1-Oct. 24, 1918; in practice, Minneapolis, Minnesota.

KINNEY, KENNETH K.

M.D., Univ. of Iowa, 1921; Surg. Interne, 1 year, Seattle Gen. Hosp.; private practice, 3 years; H. O., X-ray Dept., *P. B. B. H.*, Oct. 1, 1925-April 1, 1926; *Asst. Res. Roent.*, April 1-Oct. 1, 1926.

KINSMAN, JAMES MURRAY

B.A., Mt. Allison Univ., Sackville, N. B., 1918; M.D., C.M., McGill Univ., 1922; Pathol. Interne, Royal Victoria Hosp., 1922-23; Demonstr. in Pathol., McGill Univ., 1922-23; *Med. H. O.*, *P. B. B. H.*, July 1, 1923-Nov. 1, 1924; Asst. Res. Med., New Haven Hosp., New Haven, Connecticut; Phys., Med. Service, Louisville, Ky.; Asst. Prof. of Med., Univ. of Louisville.

KIRKWOOD, ALLAN STEWART

M.D., Univ. and Bellevue Hosp. Med. Coll., New York, 1913; *Assoc. in Med.*, *P. B. B. H.*, Nov. 1-Dec. 31, 1917; Major, M. C., U. S. Army; Phys. to Tuberculosis Clin., O. P. D., Mountainside Hosp., Montclair, New Jersey; Visit. Neuro-Psychiatrist, *ibid.*; Visit. Phys., St. Vincent's Hosp., Montclair; in practice, Montclair, New Jersey.

KOEFOED, HILMAR OLAF

B.S., Beloit, 1911; M.D., Harv., 1916; Moseley Travelling Fellowship, *ibid.*, in Europe, summer of 1916; *Med. H. O.*, *P. B. B. H.*,

REGISTER OF FORMER MEMBERS OF THE STAFF

Nov. 1, 1916-Nov. 1, 1917; 1st Lieut., M. C., U. S. Army, 1917-18; Chief of Clin. at Mem. Lab. and Clin., Santa Barbara, Cal.; Asst. in Med., Med. Sch., Univ. of Cal.; Asst. to Prof. H. C. Moffit in his private work; Chief of Med. Dept., Santa Barbara Clin.; Attend. Phys., Cottage Hosp., Santa Barbara, Cal.; in practice, Santa Barbara, California.

KOHN, LAWRENCE A.

A.B., Williams, 1914; work in Bacteriol. with Dr. Park, New York, 1914-17; work in Bacteriol. with army in France, 1917-19; 1st Lieut., San. Corps, 1918-19; M.D., Johns Hopkins, 1923; Med. Interne, *ibid.*; *Asst. Res. Phys., P. B. B. H., Sept. 15, 1924-Sept. 1, 1925*; Instr. in Med., Univ. of Rochester; Res. Phys., Strong Mem. Hosp., Rochester, N. Y., 1925-27; Asst. Prof. Med., Univ. of Rochester; Asst. Phys., Strong Mem. Hosp.; Assoc. Staff, Rochester Gen. Hosp.; in practice, Rochester, N. Y.

KREUTZMANN, HENRY ADOLPH ROBERT

M.D., Univ. of Pa., 1916; *Surg. H. O., P. B. B. H., March 1, 1917-Feb. 4, 1918*; Lieut., M. C., U. S. Army; Urologist for N. W. P. R. R.; Chief Urol., Chinese Hosp., San Francisco; Instr. in Urol., Stanford Univ.; in practice, San Francisco, California.

LADD, WILLIAM SARGENT

B.S., Amherst, 1910; M.D., Columbia, 1915; *Med. H. O., P. B. B. H., Nov. 1, 1915-March 1, 1917*; Asst. Phys., Presbyterian Hosp., New York, and Instr. in Med., Columbia, 1918-19; 1st Lieut., M. C., U. S. Army; Asst. in Med., J. H. H., and Instr. in Med., Johns Hopkins, 1919-21; Instr. in Med., Columbia, 1921-24; Assoc. in Med., *ibid.*; Asst. Phys., Presbyterian Hosp., New York.

LAMSON, PAUL DUDLEY

A.B., Harv., 1905; M.D., *ibid.*, 1911; Med. House Pupil, M. G. H., 1909-10; Lect. Asst. in Pharm., Univ. of Wurzburg, Germany, 1912-13; Sheldon Travelling Fellow, Harv., 1911-13; *Asst. Res. Phys., P. B. B. H., Oct. 1, 1913-Oct. 15, 1914*; Asst. in Exp. Therapeutics, Johns Hopkins, 1914-15; Assoc. in Pharmacology, *ibid.*, 1916-20; Assoc. Prof. Pharmacology, *ibid.*, 1921-25; Prof. Pharmacology, Vanderbilt Univ. Sch. of Med.

LANMAN, THOMAS HINCKLEY

A.B., Harv., 1912; M.D., *ibid.*, 1916; *Assoc. in Urol., P. B. B. H., March 22, 1920-June 26, 1922*; Asst. Surg., Harv.; Asst. Visit. Surg., Children's Hosp.; Visit. Surg., Children's Serv., Cambridge Hosp.; in practice, Boston.

LEHMAN, EDWIN PARTRIDGE

A.B., Williams, 1910; M.D., Harv., 1914; *Surg. H. O., P. B. B. H., July 1, 1914-July 1, 1915*; Asst. Res. Surg., Barnes Hosp., St. Louis, Missouri, 1915-16; Asst. in Surg., Washington Univ., 1916-20; 1st Lieut., M. C., U. S. Army, 1917-19; Res. Surg., Barnes Hosp., St.

PETER BENT BRIGHAM HOSPITAL

Louis, 1919-20; Instr. in Surg., Instr., Asst. Prof. and Assoc. Prof. Clin. Surg., Washington Univ., 1920-28; Prof. of Surg. and Gyn. and Director, Surg. Dept., Univ. of Va.

LEWIS, EDWIN RAY

M.D., Boston Univ., 1901; Asst. Surg., Clinton Hosp., 1907; Asst. Supt., Mass. Homœopathic Hosp., 1909; Act. Supt., *ibid.*, 1916; Supt., Hahnemann Hosp., Rochester, New York, 1916; Supt., Flower Hosp., 1919-20; Capt., M. C., U. S. Army, 1918-19; *Second Asst. Supt., P. B. B. H., April 11, 1921-Oct. 1, 1923*; Supt., Easton Hosp., Easton, Pennsylvania, 1923-26; Supt., Burbank Hosp., Fitchburg.

LEWIS, JR., WILLIAM H.

A.B., Harv., 1922; M.D., *ibid.*, 1926; Interne, Allegheny Gen. Hosp., Pittsburgh, Pa., July 1, 1926-July 1, 1927; *Med. H. O., P. B. B. H., July 1, 1927-March 1, 1928*; Neurol. H. O., B. C. H., 1928; Res. Pathol., Palmer Mem. Hosp., 1928-29; Res. in Pathol., Huntington Mem. Hosp.; Asst. Pathol., Pondville Hosp.; Asst. in Pathol., Harv.

LIEB, CLARENCE WILLIAM

A.B., Colorado, 1908; A.M., *ibid.*, 1909; M.D., Harv., 1914; *Pathol. H. O., P. B. B. H., April 1-June 6, 1914 (resigned)*; Med. Director, "The Glen Springs," Watkins, New York, 1914-17 (resigned); in practice, Gastro-enterology, New York.

LIEBMAN, CHARLES

Ph.B., Yale, 1917; M.D., Harv., 1921; X-ray Dept., Base Hosp., Camp Devens; X-ray Dept., Mass. Eye and Ear Inf.; X-ray Dept., New Haven Hosp.; *X-ray H. O., P. B. B. H., June 1, 1921-July 1, 1922*; Roentgenologist, Children's Hosp., Boston, 1922-26; Asst. Roent., Boston Disp. and Beth Isreal Hosp., Boston.

LOCKE, JR., CHARLES EDWARD

A.B., M.S., Univ. of Cal., 1916; M.D., *ibid.*, 1919; S.D. (*en Chirurgie*), Univ. of Brussels, 1922; Med. and Surg. H. O., Univ. of Cal. Hosp.; *Asst. Res. Surg., P. B. B. H., June 15, 1920-June 1, 1921*; Asst. on Visit. Surg. Staff, Dr. Depage's Service, St. Pierre Hosp., Brussels; Asst. Etranger, Prof. Pierre Marie's Serv., Salpêtrière, Paris, 1921-22; Fellow, C.R.B., Educational Foundation, 1921-22; Asst. Dept. of Surg., Univ. of Cal. Med. Sch.; Fellow, National Research Council, 1922-23; Full-time Instr. in Surg., Univ. of Cal.; Staff, Hooper Research Foundation, 1923-24; Neurol. Surg., Cleveland Clinic. *Died, Cleveland Clinic disaster, May 15, 1929.*

LOURIA, HENRY WALTER

A.B., Columbia, 1916; M.D., *ibid.*, 1919; Surg. H. O., Presbyterian Hosp., New York, 1919-20; *Med. H. O., P. B. B. H., July 1, 1920-Oct. 1, 1921*; Stud., M. I. T., 1921; Med. Interne, J. H. H., 1921-22; Asst. Surg., Brooklyn Jewish Hosp.; Instr. in Surg., Coll. of Phys. and Surg.; Assoc. Surg., Brooklyn Jewish Hosp.; Asst. Surg.,

REGISTER OF FORMER MEMBERS OF THE STAFF

King's Co. Hosp.; Vol. Asst., Surg. Serv. of Prof. H. VonHaberer, Graz, Austria, Oct., 1927-Feb., 1928; in practice, Brooklyn, N. Y.

LUGER, ALFRED

M.D., Univ. of Vienna; Demonstr., Histological Inst., Univ. of Vienna, May, 1909-May, 1911; Klinik Neusser, Vienna, May, 1911-Sept., 1911; Director, Roentgen Lab., Klinik Neusser, Vienna, Sept., 1911-Dec., 1912; *Roentgenologist, P. B. B. H., Jan. 1, 1913-June 1, 1914* (granted leave of absence from June 1, 1914-Dec. 14, 1915; Asst. in Roentgenology and Asst. in Med., H. M. S., 1914-15; Army Phys., 1915-18; Asst. Bacteriol. Inst., Prof. Dorr, Vienna, 1918-19; Asst. at II. Med. Clin. (Prof. Ortner), Vienna, 1919-29; Privatdozent f. Innere Medizin, Univ. of Vienna; Ausserordenlich Univ. Prof., *ibid.*; Director of II. Med. Div., Kaiserin Elisabeth Hosp., Vienna.

LYLE, EVELINE BURTON

B.A., Mt. Holyoke Coll., 1906; M.D., Tufts Coll. Med. Sch., 1913; *Act. Assoc. in Med., P. B. B. H., Nov. 1-Dec. 31, 1917*; Visit. Phys. and Obstetrician, N. E. Hosp. for Women and Children; Med. Examiner for Winsor School, Milton Academy Girls' School, Brookline High School Girls, Boston University School of practical Arts, Penn. Mutual Life Insurance Co., John Hancock Life Ins. Co., United Life and Accident Insurance Co.; in practice, Boston.

LYNCH, JR., JAMES JOSEPH

B.S., Notre Dame Univ., 1915; M.D., Harv., 1919; H.O., Boston Lying-In Hosp., 1919; *Med. H. O., P. B. B. H., July 1, 1919-July 1, 1920*; H. O., Cambridge City Hosp., 1920-21; Jr. Visit. Obstetrician, St. Elizabeth's Hosp.; Jr. Asst. Surg., Boston Disp.; in practice, Boston.

LYON, DON DEE

S.B., Wash. Univ., 1914; M.D., Harv., 1920; H. O., Huntington Hosp., 1919-20; Interne, Bridgeport Hosp., 1920-21; *Surg. H. O., P. B. B. H., March 1, 1921-July 1, 1922*; Res. Phys., Blodgett Mem. Hosp., Grand Rapids, Mich.; Int. Med., Grand Rapids Clin., 1924-25; in practice, Bridgeport, Connecticut.

MACMILLAN, STUART FORBES

B.S., Union College, Schenectady, New York, 1920; M.D., Albany Med. College, 1925; Interne, Albany Hosp., 1925-26; *Pathol. H. O., P. B. B. H., July 1, 1926-July 1, 1927*; in practice, Schenectady, N. Y.

MALLORY, TRACY BURR

M.D., Harv., 1921; *Med. H. O., P. B. B. H., March 1, 1922-July 1, 1923*; Instr. in Bacteriol., Harv., 1924-26; Instr. in Path., *ibid.*; Pathol., M.G.H.

PETER BENT BRIGHAM HOSPITAL

MANN, ALBERT HOWELL

M. D., Tulane Univ., 1926; *Med. H. O., P. B. B. H.*, July 1, 1926-Nov. 1, 1927.

MARINUS, CARLETON J.

B.Sc., Syracuse, 1915; M.Sc., *ibid.*, 1917; M.D., Univ. of Mich., 1921; *Med. H. O., P. B. B. H.*, Nov. 1, 1921-March 1, 1923; in practice, Detroit, Michigan.

MARKHAM, BLACKWELL

A.B., Univ. of N. C., 1917; M.A., *ibid.*, 1918; M.D., Harv., 1922; *Surg. H. O., P. B. B. H.*, July 1, 1922-Nov. 1, 1923; Res. Surg., Fifth Ave., Hosp., 1923-24; Assoc. Attend. Surg., Watts Hosp.; Instr. in Surg., Duke Univ.; in practice, Durham, N. C.

MARLOW, JR., FRANK WILLIAM

B.S., Hamilton, 1923; M.D., Harv., 1927; *Med. H. O., P. B. B. H.*, July, 1927-Nov., 1928; Asst. Res., New Haven Hosp.; Asst. in Med., Yale Univ., Nov., 1928-July, 1929; Asst. in Med., Harv.; Asst. in Med., M. G. H.

MARLOW, SEARLE BISSET

A.B., Harv., 1912; Stud., Harv., 1 year; M.D., Syracuse, 1916; *Pathol. H. O., P. B. B. H.*, July 1, 1916-June 11, 1917; Capt., M. C., U. S. Army, 1918-19; House Surg., Herman Knapp Hosp., New York, 1920-21; Asst. Prof. of Ophthal., Syracuse Univ.; Ophthalmologist, Syracuse Free Disp., St. Joseph's Hosp., General Hosp., and Syracuse Mem. Hosp.; in practice, Syracuse, New York.

MARVIN, FRANK WILLIAM

A.B., Harv., 1910; M.D., *ibid.*, 1914; House Pupil, M. G. H., 1914-15; *Surg. H. O., P. B. B. H.*, Nov. 1, 1915-March 1, 1916; in practice, Boston.

MARVIN, HAROLD MYERS

A.B., Davidson Coll., 1914; M.D., Harv., 1918; *Med. H. O., P. B. B. H.*, Feb. 13, 1918-Feb. 9, 1919; Dist. Phys. with Near East Relief, Alexandropol, Armenia, 1919-20; Asst. in Med., Harv.; Asst. in Med., M. G. H., 1920-21; Instr. in Med., Yale, 1921-23; Asst. Prof. of Med., 1923-28; Fellow, John Simon Guggenheim Memorial Foundation, 1926-27 (in laboratory of Sir Thomas Lewis, Univ. of Coll. Hosp. Med. School, London); Asst. Prof. Clin. Med., Yale.

MASON, B. HENRY

M.D., Bowdoin, 1907; Gen. Internship, Maine Gen. Hosp., 1907-08; Asst. Phys., State Asylum, Worcester, Aug., 1908-Nov., 1913; in practice, Portland, Maine, 1913-14; Asst. Phys., Worcester State Hosp., Feb., 1914-May, 1914; Asst. Supt., *ibid.*, May, 1914-June 18, 1918; Act. Supt., *ibid.*, June 18, 1918-April 1, 1921; Neuro-Psychiatrist, Advisory Board A and B, Worcester, Massachusetts, during draft; Asst. Director, Psychopathic Hosp., Ann Arbor, Michi-

REGISTER OF FORMER MEMBERS OF THE STAFF

gan, April, 1921-Jan., 1923; Neuro-Psychiatrist, U. S. V. B.; Instr. in Psychiatry, Univ. of Mich. Med. School, 1921-23; *First Asst. Supt., P. B. B. H., Jan. 8, 1923-Dec. 1, 1927*; Pres., Conn. Hosp. Assoc., 1929-30; Supt., Waterbury Hosp., Waterbury, Conn.

MASSEE, JOSEPH C.

B.S., John B. Stetson Univ., 1922; M.D., Harv., 1925; *Med. H. O., P. B. B. H., Nov. 1, 1925-March 1, 1927.*

MCCANN, WILLIAM SHARP

A.B., Ohio State Univ., 1911; M.D., Cornell, 1915; Asst. Res. Phys., Gen. Mem. Hosp., New York, 1915; *Surg. H. O., P. B. B. H., Nov. 1, 1915-Nov. 1, 1916 (resigned)*; Arthur Tracy Cabot Fellow in charge of Lab. of Surg. Research, Harv.; Capt., M. C., U. S. Army; Instr. in Med., Cornell; Research Fellow, Russell Sage Inst. of Pathol.; Adjunct Visit. Phys., Bellevue Hosp., New York; Assoc. Phys., J. H. H., Baltimore, Md.; Assoc. in Med., Johns Hopkins; Assoc. Prof. Med., *ibid.*; Dewey Prof. of Med., Univ. of Rochester, Rochester, N. Y.

MCCARTHY, PATRICK THOMAS

B.S., Univ. of Chicago, 1914; M.D., Rush Med. Coll., 1917; *Surg. H. O., P. B. B. H., Dec. 15, 1917-Oct. 1, 1918*; *Asst. Res. Surg., ibid., Oct. 1, 1918-Feb. 9, 1919*; Relief Comm., Near East, Armenia, 1919-20; Post Grad. Study in Europe, 1920; Surg., Western Montana Clin., Missoula, Montana; in practice, Missoula.

MCCARTY, ELBA DENTON

M.D., Univ. of Mich., 1903; Interne, 2 years, St. Mary's Hosp., Saginaw, E. S., Mich.; Gen. Practice, Merrill, Mich., 1905-09; Priest River, Idaho, 1909-17; *Roentgenologist, P. B. B. H., July 1, 1918-Oct. 14, 1919*; in practice, Tacoma, Washington.

MCCLURE, CHARLES WALTER

A.B., Ohio State Univ., 1906; M.D., Starling Med. Coll., Ohio, 1910; Med. H. O., St. Francis Hosp., Columbus, Ohio, 1910-11; Asst. in Clin. Med., Starling Med. Coll., 1911-12; Asst. in Med., Univ. of Iowa Med. Sch., 1912-15; Grad. Stud. in Med., Harv., 1915-16; *Asst. Res. Phys., P. B. B. H., July 1-Nov. 1, 1916*; Alumni Asst. in Med., Harv.; *Res. Phys., P. B. B. H., June 7-July 6, 1917*; Phys.-in-Chief, St. Luke's Hosp., South Bethlehem, Pa., 1917-18; Capt., M. C., U. S. Army, 1918; *Assoc. in Med., P. B. B. H., Feb. 13, 1919-Sept. 1, 1921*; Research Worker, Evans Mem. and Gastroenterologist to O. P. D., Mass. Homœopathic Hosp., Boston; in practice, Boston.

McKEAN, RICHARD M.

A.B., Univ. of Mich., 1916; M.D., *ibid.*, 1919; *Med. H. O., P. B. B. H., Dec. 15, 1919-March 1, 1921*; H. O., Infants' Hosp., Boston, 1921; Jr. Phys., Detroit Receiving Hosp., 1921-22; Assoc., *ibid.*; Instr. in Int. Med., Detroit Coll. of Med. and Surg.; Asst. Prof. of

PETER BENT BRIGHAM HOSPITAL

Med., *ibid.*; Attend. Phys. and Director of Metabolic Unit, Detroit Receiving Hosp.; Jr. Phys., Harper Hosp.; Consult. in Metab., Herman Kiefer Hosp.; Attend. Phys. to Out-Patients, Harper Hosp.; in practice, Detroit, Mich.

McKENZIE, KENNETH G.

M.B., Toronto; M.D., *ibid.*, 1914; Interne, Toronto Gen. Hosp., 1914; Capt., Imp. Army M. C., 1914-19; Instr. in Anat., Univ. of Toronto, 1919 (on leave of absence to work with Dr. Cushing under the Mickle Fellowship of Toronto Univ.); *Asst. Res. Surg., P. B. B. H., Nov. 1, 1922-Nov. 1, 1923*; Surg. Staff, Toronto Gen. Hosp.; in practice, Toronto, Canada.

McQUESTEN, PHILIP

A.B., Dart., 1911; M.D., Harv., 1915; Stud., B. C. H. (Pathol. Lab.), 1915-16; *Surg. H. O., P. B. B. H., March 1, 1916-July 1, 1917*; *Asst. Res. Surg., ibid., July 1-Aug. 17, 1917*; in practice, Nashua, New Hampshire.

MILLET, JOHN ALFRED PARSONS

A.B., Harv., 1910; M.D., *ibid.*, 1914; *Med. H. O., P. B. B. H., Nov. 1, 1914-March 1, 1916*; Internist, New York State Inst. for the Study of Malignant Disease, Buffalo, 1916-19; Capt., M. C., U. S. Army, 1917-19; Asst. Attend. Phys., Buffalo Gen. Hosp.; Assoc. in Med., Buffalo Univ. Med. Sch., and Asst. to the Chiefs of Med. Div., Dept. of Hospitals and Dispensaries, Buffalo, New York, 1916-23; Phys., Austen Riggs Foundation, Stockbridge, Massachusetts.

MILLIKEN, SAMUEL GIBBS

M.D., Univ. of Texas, 1922; Sr. Instr. in Pathol., Univ. of Texas, 1922; *Surg. H. O., P. B. B. H., March 1, 1924-Feb. 1, 1925*; Asst. Prof. of Path., Univ. of Texas; Director of Laboratories, Baptist Hosp., Houston, Texas; in practice, Houston, Texas.

MONTGOMERY, JAMES BLAINE

A.B., Dart., 1911; M.D., Harv., 1915; *Surg. H. O., P. B. B. H., Nov. 1, 1915-March 1, 1917*; House Surg., Mass. Eye and Ear Infirmary, 1917; Grad., Army Med. Sch., 1917; 1st Lieut., M. C., U. S. Army; Major, Med. Corps, U. S. Army, Washington, D. C. *Deceased.*

MOORE, RICHMOND LAWRENCE

A.B., Univ. of Va., 1918; M.D., Harv., 1922; *Surg. H. O., P. B. B. H., Nov. 1, 1922-March 1, 1924*; *Asst. Res. Surg., ibid., July 1, 1924-July 1, 1925*; Asst. Res. Phys., Hosp. of the Rockefeller Inst., New York, July 1, 1925-Aug., 1927; Fellow in Surg., Presbyterian Hosp.; Instr. in Surg., Columbia Univ.

REGISTER OF FORMER MEMBERS OF THE STAFF

MORRIS, LAIRD M.

M.D., Univ. of Cal., 1916; *Asst. Res. Phys., P. B. B. H., April 15, 1920-Oct. 1, 1920*; Asst. in Med., Univ. of Cal. Med. Sch., 1921-22; Instr. in Med., *ibid.*, 1923; Instr. in Med., Stanford Med. School; in practice, San Francisco, California.

MORRIS, JR., SAMUEL LESLIE

B.S., Davidson (N. C.), 1911; M.D., Harv., 1916; *Surg. H. O., P. B. B. H., Nov. 1, 1916-Nov. 1, 1917*; 1st Lieut., M. C., U. S. Army; 1st Asst. House Surg., St. Louis Southwestern Hosp., 1919; Chief House Surg., *ibid.*; in practice, Atlanta, Georgia.

MORTON, JOHN JAMIESON

A.B., Amherst, 1907; M.D., Johns Hopkins, 1913; *Surg. H. O., P. B. B. H., March 1, 1913-July 1, 1914*; Fellow in Pathol., Rockefeller Inst., New York City, 1914-15; House Surgeon, M. G. H., 1915-16; Asst. Res. Phys., Rockefeller Inst. Hosp., New York, 1916-17; Major, M. C., U. S. Army, 1917-19; practice, Orthopedic Surg., Boston, Massachusetts; Grad. Asst., O. P. D., Children's Hosp., Boston, and Asst. Orthopedic Surg., *ibid.*, 1919-21; Asst. Prof. Surg., Yale, 1921-24; Prof. Surg., Rochester Univ. Sch. of Med. and Dentistry, Rochester, New York.

MUNTER, EDGAR J.

M.D., Univ. of Calif., 1926; Interne, Med. and Surg., Univ. Hosp., San Francisco, 1925-26; Asst. Res. in Med., *ibid.*, 1926-27; *Asst. Res. Phys., P. B. B. H., 1927-28*; Asst. in Med., Univ. of Cal. Med. Sch.; in practice, San Francisco, Calif.

NELLANS, CHARLES T.

B.S., Univ. of Chicago, 1916; M.D., Rush Med. Coll., 1918; Mem. Res. Staff, Presbyterian Hosp., Chicago, 1918-19; *Med. H. O., P. B. B. H., Sept. 15, 1919-Nov. 1, 1920*; Asst. in Med., Yale, 1921; Instr. in Med., *ibid.*, and Res. Phys., New Haven Hosp., 1921-22; Instr. in Med., Emory Univ., and Asst. Visit. Phys., Wesley Mem. and Grady Hospitals, Atlanta, Ga.; in practice, Atlanta, Ga.

NICHOLS, ALVORD G.

A.B., Colgate, 1916; M.D., Harv., 1921; Interne, Worcester City Hosp., 1921-23; Act. Asst. Supt., *ibid.*; *Second Asst. Supt., P. B. B. H., Sept. 17, 1923-June 1, 1924*; Asst. Med. Director, John Hancock Life Insurance Co., Boston. *Died May 18, 1926.*

NICHOLS, 3D, ANDREW

A.B., Harv., 1912; M.D., *ibid.*, 1916; *Surg. H. O., B. C. H., 1916-17*; Capt., M. C., U. S. Army, 1917-19; *Second Asst. Supt., P. B. B. H., July 1, 1919-Feb. 1, 1921*; in practice, Danvers, Massachusetts.

PETER BENT BRIGHAM HOSPITAL

NOVY, ROBERT LEV

A.B., Univ. of Mich., 1913; M.S., *ibid.*, 1914; M.D., *ibid.*, 1919; *Med. H. O.*, *P. B. B. H.*, April 15, 1919-April 1, 1920; in practice, Detroit, Michigan.

O'CONOR, VINCENT JOHN

B.S., Univ. of Mich., 1915; M.D., Rush Med. Coll., 1917; *Surg. H. O.*, *P. B. B. H.*, Jan. 1, 1917-Jan. 1, 1918; House Surgeon, Presbyterian Hosp., Chicago, Ill., 1918; 1st Lieut., M. C., U. S. Army, 1918-19; *Asst. Res. Surg.*, *P. B. B. H.*, Feb. 15, 1919-July 15, 1920; Urol. Surg., Washington Boulevard Hosp.; Asst. Prof., G. U. Surg., Univ. of Ill., Sch. of Med.; Urol. Surg., Lutheran-Deaconess Hosp., Chicago; Urol. Surg., Garfield Park Hosp.; in practice, Chicago, Illinois.

O'MEARA, JOHN WILLIAM

A.B., Holy Cross, 1912; M.D., Harv., 1918; *Surg. H. O.*, *P. B. B. H.*, Jan. 7, 1918-Jan. 7, 1919; Orthopedic H. O., Children's Hosp., Boston, 1919; Comm. for Relief in Near East, in charge of Surg. Wards, American Hosp., Samsoun, Turkey-in-Asia, 1919-20; Orthopedic Surg., St. Vincent's Hosp., Worcester; Sr. Orth. Surg., Worcester City Hosp.; in practice, Worcester, Massachusetts.

OPPENHEIMER, ELLA

A.B., Bryn Mawr, 1914; M.D., Johns Hopkins, 1918; *Med. H. O.*, *P. B. B. H.*, Sept. 1, 1918-June 11, 1919; Phys. in Charge, Baby Summer Hosp. Camp, Washington, D. C., 1920; Examining Phys. (Girls), Juvenile Court, Washington, D. C., 1920-21; Asst. Visit. Phys., Children's Hosp.; Phys., National Training School for Girls; Research Asst., Federal Children's Bureau; Assoc. Pediatricist, Providence Hosp., Washington, D. C.; Director, Div. of Child Hygiene, Children's Bureau, U. S. Dept. of Labor.

ORMOND, ALEXANDER T.

A.B., Princeton, 1912; M.D., Johns Hopkins, 1919; *Surg. H. O.*, *P. B. B. H.*, Nov. 1, 1919-March 1, 1921. *Deceased.*

ORR, JR., LOUIS M.

B.S., Emory Coll., 1922; M.D., Atlanta Med. Coll., 1924; Jr. Interne, Grady Hosp., Atlanta, Ga., 1923-24; *Surg. H. O.*, *P. B. B. H.*, July 1, 1924-Nov. 1, 1925; Asst. Res. Surg., Lakeside Hosp., Cleveland; in practice, Orlando, Florida.

OUGHTERSON, ASHLEY W.

M.D., Harv., 1924; M.S., Yale, 1929; *Pathol. H. O.*, *P. B. B. H.*, Jan. 1, 1924-Jan. 1, 1925; *Surg. H. O.*, New York Hosp., Jan. 1, 1925-Jan. 1, 1927; Res. Surg., 1st Surg. Div., Bellevue Hosp., New York, Jan. 1, 1927-July 1, 1927; *Asst. Res. Surg.*, *P. B. B. H.*, 1927-28; William Harvey Cushing Fellow in Surg., Yale Univ., 1928-29; Asst. Prof. of Surg., *ibid.*

REGISTER OF FORMER MEMBERS OF THE STAFF

PARKER, JR., FREDERICK

A.B., Harv., 1913; M.D., *ibid.*, 1916; *Med. H. O.*, P. B. B. H., March 1-April 1, 1917.

PARKINS, LEROY EDWARD

A.B., Simpson Coll., 1912; M.D., Harv., 1918; Asst. Res., Boston Consumptives' Hosp.; Asst. Res., So. Dept., B. C. H.; *Surg. H. O.*, P. B. B. H., Dec. 1, 1918-March 1, 1920; private practice, Douglas, Wyo.; *Second Asst. Supt.*, P. B. B. H., Jan.-May, 1921; *First Asst. Supt.*, *ibid.*, May 1, 1921-Feb. 1, 1923; Asst. in Diseases of the Chest, Boston Univ. Med. School; Examiner in Tuberculosis, Boston Health Dept.; in practice, Boston.

PATTERSON, HOWARD A.

M.D., Harv., 1925; Interne, Roosevelt Hosp., New York, 1925-27; House Gynecologist, *ibid.*, 1927-28; *Asst. Res. Surg.*, P. B. B. H., Feb. 1-Sept. 1, 1928; Asst. Surg. to Out-Patients, Roosevelt Hosp., N. Y.; Asst. Attend. Surg., *ibid.*

PEABODY, FRANCIS WELD

A.B., Harv., 1903; M.D., *ibid.*, 1907; House Pupil, M. G. H., 1907-08; Asst. Res. Phys., J. H. H., 1908-09; Fellow in Pathol., Johns Hopkins, 1909-10; Stud. of Chem., Univ. of Berlin, Germany, 1910; Asst. Res. Phys., Hosp. of Rockefeller Inst., 1911-12; Asst., Rockefeller Inst., 1911-12; *Res. Phys.*, P. B. B. H., Nov. 1, 1912-Sept. 1, 1915 (*granted leave of absence March 1, 1914-Jan. 1, 1915, to serve as a member of the China Medical Commission of the Rockefeller Foundation*); *Asst. Visit. Phys.*, P. B. B. H., Sept. 1-Dec. 9, 1915; Alumni Asst. in Med., Harv., 1913-15; Asst. Prof. of Med., *ibid.*, 1915-19; Consult. Phys., Collis P. Huntington Mem. Hosp., Boston; *Phys.*, P. B. B. H., Dec. 9, 1915-Sept. 1921 (*leave of absence Aug. 1, 1917-Feb. 1, 1918, to serve as a member of the American Red Cross Comm. to Roumania*); Major, M. C., U. S. Army, 1918-19; Assoc. Prof. of Med., Harv., 1920-21; Prof. of Med., *ibid.*; Visit. Phys., B. C. H.; Director, Thorndike Lab., *ibid.*; Member, China Medical Board, Rockefeller Foundation; Member, Board of Scientific Directors, Rockefeller Inst.; *Consult. Phys.*, P. B. B. H. Died Oct. 13, 1927.

PECK, EUGENE CURTIS

A.B., Harv., 1916; M.D., *ibid.*, 1919; *Med. H. O.*, P. B. B. H., July 1, 1919-July 1, 1920; Instr. in Physiol. Chem., Tulane Univ., New Orleans, La.; Asst. in Pediatrics, Harv.; Prof. of Biochemistry and Physiol., St. John's Univ., Shanghai, China, 1922-25; H. O., Children's Med. Serv., M. G. H., 1925-26; Pediatrician, Lawrence and Mem. Assoc. Hosp., New London, Conn.; in practice, New London, Conn.

PENFIELD, WILDER GRAVES

Litt.B., Princeton, 1913; B.A., Oxford, 1916; M.A. and B.Sc., *ibid.*, 1920; M.D., Johns Hopkins, 1918; *Surg. H. O.*, P. B. B. H., Aug.

PETER BENT BRIGHAM HOSPITAL

15, 1918-Sept. 20, 1919; Beit Mem. Research Fellow, England; Assoc. Attend. Surg., Presbyterian Hosp., New York; Asst. Prof. of Surg., Columbia Univ.; Asst. Surg., Neurol. Inst. of New York; Attend. Neurol., Vanderbilt Clin.; Clin. Prof. Neurol. Surg., McGill Univ.; Surg. in charge Neurol. Surg., Royal Victoria Hosp.; Consult. Neurol. Surg., Montreal Gen. Hosp.; in practice, Montreal.

PETTIT, ROSWELL TALMADGE

S.B., Univ. of Chicago, 1908; M.D., Rush Med. Coll., 1913; *Med. H. O., P. B. B. H., March 1, 1914-July 1, 1915*; Asst. Med. Director, Ottawa Tuberculosis Colony, Ottawa, Ill.; Phys., Illinois Valley Hosp., Ottawa, Ill.; Capt., M. C., U. S. Army; in practice, Ottawa, Illinois.

PILCHER, COBB

M.D., Vanderbilt Univ., 1927; *Surg. H. O., P. B. B. H., July 1, 1927-Nov. 1, 1928*; Asst. Res. Phys., Vanderbilt Univ. Hosp., Nashville, Tenn., 1928-29; Asst. Res. Surg., *ibid.*

PINKERTON, HENRY

S.B., M. I. T., 1918; M.D., Harv., 1924; *Pathol. H. O., P. B. B. H., July 1, 1924-July 1, 1925*; Res. Pathol., Children's Hosp., Boston, July, 1925-July, 1926; *Res. Pathol., P. B. B. H., Sept. 1, 1926-Sept. 1, 1927*; Instr. in Pathol., Harv.

POTTER, WILLIAM HENRY

A.B., Harv., 1878; D.M.D., *ibid.*, 1885; A.M., Hon., *ibid.*, 1927; Demonstr. in Operative Dentistry, Harv., 1887-88; Clin. Lecturer, *ibid.*, 1890-96; Lecturer, *ibid.*, 1896-1900; Asst. Prof., *ibid.*, 1900-04; Prof., Operative Dentistry, *ibid.*, 1904-1927; Prof. Emeritus, *ibid.*, 1927; Dental Surgeon, "Ambulance American Hospital" at Neuilly, France, 1914-15; 1st Lieut., Major, and Lieut. Col., Dental Corps, U. S. A., 1917-19, A. E. F.; Member, U. S. A. Base Hosp. No. 5, A. E. F.; Instr., Dental Dept., U. S. A. Sanitary School, Langres, 1918-19; *Consulting Dental Surg., P. B. B. H. Died July 27, 1928.*

POTTS, JR., WILLIAM HENRY

A.B., Univ. of Texas, 1922; M.D., Harv., 1926; *Med. H. O., P. B. B. H., March 1, 1926-July 1, 1927*; Asst. Clin. Med., Baylor Univ., 1927-29; Instr. Clin. Med., *ibid.*; Visit. Phys., Parkland Hosp., 1927-29; in practice, Dallas, Texas.

PRICE, JAMES VALENTINE

A.B., Univ. of N. C., 1915; M.D., Johns Hopkins, 1919; *Surg. H. O., P. B. B. H., Oct 15, 1919-March 1, 1921*; Guggenheim Bros., La Paz, Bolivia, S. A.

PUTNAM, TRACY JACKSON

A.B., Harv., 1915; M.D., *ibid.*, 1920; Asst. Res. Pathol., J. H. H., 1920-21; *Asst. Res. Surg., P. B. B. H., Nov. 1, 1923-Oct. 1, 1924*;

REGISTER OF FORMER MEMBERS OF THE STAFF

Moseley Travelling Fellow, Harv., 1925; Arthur Tracy Cabot Fellow, *ibid.*, 1925-26; *Assoc. in Surg., P. B. B. H.*, 1925-28; Research Fellow in Neuropathol. and Asst. in Surg., Harv.; Jr. Visit. Phys. in Neurol., B. C. H.; Asst. Consult. in Neuro-surgery, Children's Hosp., Boston.

QUINLAND, WILLIAM SAMUEL

B.S., M.D., Rosenwald Fellow in Pathol., Harv., Sept., 1919-April, 1921; *Asst. in Pathol., P. B. B. H.*, April 14, 1921-July 28, 1922; Pathol., G. W. Hubbard and M. E. Hale Hospitals and Prof. of Pathol., Meharry Med. Coll., Nashville, Tennessee.

RAGSDALE, LUNEY VARNON

A.B., Univ. of Ala., 1917; M.D., Harv., 1924; *Second Asst. Supt., P. B. B. H.*, June 1-Dec. 15, 1924; *Med. H. O., ibid.*, Dec. 15, 1924-March 1, 1926; Clin. Asst. in Med., Univ. of Alabama; in practice, Bessemer, Ala.

RAND, CARL WHEELER

A.B., Williams, 1908; A.M., *ibid.*, 1909; M.D., Johns Hopkins, 1912; Res. H. O., J. H. H., 1912-13; *Asst. Res. Surg., P. B. B. H.*, Oct. 1, 1913-Nov. 1, 1914; House Surg., Mercy Hosp., Chicago, Ill., 1914-15; Lieut., M. C., U. S. Army; in practice, Los Angeles, California.

RAPPORT, DAVID

A.B., Harv., 1912; M.D., *ibid.*, 1916; Moseley Travelling Fellow, Harv., 1916-17; *Med. H. O., P. B. B. H.*, March 1-June 17, 1917; Lieut., M. C., U. S. Army, 1917-19; Austin Teaching Fellow in Physiol., Harv., 1919-20; Instr. in Physiol., *ibid.*; Research Fellow in Physiology, Cornell Univ. Med. Coll., 1921-24; Sr. Instr. in Physiol., Western Reserve Univ. Med. Sch., 1924-26; Asst. Prof. Physiol., *ibid.*

READ, JAMES S.

B.A., Vanderbilt Univ., 1921; M.D., *ibid.*, 1924; Interne, Louisville City Hosp., 1924-26; *Asst. Res. Phys., P. B. B. H.*, July 1, 1926-July 1, 1927.

REIFENSTEIN, BENEDICT W.

B.S., Syracuse, 1920; M.D., *ibid.*, 1922; Pathol. H. O., Hosp. of the Good Shepherd, Syracuse, N. Y.; *Pathol. H. O., P. B. B. H.*, July 1, 1922-July 1, 1923; Med. H. O., New Haven Hosp., 1923-24; Asst. Phys., Syracuse Mem. Hosp.; in practice, Syracuse, New York.

REYNOLDS, LAWRENCE

A.B., Univ. of Ala., 1912; M.D., Johns Hopkins, 1916; Capt., M. C., U. S. Army, 1917-19; *Roentgenologist, P. B. B. H.*, Oct. 15, 1919-June 1, 1922; Roentgenologist, Children's Hosp., Boston, 1922; Roentgenologist, Children's Free Hosp., Detroit, Mich.; Asst. Roent-

PETER BENT BRIGHAM HOSPITAL

genologist, Harper Hosp., Detroit; Editor, Am. Journal of Roent.; in practice, Detroit, Mich.

RHEA, LAWRENCE JOSEPH

B.S., Univ. of Texas, 1901; M.D., Johns Hopkins, 1905; H. O. in Pathol., B. C. H., 1906-07; Second Asst. in Pathol., *ibid.*, 1907; First Asst. in Pathol., *ibid.*, 1907-08; Asst. Visit. Pathol., *ibid.*, 1908-09; Asst. in Pathol., Harv., 1908-09; Instr. in Pathol., *ibid.*, 1909-10; Asst. Pathol., B. C. H., 1909-10; Director of Pathol. Lab. and Pathol., Montreal Gen. Hosp., 1910-12; Lect. in Pathol., McGill Univ., 1910-11; Asst. Prof. of Pathol., *ibid.*, 1911-12; *Res. Pathol., P. B. B. H., July 1, 1912-Oct. 1, 1913*; Asst. Prof. of Pathol., Harv., 1912-13; Assoc. Prof. of Pathol., McGill Univ.; Major, Canadian Army Med. Corps; Pathol., Children's Hosp., Montreal; Pathol., Foundlings' Hosp., Montreal; Director, Pathol. Lab., Montreal Div. of Shriner's Hosp.; Director of Pathol. Lab., Montreal General Hosp.

RHOADS, CORNELIUS PACKARD

A.B., Bowdoin, 1920; M.D., Harv., 1924; *Surg. H. O., P. B. B. H., July, 1924-May 18, 1925*; Assoc. in Pathol., Boston City Hosp., 1926-27; Instr. in Pathol., Harv., 1927-28; Assoc., Rockefeller Inst. for Med. Research.

RICHARDSON, HENRY BARBER

A.B., Harv., 1910; M.D., *ibid.*, 1914; *Med. H. O., P. B. B. H., March 1, 1915-July 1, 1916*; Asst. in Med., Johns Hopkins; Asst. Disp. Phys., J. H. H.; First Lieut., M. C., U. S. Army, 1918-19; Instr. in Med., Columbia Univ., New York, and Asst. Adjunct Visit. Phys., Bellevue Hosp., New York, 1921; Instr. in Med., Cornell, and Research Fellow, Russel-Sage Inst. of Pathol., Bellevue Hosp., New York; Asst. Visit. Phys., Bellevue Hosp.; Asst. Prof. of Med., Cornell Univ. Med. Coll., New York.

RIDDLE, MATTHEW C.

B.A., Reed College, 1917; M.A., Univ. of Oregon, 1922; M.D., Harv., 1926; Huntington Mem. Hosp., March-June, 1926; *Med. H. O., P. B. B. H., Nov. 1, 1926-March 1, 1928*; Res. Interne and Jr. Research Asst., Simpson Mem. Inst. for Med. Research; Fellow in Med., National Research Council.

RINGER, MICHAEL

B.S., Coll. of City of New York, 1915; M.D., Cornell, 1919; Instr. in Exper. Med., Yale, 1919-21; Instr. in Physiol., Cornell, 1921-23; *Med. H. O., P. B. B. H., Nov. 1, 1923-Jan. 1, 1925*; in practice, New York.

RIOCH, DAVID M.

B.A., Butler Coll., Indianapolis, 1920; M.D., Johns Hopkins, 1924; *Surg. H. O., P. B. B. H., Nov. 1, 1924-March 1, 1926*; *Asst. Res. Surg., ibid., March-April, 1926*; Asst. Med. Res., Strong Mem.

REGISTER OF FORMER MEMBERS OF THE STAFF

Hosp., Rochester, N. Y., April 1, 1926-July 1, 1927; Instr. in Med., Univ. of Rochester Sch. of Med., July 1, 1927-Sept. 15, 1928; Nat. Research Council Med. Fellow, Sept. 15, 1928-Sept. 15, 1929.

ROONEY, JAMES STEWART

Univ. of Calif., 1917-21; M.D., Harv., 1926; *Pathol. H. O., P. B. B. H.*, Jan. 1-Oct. 1, 1926; Res. Pathol., Long Island Hosp., Oct. 1, 1926-June 1, 1927; Res. Phys., *ibid.*, 1927-28; Instr. in Pathol., Harv.; Pathol., Charles Choate Mem. Hosp., Woburn, Faulkner Hosp., Boston, Lynn Hosp., Lynn, Malden Hosp., Malden, Mass. Women's Hosp., Boston, Moore Hosp., Brockton, Norwood Hosp., Norwood, Peterborough Hosp., Peterborough, N. H., Symmes Arlington Hosp., Arlington, Whidden Mem. Hosp., Everett.

ROSS, J. PATERSON

M.B., M.S., London; F.R.C.S., England; St. Bartholomew's Hosp., England; *Jr. Assoc. in Surg., P. B. B. H.*, April 9, 1923-Sept. 14, 1923.

SAEGER, ERNEST TIRRILL

B.S., Dart., 1914; M.D., Harv., 1917; *Surg. H. O., P. B. B. H.*, July 1, 1917-Aug. 1, 1918; Res., First Surg. Division, Bellevue Hosp., New York; in practice, Boston.

SCHLESINGER, MONROE J.

B.S., Coll. City of New York, 1912; Ph.D., Harv., 1920; M.D., *ibid.*, 1926; Asst., N. Y. H. D. Research Lab., 1912-14; Asst. Bacteriol., West Penn. Hosp., Pittsburgh, 1914-17; Asst. in Preventive Med. and Hygiene, *ibid.*, 1917-20; Instr., *ibid.*, 1920-22; Asst. in Pathol., *ibid.*, 1922-23; Research Asst. in Pathol., *ibid.*, 1923-25; *H. O. Pathol., P. B. B. H.*, July 1, 1925-July 1, 1926; Res. Pathol., Children's Hosp., Boston, 1926-27; Instr. in Pathol., Harv.; Pathol., Beth Israel Hosp., Boston.

SCHMITZ, HENRY L.

B.S., Univ. of Chicago, 1920; M.S., Univ. of Wis., 1922; Ph.D., Univ. of Wis., 1924; M.D., Harv., 1926; Med. H. O., Huntington Mem. Hosp., Boston, July, 1926-Dec., 1926; *Med. H. O., P. B. B. H.* March 1, 1927-July 1, 1928; Lasker Fellow and Instr., Dept. of Med. Univ. of Chicago.

SCHNECK, ROBERT J.

M.D., Harv., 1925; Interne, St. Luke's Hosp., Chicago, 1925-26; *Med. H. O., P. B. B. H.*, July 1, 1926-Nov. 1, 1927; Asst. Res. Phys., *ibid.*, 1927-28; Instr. in Med., Detroit Coll. of Med.; Jr. Assoc. in Med., Detroit Receiving Hosp.; in practice, Detroit, Mich.

SCHOLEFIELD, BERNARD GRAHAM

B.A., Oxford, 1921; M.A., B.M., B.Ch., *ibid.*, 1923; M.D., Oxford, 1927; F.R.C.S., England, 1928; Stud., St. Peter's College, Westminster, London, 1912-17; 2nd Lieut., Royal Engineers, 1917-19;

PETER BENT BRIGHAM HOSPITAL

Student, Guy's Hosp., London, 1922-23; House Surgeon. *ibid.*, 1924-25; Commonwealth Fund Fellow, Johns Hopkins Univ., 1925-26; *Asst. Res. Surg., P. B. B. H., Aug. 1, 1926-July 10, 1927*; Member of Staff, Guy's Hosp., London, England.

SCHUMACHER, IRWIN C.

A.B., Univ. of Cal., 1915; M.D., Johns Hopkins, 1919; *Asst. Res. Phys., P. B. B. H., Oct. 1, 1920-Sept. 1, 1921*; Asst. Prof. Med., Univ. of Cal.; in charge, Clin. Pathol. Dept., and Allergy Clin., Director of Clin. Labs., and Visit. Phys., Univ. of Cal. Hosp.; in practice, San Francisco, California.

SCHWARTZ, CHARLES WADSWORTH

Ph.B., Yale, 1914; M.D., Harv., 1919; *H. O., X-ray Dept., P. B. B. H., Feb. 20, 1919-Feb. 20-1920*; Roentgenologist, New York Neurol. Inst.; in practice, New York.

SCOTT, W. J. MERLE

A.B., Oberlin, 1914; M.D., Johns Hopkins, 1918; A.M., Columbia Univ., 1922; First Lieut., M. C., U. S. Army, 1918-19; Asst. in Surg., Henry Ford Hosp., Detroit, Mich., 1918-21; Fellow in Exper. Pathol., Montefiore Hosp., 1921-22; Arthur Tracy Cabot Fellow, Harv., 1922-23; Asst. in Surg., *ibid.*, 1923; *Assoc. in Surg., P. B. B. H., Sept. 1, 1922-July 1, 1923*; *Asst. Res. Surg., ibid., July 1, 1923-July 1, 1924*; Res. Surg., Lakeside Hosp., and Instr. in Surg., Western Reserve Univ., Cleveland, Ohio, 1924-26; Asst. Prof. Surg., Univ. of Rochester, Rochester, New York, 1926-27; Assoc. Prof. Surg., *ibid.*

SHRADER, JOHN C.

B.S., Univ. of Iowa, 1920; M.D., *ibid.*, 1922; Med. Interne, Univ. Hosp., Iowa, 1922-23; Hosp. Chem., *ibid.*, 1923-24; *Asst. Res. Phys., P. B. B. H., July, 1924-Aug., 1926*; Chief Res., Emory Div., Grady Hospital, Atlanta, Georgia, 1926-27; in practice, Ft. Dodge, Iowa.

SIMON, HILDA AMANDA

M.D., Cooper, 1905; *Third Asst. Supt., P. B. B. H., Oct. 5, 1917-March 1, 1919*; Supt., Lynn Hosp., Lynn, Mass. (*resigned*); City Health Dept., Seattle, Wash. *Died June 7, 1929.*

SIMPSON, SUTHERLAND E. R.

A.B., Cornell, 1921; M.D., Harv., 1925; *Med. H. O., P. B. B. H., March 1, 1926-Aug. 1, 1926.*

SISSON, WARREN RICHARDS

A.B., Colgate, 1906; Stud. of Med., Freiburg, Germany (summer semester), 1910; Stud., Univ. of Munchen (winter semester), 1910-11; Stud., Univ. of Heidelberg (summer semester), 1911; M.D., Johns Hopkins, 1912; House Pupil, M. G. H., Children's Med. Ward, 1912-13; *Med. H. O., P. B. B. H., March 1, 1913-March 1, 1914*; *Res. Pathol., ibid., March 1, 1914-April, 1915*; Instr. in

REGISTER OF FORMER MEMBERS OF THE STAFF

Pathol., Harv., 1914-15; H. O., B. C. H., So. Dept., summer of 1915; Sr. H. O., Boston Floating Hosp., 1915; Instr. in Pediatrics, Johns Hopkins; Instr. in Pediatrics, Harv.; Visit. Phys., Boston Lying-In Hosp.; Asst. Phys., Children's Hosp.; in practice, Boston.

SMILLIE, WILSON GEORGE

A.B., Colorado, 1908; M.D., Harv., 1912; D.P.H., *ibid.*, 1916; *Med. H. O., P. B. B. H., Nov. 1, 1912-March 1, 1914; Asst. Res. Phys., ibid., March 1-Sept. 1, 1914; Asst. Instr., Dept. of Preventive Med., Harv., 1914-16; Research Fellow, Rockefeller Inst., New York City, 1916-17; International Health Board of Rockefeller Foundation, 1917; loaned by the board as Asst. Prof. Hygiene de Faculdade de Medicina, Sao Paulo, Brazil, 1918-20; Director, Institute Hygiene; Prof. of Hygiene, Faculdade de Medicina e cirurgia, Sao Paulo, Brazil, 1920-22; Director of Training Base, International Health Board, Andalusia, Ala., 1922-25; Asst. Director for U. S., International Health Board, New York; Prof., Public Health Adm., Harv. School of Public Health; Scientific Director, International Health Div., Rockefeller Foundation, N. Y.*

SMITH, BARNEY BARR

M.D., Jefferson, 1917; H. O., Jewish Hosp., Philadelphia, Pa., 1917-18; First Lieut., M. C., U. S. Army, 1918-19; Asst., X-ray Dept., Lincoln and Beth Israel Hosp., New York City, 1920; *H. O., X-ray Dept., P. B. B. H., April 15, 1920-April 21, 1921; Assoc. Roent., City Hosp., Buffalo, 1924-28; Instr. in Radiology, Univ. Buffalo Med. Sch.; Roent., Marine Hosp., Buffalo; in practice, Buffalo, New York.*

SMITH, JUDSON ARTHUR

A.B., Harv., 1915; M.D., *ibid.*, 1918; *Med. H. O., P. B. B. H., Feb. 14, 1918-Jan. 30, 1919; Surg. Serv., New Haven Hosp.; Asst. Res. Surg., P. B. B. H., June 15, 1921-July 1, 1922; H. O., Boston Lying-In Hosp., 1922-23; Res. Obstetrician, ibid., 1923-24; in practice, Boston.*

SMITH-PETERSEN, MARIUS NYGAARD

B.S., Univ. of Wis., 1910; Univ. of Wis. Med. Sch., 1910-12; M.D., Harv., 1914; *Surg. H. O., P. B. B. H., July 1, 1914-Nov. 1, 1915; Res. Surg., Harv. Unit, Am. Ambulance Hosp., Paris, France, April-July, 1918; House Pupil, M. G. H. (Orthopedic Serv.), 1916; Visit. Orthopedic Surg., M. G. H.; in practice, Boston.*

SOOY, DANIEL WARREN

M.D., Univ. of Cal., 1917; *Asst. Res. Surg., P. B. B. H., Sept. 1, 1921-July 1, 1922; Instr. in Surg., Univ. of Cal. Med. Sch.; in practice, San Francisco.*

SPIES, THOMAS D.

M.D., Harv., 1927; *Pathol. H. O., P. B. B. H., Jan. 1, 1928-Jan. 1, 1929.*

PETER BENT BRIGHAM HOSPITAL

SPILLMAN, RAMSAY

A.B., Cornell, 1914; M.D., *ibid.*, 1917; *Surg. H. O., P. B. B. H., July 1, 1917-March 1, 1918*; Columbia Hosp., Washington, D. C., 1918-19; Instr. in Roent., Cornell Med. Sch.; Visit. Roent., Beekman St. Hosp.; in practice (Roentgenology), New York City.

SPURLING, ROY G.

A.B., Univ. of Mo., 1920; A.M., *ibid.*, 1923; M.D., Harv., 1923; *Surg. H. O., P. B. B. H., Nov. 1, 1923-March 1, 1925*; *Asst. Res. Surg., ibid., March 1-Sept. 1, 1925*; Res. Surg., Louisville City Hosp., Louisville, Ky.; Instr. in Surg., Univ. of Louisville Sch. of Med.

STATER, WAYNE J.

A.B., Univ. of Oregon, 1917; M.D., Harv., 1921; *Surg. H. O., P. B. B. H., March 1, 1922-July 1, 1923*; in practice, Portland, Oregon.

STECHEER, ROBERT M.

B.S., Dart., 1919; M.D., Harv., 1923; *Med. H. O., P. B. B. H., Nov. 1, 1924-Nov. 1, 1925*; Research Asst. in Med., Cleveland City Hosp.

STELLAR, ROBERT W.

B.S., Occidental Coll., Cal., 1919; Univ. of Cal., 2 years; M.D., Harv., 1923; *Surg. H. O., P. B. B. H., Nov. 1, 1923-March 1, 1925*; in practice, Wilmington, California.

STEVENS, FRANKLIN AUGUSTUS

B.S., Univ. of Iowa, 1913; M.D., *ibid.*, 1915; Res. Phys., Univ. Hosp., Iowa, 1915; Instr. in Med., Univ. of Iowa, 1916-17; *Asst. Res. Phys., P. B. B. H., July 21, 1917-Jan. 1, 1918*; M. C., U. S. Army, 1918-19; Coolidge Fellow in Med., Columbia Univ., New York, 1919-20; Instr. in Med., *ibid.*

STEVENS, WILLIAM B.

M.D., Harv., 1924; Asst. Res., Thorndike Lab., B. C. H., 1924-25; Interne, 4th Med. Service, *ibid.*, 1925-26; *Asst. Res. Phys., P. B. B. H., Dec. 1, 1926-Aug. 22, 1927*; Jr. Visit. Phys., B. C. H.; Asst. in Med., Harv.; in practice, Boston.

STEWART, STEELE FULLER

B.S., Westminster, Pa., 1912; M.D., Univ. of Pa., 1918; *Surg. H. O., P. B. B. H., June 1, 1918-July 1, 1919*; Orthopedic Service, Children's Hosp., Boston, 1920; Orthopedic Service, M. G. H., 1921-22; Assoc. Orthopedic Surg., Children's Hosp., Los Angeles, 1922; Asst. Orthopedic Surg., *ibid.*; Jr. Orthopedic Surg., Los Angeles Gen. Hosp.; Orthopedic Surg., San Bernardino County Welfare Commission; Orthopedic Consultant, Nat. Home for Disabled Volunteer Soldiers, Sawtelle, Calif.; in practice, Los Angeles, Calif.

STIMSON, HORACE POTTLE

A.B., Amherst, 1918; M.D., Harv., 1922; *Surg. H. O., P. B. B. H., March 1, 1923-July 1, 1924*; *Asst. Res. Surg., ibid., Sept. 8-Dec. 12,*

REGISTER OF FORMER MEMBERS OF THE STAFF

1924; Phys. of Fogg Museum Archaeological Expedition to Mongolia, 1925; in practice, Miami, Florida, 1926-28; Assoc. in Traumatic Surg., Clin. of Drs. Forrester, Lyman and Boyd, Chicago, Ill.

STODDARD, JAMES LEAVITT

A.B., Harv., 1910; M.D., *ibid.*, 1914; *Pathol. H. O.*, *P. B. B. H.*, July 1, 1914-July 1, 1915; *Act. Res. Pathol.*, *ibid.*, July 1-Sept. 1, 1915; Research Fellow in Pathol., Harv.; Major, M. C., U. S. Army, 1917-19; Lect. in Biochemistry, Smith Coll., 1920-21; Asst. Prof. Biochemistry, Smith Coll., 1921-22; Chemist, M. G. H.; Asst. in Med., Harv.

STONE, ERIC PERCY

B.S., Harv., 1914, as of 1915; M.D., *ibid.*, 1918; *Surg. H. O.*, *P. B. B. H.*, May 15, 1918-July 1, 1919; *Asst. Res. Surg.*, *ibid.*, Oct. 1, 1919-June 15, 1920; Surg. in Charge, Urol. Serv., Prov. City Hosp.; Asst. Surg., Gynecological Serv., R. I. Hosp.; Surg., Urol. Serv., Memorial Hosp., Pawtucket, R. I.; Consult. Urol., Prov. Lying-In Hosp.; in practice, Providence, Rhode Island.

STONE, GEORGE HENRY

A.B., Bowdoin, 1905; M.D., *ibid.*, 1908; H. O., Maine Gen. Hosp., 1908-09; in practice, Clinton, Mass., 1909-11; H. O., B. C. H., 1912-13; Exec. Asst., *ibid.*, 1913-15; *Third Asst. Supt.*, *P. B. B. H.*, Feb. 1, 1915-May 1, 1917; *Second Asst. Supt.*, *ibid.*, May 1, 1917-July 1, 1919; Capt., M. C., U. S. Army, 1918-19; Major, Med. Sec., Officers' Reserve Corps, U. S. Army; *First Asst. Supt.*, *P. B. B. H.*, July 1, 1919-May 1, 1921; Supt., Eastern Maine Gen. Hosp., Bangor, Maine.

STURGIS, CYRUS CRESSEY

B.S., Univ. of Wash., 1913; M.D., Johns Hopkins, 1917; *Med. H. O.*, *P. B. B. H.*, Oct. 15, 1917-Aug. 22, 1918; 1st Lieut., M. C., U. S. Army, 1918-19; *Asst. Res. Phys.*, *P. B. B. H.*, Aug. 25, 1919-April 15, 1920; *Res. Phys.*, *ibid.*, April 15, 1920-Aug. 1, 1922; *Assoc. in Med.*, *ibid.*, Aug. 1, 1922-Sept. 1, 1925; Fac. Instr. in Med., Harv., Sept. 1, 1922-Sept. 1, 1925; Asst. Prof. Med., *ibid.*, Sept. 1, 1925; Assoc. Phys., C. P. Huntington Hosp., Sept. 1, 1925-Jan. 1, 1926; *Physician*, *P. B. B. H.*, Sept. 1, 1925-July 1, 1927; Director, Thos. Henry Simpson Mem. Inst. for Med. Research; Prof. Int. Med., Univ. of Mich. Sch. of Med.; Director, Dept. of Int. Med., Univ. Hosp.

TAFT, ANNIE E.

M.D., Tufts, 1907; *Res. Pathol.*, *P. B. B. H.*, Nov. 5, 1917-Jan. 31, 1918.

TAFT, ROGER BROWNE

D.M.D., Harv., 1908; Asst. in Oral Surg., *ibid.*, 1910; Instr. in Oral Surg., *ibid.*, Feb. 1, 1919; *Dental Surg.*, *P. B. B. H.*, Jan. 13, 1916-Feb. 13, 1919; Instr. in Operative Dent., Harv.; in practice (Dentistry), Boston.

PETER BENT BRIGHAM HOSPITAL

TEEL, CHARLES E.

M.D., Washington Univ., 1923; Surg. Interne, New Haven Hosp., 1923-24; H. O., M. G. H., 1924-25; *Asst. Res. Surg., P. B. B. H., Nov. 1, 1925-June 22, 1926*; Asst. in Genito-Urinary Surg., Harv., 1925-26; in practice, Bellingham, Washington.

TEFFT, JR., RICHARD C.

A.B., Yale, 1916; M.D., Harv., 1920; *Med. H. O., P. B. B. H., March 1, 1921-July 1, 1922*.

TEMPLETON, EARL R.

B.S., Colgate Univ., 1914; M.D., Syracuse, 1920; *Pathol. H. O., P. B. B. H., July 6, 1920-July 1, 1921*; Med. H. O., New Haven Hosp., 1921-22; Res. in Med., Buffalo City Hosp., 1922; Clin. Asst. in Med., *ibid.*; in practice, Buffalo, New York.

THAXTER, LANGDON THOM

A.B., Williams, 1911; M.D., Harv., 1915; Med. House Pupil, M. G. H., 1915-16; *Surg. H. O., P. B. B. H., Nov. 14, 1916-July, 1917*; Res. Roent., M. G. H., 1926-27; Roentgenologist, Maine Gen. Hosp.

THOMPSON, CHARLES BAKER

A.B., Haverford, 1909; M.D., Johns Hopkins, 1913; *Med. H. O., P. B. B. H., Nov. 1, 1913-Nov. 1, 1914*; Second Asst. Res., Phipps Psychiatric Clin., J. H. H., 1914-15; First Asst. Res., *ibid.*, 1915-16; Examining Psychiatrist and Executive Secretary, Mental Hygiene Soc. of Md., 1916-27; Editor, Mental Health, 1923-26; School Psychiatrist, Baltimore Public Schools, 1922-27; Attend. Phys., Vanderbilt Clin., Psychiatric Dept.; Instr. in Psychiatry, College of Phys. and Surgs., New York.

TOWLERTON, FLETCHER JOHNSON

A.B., Harv., 1917; M.D., *ibid.*, 1921; H. O., Collis P. Huntington Mem. Hosp., 1919-20; *Surg. H. O., P. B. B. H., July 1, 1921-Nov. 1, 1922*; Phys., Wayne County Home, New York, 1923; Visit. Surg., Lyons Hosp., Lyons, New York; in practice, Lyons, New York.

TOWNE, EDWARD BANCROFT

A.B., Harv., 1906 (1907); M.D., *ibid.*, 1913; *Surg. H. O., P. B. B. H., July 1, 1913-Nov. 1, 1914*; *Asst. Res. Surg., ibid., Nov. 1, 1914-Nov. 1, 1915*; Surg., Second Harv. Unit, B. E. F., France, 1915-16; Vol. Asst. in Exp. Bacteriol., Mayo Foundation, Rochester, Minn., 1916; Fellow *pro tempore*, Mayo Foundation, 1916-17; *Asst. Res. Surg., P. B. B. H., Sept. 1, 1916-May 7, 1917*; Major, M. C., U. S. Army, May, 1917-19; Assoc. Clin. Prof. of Surg., Leland Stanford Junior Univ., San Francisco; in practice, San Francisco, California.

TRANter, CHARLES LEE

B.S., Univ. of Cal., 1911; M.D., *ibid.*, 1913; Med. and Surg. H. O., Univ. of Cal. Hosp., 1913-14; Asst., Nerve O. P. D., *ibid.*, 1914-15;

REGISTER OF FORMER MEMBERS OF THE STAFF

Asst. in Neurol., Univ. of Cal., 1915; *Asst. Res. Surg., P. B. B. H., Jan. 8, 1916-Jan. 1, 1917*; Asst. in Neurol., Univ. of Cal., 1917; Capt., M. C., U. S. Army; in practice, San Francisco, California.

TURNBULL, GEORGE CLARENCE

M.D., Northwestern Univ., 1922; H. O., Gen. Serv., Surg. and Obstetrics, Evanston Hosp., Evanston, Ill., 1922-23; Asst. in Pathol., Northwestern Univ., 1920-22; *Med. H. O., P. B. B. H., March 1, 1923-July 1, 1924*; Phys. (special), Yale, Dept. Univ. Health, New Haven, Conn., 1924-26; Clin. Asst., Dept. Int. Med., Yale Univ. Sch. of Med., 1924-26; Post-Grad. work in Medicine and Pathol., Vienna, Austria, 1926-27; Assoc. in Med., Northwestern Univ.; in practice, Evanston, Ill.

TURNER, RALPH WALDO

M.D., Albany Med. School, 1917; *Surg. H. O., P. B. B. H., Dec. 23, 1917-May 2, 1918*; Lieut., M. C., U. S. Army. (*Deceased.*)

VAIL, HARRIS HOLMES

A.B., Yale, 1912; M.D., Harv., 1917; *Surg. H. O., P. B. B. H., March 1, 1916-May 3, 1917*; Lieut., M. C., U. S. Navy, 1917-19; H. O., Aural, Mass. Eye and Ear Infirm., 1920-21; Clinician, Ear, Nose and Throat Clin., Cincinnati Gen. Hosp.; Attend. Laryngologist, Cincinnati Gen. Hosp.; Attend. Laryngologist, Cincinnati Tuberculosis Sanatorium; Asst. Attend. Laryngologist, Episcopal Hosp. for Children, Cincinnati; Asst. in Otolaryngology, Med. Coll. of Univ. of Cincinnati; in practice, Cincinnati, Ohio.

VANCE, ROBERT G.

Roent., Huntington Mem. Hosp., 1924-28; *Assoc. in Roent., P. B. B. H., 1928*; Asst. Visit. Phys., X-ray Dept., M. G. H.

VAN GORDER, GEORGE WILSON

A.B., Williams, 1911; M.D., Harv., 1915; *Surg. H. O., P. B. B. H., March 1, 1915-July 1, 1916*; House Surg., St. Anthony Hosp., Labrador, 1916; Med. House Pupil, M. G. H., 1916-17; House Surg., Free Hosp. for Women, Brookline; Capt., M. C., U. S. Army; Assoc. Prof. Surg. and Assoc. in Surg., Peking Union Med. Coll., Peking, China.

VAN WAGENEN, WILLIAM P.

M.D., Harv., 1922; *Surg. H. O., P. B. B. H., Nov. 1, 1922-March 1, 1924*; *Asst. Res. Surg., ibid., Oct. 1, 1924-Nov. 1, 1925.*

VASTINE, JACOB H.

M.D., Univ. of Pa., 1923; Interne, Easton Hosp., Easton, Pa., 1923-24; Gen. Practice, 1 year; *H. O., X-ray Dept., P. B. B. H., Aug. 1, 1925-Feb. 1, 1926*; *Asst. Res. in Roent., ibid., Feb. 1-June 15, 1926*; Lecturer in Roent., Woman's Med. Coll., Philadelphia; Roentgenologist, Hosp. of the Woman's Med. Coll.; in practice, Philadelphia, Pennsylvania.

PETER BENT BRIGHAM HOSPITAL

VAUGHAN, WARREN TAYLOR

A.B., Univ. of Mich., 1913; M.D., *ibid.*, 1916; *Med. H. O., P. B. B. H., July 1, 1916-Nov. 7, 1917*; M. C., U. S. Army. Nov. 7, 1917-July 27, 1919; Asst. in Preventive Med. and Hygiene, Harv., 1919-20; Attend. Phys., St. Elizabeth's Hosp., Richmond, Va., 1920-22; Lt. Col., M. O. R. C., C. O. Genl. Hosp., 41; Staff, Retreat Hosp.; Pres., 1924-25; Consult. Phys., Evangeline Booth Hosp.; Consult. Phys., Children's Home Society of Virginia; Consult. Phys., Farmville Comm. Hosp., Farmville, Va.; Secretary, Am. Assoc. for the Study of Allergy; Editor, *Journ. Lab. and Clin. Med.*; in practice, Richmond, Va.

VERMOOTEN, VINCENT

A.B., Univ. of Capetown, South Africa, 1918; A.M., *ibid.*, 1919; M.D., Johns Hopkins, 1923; Sr. Demonstr. in Anat., Univ. of Capetown, 1918-20; Res. H. O., Johns Hopkins, 1923-24; Asst. Res. Surg., New Haven Hosp., 1924-27; Asst. in Surg., Yale, 1924-27; Asst. in G. U. Surg., Harv.; *Asst. Res. Surg., P. B. B. H., 1927-28*; Instr. in Urol., Yale Univ.; Assoc. Surg., New Haven Hosp.

VICKERS, DENVER M.

A.B., Colorado Coll., 1917; M.D., Harv., 1921; *Surg. H. O., P. B. B. H., July, 1921-Nov. 1, 1922*; Surg., Mary McLellan Hosp., Cambridge, New York.

VIETS, HENRY ROUSE

B.S., Dart., 1912; M.D., Harv., 1916; *Surg. H. O., P. B. B. H., March 1-Aug. 16, 1917*; Capt., M. C., U. S. Army, 1917-19; Asst. in Neurol., M. G. H.; Asst. Visit. Neurol., Long Island Hosp., Boston; Instr. in Neurol., Harv.; in practice, Boston.

WAKEMAN, EDWARD T.

B.A., Yale, 1919; M.D., *ibid.*, 1922; *Med. H. O., P. B. B. H., July 1, 1922-Nov. 1, 1923*; in practice, New Haven, Connecticut.

WALKER, CLIFFORD BLACK

S.B., Univ. of Cal., 1906; Stud., Univ. of Cal. Med. Sch., 1907-10; M.D., Johns Hopkins, 1911; M.D., *ibid.*, 1912; Asst. to Dr. Cushing, 1911-12; Sr. Ophthal. House Surg., Mass. Eye and Ear Infirm., Boston, 1913; Sr. Aural House Surg., *ibid.*, 1914; *Assoc. in Surg., P. B. B. H., March 1, 1915-April 25, 1918*; Asst. in Ophthal., Harv., 1916-18; in practice, Los Angeles, California.

WALKER, WILLIAM G.

M.D., Univ. of Iowa; 3 months Pathol. Dept., *ibid.*; 1 year Interne, Univ. of Iowa Hosp.; 1 year Clin. Asst., *ibid.*; 2½ months Clin. Microscopy, *ibid.*; *Jr. Assoc. in Med., P. B. B. H., Sept. 25, 1922-July 1, 1924*; Chief, Med. Serv., Brockton Hosp.; in practice, Brockton, Massachusetts.

REGISTER OF FORMER MEMBERS OF THE STAFF

WARREN, JR., WILLIAM CHESTER

B.S., Emory Univ.; M.D., *ibid.*; *Surg. H. O., P. B. B. H., March 28, 1922-July 1, 1923*; Asst. and House Surg., Manhattan Ear, Nose and Throat Hosp., New York, 1923-24; Grad. Stud., Vienna, Austria; Assoc. Instr., O. R. L. Serv., Emory Univ.; in practice, Atlanta, Georgia.

WATKINS, S. SHELTON

A.B., Center Coll. of Ky., 1908; A.M., *ibid.*, 1909; M.D., Johns Hopkins, 1914; Med. and Surg. H. O., Church Home and Infirm., Baltimore, 1914; *Third Asst. Supt., P. B. B. H., May 1, 1914-Jan. 15, 1915*; Asst. in Clin. Laryngology, Johns Hopkins; Asst. Disp. Laryngologist, J. H. H.; Asst. Res. Surg., *ibid.*; Mem. of Dr. L. F. Barker's Staff at 1035 No. Calvert St., Baltimore, Md.; Lieut., M. C., U. S. Navy, 1917-19; in practice, Louisville, Kentucky.

WEARN, JOSEPH TRELOAR

B.S., Davidson, 1913; M.D., Harv., 1917; *Med. H. O., P. B. B. H., June 15, 1917-June 15, 1918*; 1st Lieut., M. C., U. S. Army, 1917-19; *Asst. Res. Phys., P. B. B. H., Sept. 1, 1919-Aug. 15, 1921*; Instr. in Pharm., Univ. of Penn., 1921-23; Instr. in Med., Harv., 1923-24; Asst. Prof. of Med., *ibid.*; Asst. Phys., Thorndike Lab., B. C. H.; Jr. Visit. Phys., *ibid.*; Assoc. Prof. Med., Harv.; Assoc. Director, Thorndike Lab., B. C. H.; Visit. Phys., B. C. H., 1928-29; Prof. of Med., Western Reserve Univ., Cleveland, Ohio; Director of Med., Lakeside Hosp.

WEGEFARTH, PAUL

A.B., Johns Hopkins, 1908; Stud. of Med., Strassburg and Berlin, Germany, 1909-11; M.D., Johns Hopkins, 1912; *Surg. H. O., P. B. B. H., Nov. 1, 1912-March 1, 1914*; Res. Phys., Church Home Infirmary, Baltimore, 1914-15; Phys., San Diego, Cal., 1914-17; Commissioned 1st Lieut., M. C., Sept., 1917; commissioned Capt., M. C., May, 1918; in practice at San Diego, May, 1919, until December, 1921. *Died March 29, 1923.*

WEISMAN, PAUL GERHARDT

B.S., Univ. of Mich., 1911; M.D., *ibid.*, 1913; H. O., Providence City Hosp. (Contagious Wards), 1914; H. O., R. I. Hosp., 1914-16; *Asst. Res. Phys., P. B. B. H., April 1-Aug. 1, 1916*; Asst. Res., Union Prot. Infirm., Baltimore, 1917; Res., *ibid.*, 1917-18; Lieut., M. C., U. S. Army, 1918; in practice, Colfax, Washington.

WELBOURN, MARSHALL AGNEW

B.S., Univ. of Mich., 1913; M.D., *ibid.*, 1915; *Assoc. in Med., P. B. B. H., July 1, 1915-March 1, 1916*; *Med. H. O., ibid., March 1, 1916-July 1, 1917*; Capt., M. C., U. S. Army, 1917-19; Instr. in Int. Med., Univ. of Mich., 1919-20; in charge of laboratories, Westlake Hosp., Los Angeles, Cal.; Med. Staff, Selwyn Emmet Graves

PETER BENT BRIGHAM HOSPITAL

Mem. Disp., Univ. of Calif.; Attend. Staff, California Lutheran Hosp.; in practice, Los Angeles, California.

WELLS, GUY

Ph.B., Brown Univ., 1916; M.D., Cornell, 1920; Interne, R. I. Hosp., 1920-22; *Asst. Res. Phys., P. B. B. H., Aug. 1, 1922-March 1, 1924*; in practice, Providence, Rhode Island.

WELLS, WARD STANLEY

S.B., Grinnell, 1909; M.D., Harv., 1916; *Assoc. in Med., P. B. B. H., July 1, 1916-April 8, 1917*; *Med. H. O., ibid., April 8-July 18, 1917*; Major, M. C., U. S. Army, Letterman Gen. Hosp., Presidio of San Francisco, Calif; Instr. in Clin. Electro-Cardiography, Army Med. Center, Washington, D. C. *Died Oct. 24, 1929, at Manila, P. I.*

WENTWORTH, JOHN ALEXANDER

A.B., Bowdoin, 1909; M.D., Harv., 1913; H. O., Hartford Hosp., Hartford, Conn., 1913-15; *Sr. Med. H. O., P. B. B. H., July 1-Nov. 1, 1915*; Alumni Asst., Clin. Pathol., Harv.; Asst., Harv. Infantile Paralysis Comm., Fall, 1916; *Asst. Res. Phys., P. B. B. H., Nov. 1, 1915-Aug. 1, 1917*; Assoc. Phys., Clifton Springs Sanitarium, New York, 1917-18; 1st Lieut., M. C., U. S. Army, 1918-19; Phys., Clifton Springs Sanitarium, New York, 1919-21; Asst. Phys., Hartford Hosp.; in practice, Hartford, Connecticut.

WEST, HOWARD FRANK

A.B., Stanford, 1912; M.D., *ibid.*, 1915; Interne, Lane Hosp., San Francisco, 1915-17; *Asst. Res. Phys., P. B. B. H., Sept. 15-Oct. 15, 1917*; *Act. Res. Phys., ibid., Oct. 15, 1917-Jan. 1, 1918*; *Res. Phys., ibid., Jan. 1, 1918-April 15, 1920*; Alumni Asst. in Med., Harv., 1918-20; Assoc. Phys., Diabetic Serv., Children's Hosp., Los Angeles; Assoc. Med. Director, Los Angeles Metabolic Clin.; Staff, St. Vincent Hosp., Los Angeles; Attend. Staff, Hosp. of Good Samaritan; in practice, Los Angeles, California.

WHEELER, BANCROFT

A.B., Harv., 1920; M.D., *ibid.*, 1924; Surg. H. O., Mass. General Hosp., Sept., 1924-June, 1926; Urol. H. O., Roosevelt Hosp., Jan.-June, 1927; *Asst. Res. Surg., P. B. B. H., 1927-28*; Res. Surg., Mem. Hosp., Worcester, 1928-29; Asst. Visit. Surg., *ibid.*

WHEELER, DANIEL W.

S.B., Knox Coll., 1915; M.D., Rush Med. Coll., 1920; *Asst. Res. Surg., P. B. B. H., June 1, 1921-March 1, 1922*; Fellow in Pathol., Rush Med. Coll., 1920-21; Fellow, Trudeau Foundation, 1922; Asst. Res. Phys., Trudeau Sanatorium, 1923; Asst. Med. Director, Nopeming Sanatorium, Nopeming, Minn., 1924; in practice, Duluth, Minnesota.

REGISTER OF FORMER MEMBERS OF THE STAFF

WHITAKER, LESTER R.

M.D., Harv., 1923; Surg. H. O., New Haven Hosp., 1923-24; *Assoc. in Surg., P. B. B. H., July 11, 1924-Sept. 1, 1925*; Arthur Tracy Cabot Fellow, Harv., 1924-25; *Asst. Res. Surg., P. B. B. H., Sept. 1, 1925-July 1, 1927*; Nat. Research Council Fellow in Surg., Univ. of Rochester Sch. of Medicine and Dentistry, 1927-28; Second Asst. Visit. Surg., Mass. Homeo. Hosp.; Asst. in Anat., Boston Univ. Sch. of Med.; Assoc. Member, Evans Mem. for Clin. Research and Prev. Med.; in practice, Boston.

WHITING, WALTER BELKNAP

Two years pre-med. work, Wash. and Lee Univ., and Cornell Summer Sch.; M.D., Harv., 1923; *Med. H. O., P. B. B. H., July 1, 1923-Nov. 1, 1924*; *Asst. Res. Phys., ibid., Nov. 1, 1924-July 1, 1925*; Phys., Wichita Clin. Hosp.; in practice, Wichita Falls, Texas.

WHITNEY, RAYMOND CYRUS

B.S., Middlebury, 1914; M.D., Harv., 1918; *Surg. H. O., P. B. B. H., Jan. 10-Oct. 28, 1918*; American Relief Comm., Near East, Caesarea, Turkey-in-Asia, American Hosp.; H. O., Mass. Eye and Ear Infirm., 1920-22; Ophthalmologist, St. Luke's Hosp., New Bedford; in practice (Ophthalmology), New Bedford, Massachusetts.

WILENS, GUSTAV

Ph.B., Yale, 1920; M.D., *ibid.*, 1923; *Pathol. H. O., P. B. B. H., July 1, 1923-July 1, 1924*; Res. Pathol., Children's Hosp., Boston; Instr. in Pathol., Harv., 1924-25; H. O. in Pediatrics, Children's Hosp., Boston, 1926-27; Director of Laboratories, Truesdale Hosp., Fall River, Mass.; Asst. Pediatrician, *ibid.*, Jan.-Sept., 1927; in practice, Utica, New York.

WILMAERS, ALBERT

M.D., Univ. of Brussels, 1921; Interne, Hospitals of Brussels; 3 months as Asst. to Prof. Vaquez, Paris; worked under Dr. DeMoor and Dr. DeMeyer; Physiol. Inst., Univ. of Brussels; Fellow, C.R.B., Educational Foundation; *Act. Asst. Res. Phys., P. B. B. H., Sept. 15-Nov. 15, 1923*; Asst. in General Path., Univ. of Brussels, 1924-28; in practice, Brussels, Belgium.

WILSON, CHARLES P.

A.B., Reed Coll., Portland, Oregon, 1920; M.D., Johns Hopkins, 1924; *Med. H. O., P. B. B. H., March 1, 1925-July 1, 1926*; Asst. Res. Phys., Vanderbilt Univ., Nashville, Tenn., 1926-27; Res. Phys., *ibid.*, 1927-28; in practice, Portland, Oregon.

WILSON, DAVID COLE

B.A., Univ. of Va., 1912; M.D., *ibid.*, 1919; Interne, Univ. of Va. Hosp., 1919; *Med. H. O., P. B. B. H., Dec. 15, 1919-March 1, 1921*; Phys., Clifton Springs San., Clifton Springs, New York.

PETER BENT BRIGHAM HOSPITAL

WILSON, JAMES ROBERT

M.D., Syracuse Univ., 1921; Instr., *ibid.*; Asst. in Pathol., Harv.; Res. Pathol., Children's Hosp., Boston; Instr., Dept. Pathol., Harv.; Res. Pathol., P. B. B. H., Sept. 15, 1923-July 1, 1924; Assoc. in Pediatrics, Cornell Med. School, New York; Asst. Attend. Pediatricist, Out-Patient Dept., New York Nursery and Child's Hosp., New York; Pathologist, *ibid.*; Asst. Attend. Pediatricist, Pediatric Serv. of Dr. Schloss.

WILSON, RICHARD B.

B.S., Emory Univ., 1920; M.D., *ibid.*, 1922; H. O. Boston Psycho. Hosp., 1922-23; Med. H. O., P. B. B. H., March 1, 1924-July 1, 1925; Post-Grad. work at Inst. for Brain Anatomy, Amsterdam, Holland, 1925-26; Post-Grad. work in Neuro-Pathol., Hamburg, Freidrichsburg, Germany, 1926-27.

WISLOCKI, GEORGE BERNAYS

A.B., Washington Univ.; M.D., Johns Hopkins, 1916; Asst. in Anat., *ibid.*, 1916-17; Arthur Tracy Cabot Fellow, Harvard, 1916-17; and 1919-20; Assoc. in Surg., P. B. B. H., March 25-Oct. 1, 1920; Assoc. Prof. of Anat., Johns Hopkins, Baltimore, Maryland.

WOOD, R. HUGH

M.D., Med. Coll. of Va., 1921; Interne, St. Elizabeth's Hosp., Richmond, Va., 1922; Res. Pathol., Mem. Hosp., Richmond, Va., 1922-23; Med. H. O., P. B. B. H., March 1, 1923-July 1, 1924; Chief Res., Grady Hosp., Atlanta, Ga., 1924-26; in practice, Atlanta, Georgia.

WOOD, RUSSELL

A.B., Harv., 1916; M.D., *ibid.*, 1920; Med. H. O., P. B. B. H., March 1, 1921-July 1, 1922; Grad. Asst. in Med., M. G. H., 1922; H.O., So. Dept., B. C. H., 1922-23; Asst. Visit. Phys., St. Luke's Hosp., New Bedford, Mass.; in practice, New Bedford, Massachusetts.

WOODS, ALAN CHURCHILL

A.B., Johns Hopkins, 1910; M.D., *ibid.*, 1914; Med. H. O., P. B. B. H., July 1, 1914-Nov. 1, 1915; Fellow and Assoc. in Exper. Med. and Asst. in Ophthal., Univ. of Pa.; Major, M. C., U. S. Army, 1917-19; Assoc. Prof. Clin. Ophthal., Johns Hopkins; Visit. Ophthal., *ibid.*; in practice (Ophthalmology), Baltimore, Md.

WOODWARD, HARRY WHITING

A.B., Bowdoin, 1910; M.D., Harv., 1915; Surg. H. O., P. B. B. H., March 1, 1915-July 1, 1916; H. O., Boston Lying-In Hosp., 1916; Capt., Royal Army Med. Corps; Visit. Staff, Surg. Services, Glockner Hosp. and Sanatorium, Bethel Hosp., Colorado Springs, Colorado; in practice, Colorado Springs.

REGISTER OF FORMER MEMBERS OF THE STAFF

WRIGHT, MARY

A.B., Vassar, 1911; M.D., Johns Hopkins, 1917; *Med. H. O., P. B. B. H., July 1, 1917-Sept. 17, 1918*; H. O. (Pediatrics), M. G. H., 1918-19; H. O., St. Louis Children's Hosp., 1919; Asst. Res., St. Louis Children's Hosp., 1919-20; Phys. to Children's Med. O. P. D., M. G. H.; Attend. Phys., N. E. Hosp. for Women and Children; in practice, Boston. *Died, Jan. 13, 1927.*

WULFFAERT, FRANZ RENE

B.A., Brussels, 1906; B.S., *ibid.*, 1907; M.D., *ibid.*, 1912; Asst. Phys., St. John's Hosp., Brussels, 1913; Res. Anesthetist, St. Mary's Hosp., London, Eng., 1915; *Pathol. H. O., P. B. B. H., Jan. 15-July 1, 1918*; *Res. Pathol., ibid., July 1, 1918-March 31, 1919*; Asst. in Pathol., Harv., 1918-19; Asst. Surg. (Gynecology), St. John's Hosp., Brussels, 1919-23; Asst. Surg., Univ. Brussels, 1923-25; in practice, Brussels, Belgium.

WYATT, TYREE C.

A.B., Wake-Forest Coll., 1920; M.D., Syracuse Univ., 1922; Dept. of Pathol., *ibid.*, 1922-27; *Med. H. O., P. B. B. H., 1927-28*; H. O., N. Y. Nursery and Child's Hosp., 1929; Attend. Pathol., *ibid.*; Instr. in Pediatrics, Cornell Univ. School of Med.

WYNN, JAMES

B.S., Indiana Univ., 1917; M.D., *ibid.*, 1919; M.D., *cum laude, ibid.*, 1920; *Asst. Res. Phys., P. B. B. H., July 1, 1920-Oct. 4, 1921*; Alternate on Visit. Staff, Indianapolis City Hosp., Indianapolis; Research Fellow, Indiana Univ. Med. Sch.

YOAKAM, WAYNE ADDISON

B.S., Denison Univ., 1916; M.D., Harv., 1920; *Surg. H. O., P. B. B. H., July 1, 1920-Nov. 1, 1921*; Obst. H. O. Boston Lying-In Hosp., 1921-22; Henry Ford Hosp., 1922-25; Assoc. Attend. Obstetrician, Providence Hosp. and Herman Keifer Hosp.; in practice, Detroit, Michigan.

Former Members of the Corporation

Elected

May 8, 1902	ALEXANDER COCHRANE	Died April 10, 1919
Oct. 2, 1902	AUGUSTUS HEMENWAY	Resigned September 12, 1919
May 8, 1902	WALTER HUNNEWELL	Died September 30, 1921

Appointed

June 16, 1909	*JOHN P. REYNOLDS	Died December 9, 1920
---------------	-------------------	-----------------------

Elected

Feb. 7, 1918	CHARLES F. CHOATE, JR.	Resigned March 13, 1924
Dec. 11, 1919	LOUIS A. FROTHINGHAM	Died August 23, 1928
Feb. 12, 1920	WILLIAM H. WELLINGTON	Died February 2, 1925

* Appointed by the Governor of Massachusetts.

Officers of the Institution, 1930

President

CHARLES P. CURTIS

Treasurer

EDMUND D. CODMAN

Secretary

LAURENCE H. H. JOHNSON

MEMBERS OF THE CORPORATION

Appointed

Jan. 5, 1921	*WILLIAM AMORY	.....179 Commonwealth Ave.	Boston
Mar. 26, 1925	HARRY L. BAILEY	..... 93 Franklin St.,	Boston
May 8, 1902	EDMUND D. CODMAN	..... 27 Kilby St.,	Boston
Apr. 15, 1915	CHARLES P. CURTIS	..... 71 Ames Building,	Boston
Mar. 26, 1925	PAUL E. FITZPATRICK	..... 104 Kingston St.,	Boston
June 16, 1909	†IRVIN MCD. GARFIELD	..... 30 State St.,	Boston
Feb. 7, 1918	FRANCIS L. HIGGINSON	..... 70 Federal St.,	Boston
May 8, 1902	HENRY S. HOWE	..... 53 State St.,	Boston
May 8, 1902	LAURENCE H. H. JOHNSON	..... 27 Kilby St.,	Boston
Mar. 27, 1924	RICHARD S. RUSSELL	..... 50 State St.,	Boston
May 8, 1902	WILLIAM R. TRASK	..... 10 State St.,	Boston

STANDING COMMITTEES OF THE CORPORATION

Building Committee

WILLIAM AMORY, *Chairman*

CHARLES P. CURTIS

LAURENCE H. H. JOHNSON

HARRY L. BAILEY

JOSEPH B. HOWLAND, M.D., *Secretary*

Auditing Committee

WILLIAM AMORY

* Appointed by the Governor of the Commonwealth under an act approved May 8, 1909. Commission expires May 1, 1936.

† Appointed by the Governor of the Commonwealth under an act approved May 8, 1909. Commission expires May 1, 1933.

PETER BENT BRIGHAM HOSPITAL

Committee on Finances

HENRY S. HOWE
EDMUND D. CODMAN
LAURENCE H. H. JOHNSON
RICHARD S. RUSSELL

Committee on Nominations

CHARLES P. CURTIS
EDMUND D. CODMAN

Committee on Rules

CHARLES P. CURTIS
EDMUND D. CODMAN
IRVIN MCD. GARFIELD

VISITING COMMITTEE FOR 1929

CHARLES P. CURTIS	January
PAUL E. FITZPATRICK	February
HENRY S. HOWE	March
WILLIAM R. TRASK	April
LAURENCE H. H. JOHNSON	May
FRANCIS L. HIGGINSON	June
EDMUND D. CODMAN	July
CHARLES P. CURTIS	August
IRVIN MCD. GARFIELD	September
HARRY L. BAILEY	October
WILLIAM AMORY	November
RICHARD S. RUSSELL	December

VISITING COMMITTEE FOR 1930

CHARLES P. CURTIS	January
PAUL E. FITZPATRICK	February
HENRY S. HOWE	March
WILLIAM R. TRASK	April
LAURENCE H. H. JOHNSON	May
FRANCIS L. HIGGINSON	June
EDMUND D. CODMAN	July
CHARLES P. CURTIS	August
IRVIN MCD. GARFIELD	September
HARRY L. BAILEY	October
WILLIAM AMORY	November
RICHARD S. RUSSELL	December

OFFICERS OF THE INSTITUTION

EXECUTIVE COMMITTEE OF THE STAFF

HENRY A. CHRISTIAN, M.D.
HARVEY CUSHING, M.D.
S. BURT WOLBACH, M.D.
JOSEPH B. HOWLAND, M.D., *Secretary*

ADMINISTRATIVE DEPARTMENT

Superintendent

Service began

May 1, 1919 JOSEPH B. HOWLAND, M.D.

Assistant Superintendents

Dec. 15, 1924 LESLIE H. WRIGHT, M.D.
Jan. 15, 1928 CHARLES L. CLAY, M.D.

Executive Assistant

May 14, 1927 HELEN GOODWIN, R.N.

BOARD OF CONSULTATION

Appointed

Mar. 25, 1912 WALTER B. CANNON, M.D., *Consulting Physiologist*
Mar. 25, 1912 OTTO FOLIN, Ph.D., *Consulting Chemist*
Oct. 7, 1929 HAROLD A. KENT, D.M.D., *Consulting Dental Surgeon*
Mar. 8, 1928 GEORGE R. MINOT, *Consulting Physician*
Apr. 12, 1923 HANS ZINSSER, M.D., *Consulting Bacteriologist*

MEDICAL DEPARTMENT

Service began

May 1, 1912 HENRY A. CHRISTIAN, M.D., *Physician-in-Chief*
July 1, 1912 CHANNING FROTHINGHAM, M.D., *Physician*
Sept. 1, 1922 REGINALD FITZ, M.D., *Physician*
July 1, 1928 CLIFFORD L. DERICK, M.D., *Physician*
July 1, 1915 JAMES P. O'HARE, M.D., *Senior Associate in Medicine*
Aug. 8, 1919 SAMUEL A. LEVINE, M.D., *Senior Associate in Medicine*
May 24, 1928 JOSEPH C. AUB, M.D., *Senior Associate in Medicine*
Dec. 12, 1912 NATHANIEL K. WOOD, M.D., *Associate in Medicine*
July 1, 1915 GEORGE P. DENNY, M.D., *Associate in Medicine*
Sept. 1, 1915 I. CHANDLER WALKER, M.D., *Associate in Medicine*
Sept. 12, 1919 DONALD J. MACPHERSON, M.D., *Associate in Medicine*
Apr. 14, 1921 FRANCIS C. HALL, M.D., *Associate in Medicine*
Apr. 13, 1922 HOWARD F. ROOT, M.D., *Associate in Medicine*
Nov. 12, 1925 GUSTAVE P. GRABFIELD, M.D., *Associate in Medicine*
May 10, 1926 WILLIAM P. MURPHY, M.D., *Associate in Medicine*
May 10, 1926 EDWARD S. EMERY, JR., M.D., *Associate in Medicine*

PETER BENT BRIGHAM HOSPITAL

Sept. 1, 1926	ROBERT T. MONROE, M.D., <i>Junior Associate in Medicine</i>
Nov. 1, 1927	LYMAN H. HOYT, M.D., <i>Junior Associate in Medicine</i>
Sept. 1, 1928	WILLIAM C. EGLOFF, M.D., <i>Junior Associate in Medicine</i>
Jan. 24, 1929	HARRY H. BLOTNER, M.D., <i>Junior Associate in Medicine</i>
Sept. 15, 1929	ROBERT F. MCGRATH, M.D., <i>Junior Associate in Medicine</i>
Sept. 1, 1929	MARSHALL N. FULTON, M.D., <i>Resident Physician</i>
June 15, 1929	FRANCIS M. THURMON, M.D., <i>Assistant Resident Physician</i>
July 1, 1929	SAMUEL A. SHELBURNE, M.D., <i>Assistant Resident Physician</i>
Aug. 1, 1929	S. MARION SALLEY, M.D., <i>Assistant Resident Physician</i>
<i>Service began</i>	
Sept. 1, 1929	STUYVESANT P. BUTLER, M.D., <i>Assistant Resident Physician</i>
Sept. 1, 1929	NEIL FEENEY, M.D., <i>Assistant Resident Physician</i>

SURGICAL DEPARTMENT

<i>Service began</i>	
Sept. 1, 1912	HARVEY CUSHING, M.D., <i>Surgeon-in-Chief</i>
May 1, 1912	JOHN HOMANS, M.D., <i>Surgeon</i>
Oct. 1, 1912	DAVID CHEEVER, M.D., <i>Surgeon</i>
June 19, 1916	WILLIAM C. QUINBY, M.D., <i>Urological Surgeon</i>
Oct. 9, 1919	GILBERT HORRAX, M.D., <i>Senior Associate in Neurological Surgery</i>
June 15, 1924	FRANCIS C. NEWTON, M.D., <i>Senior Associate in Surgery</i>
June 12, 1924	LYMAN G. RICHARDS, M.D., <i>Associate in Otolaryngology</i>
Nov. 17, 1914	HILBERT F. DAY, M.D., <i>Associate in Surgery</i>
Jan. 27, 1930	PAUL MARTIN, M.D., <i>Associate in Surgery</i>
Mar. 8, 1928	LOUISE EISENHARDT, M.D., <i>Junior Associate in Surgery</i>
Oct. 1, 1928	HARLAN F. NEWTON, M.D., <i>Junior Associate in Surgery</i>
July 1, 1929	HAROLD M. TEEL, M.D., <i>Jr. Associate in Surgery</i>
May 1, 1930	RICHARD MEAGHER, M.D., <i>Jr. Associate in Surgery</i>
Oct. 15, 1928	JOHN H. POWERS, M.D., <i>Resident Surgeon</i>
July 1, 1928	JOHN E. SCARFF, M.D., <i>Assistant Resident Surgeon</i>
May 1, 1929	ERIC OLDBERG, M.D., <i>Assistant Resident Surgeon</i>
Jan. 15, 1930	JOHN C. ECKELS, M.D., <i>Assistant Resident Surgeon</i>
Feb. 1, 1930	WILLIAM T. GREEN, M.D., <i>Assistant Resident Surgeon</i>
Apr. 24, 1930	WILLIAM R. HENDERSON, M.D., <i>Assistant Resident Surgeon</i>
May 1, 1930	FRANK N. GLENN, M.D., <i>Assistant Resident Surgeon</i>

OFFICERS OF THE INSTITUTION

PATHOLOGICAL DEPARTMENT

Service began

Dec. 1, 1916 S. BURT WOLBACH, M.D., *Pathologist*
 Sept. 1, 1929 REUBEN Z. SCHULZ, M.D., *Resident Pathologist*

ROENTGENOLOGICAL DEPARTMENT

Service began

May 15, 1922 MERRILL C. SOSMAN, M.D., *Roentgenologist*
 Jan. 12, 1928 EDWARD C. VOGT, M.D., *Associate in Roentgenology*

DENTAL SURGEON

Service began

Oct. 7, 1929 MOSES S. STROCK, D.M.D.

MEDICAL HOUSE OFFICERS

Service began

Nov. 1, 1927	JOHN M. FLYNN, M.D.,	<i>Service ended</i> Mar. 1, 1929
Nov. 1, 1927	OLIVER J. MENARD, M.D.	Mar. 1, 1929
Nov. 1, 1927	GEORGE H. HOUCK, M.D.	Mar. 1, 1929
Mar. 1, 1928	HARRY A. DEROW	July 1, 1929
Mar. 1, 1928	DANIEL V. TROPPOLI	July 1, 1929
Mar. 1, 1928	THOMAS H. McEACHERN	July 1, 1929
July 1, 1928	WILLIAM D. STRAYHORN, JR., M.D.	Nov. 1, 1929
July 1, 1928	FRIEDRICH ENGELBACH, M.D.....	Nov. 1, 1929
July 1, 1928	DAVID L. HALBERSLEBEN, M.D.....	Nov. 1, 1929

Service began

Nov. 1, 1928	HARRY B. FRIEDGOOD, M.D.....	<i>Service will end</i> Mar. 1, 1930
Nov. 1, 1928	GEORGE E. SHAMBAUGH, JR., M.D.	Mar. 1, 1930
Nov. 1, 1928	THOMAS A. C. RENNIE, M.D.....	Mar. 1, 1930
Mar. 1, 1929	RICHARD G. HAHN, M.D.....	July 1, 1930
Mar. 1, 1929	WILLIAM G. HARRISON, JR., M.D...	July 1, 1930
Mar. 1, 1929	THEODORE G. KLUMPP, M.D.....	July 1, 1930
July 1, 1929	MORRIS A. BOWIE, M.D.....	Nov. 1, 1930
July 1, 1929	JAMES I. FARRELL, M.D.....	Nov. 1, 1930
July 1, 1929	JAMES P. TOLLMAN, M.D.....	Nov. 1, 1930
Nov. 1, 1929	PAUL C. DOZIER, M.D.....	Mar. 1, 1931
Nov. 1, 1929	EARLE A. HARVEY, M.D.....	Mar. 1, 1931
Nov. 1, 1929	DANIEL BLAIN, M.D.....	Mar. 1, 1931
Mar. 1, 1930	EDWIN J. DOTY, M.D.....	July 1, 1931
Mar. 1, 1930	JAMES H. MARKS, M.D.....	July 1, 1931
Mar. 1, 1930	NORMAN A. POKORNEY, M.D.....	July 1, 1931

SURGICAL HOUSE OFFICERS

Service began

Oct. 1, 1927	ALFRED C. ORMOND, JR., M.D.	<i>Service ended</i> Feb. 1, 1929
Oct. 1, 1927	JAMES L. SAGEBIEL, M.D.	Feb. 1, 1929
Jan. 1, 1928	ERIC OLDBERG, M.D.	May 1, 1929
Jan. 1, 1928	ROBERT ZOLLINGER, M.D.....	May 1, 1929

PETER BENT BRIGHAM HOSPITAL

<i>Service began</i>		<i>Service ended</i>
Apr. 1, 1928	GEORGE C. CRUMP, M.D.	Aug. 1, 1929
Apr. 1, 1928	RICHARD H. MEAGHER, M.D.	Aug. 1, 1929
July 1, 1928	WILLIAM G. CRUTCHFIELD, M.D....	Nov. 1, 1929
July 1, 1928	ROBERT M. HARBIN, Jr., M.D.....	Nov. 1, 1929
Oct. 1, 1928	ROBERT B. BRIGHAM, M.D.....	June 1, 1929
<i>Service began</i>		<i>Service will end</i>
Oct. 1, 1928	WALTER W. BOYD, M.D.....	Feb. 1, 1930
Aug. 1, 1929	WILLIAM T. GRUN	Feb. 1, 1930
Jan. 1, 1929	FRANK N. GLENN, M.D.....	May 1, 1930
Jan. 1, 1929	H. WALTON COCHRAN, M.D.....	May 1, 1930
Apr. 1, 1929	RICHARD W. FARNSWORTH, M.D...	Aug. 1, 1930
Apr. 1, 1929	THOMAS I. HOEN, M.D.....	Aug. 1, 1930
July 1, 1929	EDWARD B. CASTLE, M.D.....	Nov. 1, 1930
July 1, 1929	RICHARD U. LIGHT, M.D.....	Nov. 1, 1930
Oct. 1, 1929	FREDERICK A. FENDER, M.D.....	Feb. 1, 1931
Oct. 1, 1929	WILLIAM DEG. MAHONEY, M.D....	Feb. 1, 1931
Jan. 1, 1930	KENNETH W. THOMPSON, M.D....	May 1, 1931
Jan. 1, 1930	BRONSON S. RAY, M.D.....	May 1, 1931
Apr. 1, 1930	JOHN H. LAWRENCE, M.D.....	Aug. 1, 1931
Apr. 1, 1930	DONALD E. DIAL, M.D.....	Aug. 1, 1931

PATHOLOGICAL HOUSE OFFICERS

July 1, 1929	RUDOLPH OSGOOD, M.D.
Jan. 1, 1930	GEORGE M. HASS, M.D.

HOUSE OFFICERS IN ROENTGENOLOGICAL DEPARTMENT

July 1, 1929	ERSKINE R. PICKWICK, M.D.
Oct. 1, 1929	HOWARD L. JACKSON, M.D.

SCHOOL OF NURSING

*Superintendent of Nurses and
Principal of the School of Nursing*

Service began

July 1, 1912 CARRIE M. HALL, R.N.

Assistant Superintendent of Nurses

June 1, 1928 MARY C. GILMORE, R.N.

Instructor in Theory

Jan. 17, 1928 KATHERINE BELL, B.S., R.N.

Instructor in Practice

Sept. 1, 1929 BERNICE J. SINCLAIR, R.N.

OFFICERS OF THE INSTITUTION

Instructor in Operating Room Technique

Sept. 1, 1929 ELIZABETH A. HAGERTY, R.N.

Supervisors

June 1, 1929 HELEN A. NEWHALL, A.B., R.N.

Sept. 1, 1929 ELSA E. C. STORM, R.N.

Oct. 13, 1927 RACHEL T. ADAMS, R.N.

Jan. 3, 1928 EVELEAN G. PIERCE, R.N.

Night Supervisors

June 29, 1929 VERA B. GRIFFIN, R.N.

Nov. 1, 1929 GRACE E. SLIPP, R.N.

Chief—Social Service Department

Aug. 17, 1914 ALICE M. CHENEY, R.N.

Dietitian

May 21, 1925 THELMA TUBBS CURRIER, B.S.

Apothecary

Dec. 2, 1912 HARRY H. COMAN

Clerk

Apr. 29, 1912 LIDA E. CRAWFORD

Record Librarians

House Records

June 16, 1922 EDITH M. ROBBINS

Out-Patient Records

Jan. 8, 1912 MAUD MACAULAY

Housekeeper

Nov. 1, 1912 ELIZABETH M. PACKARD

Chief—Mechanical Departments

Oct. 21, 1911 JOHN A. AITKEN

THE HISTORY OF THE

REIGN OF CHARLES THE FIRST

BY JOHN BURNET

IN TWO VOLUMES

LONDON, 1724

Printed by J. Sturges

at the Sign of the Crown

in St. Pauls Church-Yard

Against the Wall

near the North-Door

of the said Church

By J. Sturges

Printer

of the said Church

and of the said Wall

near the North-Door

of the said Church

By J. Sturges

Printer

of the said Church

and of the said Wall

near the North-Door

of the said Church

By J. Sturges

Printer

of the said Church

and of the said Wall

near the North-Door

of the said Church

By J. Sturges

FORM OF BEQUEST

I give and bequeath to the Peter Bent Brigham Hospital, a corporation established under the laws of the Commonwealth of Massachusetts, the sum of _____ dollars, the same to be used for the furtherance of its charitable work.

